PROSOCIAL BEHAVIOR AND POSITIVE AFFECT: A CROSS-CULTURAL COMPARISON

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Chapter 1 Introduction

Western conceptualizations of the life well lived focus on the idea that virtue is the path to individual happiness. Living a virtuous life is the key to salvation according to all major world religions (e.g. "do good, lend, expecting nothing in return, and your reward will be great", Luke 6:35), and intentionally practicing altruism is promoted by folk psychology as the way to escape the self and flourish. The link between happiness and virtue can be traced down to the ancient Greek concept of *eudaimonia.* For Aristotle, *eudaimonia* (doing and living well) is an activity in accord with virtue (*aretē*) (Aristotle, *trans*. 2011, X). All these perspectives converge in emphasizing that doing good (to others) does not only benefit them, but also the person who does it.

Considering how prevalent the above idea is in Western thought, it is surprising to note that only in the last 20 years has psychology started to investigate systematically whether intentionally enacting prosocial behavior has any positive effects on the actor. A now growing body of literature backs up with scientific evidence the claim that kindness and well-being are closely connected (Curry et al., 2018). However, if doing good actually feels good (as science suggests), why aren't people kind more often? In this chapter, literature pertaining to the effects of engaging in prosocial behavior on the well-being of the benefactor is reviewed, focusing on the mechanisms and moderating factors of this association. First, recent correlational, experimental and interventional research investigating the relationship between prosocial behavior and the well-being of the benefactor, as well as its mediating mechanism are reviewed and interpreted in light of self-determination theory (Deci & Ryan, 2000), focusing particularly on the explanatory pathways through satisfaction of basic psychological needs. Next, it is argued that the claim that kindness improves benefactors' mental health has been overly simplified, because it ignores the moralizing aspect of prosocial behavior. Individuals have different

conceptualizations of morality (which are often culturally determined), and might act prosocially for different reasons. As the motives behind engaging in prosocial behavior play an important role in determining how people feel when acting prosocially, cross-cultural research on agentic and obligated motivation to engage in prosocial behavior is reviewed, and the role that motivation plays in determining whether prosocial behavior enactment is conducive to positive affect is discussed. In the final part, gaps in the literature are pointed out, and the purpose of this research is presented.

1.1 Engagement in prosocial behavior and positive affect

The existence of a positive relationship between engagement in prosocial behavior and subjective well-being has been documented by correlational (Meier & Stutzer, 2008), experimental (Martela & Ryan, 2016a), and interventional studies (Layous, Nelson, Oberle, Schonert-Reichl, & Lyubomirsky, 2012). Using different methodologies, operationalizations of prosocial behavior, and sampling populations, these studies converge in revealing that other-focused behavior has positive effects on the actor (Piliavin, 2003).

Correlational studies have shown that people who are characterized by kindness are more satisfied with their life (Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006; Park, Peterson, & Seligman, 2004), those who frequently spend money on others are happier, regardless of culture (Aknin et al., 2013; Dunn, Aknin, & Norton, 2008), those who volunteer report higher well-being (Jenkinson et al., 2013; Meier & Stutzer, 2008; Wheeler, Gorey, & Greenblatt, 1998), those with compassionate goals are low in depression and anxiety and high in positive affect (Crocker, Olivier, & Nuer, 2009), those high in communal strength who make sacrifices for their romantic partners experience more positive emotions and relationship satisfaction (Kogan et al., 2010), along with a host of other benefits for the benefactors (Piliavin, 2003). However, correlational design cannot speak of causation, as it is very likely that happier people are more prone to engage in prosocial behavior in the first place (Aknin, Van de Vondervoort, & Hamlin, 2018; Isen & Levin, 1972).

Elaborating on the direction of causality, experimental research brings evidence to support the claim that prosocial behavior does lead to an increase in positive affect. For example, merely recalling a past instance of engagement in prosocial behavior improves current mood. Participants who recalled spending money on others versus on themselves were seen to attain a more positive affect state (Aknin et al., 2013; Aknin, Dunn, & Norton, 2012), as were those who recalled an instance of other-focused

helping versus self-focused helping (Wiwad & Aknin, 2017), and those who just counted their acts of kindness over the last week (Otake et al., 2006). In fact, recalling past engagement in prosocial action enhances well-being as much as actually performing prosocial behavior (Ko, Margolis, Revord, & Lyubomirsky, 2019).

Furthermore, in field and laboratory studies, individuals who were randomly assigned to engage in prosocial behavior experienced an increase in positive affect, including those who were given an opportunity to help a confederate (Harris, 1977; Weinstein & Ryan, 2010), and those who were randomly assigned to spend money on others (Aknin et al., 2013; Anik, Aknin, Norton, Dunn, & Quoidbach, 2013; Dunn et al., 2008; Geenen, Hohelüchter, Langholf, & Walther, 2014). This effect has been confirmed not only on adults. Toddlers, as young as two years in age, showed greater happiness when giving treats to others compared to when receiving treats themselves (Aknin, Hamlin, & Dunn, 2012). Furthermore, direct contact with the beneficiary is not necessary, as even online based prosocial behavior, in which the target remains anonymous, can boost vitality and well-being. In one study, participants who were told that the points they gain in an online game would be converted to food donations experienced greater well-being versus those who were not aware of such prosocial contribution (Martela & Ryan, 2016a). In summary, studies have employed a wide range of prosocial behaviors, including real-life and online helping, in order to demonstrate that kindness *causes* positive affect.

Given the above, if kindness improves the mood of the benefactors, could intentional engagement in prosocial behavior promote well-being? Kindness-based positive psychology interventions suggest that this is so. In such interventions, participants are randomly assigned to a kindness condition (intentionally conducting acts of kindness for a longer period of time) or a control condition (engaging in an activity that does not have any effects on mood), and report on various measures of well-being throughout the intervention. For example, participants who were randomly assigned to perform acts of kindness for as few as seven (Rowland & Curry, 2019) or 10 days (Buchanan

& Bardi, 2010), reported higher life satisfaction than the control group. Other studies, employing longer interventions, also replicated these findings. For example, U.S. and Korean participants who performed acts of kindness over a six-week period of positive intervention showed higher well-being upon post-test, compared to the control group, and the effects remained at least marginally significant after a one-month follow-up (Layous, Lee, Choi, & Lyubomirsky, 2013). These results suggest that the positive effect of engaging in prosocial behavior does not wear off immediately. Similarly, in a six-week intervention contrasting self-oriented with other-oriented kindness, participants from diverse populations (students, adults, and Mechanical Turk workers) who performed acts of kindness showed increases in positive affect and decreases in negative affect at post-test compared to those who did acts of kindness for the self or engaged in another neutral activity, and the effects remained marginally significant upon a two-week follow-up (Nelson, Layous, Cole, & Lyubomirsky, 2016). Furthermore, in another six-week intervention on U.S. and Korean participants, the biggest boosts in well-being were observed for participants who received autonomy support (Nelson et al., 2015). A kindness intervention carried out in an academic environment showed that engagement in prosocial acts leads to higher positive emotions and academic engagement, suggesting that the benefits of the intervention extend to motivation as well (Ouweneel, Le Blanc, & Schaufeli, 2014). The positive effects of kindness interventions were replicated with diverse samples, including socially anxious individuals (Alden & Trew, 2013), preadolescents (Layous et al., 2012), and corporate employees (Chancellor, Margolis, Jacobs Bao, & Lyubomirsky, 2018). A recent meta-analysis of kindness interventions (Curry et al., 2018) concluded that engagement in prosocial behavior has small to medium effects on the benefactor, and these effects are not moderated by age, gender, or other individual characteristics.

Mediating Role of Basic Psychological Needs. All research reviewed above suggest that performing prosocial acts has desirable effects on the benefactor, leading to greater positive affect, life satisfaction,

and subjective happiness. But why? Not many studies have investigated the mediating mechanism of the association between engagement in prosocial behavior and well-being. However, most research focusing on the mediating pathways between kindness and well-being have employed the theoretical framework of self-determination (Deci & Ryan, 2000), showing that satisfaction of the basic psychological needs for autonomy, competence, and relatedness explains why prosocial behavior is conducive to positive emotions (Martela & Ryan, 2016a).

Self-determination theory (Deci & Ryan, 2000) is a major theory of human motivation which posits that individuals have three fundamental psychological needs, and need satisfaction leads to growth and well-being. In self-determination theory, psychological needs are conceptualized as "innate psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229). Three needs are involved, including need for autonomy (being free to choose and in control of one's actions), need for competence (being capable to carry out difficult tasks) and need for relatedness (being connected to others). Activities that support satisfaction of the basic psychological needs facilitate performance and well-being (Deci & Ryan, 2000; Deci et al., 2001; Sheldon & Hilpert, 2012). Consequently, if prosocial behavior is enacted in a way that leads to the satisfaction of the three basic psychological needs, then it could explain why prosocial behavior is linked to subjective well-being.

In self-determination theory (Deci & Ryan, 2000), it is assumed that engagement in a certain behavior has the potential of satisfying the needs that are most important for human flourishing, as long as the environment is an autonomy-supportive one, that is, an environment in which the person is encouraged to engage in the activity volitionally. Accordingly, the *why* of goal pursuit (motivation for action) is central in determining performance and flourishing when engaging in a certain activity. This also applies to prosocial behavior engagement. Prosocial behavior, when enacted with a sense of choice, (for autonomous reasons), may satisfy individuals' basic psychological needs and contribute to optimal

functioning. However, prosocial behavior may also be enacted for extrinsic reasons, such as gaining reputation, responding to social expectations, or from a sense of obligation to comply to social norms. In such cases, prosocial behavior may not lead to need satisfaction or positive affect (Weinstein & Ryan, 2010; also see section 1.2 for a review of previous research on autonomous prosocial motivation). However, self-determination theory also suggests that some goals may be more intrinsically satisfying than others, pointing to the fact that the *what* of goal pursuit is also important. Previous research has shown that extrinsic aspirations, such as financial success, are negatively predictive, while intrinsic aspirations, such as self-acceptance and community involvement, are positive predictive of well-being indices (Kasser & Ryan, 1993). In one study (Kasser & Ryan, 1993), participants who reported they pursue prosocial goals, such as helping others and working towards making the world a better place, showed higher well-being than participants who reported pursuing goals such as getting a well-paid job and being one's own boss. Deci and Ryan (2000) emphasize the importance of the content of one's goals, suggesting that some goals, such as community contribution, may be more intrinsically satisfying, leading to more satisfaction of basic psychological needs and flourishing. Prosocial behavior, may, thus, have high potential of being an intrinsically satisfying activity through which individuals may satisfy their basic psychological needs of autonomy, competence and relatedness.

These being said, how can engagement in autonomously-motivated prosocial behavior lead to satisfaction of each of the three basic psychological needs? First, engagement in prosocial behavior could satisfy the need for autonomy, as other-oriented behavior is enacted at the choice of the benefactor, usually as an expression of internalized personal values. In this case, autonomous motivation to engage in prosocial behavior is a prerequisite of need satisfaction. As long as individuals enact prosocial behavior in order to express their well-internalized values (with a full sense of choice), by performing prosocial behavior, they could experience self-congruence and autonomy, which in turn, promotes positive affect and satisfaction. Autonomous prosocial behavior could also promote the satisfaction of

the need for competence, because performing the behavior requires intentional effort, and succeeding in doing something that benefits another could enhance feelings of social competence. Other-oriented behavior may foster feelings of self-efficacy and usefulness (Caprara & Steca, 2005). By having a positive impact on others, individuals may feel that they have accomplished an important task, and their sense of competence may grow with the difficulty or cost of engaging in prosocial behavior. Finally, autonomously-motivated other-oriented behavior could facilitate the satisfaction of the need for relatedness, because kind behavior necessitates an interaction between the giver and the receiver, interaction which fosters a sense of closeness and connection. Helping may bring people together, deepening feelings of intimacy and relatedness, which are strong predictors of optimal functioning.

Some of the reviewed literature brings empirical evidence to support the idea that prosocial behavior, as long as it is self-organizing, leads to satisfaction of the basic psychological needs, which, in turn, promotes well-being. For example, satisfaction of all three basic psychological needs fully mediated the relationship between daily autonomous helping and well-being in a diary study, while autonomy and relatedness need satisfaction mediated the relationship between engagement in autonomous helping and well-being in three experimental studies (Weinstein & Ryan, 2010). However, in the latter experiments, competence need satisfaction had only marginally-significant indirect effects. In a kindness-based intervention, satisfaction of the needs for autonomy, competence, and relatedness independently mediated the effect of kindness with autonomy support on well-being (Nelson et al., 2015). These studies focused specifically on autonomously-motivated prosocial behavior engagement. Some other studies also revealed that engagement in prosocial behavior can lead to satisfaction of basic psychological needs, and thus, to greater well-being, although motivation behind prosocial behavior engagement was not investigated, assuming that participants engaged in prosocial behavior for autonomous reasons. For example, in an online experiment in which participants played games for food donations (Martela & Ryan, 2016a), satisfaction of the needs for autonomy and competence mediated the relationship between

engagement in prosocial behavior and positive affect, but the indirect effect of relatedness need was not significant, possibly because there was no contact with beneficiaries. In another study, global satisfaction of psychological needs (the three needs were not assessed separately) mediated the effect of prosocial spending on well-being, exclusively for individuals high in self-transcendence (Hill & Howell, 2014). In another study, Martela and Ryan (2016b) tested the mediating effect of beneficence (the feeling of making a contribution to others), and uncovered that all three basic psychological needs mediated the relationship between prosocial behavior and well-being, alongside beneficence. This study suggests an alternative explanation to why prosocial behavior promotes well-being, while bringing further evidence of the role played by satisfaction of the needs for autonomy, competence, and relatedness.

Although these studies provide support to the idea that autonomy, competence, and relatedness have independent explanatory power and significantly mediate the effect of engagement in autonomous prosocial behavior on well-being, it is important to note that in some experiments, not all needs were observed to have significant indirect effects (Martela & Ryan, 2016a; Weinstein & Ryan, 2010). This suggests that empirical evidence is still inadequate for drawing a conclusion pertaining to the independent contribution of the three basic psychological needs.

1.2 Motives behind prosocial behavior and their relationship to positive affect

Past research suggests that engagement in prosocial behavior promotes well-being by satisfying individuals' basic psychological needs (Nelson et al., 2015; Weinstein & Ryan, 2010). However, in order for prosocial behavior to be satisfying and promote well-being, it is necessary for it to be enacted for autonomous reasons. Merely engaging in other-oriented behavior is not enough for well-being boosts to be observed; an autonomy-supportive environment which fosters intrinsic motivation and enables individuals to engage in prosocial behavior via internalized values, is necessary. In other words, not all prosocial behavior is conducive to need satisfaction and positive affect. Therefore, the motivation underlying prosocial behavior plays an important role in determining whether benefactors experience positive affect by engaging in other-oriented behavior.

Self-determination theory (Deci & Ryan, 2000) emphasizes the importance of autonomous motivation in determining the degree of satisfaction derived from engaging in an activity. From the perspective of self-determination theory, behaviors vary in the degree to which they are self-determined, on a continuum from intrinsic (or autonomous) to extrinsic (or controlled) motivation, reflecting the extent to which a person has internalized the regulation of the activity. If an action is autonomously motivated (the person enacts it with a sense of choice), more satisfaction will be derived than when it is motivated by controlled, external reasons, which reduce the sense of "owning" the act (Deci & Ryan, 1985). Consequently, feeling pressured into acting prosocially, or doing so because of external social regulations and expectations that have not been integrated into one's sense of self and accepted as one's own, could lead to feeling less satisfaction and positive affect. Therefore, the extent to which motivation underlying prosocial behavior is self-determined directly influences the strength and direction of the association between prosociality and well-being.

Research supports this claim, bringing empirical evidence to show that individuals who are

motivated by external pressures to engage in prosocial behavior do not experience positive affect. First, correlational studies suggest the existence of an association between autonomously motivated prosocial behavior and well-being. For example, although no well-being measure was used, Gagné's study (2003) found that autonomy support and autonomy orientation predicted engagement in prosocial behavior and need satisfaction. Gebauer, Riketta, Broemer, and Maio, (2008) discovered that participants who help others for attainment of pleasure showed higher life satisfaction and positive affect, while participants who reported helping out of obligation, or to fulfill duty, showed higher negative affect. The role of motivation in determining whether prosocial behavior boosts well-being has also been replicated using experimental designs. In a series of experiments (Weinstein & Ryan, 2010), participants who were given the choice whether to help or not (therefore being autonomously motivated to do so) experienced more need satisfaction and positive affect after helping than participants who were told they should do so (therefore being motivated by external, controlled reasons). Similarly, in a kindness intervention (Nelson et al., 2015), simply performing kind behavior did not lead to a boost in well-being. Only when participants were provided with autonomy-supportive messages, emphasizing it is their choice to engage in kind behavior, a significant increase in need satisfaction and well-being was observed. The effects of autonomous and controlled motivation were replicated on younger samples, too. For example, Chinese preschoolers who shared a reward for autonomous (they could do so if they wanted), compared to obligated reasons (they had no choice but to do so), were found to be happier, but the difference was only marginally-significant (Wu, Zhang, Guo, & Gros-Louis, 2017). Consequently, agency is required for positive effects to be observed, while helping out of obligation might not lead to benefactors' experience of positive affect.

1.3 Prosocial behavior and well-being in different cultures

As with most research in psychology, the majority of studies investigating the effect of prosocial behavior on the well-being of the benefactor has dealt with Western, educated, industrialized, rich and democratic (WEIRD) samples (Henrich, Heine, & Norenzayan, 2010). Only some cross-cultural research has provided support for the universality of the positive effect of engagement in prosocial behavior. For example, Aknin and her colleagues have replicated the association between prosocial spending and well-being in 136 countries, and showed that spending money on others brought happiness in experiments involving participants from Canada and South Africa (Aknin et al., 2013), as well as in a small isolated rural society in Vanuatu (Aknin, Broesch, Hamlin, & Van de Vondervoort, 2015). As for the positive effect of kindness interventions on well-being, studies provided evidence from both the U.S. and Korea (Layous et al., 2013; Nelson et al., 2015; Shin, Layous, Choi, Na, & Lyubomirsky, 2019), from Japan (Otake et al., 2006), and from Spain (Chancellor et al., 2018). Other studies employing Chinese samples showed that volunteering promotes physical functioning and inhibits depression for elderly Taiwanese (Li, Chen, & Chen, 2013), that recalling past prosocial behavior increases vitality and boosts positive mood (Guo, Wu, & Li, 2018), and that charitable behavior is associated with both hedonic and eudaimonic well-being, this relationship being mediated by relatedness need satisfaction (Jiang, Zeng, Zhang, & Wang, 2016). However, in the latter study, satisfaction of the needs for autonomy and competence were not measured, so it remains unclear whether all three basic psychological needs have significant mediating effects in non-Western cultural contexts.

As reviewed above, research on the positive effects of engagement in prosocial behavior beyond the Western world has yet to be extensively investigated. In particular, cross-cultural research that compares the effect of prosocial behavior on affect in different cultures is limited, and so is research testing the mediating effect of satisfaction of basic psychological needs.

Agency and Obligation in Different Cultures. Past studies have concluded that agency is an important determining factor of individual well-being, while obligation has detrimental effects (Weinstein & Ryan, 2010). However, what is perceived as agentic or obligatory might differ by culture. Personal choice is the core element of agency, but is the lack of choice synonymous to obligation, and are social expectations obliging and coercive, as Western psychology would have it? In support of the idea that being given a choice is an important foundation of well-being, research on self-concordant individuals offers evidence that people who pursue life goals reflecting their personal choices rather than goals controlled by external forces exhibit higher well-being, regardless of their cultural background (Sheldon et al., 2004). However, lack of personal choice has a negative relationship with performance and well-being for people of individualistic Western cultures (Gebauer et al., 2008; Weinstein & Ryan, 2010). In contrast, in collectivistic cultures in which people strive to fulfill the wishes of important members of the group, responding to other people's expectations is not perceived as obligatory, and having a choice is less important (Buchtel et al., 2018; Janoff-Bulman & Leggatt, 2002; Miller, Das, & Chakravarthy, 2011; Miller, Goyal, & Wice, 2017). For example, comparing Euro-Americans to Asian-Americans, the former showed high intrinsic motivation and performance when choosing the task by themselves, while the latter performed better when choices were made by a significant other, such as their mother or ingroup peer (Iyengar & Lepper, 1999). More recently, Tripathi, Cervone, and Savani (2018) found that Indians prefer messages invoking obligations to autonomy-supportive motivational cues, performing better and exhibiting higher motivation when having to engage in a task because it was expected of them, a pattern opposite to that of Euro-American participants. Together, these results challenge the idea that lack of personal choice has a negative effect on performance, satisfaction, and affect in Asian cultures.

The above studies focused on task performance, a domain which, unlike prosocial behavior, incorporates fewer moral values and standards considering duties and obligations. How does agency and obligation relate to satisfaction across cultures when it comes to engagement in prosocial behavior?

Research brings evidence that feeling obligated to help someone else does not undermine satisfaction derived from fulfilling that obligation in some cultures. First, compared to Westerners, those from collectivistic cultures perceive greater moral obligation to help someone in need (Baron & Miller, 2000; Janoff-Bulman & Leggatt, 2002). However, they also feel more sense of choice when fulfilling their obligation (Miller et al., 2011), having higher desire to act in accordance with it, and deriving more satisfaction as a result (Janoff-Bulman & Leggatt, 2002). In one study comparing the responses of Americans and Brazilians to various scenarios in which they had the opportunity to engage in prosocial behavior, Brazilians reported higher intention of doing what was expected of them, and reported they would feel more satisfaction from meeting those expectations (Bontempo & Lobel, 1990). Similarly, in another study investigating individuals' responses to helping scenarios (Janoff-Bulman & Leggatt, 2002), Latino-Americans reported they feel more obligation (*should*) and more desire (*want*) to help acquaintances (distant family and friends), than their Anglo-American counterparts. Furthermore, while desire to help was associated with life satisfaction in both cultural groups, sense of obligation (should) predicted life satisfaction only for Latino-Americans. However, there were no significant differences in the responses of the two cultural groups for the scenarios involving close family and friends, suggesting that both Anglo-Americans and Latino-Americans had internalized their obligation to help close others to the same degree. Similar results were obtained when comparing Euro-Americans to Asians. For example, Miller and her colleagues (Miller et al., 2011) showed that compared to Americans, who exhibited less sense of personal choice and satisfaction when helping someone was strongly expected, there were no differences in the degree of satisfaction and choice felt by Indians in strongly versus weakly expected helping cases. Furthermore, when comparing parents' and children's views of agency in India and the U.S. (Goyal, Wice, Aladro, Kallberg-Shroff, & Miller, 2019), Indian parents and children shared a view of agency being compatible with social expectations, while their American counterparts viewed social expectations to be in conflict with agency. In this study, it was suggested that the greater

compatibility between meeting expectations and agency might be culturally educated, as an analysis of Indian and American children's books revealed that negative emotions were associated with behaviors that were socially expected only in American, but not in Indian books (Goyal et al., 2019). Therefore, social expectations might be more fully internalized by Indians than Americans. In another study, an obligation-motivated benefactor was judged more negatively by Westerners than participants from Confucian heritage cultures, who revealed higher congruence between their agentic and obligated motivations to help, and associated positive emotions with fulfilling their obligations (Buchtel et al., 2018). Together, these results suggest that, compared to Westerners, individuals from collectivistic cultures experience more obligation to help others, more sense of choice when doing so, and derive more satisfaction from fulfilling those obligations.

The above cross-cultural studies reveal that Asian and Latino participants feel autonomous when acting in accordance with social expectations, while social expectations decrease Westerners' satisfaction and sense of agency (Chirkov, Ryan, & Kim, 2003; Miller et al., 2011). How can this be explained from the perspective of self-determination theory (Deci & Ryan, 2000)? Even though most Western participants experience social expectations as controlled (extrinsic) reasons, individuals from cultures that moralize behaving dutifully feel choice and satisfaction when fulfilling these social obligations, and therefore, might not experience them as controlling. Self-determination theory suggests that fulfilling role-related obligations can be experienced in an agentic way (Chirkov et al., 2003). Although in Western folk psychology, social expectations are conceptualized as coercive, limiting individual autonomy, for individuals from collectivistic cultures in which duty-based moral reasoning is prevalent, social expectations are internalized, therefore, not heteronomous (Miller, Goyal, et al., 2017).

Duty-Based Versus Autonomy-Based Moral Reasoning. Research reviewed above concludes that individuals from collectivistic cultures internalize obligations to help others more than Westerners do.

However, what is the reason behind these cultural differences? Miller (1997) makes a distinction between Western conceptualization of duty and the Indian concept o*f dharma*. For Westerners, duty is conceptualized as constraining and artificial, compelling individuals to engage in action they would not engage in spontaneously. The self is seen as separate and in opposition to the surroundings, and fulfilling role-based obligations, unnatural. In contrast, *dharma*, the Indian concept of moral duty and right action, portraits duty as congruent with individual nature and agency. While from the Western cultural viewpoint, working for the benefit of others is an unnatural social obligation which constrains individuals' sense of agency and freedom (Becker, 1980), *dharma* is the expression of the congruence between individual choice and social expectation. An action governed by *dharma* can be motivated endogenously and exogenously at the same time (O'Flaherty & Derrett, 1978), and fulfilling one's duty can be personally satisfying. Consequently, Indians might internalize social obligations more than Westerners, due to a culturally-determined conceptualization of moral duty as congruent with human agency.

Another explanation, proposed by Buchtel and her collaborators (Buchtel et al., 2018), distinguishes between Western European post-Kantian moral philosophy and Confucian Role Ethics. In Kantian philosophy, autonomy plays a central role, as moral action must be free from external coercion and determined by individual choice. Humans are considered to be complete, free beings, and their wills independent of the will of others. The autonomy of the will lies at the basis of morality, so action based on reasons other than one's will (such as interests and incentives) leads to heteronomy, which is incompatible with moral action, autonomy, and freedom (Bacin & Sensen, 2018). On the other hand, fulfilling role-defined obligations is virtue in Confucian Role Ethics (Rosemont & Ames, 2016). Although Confucius does not see social responsibilities as freely chosen, freedom can be achieved only when wanting to fulfil one's responsibilities. Personal cultivation in Confucianism is not only meeting social expectations, but wanting to do so, and feeling joy when meeting them (Rosemont, 2015). Therefore, in Confucianism, meeting social responsibilities can be an expression of agency as long as

individuals want to do what should be done. From the Confucian Role Ethics point of view, responding to social expectations does not undermine intrinsic motivation, as actors can be motivated both by agency and by duty, thus being *willingly obliged* (Buchtel et al., 2018).

Both the Indian concept of *dharma* and Confucian Role Ethics develop moral reasoning patterns focused on duty, role-fulfillment, and obligation, while the focus of Western thought on the promotion of freedom from exterior constraints can be traced back to a type of moral reasoning in which rights, freedom, and autonomy are key concepts. Moral reasoning, and therefore, the values and concepts used in moral judgement differs across cultures (Graham et al., 2013; Haidt, 2008; Shweder, Much, Mahapatra, & Park, 1997). Therefore, what people from different cultures consider to be moral could shape their reasons to engage in prosocial behavior and determine the degree of satisfaction derived from doing so.

1.4 Issues in previous research

Some unresolved issues can be pointed out to the research reviewed so far. First, the lack of cross-cultural studies investigating the role of satisfaction of basic psychological needs on the association between autonomous prosocial behavior engagement and well-being is yet to be addressed. Second, reinterpreting the meaning of social obligation in the light of cross-cultural findings and integrating these findings in the framework of self-determination theory is necessary. Third, more clarification is needed concerning the role played by the relationship between benefactor and beneficiary. Fourth, exploring how moral reasoning shapes motivation to engage in prosocial behavior and satisfaction derived from doing so requires further investigation. Each of these issues is discussed in detail below.

Clarifying the Mediating Mechanism. Although scarce, cross-cultural research on the effect of prosocial behavior enactment suggests that the relationship between kindness and well-being might be universal, and so could the mediating effect of satisfaction of the need for relatedness (Jiang et al., 2016). However, there is not enough evidence to conclude that the needs for autonomy and competence have significant indirect effects. Does engagement in prosocial behavior lead to a sense of competence and autonomy in Asian cultures, too? As there are no studies comparing the explanatory power of the three basic psychological needs across cultures, it is difficult to draw a conclusion concerning their mediating effects. Future research should clarify whether satisfaction of the needs for autonomy, competence, and relatedness functions similarly across cultures or not.

Obligation Not Incompatible with Agency: Review of Self-Determination Measures. While most Western research conceptualize exterior pressures and social expectations as diminishing self-determination and satisfaction, obligation is not viewed as incompatible with agency in collectivistic

cultures (Buchtel et al., 2018; Janoff-Bulman & Leggatt, 2002; Miller, Goyal, et al., 2017), where individuals may be motivated both by personal will and social expectations at the same time. Although self-determination theory proposes that social expectations can be experienced in agentic ways as long as they are internalized (Chirkov et al., 2003), in some research, social expectations are placed at the opposite end of autonomy on the self-determination continuum. For example, items such as "I am pursuing this goal because other people expect me to" are scored as controlled items (Jiang & Gore, 2016). Furthermore, the Relative Autonomy Index (RAI; e.g. Grolnick & Ryan, 1989), which calculates a relative index of autonomy by subtracting controlled reasons (including meeting social expectations) from more autonomous reasons (interest) is still being used in research. Considering that meeting social expectations is not perceived as coercive and limiting personal choice by participants with collectivistic cultural backgrounds (e.g. Goyal et al., 2019), aggregated self-determination measures such as RAI should be used with caution in cross-cultural studies, as these measures cannot distinguish between individuals who internalize their role-related obligations (feeling both high obligation and high agency), and individuals who just comply to social obligations without endorsing them (high obligation but low agency). In future cross-cultural research, new measures of self-determination that are capable of capturing this distinction are neccesary.

Role of Relationship with Beneficiary. Research on the effects of social expectation to help across cultures has shown that doing what one is expected to do reduces satisfaction and sense of choice in Western cultures, but not in collectivistic cultures, as collectivistic individuals have internalized social expectation to a higher degree (Buchtel et al., 2018; Goyal et al., 2019; Miller et al., 2011). However, some studies suggest that the relationship between beneficiary and benefactor must be taken into account when discussing these cultural differences (Janoff-Bulman & Leggatt, 2002). For example, while both Westerners and collectivists (Indians, Latino) perceive they are obligated to help close friends and family,

only the latter report a sense of obligation to help strangers (Baron & Miller, 2000; Janoff-Bulman & Leggatt, 2002), and life satisfaction is associated with perceived obligation to help distant others only for the latter (Janoff-Bulman & Leggatt, 2002). These studies suggest that individualists and collectivists internalize their obligations to help close others to the same degree, but collectivists internalize social obligations to help distant others more. However, in Miller et al. (2011), cultural differences between Americans and Indians emerged even when the beneficiary was a close family member or friend. As more recent research (e.g. Buchtel et al., 2018) did not focus on the relationship between benefactor and target, future work needs to clarify whether cultural differences in the degree of internalization of social expectations to help exist only when the beneficiary is a distant other.

Moral Reasoning and Obligation in Different Cultures. Another issue that remains to be probed empirically is that of why cultural differences in the perception of social obligation exist. Explanations based on differences in moral reasoning across cultures have been proposed (Buchtel et al., 2018; Miller, 1997), but no empirical evidence has been demonstrated to support these claims. If the greater congruence between what should be done and what one wants to do in collectivistic cultures is due to greater endorsement of duty-based moral reasoning, then the degree to which people endorse moral views such as *dharma* or Confucian Role Ethics should explain away the cultural differences observed. However, until now, no studies have actually measured individuals' endorsement of a duty-based morality, so future research should address this gap and investigate how morality shapes motivation to engage in prosocial behavior and satisfaction derived from doing so in different cultures. Furthermore, neither the concept of *dharma*, nor Confucian Role Ethics can explain the higher congruence between agency and obligation observed among Brazilians (Bontempo & Lobel, 1990) and Latino-Americans (Janoff-Bulman & Leggatt, 2002), as the prevalent moral philosophical tradition in these cultures is mainly influenced by Western-European thought. Consequently, the role played by moral reasoning in

determining motivation for people from Latin-America needs to be addressed in future research, alongside other possible explanatory cultural factors.

1.5 Overview of the current research

Purpose of Research. This research aims to investigate the association between engagement in prosocial behavior and benefactors' positive affect from a cross-cultural perspective. Building on the theoretical framework of self-determination theory (Deci & Ryan, 2000), it focuses on the mediating (basic psychological need satisfaction) and moderating (motivation to engage in prosocial behavior) factors of the association between prosocial behavior and positive affect, interpreting findings from the perspective of cultural psychology.

First, as an explanatory mechanism, satisfaction of the basic psychological needs for autonomy, competence, and relatedness (Sheldon & Hilpert, 2012) is investigated, and the hypothesis that autonomous prosocial behavior enhances positive affect because it satisfies individuals' basic psychological needs, regardless of their cultural background, will be put to test. In addition, the moderating effect of benefactors' motivation to help on the relationship between prosocial behavior engagement and positive affect is investigated. More specifically, this research focuses on the role of social expectations to act prosocially, making the claim that social expectations hinder benefactors' autonomous prosocial behavior and, thus, experiencing positive affect, and that culture moderates the strength of this association. In line with previous research (e.g. Buchtel et al., 2018), it was hypothesized that social expectations inhibit autonomous motivation to engage in prosocial behavior, satisfaction of basic psychological needs, and positive affect only in independent cultures, but not in interdependent cultures in which individuals tend to internalize the expectations of others to a higher degree.

Cultural Background of the Three Cultures Compared. This study targets participants from three cultures that have rarely been included together in cross-cultural research: Japan, Romania, and the United States. Before presenting the details of the studies comprising the current research, the cultural

background of these three nations should be discussed.

In this study, it is hypothesized that the cultural moderation effects could be interpreted from the perspective of independence/interdependence. Markus and Kitayama (1991) forward that culture influences the self-construal of individuals, and that people from Western cultures have an independent self-construal, while people from Asian cultures have an interdependent self-construal. Independent individuals construe their selves as separated from others, being organized in an autonomous, distinctive whole with unique qualities. In contrast, interdependent individuals construe their selves as being connected to others and complete only when cast in a specific relationship. The authors bring evidence in support of the claim that cultural self-construals impact motivation, cognition, and emotion (Markus & Kitayama, 1991).

Self-construal is relevant to the current research, as it shapes the factors that are most contributive to subjective well-being, as well as the way individuals interact with their significant others. First, considering the predictors of well-being, self-esteem was shown to be a better predictor of life satisfaction than relationship harmony in independent cultures (U.S.), but not in interdependent cultures (Hong-Kong), where self-esteem and relationship harmony had equal importance (Kwan, Bond, & Singelis, 1997). Similarly, Kitayama and colleagues revealed that the strongest predictors of health and psychological well-being differ between independent and interdependent individuals (Kitayama, Karasawa, Curhan, Ryff, & Markus, 2010). More specifically, personal control was the strongest predictor of well-being in independent cultures (U.S.), while lack of relationship strain was the strongest predictor in interdependent cultures (Japan). These studies point out the importance of self-related goals for independent individuals and relationship-related goals for interdependent individuals. Furthermore, the way people interact with others, and the influence others have on the self differ between independent and interdependent cultures. For example, pursuing goals to meet the expectations of significant others is related to subjective well-being for interdependent (Asian-Americans) but not independent individuals

(Euro-Americans), for which pursuing goals for fun and enjoyment is more important (Oishi & Diener, 2001). Also, reading others' minds and responding to their expectations is considered to be more central in interdependent cultures (Markus & Kitayama, 1991). Considering these findings, cultural self-construal could shape the reasons why people engage in prosocial behavior, and satisfaction derived from meeting other people's expectations to behave prosocially.

Self-construal is found to be associated to other two major cultural dimensions, such as individualism/collectivism (Hofstede, Hofstede, & Minkov, 2010) and tightness/looseness (Gelfand et al., 2011). Individualism/collectivism is one of the six cultural dimensions (alongside uncertainty avoidance, power distance, masculinity, short term orientation, and indulgence) proposed by Geert Hofstede to understand cultural differences (Hofstede, 1980). An individualistic culture is one in which individuals have weak ties with others, while a collectivistic culture is one in which people are considered to be part of a larger group which defends their interests in exchange for loyalty. Cultural individualism/collectivism tends to be related to individuals' self-construal, people from individualistic cultures having an independent self, while people from collectivistic cultures have an interdependent self. However, individualism/collectivism is usually used to describe cultures, while self-construal is used to describe individuals (Cross, Hardin, & Gercek-Swing, 2011). The other cultural dimension is tightness, which refers to the strength of social norms and tolerance toward deviations from them (Gelfand, Nishii, & Raver, 2006). Tight societies could have stronger rules and sanctions concerning prosocial behavior, leading people in these cultures to being more sensitive to the social expectations of others concerning whether and how to help. Self-construal is moderately related to cultural tightness, people in tight societies tending to have an interdependent self-construal (Carpenter, 2000). However, tightness has discriminant validity, being distinguishable from collectivism and interdependence (Gelfand et al., 2011). The three cultures investigated in this study are assumed to differ in independence/interdependence, as well as in cultural values such as individualism/collectivism and tightness/looseness. The relative

position of each culture on these dimensions, as well as the particularities of each sample, are discussed in detail below.

The cultural background of Japan. In the classical article describing cultural self-construal theory, many examples of the expression of interdependent self-construal are provided from the Japanese society (Markus & Kitayama, 1991). In fact, most research on cultural self-construal that followed compared Japan to the United States, on the assumption that Japanese are more interdependent, and Americans, more independent, and these differences in self-construal explain cultural differences in cognition, emotion, motivation, and behavior (Kitayama et al., 2010; Morling, Kitayama, & Miyamoto, 2002). As for the Japanese culture, research reveals that it is less individualistic than the United States (Hofstede, 1980; Hofstede et al., 2010; Oyserman, Coon, & Kemmelmeier, 2002), and tighter than the U.S. (Gelfand et al., 2011; Uz, 2015). Accordingly, Japanese people may care less about uniqueness, preferring dependence, and may also be more prone to following strict norms concerning social relationships.

Of relevance to the current research, three characteristics of interpersonal relationships in Japan are discussed. The first one is the importance of relationship harmony for individuals' well-being. Fitting in, belonging, a sense of relatedness and the ability to adjust oneself in order to maintain good relationships with others is of central importance for the well-being of Japanese (Kitayama et al., 2010; Kitayama, Markus, & Kurokawa, 2000; Morling et al., 2002). Prosocial behavior may be a way through which to enhance current relationships and promote closeness, but only when it is perceived to be needed and situationally appropriate (Morling, Uchida, & Frentrup, 2015). This particularity is related to another characteristic of interpersonal relationships in Japan: relational concerns and indebtedness (*oime*). Compared to Americans and Indians, Japanese have more negative views of social support, emphasizing the burden one places on others when asking for support and the great relational concerns associated with support giving (Miller, Akiyama, & Kapadia, 2017). This can be explained by the fact that Japanese

are prone to experiencing indebtedness when being offered social support (Hitokoto, 2016). In fact, Japanese perceive indebtedness to be even more unpleasant than general negative emotions such as anger or sadness (Markus & Kitayama, 1991). When it comes to support offering, Japanese may be especially sensitive to others' needs, and offer help only when it is truly needed, in order not to offend the other person or cause indebtedness. Previous research has shown that compared to Americans, situation severity and need was more strongly associated to positive perceptions of social support in Japan (Morling et al., 2015). Accordingly, Japanese helpers may have to be very attentive to others' needs and make sure that the help they offer does not create an unwanted debt. And doing so requires the capacity to infer others' mental states and understand what their needs and wishes are. This is the third important characteristic of interpersonal relationships in Japan: mind-reading (Markus, 2016). While in independent cultures using direct communication and saying what's on one's mind is the norm, in interdependent cultures such as Japan, reading other people's minds and adjusting one's behavior to these unspoken expectations is more important (Markus & Kitayama, 1991). The Japanese style of communication is focused not on the sender, but on the receiver (Yum, 1988), whose role is to guess the thoughts of the sender and accommodate their needs, without having to make the sender say what they want directly (Lebra, 1976). Therefore, Japanese are motivated to meet other people's expectations in order to maintain harmonious interpersonal relationships based on reciprocity.

The cultural background of the United States. The United States has been considered a highly individualistic (Hofstede et al., 2010) and moderately loose culture (Gelfand et al., 2011), and has been included in numerous cross-cultural comparisons as a representative of the independent self-construal (Kitayama et al., 2000; Markus & Kitayama, 1991; Morling et al., 2002). Previous cross-cultural research has brought evidence for the existence of significant differences in cognition, emotion, motivation and behavior between Americans and Japanese (Markus & Kitayama, 1991). First, unlike Japanese, for whom fitting in is the plays an important role, Americans are motivated to maintain an image of

themselves as independent, autonomous, and unique individuals. Failing at the task of separating from others is a nightmare that contrasts with the nightmare of Japanese, which is being excluded from one's group (Lebra, 1976). Accordingly, people from the U.S. consider that their behavior is determined by internal aspects such as values and preferences, and tend to reject influence from others. Lack of personal control is a strong predictor of ill-being in the U.S., unlike Japan, where relationship strain has more negative consequences (Kitayama et al., 2010). The importance of independence is also expressed in the domain on moral behavior, as participants from the U.S. tend to treat moral issues such as helping in terms of personal choice, and much less in terms of social obligations (Miller, 1997; Miller et al., 2011). U.S. participants also tend to see support-givers as acting more out of a sense of free will and less out of obligation (Morling et al., 2015). Another characteristic that is contrastive to that of Japanese is the direct style of communication used. In the U.S. individuals are expected to have their own wishes and preferences, so people have to express them in a direct manner if they want others to attend to them (Markus & Kitayama, 1991; Yum, 1988). Overall, for Americans, personal control, choice and independence are crucial aspects of well-being and self-esteem, which influence the way they interact with others.

The cultural background of Romania. Unlike Japan and the United States, which have been so often included in cross-cultural comparisons that interdependence has been equated to the Japanese culture, while independence, with the American one (Matsumoto, 1999), fewer studies have investigated the self-construal of Romanians. One study (Gavreliuc & Ciobotă, 2013) pointed out that young Romanians may have an ambivalent self-concept, which mixes independent (self-reliance and uniqueness) and interdependent aspects (inclusion). The same study also showed strong rejection of external influences, which, together with the high importance given to self-reliance, suggests that young Romanians consider that their lives are not influenced by anyone other than themselves (Voicu, 2001). Another study replicated the relative importance of independent versus interdependent aspects of the self

on a sample of Romanian mothers (Benga, Susa-Erdogan, Friedlmeier, Corapci, & Romonti, 2019). However, one important limitation of these studies is that they did not compare the scores of Romanians to representatives of other cultures in order to evaluate their relative position. The limited evidence gathered so far suggests that Romanians might have a relatively more independent than interdependent self-construal, being more similar to American, than to Japanese participants.

As for the position of Romania on the individualism/collectivism, as well as on the tightness/looseness axes, some research suggest that Romania is the most collectivistic of the three cultures (Hofstede et al., 2010), while in more recent studies, using younger, educated populations (Stamkou et al., 2019), Romania is positioned more to the individualistic end of the individualism/collectivism continuum, being more individualistic than Japan (and, in this study, more so than the United States). The latter study also suggests that Romania is the loosest among the three cultures. Considering the scarcity of cross-cultural research directly comparing these three cultures, making strong predictions about the position of Romanian participants relative to their American and Japanese counterparts is difficult. However, based on the evidence available, it is expected that Romanians would behave more independently than Japanese, but would not differ greatly from Americans.

Overview of Research. In 3 studies, employing correlational (Study 1, 2) and experimental designs (Study 3), and sampling both university students (Study 2a) and adults (Study 1, 2b, 3) from Japan and the U.S. (Study 1, 2, 3), as well as Romania (Study 1, 2a), empirical evidence in response to the following research question was brought.

RQ: Is obligation to engage in prosocial behavior experienced differently across cultures, and does it influence the degree of need satisfaction and positive affect derived from prosocial behavior engagement differently?

Chapter 2 presents the results of Study 1, which tested the main hypothesis that engagement in prosocial behavior promotes the experience of positive affect through satisfaction of basic psychological needs. In Chapter 3, the results of Study 2 are presented. Study 2 focused on the role of social expectations to engage in prosocial behavior, and revealed their contrasting effects on need satisfaction and affect depending on culture. Japanese showed a stronger positive relationship between perceived social expectations to help a distant target and positive affect than Romanians (Study 2a) and Americans (Study 2b). Furthermore, perceiving the existence of social expectations reduced satisfaction of the need for autonomy, and thus, positive affect, in the U.S., but it led to more satisfaction of the need for competence, and more positive affect, in Japan (Study 2b). Chapter 4 describes the results of Study 3. In Study 3, social expectations to help were manipulated, and engagement in actual prosocial behavior toward a distant target was investigated. Results showed that the negative effect of recalling an instance of requested (expected) helping on positive affect was significantly stronger for Americans than for Japanese (Study 3a). Furthermore, when help was explicitly expected, Americans made less prosocial effort, while Japanese tended to make more (Study 3b). In Chapter 5, the results of these three studies are discussed, drawing conclusions pertaining to its theoretical and practical implications, as well as directions for future research.

This study aims to provide a more elaborated image of the relationship between prosocial behavior and the well-being of the benefactor, suggesting the importance of situational factors (e.g. the existence of social expectations), and the moderating role of culture (Figure 1.1).

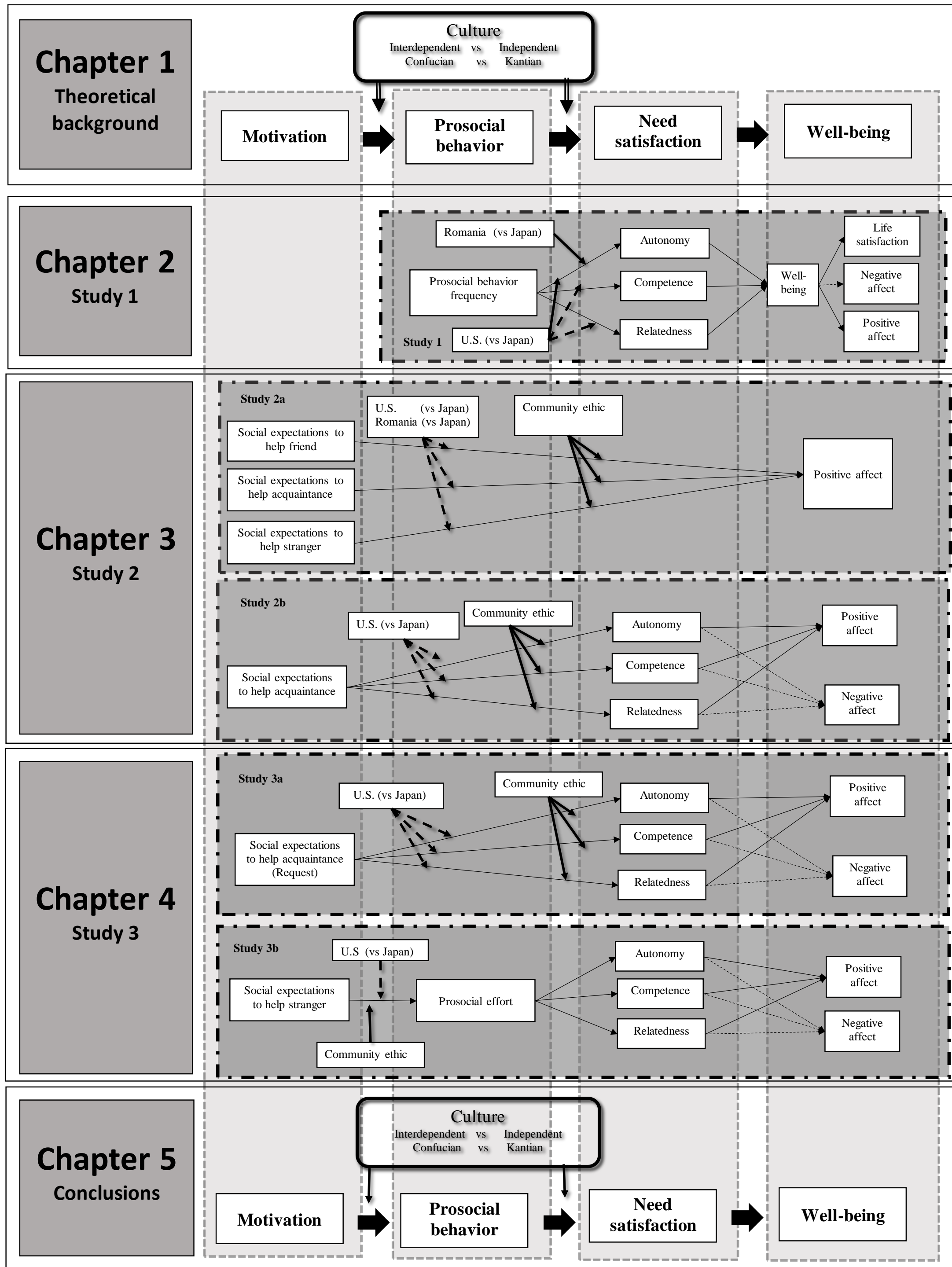

Figure 1.1. The structure of the dissertation and the hypothesized relationships between main research variables. Solid lines represent positive associations. Dotted lines represent negative associations.

The chapters of this dissertation have been comprised of the following articles:

Chapter 1

Gherghel, C., & Takai, J. (2019). Prosocial behavior and well-being in different cultures. *Bulletin of the Graduate School of Education and Human Development, Nagoya University (Psychology and Human Development Sciences)*, 66, 17-30, http://dx.doi.org/10.18999/nupsych.66.1.3

Chapter 2

Gherghel, C., Nastas, D., Hashimoto, T., & Takai, J. (2019). The relationship between frequency of performing acts of kindness and subjective well-being: A mediation model in three cultures. *Current Psychology*, Advance online publication. doi: 10.1007/s12144-019-00391-x

Chapter 3

Gherghel, C., Nastas, D., Hashimoto, T., Takai, J. & Cargile, A.C. (2020). Culture, morality, and the effect of prosocial behavior motivation on positive affect. *Ethics and Behavior*, *30*(2), 126-149. doi:10.1080/10508422.2019.1651651.

Gherghel, C., Hashimoto, T., & Takai, J. (2020). Culture moderates the association between social expectations to help and positive affect. *The Japanese Journal of Experimental Social Psychology*, *60*(1), 56-60. doi: 10.2130/jjesp.1917

Chapter 4

Gherghel, C., & Nastas, D. (under review). Obligated yet happy to help? The moderating role of culture and morality. *Asian Journal of Social Psychology*.

Chapter 2 Prosocial Behavior Engagement and Well-Being

Previous research has shown that engagement in autonomous prosocial behavior promotes well-being through satisfaction of basic psychological needs (e.g. Martela & Ryan, 2016a; Nelson et al., 2015), but only a few studies have investigated this relationship beyond the Western world (see Aknin et al., 2013; Aknin, Broesch, Hamlin, & Van de Vondervoort, 2015; Jiang, Zeng, Zhang, & Wang, 2016). Study 1 aims to replicate the positive association between prosocial behavior enactment and subjective well-being cross-culturally, and to explore whether the paths through which prosocial behavior leads to higher well-being levels are the same or differ between cultures.

In this research, the definition of subjective well-being proposed by Ed Diener (Diener, 1994), which identifies life satisfaction, positive affect, and lack of unpleasant affect as its primary components, is employed. Respondents from three countries (Japan, Romania, and the United States) were sampled. These three countries are known to differ in independence/interdependence (Markus & Kitayama, 1991). Japanese are considered to be mostly interdependent, and Americans, mostly independent, while the self-concept of Romanians is ambivalent, merging both independent (self-reliance) and interdependent (inclusion) aspects (Gavreliuc & Ciobotă, 2013). Past research suggests that positive life outcomes are achieved through culturally distinct pathways (Kitayama et al., 2010; Kwan et al., 1997), so Study 1 aims to explore whether the effect of prosocial behavior enactment on well-being differs between cultures.

Two studies were conducted. In Study 1a, the validity of a newly devised short questionnaire measuring frequency of performing prosocial acts is probed, and in Study 1b, the mediating mechanism of the relationship between performing acts of kindness and well-being is investigated across three cultures.

2.1 Study 1a - Prosocial behavior engagement frequency and well-being

The purpose of Study 1a is to devise a short questionnaire measuring frequency of performing acts of kindness, and to investigate its convergent validity. The most commonly used scale measuring prosocial tendencies is the Self-Report Altruism Scale (Rushton, Chrisjohn, & Fekken, 1981), which has been devised in Canada, most likely based on Canadian assumptions for altruistic behavior. However, some items of this scale are culturally inappropriate for Japanese (e.g. "I have bought charity Christmas cards deliberately because I knew it was a good cause"). In an attempt to tackle the cultural mismatch issue of the Self-Report Altruism Scale, Oda and colleagues (Oda et al., 2013) made some modifications to the scale. While these researchers aimed to use the scales on their respective cultures, this research involves cross-cultural comparison, hence a scale that would be unbiased across Japanese, U.S., and Romanian cultures is necessary. In order to make sure that the prosocial behavior scale is valid for this research, the contents of the scale were adjusted so that it would be suitable to all three cultures to be examined. In effect, the purpose of Study 1a is to construct a derived etic measure (Berry, 1989) of prosocial behavior to allow comparison across the cultures of concern.

To test the convergent validity of the newly constructed scale, its associations with the emotional component of empathy, social value orientation, and subjective well-being, were investigated. Study 1a hypotheses are presented below.

H1: Engagement in prosocial behavior is positively associated with affective empathy.

H2: Engagement in prosocial behavior is positively associated with prosocial value orientation.

H3: Engagement in prosocial behavior is positively associated with subjective well-being.

First, it is expected that prosocial behavior is positively associated with affective empathy (H1). It is widely known that situational empathic concern for the victim increases one's willingness to help. Dispositional affective empathy (individuals' tendency to experience empathy for others in need), is also

associated with helping, as people who are more emphatic feel situational empathy more easily, which in turn promotes prosocial behavior toward the target (Davis, 2015).

The second hypothesis is that prosocial behavior is related to prosocial value orientation (H2). Social value orientation reflects the relative weight that individuals assign to their own and others' outcomes in interdependent decision-making settings. In the social value orientation framework, individuals who maximize other's welfare, alongside their own, are considered cooperators, or prosocials. Past research has shown that cooperators offer more of their time to volunteer, thus suggesting that prosocial value orientation is predictive of prosocial behavior beyond interdependent decision making settings (McClintock & Allison, 1989). Therefore, it is expected that people who make cooperative choices in a resource allocation situation report higher frequency of past prosocial behavior.

Third, it was hypothesized that engagement in prosocial behavior positively correlates with the subjective well-being of the benefactor, as previous research has shown that engagement in prosocial behavior such as volunteering (Meier & Stutzer, 2008) or performing small acts of kindness (Layous, Nelson, Kurtz, & Lyubomirsky, 2017) is associated with positive affect and life satisfaction.

Method

Participants. American and Japanese participants were recruited through crowd-work platforms (233 American participants completed the survey on Amazon Mechanical Turk, and 172 Japanese participants completed the survey on Lancers) in exchange for a small monetary payment. Romanian participants were sampled from working adults enrolled in a distance-learning university program, and 136 participants completed the survey in exchange for course credits. From the initial participants who completed the survey, we eliminated participants who failed attention checks (see the Materials and Procedures section), participants who withdrew their informed consent, participants who were not U.S.

citizens, Japanese, or native speakers of Romanian, and participants who responded to the survey in less than 3 minutes, resulting in a final sample of 145 American participants (87 males, 58 females, M_{age} = 36.33, SD = 11.02, 60.68% were Euro-Americans, 66.20% had a undergraduate degree or higher), 167 Japanese participants (88 males, 78 females, 1 unknown, M_{age} = 40.12, SD = 8.74, 56.28% had a undergraduate degree or higher) and 127 Romanian participants (18 males, 107 females, 2 unknown, M_{age} = 29.42, SD = 8.96, 49.60% had a undergraduate degree or higher). Japanese participants were significantly older than Americans, who were significantly older than the Romanians ($F(2, 435) = 44.94$, $p < .001$). Gender ($\chi^2(2) = 64.89$, $p < .001$) and education (holding a undergraduate degree or not; $\chi^2(2) = 7.84$, $p = .019$) distributions also differed between cultures. Therefore, age, gender, and education were controlled for in subsequent analyses.

Materials and Procedures. Participants responded to the survey online. The items of each questionnaire were presented in random order.

Demographics. Participants provided information on gender (male, female, other), age, education (1 = never attended college, 2 = some college, 3 = currently a college student, 4 = holding an undergraduate degree or higher), citizenship and ethnicity (in the U.S.), whether they are native Japanese or not (in Japan), and whether they are native speakers of Romanian or not (in Romania).

Kindness Frequency Questionnaire. To measure prosocial behavior frequency, a short questionnaire depicting small acts of kindness was created, and participants were asked to evaluate the frequency at which they had done those behaviors during the past month. Items were selected from the Self-Report Altruism Scale (Rushton et al., 1981), and the Japanese version of the Self-Report Altruism Scale Distinguished by Recipient (Oda et al., 2013). The chosen items had to meet the following requirements: are simple kind behaviors one could enact in a kindness-based happiness-increasing intervention, are culturally universal (at least valid for the three cultures compared: U.S., Romania, and

Japan), are appropriate for all participants (for example, items involving driving a car were avoided, as some participants might not have a driver's license), and are appropriate for student and non-student samples (thus, references to university attendance were avoided). The following behaviors were included: 1) offering objects; 2) lending objects; 3) counselling; 4) teaching; 5) doing something in someone else's place; 6) holding things; 7) giving directions; 8) helping with work or school; and 9) accompanying someone. The final scale contained 9 items, such as: "I have offered food or objects to someone" (see Table 2.1; for the translations of the questionnaire, see Appendix A). Frequency of conducting prosocial behavior was measured on a Likert-type scale from 1 to 5, using the same labels as in the Rushton et al., (1981) and Oda et al., (2013) studies: 1= never, 2 = once, 3 = a few times, 4 = often, 5 = very often. The following instructions were used: *Choose the answer that conforms to the frequency with which you have carried out the following behaviors during the last month. However, please exclude cases in which you have carried out these behaviors as part of your job or other public function, or for which you received monetary rewards.* In order to eliminate cases in which participants engaged in prosocial behavior out of obligation (for example, a person that works as a teacher may frequently teach someone, because it is their job, and not out of kindness), participants were asked not to think of situations in which they engaged in the behavior for extrinsic reasons. A time period of one month was specified, to avoid ceiling effects. Accordingly, participants had to evaluate how often they had carried out each described prosocial behavior in the previous month, on a scale from 1 (never) to 5 (very often).

Social Value Orientation. To measure prosocial value orientation, the six primary items of the Social Value Orientation Slider (Murphy, Ackermann, & Handgraaf, 2011) were used. Participants were instructed to imagine playing a game for points and were asked to choose their preferred point allocation. For each of the 6 items, participants could choose among 9 different resource allocations from a continuum of joint payoffs. Each of the 9 choices represented a point allocation to themselves and another randomly chosen anonymous participant (for example, "You receive 85 points, Other receives 85

points”). Based on participants’ choices, mean allocation to self and mean allocation to other can be calculated. The formula presented in Murphy et. al (2011) was used to calculate a single index of social value orientation (SVO), with higher scores reflecting higher prosocial tendency. The Social Value Orientation Slider has been shown to have good test-retest reliability, convergent validity, and predictive validity, as SVO scores measured with the Slider predicted cooperation in a Prisoner’s dilemma (Murphy et al., 2011).

Empathy. Empathy was measured with the Emphatic Concern subscale of the Interpersonal Reactivity Index (Davis, 1983; Himichi et al., 2017). The scale includes 7 items, such as: “I often have tender, concerned feelings for people less fortunate than me.” Answers were given on a Likert scale from 1 (does not describe me very well) to 5 (describes me very well). In previous research, the scale showed good internal consistency, test-retest reliability (Davis, 1980), and validity (Davis, 1983).

Subjective well-being. To measure life satisfaction, Satisfaction with Life Scale was used (SWLS; Diener, Emmons, Larsen, & Griffin 1985; for the Japanese version see Oishi, 2009; for the Romanian version see Stevens et al., 2012). The instrument is comprised of 5 items, such as: “In most ways my life is close to my ideal”, answered on a scale from 1 (strongly disagree) to 7 (strongly agree). The instrument is a reliable, widely used, and validated measure of the judgmental component of subjective well-being (Pavot, Diener, Colvin, & Sandvik, 1991). Affect was measured with the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen 1988; for the Japanese version, see Kawahito, Otsuka, Kaida, & Nakata 2011). The scale is comprised of 20 items, 10 measuring positive affect (for example, “Interested”), and 10 measuring negative affect (for example, “Distressed”). Participants reported how much they had experienced each affect during the previous month, on a Likert-type scale from 1 (very slightly or not at all) to 5 (extremely). The scale is one of the most widely used questionnaires measuring state positive and negative affect, showing high internal consistency and good validity (Watson et al., 1988). In order to reduce the well-being data, an aggregate subjective well-being

score (life satisfaction + positive affect – negative affect) was created, based on the definition of subjective well-being proposed by Ed Diener (Diener, 1994). To calculate the aggregate score, life satisfaction, positive affect, and negative affect scores were standardized, then negative affect was subtracted from the sum of life satisfaction and positive affect (Brunstein, 1993; Sheldon & Elliot, 1999).

Attention checks. Two items were used as attention checks, and participants who failed to answer either of them correctly were excluded from the analysis. One item asked participants to choose the leftmost point on the scale ("To make sure you are reading the instructions, for this item, please choose Does not describe me well"), and another one asked participants to skip the item ("Please ignore this item and proceed further, without clicking on any of the answers").

Scale translation process. The Emphatic Concern subscale of the Interpersonal Reactivity Index, and the PANAS were translated into Romanian through the process of back-translation, by a team of bilingual researchers. The team was composed of one psychology graduate student and one researcher, both native speakers of Romanian and fluent in English.

Results

Descriptive statistics for the Kindness Frequency Questionnaire by country are presented in Table 2.1. Three of the items exhibited floor effects in Japan (items 2: skew = 1.07, item 7: skew = 1.87, and item 9: skew = 1.26). Considering the low frequencies observed in Japan for these three items, item 2, 7 and 9 might not be culturally appropriate for measuring kindness in Japan, so they were eliminated from subsequent analyses.

Table 2.1

Descriptive Statistics of Kindness Frequency Questionnaire Items

	Japan (*n* =167)		Romania (*n* =127)		U.S. (*n* =145)	
	M	***SD***	***M***	***SD***	***M***	***SD***
1. I have offered food or objects to someone	2.20	1.21	3.23	1.13	2.88	1.18
2. I have lent some things to someone*	1.74	0.93	2.65	1.17	2.16	1.22
3. I have actively listened to someone's worries and tried to cheer them up	2.00	1.02	3.80	1.02	3.32	1.07
4. I have taken time to teach or explain something to someone	2.43	1.12	3.56	1.03	3.16	1.14
5. I have helped someone by doing something in their place	2.29	0.97	2.88	1.05	2.59	1.21
6. I have helped someone by holding or carrying their things	2.09	1.08	2.78	1.07	2.90	1.25
7. I have given directions to someone*	1.26	0.50	2.52	1.07	2.49	1.29
8. I have helped someone with work or school activities, although it was not my responsibility	1.87	1.08	3.17	0.93	2.03	1.35
9. I have accompanied someone to their destination although it was not my own*	1.63	0.92	2.20	1.23	2.27	1.25

Note. * Items were eliminated from subsequent analyses due to high skewness in Japan.

Next, to investigate whether the scale had an unifactorial structure, as was expected, exploratory factor analysis (weighted least squares) was performed. The scree plot showed a one-factor structure explaining 50% of the variance.

To confirm the unifactorial structure of the scale in the three cultures investigated, the six items were submitted to confirmatory factor analysis, and measurement equivalence of the scale (configural, metric, and scalar invariance) was tested. The results of the analyses are presented in Table 2.2. Goodness-of-fit indices for the unifactorial model were adequate (CFI = .986, RMSEA = .062). The configural model showed consistent results (CFI = .986, RMSEA = .055), thus supporting the validity of the unifactorial structure of the questionnaire in the three cultures investigated. Furthermore, metric invariance was obtained (CFI = .980, ΔCFI = .006), suggesting that the items have similar factor loadings in each culture. However, full scalar invariance was not obtained (CFI = .856, ΔCFI = .124), so three non-invariant items (item 3, item 5, and item 6) were identified and, by relaxing equality constraints for them, partial scalar invariance was obtained (CFI = .976, ΔCFI = .004).

As lack of invariance could be a sign of response bias, extreme response style and acquiescent response style indices were created (van Herk, Poortinga, & Verhallen, 2004). The Empathic Concern

items and the PANAS items were used to create the indices, because they contain reverse-scored items and unrelated subscales, respectively. The extremity index was created by counting the number of extreme choices on the scale (1 and 5) and dividing them by the number of items, thus obtaining an index ranging from 0 to 1. Acquiescence index was creating by subtracting the number of the two lowest values (1 and 2) from the number of the two highest values (4 and 5), and dividing the result by the number of items, thus obtaining an index ranging from -1 to 1.

Table 2.2

Measurement Invariance of the Kindness Frequency Questionnaire

Model	χ^2		*df*	χ^2/df	CFI	RMSEA [95% CI]	$\Delta\chi^2$		Δdf	ΔCFI
One-factor model (6 items)	24.03	**	9	2.67	.986	.062 [.032, .092]				
Configural model	38.98		27	1.44	.986	.055 [.000, .091]	-		-	-
Metric model	53.97	*	37	1.46	.980	.056 [.015, .087]	14.99		10	.006
Scalar model	166.77	***	47	3.55	.856	.132 [.111, .154]	112.804	***	10	.124
Partial scalar model	61.34	*	41	1.50	.976	.058 [.023, .087]	7.375		4	.004

Note. $\chi 2$/df = chi-square divided by its degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation. $\Delta\chi 2$ = Delta chi-square; Δ df = Delta degrees of freedom; *N* = 439.

*$p < .05$, **$p < .01$, ***$p < .001$.

Means and standard deviations, Cronbach's alphas, and bivariate correlations between frequency of performing acts of kindness and other study variables by country are presented in Table 2.3. Kindness frequency correlated positively with empathic concern in all cultures (Japan $r = .29$, $p <.001$; Romania $r = .25$, $p <.001$; U.S. $r = .24$, $p <.001$), but it was not significantly related to social value orientation. In addition, kindness frequency correlated positively with life satisfaction, positive affect, and the aggregate subjective well-being score in all three cultures (aggregate well-being Japan $r = .26$, $p =.001$; Romania $r = .17$, $p = .050$; U.S. $r = .38$, $p <.001$).

Table 2.3

Descriptive Statistics and Bivariate Correlations Between Study Measures and Kindness Frequency

	Japan (n =167)					Romania (n =127)					U.S. (n =145)				
	α	***M***	***SD***	***SE***	***r***	**α**	***M***	***SD***	***SE***	***r***	**α**	***M***	***SD***	***SE***	***r***
1. Kindness frequency	.82	2.15	0.78	.06	-	.83	3.24	0.76	.07	-	.85	2.96	0.91	0.08	-
2. Social value orientation	-	30.00	11.83	.92	.15	-	32.01	14.20	1.26	.00	-	21.65	14.87	1.23	.03
3. Empathic concern	.84	3.35	0.67	.05	.29 ***	.73	4.02	0.64	.06	.25 **	.92	3.84	1.03	0.09	.24 **
7. Life satisfaction	.91	3.54	1.33	.10	.21 **	.87	4.94	1.13	.10	.18 *	.95	4.19	1.75	0.15	.44 ***
8. Positive affect	.84	2.42	0.63	.05	.33 ***	.86	3.42	0.62	.06	.37 ***	.93	3.27	0.88	0.07	.48 ***
9. Negative affect	.89	2.33	0.79	.06	.01	.88	2.63	0.77	.07	.14	.93	1.71	0.77	0.06	.09
10. Aggregate well-being		-1.21	1.63	.13	.26 **		0.53	1.63	.15	.17 *		0.92	2.49	0.21	.38 ***
11. Extremity	-	0.25	0.19	.01	-.02	-	0.28	0.16	.01	.21 *	-	0.43	0.24	0.02	.11
12. Acquiescence	-	-0.36	0.29	.02	.22 **	-	0.04	0.24	.02	.33 ***	-	-0.18	0.26	0.02	.54 ***
13. Age	-	40.12	8.74	.68	-.02	-	29.42	8.96	.80	.03	-	36.33	11.02	0.92	-.19 *

*$p < .05$, **$p < .01$, ***$p < .001$.

However, as these associations might be influenced by demographic variables or response style, regression analyses were conducted. Kindness frequency was predicted separately by empathy (Model 1) and social value orientation (Model 2), while controlling for culture (two dummy-coded variables, American = 1 for U.S. citizens, 0 for others, and Romanian = 1 for Romanian natives, 0 for others), gender (dummy coded as 1 = female, 0 = male), age, education (dummy coded as 1 = holding an undergraduate degree or higher, 0 = less than an undergraduate degree) and response style. Results are presented in Table 2.4.

Among the control variables, gender, age, and education had small effects on frequency of performing acts of kindness. Culture predicted frequency of performing acts of kindness, Romanians and Americans having higher scores compared to Japanese. Even when controlling for demographic variables and response style, empathy was positively related to frequency of performing acts of kindness ($\beta = .16$, $p < .001$). However, social value orientation did not significantly predict kindness frequency ($\beta = .04$, $p = .297$).

Table 2.4

The Effect of Empathy and Social Value Orientation on Kindness Frequency

	Model 1	Model 2
Gender (Female=1)	.07	.09 *
Age	-.09 *	-.06
Education (Bachelor=1)	.05	.06
American (U.S. citizen=1)	.26 ***	.29 ***
Romanian (Romanian native=1)	.24 ***	.27 ***
Extremity	.02	.06
Acquiescence	.29 ***	.34 ***
Empathy	.16 ***	
Social value orientation		.04
R^2	.38	.36
Adj. R^2	.37	.35

Note. Standardized regression coefficients (β) are reported.

*p <.05, ***p <.001.

Finally, to examine the effect of frequency of performing acts of kindness on subjective well-being, multiple regression analyses were conducted (Table 2.5). The positive effect of kindness on aggregate well-being remained significant after controlling for demographics and response style ($\beta = .27$, $p < .001$).

Table 2.5

The Effect of Frequency of Performing Acts of Kindness on Subjective Well-being

	Life satisfaction	Positive affect	Aggregate well-being
Gender (Female=1)	.08	-.05	.00
Age	-.05	.09 **	.07
Education (Bachelor=1)	.08	.06 *	.10 *
American (U.S. citizen=1)	-.05	.16 ***	.22 ***
Romanian (Romanian native=1)	.17 **	.12 ***	.24 ***
Extremity	.27 ***	.16 ***	.35 ***
Acquiescence	.09	.63 ***	.00
Kindness frequency	.25 ***	.18 ***	.27 ***
R^2	.30	.69	.39
Adj. R^2	.29	.68	.38

Note. Standardized coefficients (β) are reported.

*p < .05, **p < .01, ***p < .001.

Discussion

The purpose of Study 1a was to investigate the convergent validity of the newly constructed Kindness Frequency Questionnaire, and to explore its relationship with subjective well-being. Results revealed that the six-item Kindness Frequency Questionnaire had an unifactorial structure and showed partial scalar invariance in the three cultures, suggesting that the scale is acceptable for cross-cultural research. Replicating past research (Davis, 2015; Eisenberg & Miller, 1987), empathic concern was positively related to frequency of performing acts of kindness, regardless of participants' response style, thus providing support for the convergent validity of the scale. Therefore, H1 was supported. However, contrary to H2, prosocial value orientation was not associated with frequency of performing acts of kindness. One possible reason is that the instructions of the point-allocation game might have been difficult to comprehend. As participants were asked to imagine playing a game for money (but the points were not converted to real money), they might have had a hard time understanding the reasons behind playing it, who their game partner would be, and what would happen once the game was over. Future research should clarify the relationship between social value orientation and self-report measures of prosocial behavior.

Frequency of performing acts of kindness positively predicted aggregate well-being, so H3 was supported. This result replicates past research showing that engagement in prosocial behavior is associated with subjective well-being (Curry et al., 2018). Study 1b aims to explore this relationship further and investigate its mediating mechanism.

2.2 Study 1b - The mediating role of basic psychological need satisfaction

The purpose of Study 1b was to test the mediating effects of autonomy, competence and relatedness need satisfaction on the relationship between frequency of performing acts of kindness and subjective well-being. The hypotheses of Study 1b are detailed below.

H1: The association between frequency of performing acts of kindness and subjective well-being is mediated by satisfaction of the needs for autonomy, competence, and relatedness.

H2: In Japan, satisfaction of the needs for competence and relatedness have stronger mediating effects than satisfaction of the need for autonomy.

H3: In the U.S., satisfaction of the need for autonomy has stronger mediating effects than satisfaction of the needs for competence and relatedness.

H4: In Romania, all three psychological needs have similarly strong mediating effects.

In light of previous research (Martela & Ryan, 2016a; Weinstein & Ryan, 2010), it was expected that all three mediators have independent explanatory power (H1). In addition, by conducting multigroup analyses, the relative explanatory power of each mediator was investigated by culture. Past research suggests that positive life outcomes are achieved through culturally distinct pathways: self-esteem and personal control in independent cultures such as the United States, and relationship harmony (or lack of relationship strain) in interdependent cultures (Kitayama et al., 2010; Kwan et al., 1997). Consequently, it was expected that for Japanese, satisfaction of the need for relatedness would be a strong mediator of the relationship between kindness and well-being, as kind behavior contributes to the maintenance of relationship harmony, which is an important cultural task in an interdependent culture. In addition, in interdependent cultures such as China and Japan, the society puts greater emphasis on socializing children to cooperate with peers rather than competing or striving for individual achievement (Stevenson, 1991). Therefore, because being able to contribute to the welfare of others can be interpreted as a sign

of social competence, it was expected that satisfaction of the need for competence also has a strong mediating effect for the interdependent Japanese. However, as people from collectivistic cultures tend to view helping behavior as more obligatory than people from Western cultures (Baron & Miller, 2000), enactment of prosocial behavior might not satisfy Japanese individuals' need for autonomy. Therefore, in Japan, satisfaction of the need for autonomy might have a weaker mediating effect compared to the needs for relatedness and competence (H2).

Second, for the independent Americans, satisfaction of the need for autonomy might be the strongest mediator of the relationship between kindness and well-being, because enactment of prosocial behavior could lead to the enhancement of a sense of personal control, an important well-being predictor in the U.S. (Kwan et al., 1997). However, satisfaction of the needs for relatedness and competence might have weaker mediating effects than autonomy need (H3).

Third, for the ambivalent Romanians (Gavreliuc & Ciobotă, 2013), all three basic psychological needs might be strong mediators of the association between enactment of prosocial behavior and well-being (H4), as both preserving interdependent relationships (thus satisfying the needs for relatedness and competence) and a sense of self-direction (the need for autonomy) are important cultural tasks for Romanian people.

Method

Participants. Participants were recruited through the same procedure as in Study 1a. From the initial sample of 193 American participants, 156 Japanese and 149 Romanian participants, participants who did not meet the criteria (exclusion criteria are the same as in Study 1a) were excluded. Analyses were conducted on a final sample of 151 American participants (93 males, 57 females, 1 unknown, M_{age} = 36.26, *SD* = 10.29, 70.86% Euro-Americans, 56.29% had a undergraduate degree or higher), 153

Japanese participants (68 males, 84 females, 1 unknown, M_{age} = 40.39, SD = 9.31, 54.24% had a undergraduate degree or higher) and 129 Romanian participants (27 males, 102 females, M_{age} = 33.35, SD = 8.49, 62.79% had a undergraduate degree or higher). Japanese participants were significantly older than the Americans, who were significantly older than the Romanians ($F(2, 430) = 19.97$, $p < .001$). Gender ($\chi^2(2) = 47.68$, $p < .001$) distributions differed between cultures, so gender was controlled for in subsequent analyses.

Materials and Procedures. As in Study 1a, participants were asked to provide basic demographic information (gender, age, education, and ethnicity in the U.S.). Frequency of performing acts of kindness was measured with the newly constructed Kindness Frequency Questionnaire from Study 1a. Participants also responded to the Satisfaction with Life Scale (Diener et al., 1985) and Positive and Negative Affect Schedule (Watson et al., 1988). As in Study 1a, mean life satisfaction, positive affect, and negative affect scores, as well as an aggregate subjective well-being score, were calculated. The same check-items as in Study 1a were used to screen participants who did not pay attention to the instructions. Instruments that were not included in Study 1a are detailed below.

Psychological needs satisfaction. The Balanced Measure of Psychological Needs Scale (BMPN; Sheldon & Hilpert, 2012) was used. The scale has 18 items and is comprised of three six-item subscales (Need for Autonomy, Need for Competence, Need for Relatedness). Among the six items of each subscale, three measure satisfaction of the need, and three measure dissatisfaction. In the Need for Autonomy subscale, items such as: "I was free to do things my own way" were included. Need for Competence subscale included items such as: "I was successfully completing difficult tasks and projects". In the Need for Relatedness subscale, items such as: "I felt a sense of contact with people who care for me, and whom I care for" were included. Participants were asked to report how much each statement was true for them, referring to the previous month, on a scale from 1 (no agreement) to 5 (much

agreement).

The items of the BMPN were translated from English into Japanese and Romanian by a team of bilingual researchers, through the process of back-translation. The team was composed of one graduate student, native speaker of Romanian and fluent in English and Japanese, one graduate student and one researcher native speakers of Japanese and fluent in English, one researcher native speaker of both English and Japanese, and one researcher native speaker of Romanian and fluent in English.

Results

Two items of the Kindness Frequency questionnaire exhibited floor effects in Japan (items 2: skew = 1.09, item 7: skew = 2.28), but item 9 had a skew below the threshold of 1 (item 9 skew = 0.77). However, considering that item 9 was problematic in Study 1a, items 2, 7 and 9 were eliminated. Confirmatory factor analysis was performed and the measurement equivalence of the six-item scale was examined again. The one-factor model showed adequate fit ($\chi^2(9) = 36.73$, $p < .001$, CFI = .972, RMSEA = .084), and so did the configural model ($\chi^2(27) = 62.24$, $p < .001$, CFI = .954, RMSEA= .095). Metric equivalence was achieved, as there were no significant differences between the configural model and the metric model which assumed similar factor loadings across cultures ($\Delta\chi^2 = 14.79$, $\Delta df = 10$, $p = .141$, ΔCFI = .006). As in Study 1a, scalar invariance was achieved after relaxing constraints for items 3, 5, and 6 ($\Delta\chi^2 = 8.17$, $\Delta df = 4$, $p = .08$, ΔCFI = .006). Overall, the results of the confirmatory factor analysis replicated Study 1a, bringing further evidence to support the unifactorial structure of the Kindness Frequency Questionnaire and its validity for cross-cultural research. Extremity and acquiescence response indices were also calculated, this time using the Balanced Measure of Psychological Needs Scale. Means of the main study variables are presented in Table 2.6.

Table 2.6

Internal Consistency of Scales and Descriptive Statistics of Study 1b Variables

	Japan (*n* =153)				Romania (*n* =129)				U.S. (*n* =151)			
	α	***M***	***SD***	***SE***	**α**	***M***	***SD***	***SE***	**α**	***M***	***SD***	***SE***
1. Kindness frequency	.83	2.18	0.81	0.07	.78	3.10	0.64	.06	.84	3.03	0.87	0.07
2. Autonomy need	.65	3.29	0.67	0.05	.76	3.61	0.73	.06	.73	3.40	0.80	0.06
3. Competence need	.71	2.69	0.73	0.06	.72	3.84	0.66	.06	.70	3.46	0.77	0.06
4. Relatedness need	.72	3.39	0.78	0.06	.85	3.80	0.86	.08	.77	3.52	0.89	0.07
5. Life satisfaction	.94	3.69	1.48	0.12	.87	5.24	1.04	.09	.92	4.30	1.59	0.13
6. Positive affect	.82	2.49	0.62	0.05	.87	3.48	0.66	.06	.93	3.24	0.89	0.07
7. Negative affect	.90	2.31	0.80	0.06	.92	2.04	0.78	.07	.95	2.02	0.96	0.08
8. Aggregate well-being	-	-1.31	1.91	0.15	-	1.19	1.91	.17	-	0.31	2.50	0.20
9. Extremity	-	0.27	0.21	0.02	-	0.35	0.26	.02	-	0.36	0.25	0.02
10. Acquiescence	-	-0.07	0.31	0.02	-	0.14	0.23	.02	-	0.14	0.33	0.03

Bivariate correlations between main study variables by culture are presented in Table 2.7. Frequency of performing acts of kindness was significantly associated with aggregate well-being in Japan (r = .22, p = .007) and the U.S. (r = .33, p <.001), but the association was marginally-significant in Romania (r = .16, p = .063). Kindness was also significantly associated with satisfaction of the need for relatedness in Japan (r = .24, p =.003) and the U.S. (r = .23, p = .004). Satisfaction of the basic psychological needs was strongly correlated with aggregate well-being in all three cultures (see Table 2.7).

To investigate the hypothesized mediation model, multiple-group path analysis, using maximum likelihood estimation method, and bootstrap for 5000 samples, was conducted. Frequency of performing acts of kindness was treated as an exogenous variable, aggregate well-being as endogenous variable, and satisfaction of the three psychological needs as parallel mediators. Gender and response style (extremity and acquiescence) were included in the model as control variables.

Table 2.7

Bivariate Correlations of Study 1b Measures by Culture

Japan (n =153)	1	2	3	4	5	6	7	8	9
1. Kindness									
2. Autonomy need	-.14								
3. Competence need	.11	.34 ***							
4. Relatedness need	.24 **	.42 ***	.41 ***						
5. Life satisfaction	.22 **	.40 ***	.44 ***	.71 ***					
6. Positive affect	.30 ***	.18 *	.21 **	.42 ***	.42 ***				
7. Negative affect	.01	-.49 ***	-.48 ***	-.45 ***	-.43 ***	.03			
8. Aggregate well-being	.22 **	.51 ***	.53 ***	.74 ***	.88 ***	.58 ***	-.69 ***		
9. Extremity	-.27 **	.17 *	-.28 **	-.06	-.04	-.03	.04	-.05	
10. Acquiescence	.41 ***	-.24 **	-.04	.12	.18 *	.39 ***	.30 ***	.09	-.18 *
Romania (n =129)	1	2	3	4	5	6	7	8	8
1. Kindness									
2. Autonomy need	.07								
3. Competence need	.13	.61 ***							
4. Relatedness need	.11	.57 ***	.64 ***						
5. Life satisfaction	.19 *	.51 ***	.36 ***	.40 ***					
6. Positive affect	.19 *	.45 ***	.53 ***	.56 ***	.50 ***				
7. Negative affect	-.04	-.50 ***	-.41 ***	-.59 ***	-.48 ***	-.49 ***			
8. Aggregate well-being	.16	.60 ***	.53 ***	.65 ***	.78 ***	.81 ***	-.84 ***		
9. Extremity	.08	.56 ***	.63 ***	.66 ***	.33 ***	.41 ***	-.29 **	.42 ***	
10. Acquiescence	.21 *	-.12	-.18 *	-.15	.09	.04	.23 **	-.06	-.10
United States (n =151)	1	2	3	4	5	6	7	8	8
1. Kindness									
2. Autonomy need	.12								
3. Competence need	.16	.67 ***							
4. Relatedness need	.23 **	.60 ***	.61 ***						
5. Life satisfaction	.37 ***	.47 ***	.50 ***	.59 ***					
6. Positive affect	.42 ***	.51 ***	.47 ***	.46 ***	.64 ***				
7. Negative affect	.00	-.59 ***	-.65 ***	-.51 ***	-.34 ***	-.29 ***			
8. Aggregate well-being	.33 ***	.67 ***	.69 ***	.66 ***	.83 ***	.81 ***	-.71 ***		
9. Extremity	.04	.39 ***	.30 ***	.31 ***	.18 *	.22 **	-.18 *	.24 **	
10. Acquiescence	.40 ***	-.24 **	-.31 ***	-.17 *	.14 *	.30 ***	.41 ***	.00	-.18 *

Note. *p < .05, **p < .01, ***p < .001.

Results of the unconstrained multigroup analysis are presented in Figure 2.1. When estimating the effects for the whole sample, satisfaction of all three psychological needs mediated the relationship between

kindness and well-being (Autonomy *b* = .115, 95% CI [.035, .206]; Competence *b* = .351, 95% CI [.235, .489]; Relatedness *b* = .251, 95% CI [.150, .370]).

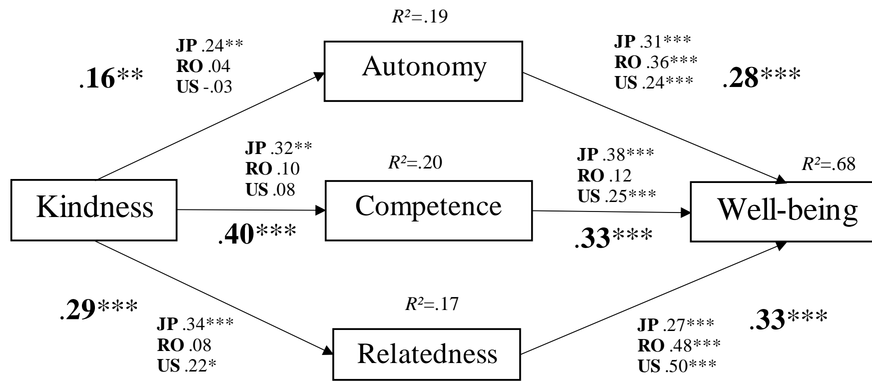

Figure 2.1. Standardized regression coefficients for the relationship between frequency of performing acts of kindness and well-being, as mediated by basic psychological need satisfaction. Gender and response style (extremity and acquiescence) were included in the model as control variables. Bold coefficients represent effects on whole sample (N = 431). JP = Japan (n = 153), RO = Romania (n = 129), US = United States (n = 151).

*p < .05, **p < .01, ***p < .001.

Some differences between cultures were observed when estimating the effects separately in each group. First, in Romania, possibly because of the small sample size, all indirect effects included zero (Autonomy *b* = .038, 95% CI [-.171, .231]; Competence *b* = .037, 95% CI [-.035, .153]; Relatedness *b* = .109, 95% CI [-.088, .305]). In Japan, all three psychologic needs had positive indirect effects (Autonomy *b* = .216, 95% CI [.050, .423]; Competence *b* = .348, 95% CI [.115, .634]; Relatedness *b* = .255, 95% CI [.090, .471]). Because all three mediators were significant, to compare the size of their indirect effects, contrasts were computed by subtracting each indirect effect from the others, but none of the contrasts were significant (Autonomy/Competence contrast *b* = .131, *p* = .340, 95% CI [-.122, .424];

Autonomy/Relatedness contrast b = .039, p = .755, 95% CI [-.197, .295]; Competence/Relatedness contrast b = -.092, p = .486, 95% CI [-.368, .156]). In the U.S., only satisfaction of the need for relatedness mediated the relationship between kindness and well-being (Autonomy b = -.015, 95% CI [-.125, .080]; Competence b = .047, 95% CI [-.044, .161]; Relatedness b = .263, 95% CI [.060, .490]).

Discussion

The purpose of Study 1b was to investigate the mediating effect of psychological need satisfaction on the association between engagement in prosocial behavior and subjective well-being. Results of the path analysis on the whole sample revealed that satisfaction of all three psychological needs significantly mediated the relationship between kindness and well-being, after controlling for gender and response style effects. In line with previous research, the results replicated the independent contributions of the needs for autonomy, competence, and relatedness, in explaining the association between prosocial behavior engagement and well-being (Martela & Ryan, 2016b; Weinstein & Ryan, 2010). However, due to the fact that in the multigroup analysis not all mediators had significant indirect effects in each culture, H1 was only partially supported.

When testing the model separately in each culture, some noteworthy cultural differences were observed. As expected, all three psychological needs significantly mediated the relationship between kindness and well-being in Japan. This result corroborates the findings of previous research conducted on Western samples, which revealed that engagement in autonomously-motivated prosocial behavior promotes well-being through satisfaction of the needs for autonomy, competence and relatedness (Nelson et al., 2015; Weinstein & Ryan, 2010). Therefore, this result brings further support to the universality of the effects of basic psychological needs satisfaction (Deci & Ryan, 2000). First, the mediating effect of autonomy was significant, suggesting that for Japanese people, being able to contribute to the welfare of

others increased feelings of autonomy, which then enhanced well-being. Enactment of prosocial behavior may be a way to express internalized values, which translate into a sense of being free to act as an autonomous person. Autonomy is an important predictor of well-being, not only in Western, but also in Eastern cultures (Chirkov, 2014), and should not be equated to individualism or separateness. On the contrary, in interdependent culture such as Japan, interpersonal interactions in the form of prosocial behavior may provide an opportunity for individuals to express themselves as autonomous persons that act in accordance with their personal moral values. Second, this study reveals that competence need satisfaction is a significant mediator explaining why prosocial behavior engagement is associated to well-being. Engagement in prosocial behavior fosters a sense of competence, because individuals, through their other-oriented behavior, make positive changes on the world. Previous research on Western samples (Caprara & Steca, 2005) has shown that engagement in prosocial behavior, such as volunteering, is associated with social and emphatic self-efficiency, that is a sense of interpersonal and emotional competence. Accordingly, the sense of being able to make a change, to influence another persons' situation and well-being, can be intrinsically satisfying and lead to the experience of competence. In Japan, this effect may be even more salient, because responding to others' needs and expectations is a highly valued cultural requirement (Markus, 2016). The enactment of prosocial behavior may have made participants feel more socially competent, which in turn led to the experience of higher levels of well-being. Third, Study 1b supports the explanatory power of relatedness need satisfaction in Japan, corroborating previous findings on the importance of relationship harmony for the well-being of individuals from interdependent cultures (Kwan et al., 1997). Helping is inherently interpersonal, and fosters a sense of closeness between the helper and the helpee, as well as feelings of recognition and being relied upon (Piliavin & Siegl, 2007), which satisfy the need for relatedness and, thus promote higher levels of well-being. The mediating role of relatedness need on the relationship between prosocial behavior and well-being has been observed in studies employing Asian samples, too (Jiang et al., 2016).

Study 1b replicated these findings on a Japanese sample, bringing additional support for the importance of relatedness satisfaction when discussing the positive effects of prosocial behavior. However, Study 1b hypothesized that in Japan, satisfaction of the needs for competence and relatedness would have stronger mediating effects than satisfaction of the need for autonomy (H2). To test this hypothesis, the relative explanatory power of the three mediators was estimated, but the results showed no significant differences between the strengths of the three indirect effects, so H2 was not supported.

In the U.S., although it was expected that satisfaction of the need for autonomy would be the strongest mediator (H3), only the indirect effect through satisfaction of the need for relatedness was positive. These results suggest that for the U.S. sample, the effect of engagement in prosocial behavior on well-being was mainly due to satisfaction of the need to connect with others, and not a sense of personal agency, as was hypothesized. Therefore, H3 was not supported.

Finally, possibly because of insufficient sample size, none of the indirect effects through satisfaction of the three psychological needs reached significance in Romania. Therefore, H4 was not supported. With an increase in sample size, future research could clarify whether the results of the current research indicate lack of statistical power, or there are other factors which explain the association between performing acts of kindness and well-being better than satisfaction of the basic psychological needs, in Romania. For example, past research has shown that beneficence, the sense of having a positive impact on others, independently mediates the association between prosocial action and well-being, even after controlling for autonomy, competence, and relatedness need satisfaction (Martela & Ryan, 2016b).

2.3 General discussion

Study 1 aimed to investigate the relationship between prosocial behavior enactment and subjective well-being in three cultures: Japan, Romania, and the U.S. The purpose of Study 1a was to develop a short questionnaire measuring frequency of performing small acts of kindness, for use in cross-cultural research, while Study 1b aimed to explore the mechanism through which prosocial behavior enhances the well-being of the benefactor across cultures.

First, as the study's main aim was to devise a derived etic measure of prosocial behavior (Berry, 1989), valid in the three cultures investigated, two widely-used English and Japanese scales were revised and updated (Oda et al., 2013; Rushton et al., 1981) and a short self-report Kindness Frequency Questionnaire was developed. The results of both studies revealed that the scale shows measurement invariance in the three cultures under investigation, has good internal consistency and construct validity, being correlated with related concepts, such as empathy (Study 1a), subjective well-being (Study 1a and Study 1b), and satisfaction of basic psychological needs (Study 1b). Overall, the results of these two studies support the validity of the newly constructed questionnaire for cross-cultural research.

The second aim of this research was to replicate the association between prosocial behavior engagement and subjective well-being, across three cultures. Supporting previous research (Curry et al., 2018; Piliavin, 2003), in both studies, a significant relationship between frequency of performing acts of kindness and well-being indicators, such as life satisfaction and experience of positive affect, was identified, even when controlling for personal characteristics and response style. These findings add to the cross-cultural literature on the positive effects of prosocial behavior on well-being, suggesting that individuals who dedicate more of their time and resources to help others are also happier, no matter where they come from. This study supports the claim that the relationship between kindness and subjective well-being is universal (Aknin et al., 2013), and is not moderated by individual factors (Curry

et al., 2018), such as benefactors' cultural background. Although this research was correlational and, therefore, it is difficult to establish causality based on its findings, the behaviors included in the newly constructed kindness frequency scale are simple and easy to enact in an experiment investigating the effects of a kindness intervention (Layous et al., 2012; Nelson et al., 2016). The results of such an experiment could clarify the causal relationship between prosocial behavior and well-being.

Third, this research aimed to test an explanatory mechanism of the relationship between prosocial behavior and subjective well-being and explore whether there are any cultural differences in the process through which kindness enhances the well-being of the benefactor. Applying the framework of self-determination theory (Deci & Ryan, 2000), it was hypothesized that kindness promotes happiness because it is intrinsically satisfying, leading to the fulfilment of three basic psychological needs: the needs for autonomy, competence, and relatedness (Martela & Ryan, 2016b). In accordance with previous findings (Martela & Ryan, 2016b; Weinstein & Ryan, 2010), the needs for autonomy, competence, and relatedness had independent mediating effects on the relationship between kindness and well-being. However, multigroup analysis suggested that the paths through which kindness promotes well-being might differ between cultures. While in Japan all three mediators were significant, in the U.S., only satisfaction of the need for relatedness was significant, and in Romania, probably because of the small sample size, none of the indirect effects reached statistical significance. In line with previous research suggesting that in independent cultures, happiness is acquired through personal control, it was expected that satisfaction of the need for autonomy would have a greater explanatory power than satisfaction of the need for relatedness and competence in the U.S. (Kwan et al., 1997), but the results did not support this hypothesis. It is possible that the independent Americans might not have many opportunities to experience being meaningfully related to others. Therefore, prosocial behavior, through its inherent interactive nature, could be one of the main ways to satisfy Americans' need for relatedness, making relatedness need the strongest explanatory mechanism of the relationship between kindness and well-

being in the U.S. In contrast, for Japanese people, prosocial behavior might not be only a way to build and maintain relationships with others (thus satisfying the need for relatedness), but also a duty one has to fulfil in order to feel socially competent (satisfying the need for competence) and an opportunity to express one's agency (satisfying the need for autonomy). Future research should clarify whether prosocial behavior promotes well-being through satisfaction of different psychological needs in different cultures, and if so, what the cultural factors explaining those differences are.

Limitations and Future Directions. The main limitation of this study is the use of a correlational design. To bring more robust evidence of the effect of engagement in prosocial behavior on well-being, and of the mediational role of the basic psychological needs, experimental or interventional research is necessary.

Second, this study did not target an important factor determining whether prosocial behavior is conducive to positive affect: actors' motivation to behave prosocially. Self-determination theory (Deci & Ryan, 2000) emphasizes the importance of an autonomy-supportive environment which allows individuals to choose the tasks they engage in based on their interests and personal values, thus promoting autonomous motivation to engage in the activity. The same behavior (helping another person) can be motivated by very different factors, from internalized moral values (autonomous motivation) to less internalized social norms (controlled motivation). Previous research has shown that only when prosocial behavior is autonomously motivated does it lead to the experience of positive affect (Nelson et al., 2015; Weinstein & Ryan, 2010). In other words, kind behavior that is enacted out of obligation, in response to other's expectations, as a means to avoid negative evaluation from others or as a means of gaining reputation, may not lead to satisfaction of the needs for autonomy, competence, and relatedness, and may, thus, not contribute to subjective well-being. This study did not address this issue, as participants were asked to report on their frequency of engaging in prosocial behavior, but not also on their motives to do

so. In an attempt to focus participants only on autonomously-motivated prosocial behavior, the instructions for the Kindness Frequency Questionnaire asked them to eliminate cases in which they had engaged in those prosocial behaviors as part of their job or in order to receive monetary rewards. However, there remains a possibility that some participants may have thought of situations in which, although not as part of their job or for money, they had performed prosocial behavior out of obligation, in order to please other people, or as a response to social expectations. Furthermore, depending on culture and the relationship between helper and helpee, prosocial behavior can be perceived as more or less obligatory (Baron & Miller, 2000; Miller et al., 2011), so there is the possibility that, for example, Japanese may have thought of situations in which they performed prosocial behavior out of obligation, while U.S. participants may have mainly thought of situations in which they freely chose to engage in prosocial behavior. Although this study assumed that participants referred to mostly autonomously motivated prosocial behavior, which has the potential to satisfy basic psychological needs and promote well-being, because motivation was not directly measured, some questions pertaining to the validity of the findings remain. Study 2 tries to address this problem by investigating the motivation behind prosocial behavior, and whether culture influences how motivation shapes positive affect that is derived from other-oriented behavior.

Another noteworthy limitation is related to the characteristics of the samples employed in this research. Although this study aimed to test the moderating effect of *culture* on the association between prosocial behavior engagement and well-being, there were some important differences between cultures in the characteristics of the samples compared. More specifically, in Japan and the U.S., participants were recruited from online crowdsourcing platforms, while in Romania, they were recruited among adults (mostly women) enrolled in university undergraduate classes. Accordingly, the crowdsourcing samples were considerably more diverse in terms of demographics than the Romanian convenience sample. These differences may have affected the results in difficult to control ways. For example, the

important cultural differences observed in frequency of performing acts of kindness (Romanians reporting more frequent prosocial behavior compared to Americans and Japanese) may mask differences in daily interaction frequency (participants in online panels may spend more time in front of the computer and less time interacting with others), as well as differences in domains of employment and personal interest (Romanian participants, being enrolled in a Psychology undergraduate course, may have been working in social services where a Psychology-related degree could be an advantage, and may have had considerable personal interest in helping others, in the first place). This last difference may also explain the low correlation between frequency of engagement in prosocial behavior and well-being in the Romanian sample; working as a volunteer or intern in social services and having the opportunity to perform prosocial behavior more often, the positive effect of prosocial behavior engagement on well-being may have weakened. Furthermore, it is possible that the Romanians were motivated by more controlled reasons to engage in prosocial behavior compared to the other two samples, and this may have reduced the positive association between prosocial behavior engagement and well-being. In order to disentangle culture from sample characteristics, future research should aim to compare participants that are more similar in demographic characteristics.

Another issue that was not addressed in this study and may have influenced the result is the relationship between benefactor and beneficiary. The Kindness Frequency Questionnaire does not define who the beneficiary is, as its items refer to a general "someone". As the beneficiary was not defined, participants from different cultures may have had different types of persons in mind when responding to the questionnaire. Especially in Japan, where the difference between close others (*uchi*), and distant others (*soto*) is very salient (Bachnik & Quinn, 1994), it is known that Japanese are less prone to offering support to distant others (Oda et al., 2013). Therefore, Japanese may have thought of close family and friends when completing the questionnaire, while Americans may have referred to more diverse others. In addition, the degree of satisfaction derived from helping close versus distant others may differ, and

this difference could influence the strength of the association between prosocial behavior engagement and well-being. In order to clarify the role played by the relationship between benefactor and beneficiary, distinguishing between close, medium and distant targets is necessary. Study 2 addresses this issue by adding to the investigation the relationship between actor and target of prosocial behavior.

This study brings only some preliminary evidence suggesting that the needs for autonomy, relatedness, and competence might function differently as mediators of the relationship between kindness and well-being, depending on culture. More evidence is needed in order to establish what the strongest paths from prosocial behavior to well-being are, in different cultures.

Proffering the universality of the pathway from prosocial behavior to satisfaction of basic psychological needs and subjective well-being, this study brings additional support for self-determination theory (Deci & Ryan, 2000). Overall, Study 1 contributes to the cross-cultural literature on the positive effects of engagement in prosocial behavior, suggesting that even small acts of kindness, such as listening to someone's concerns, might have happiness-enhancing effects. This way, the study provides some hints on what individuals could do to experience higher levels of positive affect. Well-being boosting interventions could focus on such simple acts of kindness, which are easy to enact in one's daily life and have positive effects not only on the target, but also on the giver, who can thus feel more autonomous, more connected to others, more competent, and happier.

Chapter 3 Perceived Social Expectations to Engage in Prosocial Behavior and Positive Affect

Study 1 has revealed that frequency of engagement in prosocial behavior promotes well-being through satisfaction of basic psychological needs. However, it did not look into individuals' motivation to engage in prosocial action. Self-determination theory (SDT; Deci & Ryan, 2000) suggests that one factor determining whether prosocial behavior increases actors' well-being is its underlying motivation. If other-oriented action is autonomously motivated, that is, motivated by a full sense of volition and choice, higher satisfaction will be derived from enacting it than when it is motivated by controlled reasons, that is, reasons perceived to be external, which reduce the sense of "owning" the act (Deci & Ryan, 1985). Research shows that individuals who are autonomously motivated to help experience higher levels of positive affect as a result, compared to individuals who are motivated by external pressures experienced as phenomenally alien from the self (Nelson et al., 2015; Weinstein & Ryan, 2010). Accordingly, agency is required for positive effects to be observed, while lack of it might be detrimental.

Although Western folk psychology tends to conceptualize social expectations as coercive and limiting individual autonomy, self-determination theory suggests that fulfilling role-related obligations can be experienced in an agentic way (Chirkov et al., 2003). In cultures in which fulfilling one's obligation to help is highly moralized, responding to other people's expectations to help is not associated with less satisfaction, as it is the case in Western cultural contexts (Buchtel et al., 2018; Miller et al., 2011). For individuals from cultures with a duty-based morality, social expectations are internalized, therefore, not heteronomous (Chirkov et al., 2003; Miller et al., 2011; Miller, Goyal, et al., 2017). Consequently, although social expectations are experienced as controlled reasons to help by most Western participants, individuals from cultures in which duty is highly moralized perceive choice and feel satisfaction when fulfilling these social obligations, and may not experience them as controlling.

Duty-Based Versus Autonomy-Based Moral Reasoning. Past research supports the idea that Asians internalize their obligations to help more than Westerners. But why? Two explanations based on the distinction between Western and Eastern ethics are proposed. First, Miller (1997) distinguishes between the Western conceptualization of duty as constraining and artificial, and Indian conceptualization of *dharma*, which portrays duty as congruent with individual nature and positively related to agency and satisfaction. Therefore, what might lie behind Indians' higher internalization of obligation is a culturally-determined conceptualization of moral duty as congruent with human nature and agency. Another explanation is proposed by Buchtel and her collaborators (Buchtel et al., 2018). She distinguishes between post-Kantian moral philosophy, product of Western European culture, and Confucian Role Ethics. Kantian philosophy emphasizes the role of autonomy by defining moral action as free from external coercion and determined by individual choice, whereas Confucian Role Ethics affirms virtue in fulfilling role-defined obligations (Rosemont & Ames, 2016). From a Role Ethics point of view, fulfilling social expectations does not undermine internal motivation, as actors can be motivated by both agency and duty, thus being *willingly obliged* (Buchtel et al., 2018).

These two perspectives on the concept of moral duty converge in suggesting that the focus of Western thought on the promotion of agency could be an expression of a type of moral reasoning based on rights, freedom and autonomy. At the same time, the Asian congruence between choice and obligation could be an expression of a type of moral reasoning focused on duty, role-fulfilment, and obligations. The fact that moral reasoning, and therefore, the key concepts used to talk about what is moral and not differs across cultures, is widely known (Graham et al., 2013; Haidt, 2008; Shweder et al., 1997). Hence, it can be expected that what people consider to be moral shapes their motivation to engage in prosocial behavior, and the degree to which they derive satisfaction from doing so.

A culturally-informed perspective on moral reasoning is offered by Shweder and his collaborators (Shweder et al., 1997). Analyzing the ethical discourse of Indians, they identified three

clusters of themes: the Ethics of Autonomy, Community and Divinity. The Ethics of Autonomy protect the rights of individuals, promoting the exercise of personal choice. The Ethics of Community protect the different roles that constitute a society, promoting interdependency and the fulfilment of duties. The Ethics of Divinity protect the human soul from degradation, and promote the maintenance of the sacred, natural order. While Autonomy discourse is considered to be most prevalent in individualistic, Western societies, the Ethics of Community and Divinity prevail in more collectivistic societies (Haidt, 2008; Shweder et al., 1997). Consequently, endorsement of a type of moral reasoning using regulatory concepts that reflect the Ethic of Community could underlie Asians' higher congruence between obligated and agentic motivations.

Given the above, the purpose of Study 2 is to investigate the role played by motivation in shaping the association between engagement in prosocial behavior and affect. Study 2 distinguishes between *agentic motivation*, which refers to motivation that stems from individuals' wants and sense of choice, and *obligated motivation*, which refers to motivation stemming from fulfilling one's duty and meeting the expectations of others. In line with previous research (e.g. Nelson et al., 2015), it is expected that agentic motivation to engage in prosocial behavior positively predicts satisfaction derived from doing so. In contrast, obligated motivation might have contrasting effects on positive affect, depending on culture (Buchtel et al., 2018). Obligated motivation to engage in prosocial behavior could reduce positive affect for participants from Western cultures, but not for those from Asian cultures in which social obligations are internalized to a higher degree. Furthermore, to investigate whether moral reasoning plays a role in determining whether social obligations promote or inhibit positive affect, individuals' endorsement of the Community ethic is measured. It is expected that, regardless of their cultural background, people who place more moral value on duty fulfillment and abiding by the norms of one's community would show higher internalization of social obligations and, therefore, would experience more satisfaction from meeting those obligations.

To test these hypotheses, two studies were conducted. Study 2a employs scenarios and investigates the association between motivation to help and expected positive affect, while also looking into the role of endorsement of the Community ethic and relationship with the beneficiary. Study 2b asks participants to recall a personal help-offering experience, and tests the mediating effect of satisfaction of basic psychological needs in the association between motivation to engage in prosocial behavior and experienced positive affect, as well as the moderating role of Community ethic.

3.1 Study 2a – Perceived social expectations and imagined prosocial behavior

In Study 2a, the association between motivation to engage in prosocial behavior (as depicted in several scenarios) and participants' expected positive affect is investigated, bringing evidence from three cultures with distinct philosophical conceptualizations of *agency* and *obligation* (i.e. Japan, Romania, and the United States). The purpose of this study is to clarify the role of moral reasoning and relationship with target in shaping motivation to help, as well as the relative importance of agency and obligation in determining the degree to which prosocial behavior is conducive to positive affect in the three cultures examined.

Cultural Background of Japan, Romania, and the U.S. As discussed in the introduction, the three cultures under investigation (Japan, Romania, and the U.S.) differ in independence/interdependence (Markus & Kitayama, 1991), Japanese being mostly interdependent, Americans, mostly independent, and Romanians mixing both independent and interdependent aspects (Gavreliuc & Ciobotă, 2013). Considering that people from interdependent cultures value being receptive to others' expectations more than evidencing agency and choice (Markus, 2016), it is expected that Japanese would show higher internalization of social obligations, deriving more satisfaction from meeting obligations to help than participants from independent cultures. On the other hand, past research has repeatedly shown that external coercion reduces sense of choice and satisfaction among European-Americans (Weinstein & Ryan, 2010), suggesting that they conceptualize agency and obligation as opposing. Therefore, it is expected that obligated motivation would have a detrimental effect on positive affect for Americans. As for Romanians, in view of their relatively more independent self-construal (Benga et al., 2019; Gavreliuc & Ciobotă, 2013), it is expected that their responses would be more similar to Americans than Japanese, showing less internalization of social expectations than the interdependent Japanese.

Unrequested Prosocial Behavior and Relationship with Beneficiary. Unlike previous research that investigated individuals' motivation in situations in which help was either requested or highly expected (Janoff-Bulman & Leggatt, 2002; Miller et al., 2011), in Study 2a, unrequested, simple kind behaviors are investigated. It is important to note that in happiness-increasing interventions participants are sometimes asked to perform small acts of kindness, as a way to experience higher levels of positive affect (e.g. Layous et al., 2012). However, in these studies, the fact that kindness is highly moralized, and that the type of motivation behind the act can influence whether satisfaction is experienced, have rarely been addressed. Therefore, it is necessary to verify whether individuals perceive obligation to help even when the external pressure to perform the act is minimum, such as when performing small acts of kindness in a happiness-increasing intervention. Furthermore, as the relationship with the target can directly influence the type of motivation underlying kind behavior, and this association is subsequently influenced by culture (Janoff-Bulman & Leggatt, 2002), the effect of relationship closeness (i.e. close, medium, and distant) is also examined.

Role of Moral Reasoning. Although previous research discusses the role of moral reasoning as possible underlying mechanism of the cultural differences observed (Buchtel et al., 2018; Miller et al., 2011), this has yet to be empirically supported. Study 2a focuses on participants' endorsement of a morality based on regulatory concepts such as duty and role expectations. For this, endorsement of the Autonomy, Community and Divinity Ethics is measured, and the role of endorsement of a duty-based morality (Community Ethic) in determining higher internalization of obligations to help is investigated. In addition, the degree to which performing/not performing the acts is worthy of moral recognition/blame, as well as differences in expectations concerning target's reaction to help are also explored. This study's hypotheses are described below.

H1: Japanese internalize social obligations more than Romanians and Americans, showing a stronger positive association between agentic and obligated motivation to help, regardless of target.

H2: Agentic motivation to help is positively related to positive affect regardless of culture and target.

H3: Obligated motivation to help has a stronger positive effect on positive affect in Japan compared to Romania and the U.S.

H4-1: Participants who endorse the ethic of Community internalize social obligations more, showing a stronger positive association between agentic and obligated motivation to help, regardless of target and culture.

H4-2: Obligated motivation to help has a stronger positive effect on positive affect for participants who endorse the Community ethic, regardless of culture and target.

First, in line with past research suggesting a stronger association between agency and obligation in Confucian heritage cultures (Buchtel et al., 2018), it is expected that the positive relationship between agentic and obligated motivation to perform acts of kindness is stronger in Japan compared to Romania and the United States (H1).

Second, as suggested by SDT (Deci & Ryan, 2000), it is expected that agentic motivation to engage in prosocial behavior is positively related to positive affect regardless of target and culture (H2).

Third, because obligated motivation to help is more internalized in interdependent cultures, it is expected that obligated motivation has a stronger effect on positive affect in Japan than in Romania and the U.S. (H3).

Furthermore, if endorsement of a morality emphasizing the importance of role-related obligations (the Community ethic) lies behind the greater internalization of obligations in interdependent cultures, a stronger association between agentic and obligated motivation should also be observed for individuals with higher endorsement of the Community ethic (H4-1). Similarly, for those with higher endorsement of the Community Ethic, a stronger association between obligation and positive affect should also be observed (H4-2).

Method

Participants. One hundred and fifty-four Japanese students (46 males, 108 females, M_{age} = 20.03, *SD* = 1.08), 304 Romanian students (44 males, 260 females, M_{age} = 20.75, *SD* = 1.10) and 107 American students (21 males, 86 females) enrolled in Psychology classes responded to the online questionnaire in exchange for course credits. Four international students from the American sample were eliminated, leaving a total sample of 103 participants (21 males, 82 females, M_{age}= 21.27, *SD* = 1.78). American participants were sampled from a state university on the West Coast, and were more ethnically diverse than the Romanians and the Japanese (9.72% were African American, 33.98% were Latino American, 24.27% were Asian American, 15.53% were Euro-American and 16.50% reported other ethnicities). The proportion of participants reporting a religious affiliation was 37.01% in Japan, 86.84% in Romania and 67.96% in the United States.

Materials. The following measures were included in the online questionnaire.

Demographics. Questions on gender, age, ethnicity (in the U.S.), religious affiliation and frequency of going to places of worship (5-point scale from 1 = never to 5 = weekly) were included.

Moral reasoning. The Community, Autonomy and Divinity Scale (CAD; Guerra & Giner-Sorolla, 2010; for the Japanese version see Guerra, Giner-Sorolla, & Vasiljevic, 2013) was used. A team of bilingual researchers translated the items into Romanian through the process of back-translation.

Kindness scenarios. Six kindness scenarios depicting situations in which participants had the opportunity to do something kind for a same-gender target were created. Closeness of target was manipulated, the close relationship being one's friend, the medium close relationship being a colleague one did not feel very close to, and the distant relationship being a stranger. There were two scenarios for each type of target (close friend, acquaintance, stranger), and all scenarios were randomly presented. The

kind behaviors chosen for the scenarios were simple, easy to enact (e.g. in a happiness increasing intervention), and common in all three cultures investigated (see Appendix B): providing emotional support (friend scenario 1), offering a customized present (friend scenario 2), working more to cover for someone (acquaintance scenario 1), offering a souvenir (acquaintance scenario 2), giving directions (stranger scenario 1), and making change (stranger scenario 2).

After reading each scenario, participants answered a series of questions, including: how much they feel it is their duty to do the act of kindness (*duty*), how much they think the target expects them to do it (*target expectation*), how much they want to do it (*desire*), how much positive affect they expect to experience if they did it (*expected positive affect*), how much negative affect they expect to experience if they do not do it (*expected negative affect*), how much positive (gratitude, happiness, and surprise) and negative (embarrassment, helplessness, indebtedness) affect they expect the target to experience if they do it (*target positive and negative affect*), how moral they would feel if they did it (*moral worth*), how immoral they would feel if they did not do it (*moral blame*) and how costly the behavior is (*cost*; see Appendix C). The questions referring to *duty* and *target expectation* were used as measures of obligation to do the act of kindness, while *desire* (want) was used as measure of agentic motivation. In previous research, agentic motivation to help was also measured as how much one *wants* to do so (Buchtel et al., 2018; Janoff-Bulman & Leggatt, 2002), while the word *duty* and *target expectation* were used to measure obligation to help (Buchtel et al., 2018). The scenarios were written in English, and then translated into Japanese and Romanian by a team of bilingual researchers, through the process of back-translation.

Results

Community, Autonomy, and Divinity Ethics. The Community, Autonomy, and Divinity Scale showed high internal consistency in all three cultures (CAD Japan Cronbach's alphas .90, .81, .92; CAD Romania

Cronbach's alphas .94, .86, .84, CAD U.S. Cronbach's alphas .90, .81, .91). The correlations between the Autonomy, Community and Divinity subscales were also investigated in each culture. In Japan, Autonomy correlated strongly both with Community (r (154) = .52, p <.001) and with Divinity (r (154) = .45, p < .001), and the correlation between the latter two was also significant (r (154) = .53, p <.001). In Romania and the U.S., there was a strong correlation between Community and Divinity (Romania: r (304) = .49, p < .001; U.S.: r (102) = .64, p < .001), and between Autonomy and Community (Romania: r (304) = .38, p < .001; U.S.: r (103) = .53, p < .001), while the correlation between Autonomy and Divinity (Romania: r (304) = .14 , p = .02; U.S.: r (102) = .19, p = .05) was weaker.

Also, in Romania and the U.S., religiousness (measured as frequency of going to places of worship) correlated strongly with the Divinity scale (Romania: r (304) = .57, p <.001; U.S.: r (100) = .40, p < .001), but in Japan, the correlation was non-significant (r (153) = -.07, p = .39).

Kindness Scenarios. As there were two different scenarios for each target type, for the sake of clarity, scores were aggregated across scenarios for same type of target. Same items for same type of targets (e.g. *duty* for friend scenario 1 and *duty* for friend scenario 2) had moderate to high positive correlations (friend: r (561) = .26 ~ .56; acquaintance: r (560 ~ 561) = .20 ~ .46; stranger: r (560 ~ 561) = .31 ~ .52; ps < .001), so mean scores of the two scenarios (for each target type) were computed.

Regarding the items used to measure obligated motivation (*duty* and *target expectation*), in their study, Buchtel and her colleagues (Buchtel et al., 2018) combined the two items into one measure. However, in Study 2a they were analyzed separately, as past research has shown that *duty* might have internalized meanings for both Western and Eastern participants (Miller et al., 2011). *Target expectation*, on the other hand, captures better the external pressure to perform the act. In past research using self-determination theory framework, responding to others' expectations was conceptualized as the most externalized reason for goals (Sheldon & Elliot, 1998). To investigate whether this distinction exists,

duty and *target expectation* were analyzed separately.

In addition, in the case of target's expected emotions (6 items), an aggregate target positive emotions score (mean of gratitude, positive surprise, and happiness items; Cronbach's alpha .61 ~ .82), and an aggregate target negative emotion score (mean of indebtedness, helplessness, and embarrassment items; Cronbach's alpha .54 ~ .66), was created for each type of target, and finally, the scores for same target scenarios were averaged. Possibly because of the small number of items included, the internal consistency coefficients for target positive and negative emotions were low, so results should be interpreted with caution.

Effect of Relationship Type and Culture on Kindness Scenario Measures. First, the effect of relationship type on motivation and expected affect was investigated. A within-subjects Analysis of Variance (ANOVA; within-factor relationship type: friend vs acquaintance vs stranger) was conducted on all items, and the results of the analysis are presented in Table 3.1. Post-hoc paired *t*-tests with Bonferroni correction were conducted to investigate the pattern of differences between targets. For all items except cost of performing the act of kindness and target emotions, scores for friend scenarios were highest.

Results showed that participants perceived greater *duty*, *desire*, *expected positive and negative affect*, *moral blame* and *moral worth* when the target was a close friend, less so when it was a stranger or acquaintance. Although it was expected that participants perceive greater *duty* and *desire* in the case of the acquaintance than in the case of the stranger, the results showed the opposite pattern, possibly because in the scenarios it was clearly stated that the acquaintance was a person one doesn't feel very close to. Similarly, the cost of kind behavior was perceived to be the highest when the target was an acquaintance. When evaluating target's expectations and emotions, participants considered that targets with whom they have closer relationships would expect the kind behavior more and will experience both

less negative and less positive emotions.

Table 3.1

Effect of Closeness of Target on Motivation to Perform Acts of Kindness and Expected Affect

	Friend		Acquaintance		Stranger		*F*		Post-hoc test
	M	*SD*	*M*	*SD*	*M*	*SD*			
1. Cost	4.36	1.49	4.96	1.23	3.87	1.54	71.84	***	A>F>S
2. Desire	5.93	1.13	4.15	1.41	4.62	1.33	251.90	***	F>S>A
3. Duty	5.57	1.33	3.65	1.46	3.74	1.46	292.60	***	F>A=S
4. Target expectation	5.05	1.25	3.75	1.35	2.96	1.36	340.10	***	F>A>S
5. Target positive affect	5.83	0.80	5.96	0.88	6.09	0.80	11.97	***	F<A<S
6. Target negative affect	2.41	0.97	2.94	1.00	3.19	1.25	61.44	***	F<A<S
7. Moral worth	4.72	1.53	4.32	1.49	4.80	1.46	13.66	***	F=S>A
8. Moral blame	4.17	1.46	3.24	1.33	3.50	1.44	57.27	***	F>S>A
9. Expected positive affect (own)	6.07	1.03	4.99	1.31	5.58	1.08	106.80	***	F>S>A
10. Expected negative affect (own)	5.01	1.48	3.61	1.33	3.81	1.40	147.20	***	F>S>A

Note. F = Friend, A = Acquaintance, S = Stranger. For *F* tests, *df* (target) = 2, residuals = 1675~1677.

***$p < .001$.

Effect of Obligated Motivation on Agentic Motivation. To investigate whether the strength of the relationship between agentic and obligated motivation differs significantly between cultures (H1), correlations between the two measures of obligated motivation (*duty* and *target expectation*), and agentic motivation (*desire*) were computed. Results are presented in Table 3.2. Regardless of target and culture, the correlations between *duty* and *desire* were high, suggesting that *duty* has an internalized meaning for all participants, and might reflect identified motivation (Miller et al., 2011), rather than obligated motivation, as initially expected. Because distinguishing between *duty* and *desire* might be difficult, considering the high correlations between them, the analyses were continued using only *target expectation* as measure of obligated motivation.

Table 3.2

Correlations between Agentic and Obligated Motivation by Culture

	Friend		Acquaintance		Stranger	
Japan (n = 154)						
	1	**2**	**1**	**2**	**1**	**2**
1. Agentic motivation (desire)						
2. Obligated motivation (duty)	.59 ***		.54 ***		.57 ***	
3. Obligated motivation (expectation)	.39 ***	.46 ***	.28 ***	.26 ***	.30 ***	.45 ***
Romania (n = 304)						
	1	**2**	**1**	**2**	**1**	**2**
1. Agentic motivation (desire)						
2. Obligated motivation (duty)	.65 ***		.60 ***		.61 ***	
3. Obligated motivation (expectation)	.33 ***	.45 ***	.10	.26 ***	.12 *	.27 ***
United States (n = 103)						
	1	**2**	**1**	**2**	**1**	**2**
1. Agentic motivation (desire)						
2. Obligated motivation (duty)	.67 ***		.58 ***		.52 ***	
3. Obligated motivation (expectation)	.28 ***	.37 ***	.24 *	.44 ***	.31 ***	.32 ***

*$p < .05$, **$p < .01$, ***$p < .001$.

To test the hypothesis that the relationship between agentic and obligated motivation would be higher in Japan compared to Romania and the U.S. (H1), regression analyses were conducted, predicting agentic motivation (*desire*) by obligated motivation (*target expectation*). First, two dummy variables representing the Romanian and the U.S. culture were constructed (Romanian dummy = 1 for Romanians, 0 otherwise, and American dummy = 1 for U.S. participants and 0 otherwise). Japan was chosen as reference category, because it was expected that Japanese differ from both Romanians and Americans. Next, *desire* to perform acts of kindness was predicted separately for each target (see Table 3.3).

In the case of distant targets (acquaintance and stranger), a weaker association between *expectation* and *desire* was found for the Romanian participants (Romanian × acquaintance *expectation* $b = -.19$, $p = .08$; Romanian × stranger *expectation* $b = -.20$, $p = .04$). Therefore, compared to Romanian participants, Japanese had more strongly internalized the expectations of distant targets.

Table 3.3

Interaction Effect of Obligated Motivation (Target Expectation) and Culture on Agentic Motivation (Desire)

	Friend scenario			Acquaintance scenario			Stranger scenario		
	b	*SE*		*b*	*SE*		*b*	*SE*	
Gender	0.39	.11	***	-0.14	.15		0.34	.14	*
Romanian	0.36	.10	***	0.80	.15	***	0.44	.14	**
American	0.35	.14	*	0.62	.19	***	0.59	.17	***
Obligated motivation (expectation)	0.40	.07	***	0.31	.09	**	0.31	.08	***
Obligated motivation × Romanian	-0.13	.09		-0.19	.11	†	-0.20	.10	*
Obligated motivation × American	-0.18	.11		-0.06	.14		0.00	.13	
R^2		.17	***		.06	***		.07	***

Note. Gender is a dummy coded variable, the reference category being male. Romanian and American are dummy-coded culture variables, the reference category being Japanese. Unstandardized regression coefficients are presented.

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

Effect of Agentic and Obligated Motivation on Expected Positive Affect. It was hypothesized that agentic motivation to perform acts of kindness would be positively related to own's positive affect regardless of culture (H2), while obligated motivation would have a stronger effect on positive affect in Japan (H3).

To investigate the moderation effect of culture on the relationship between agentic and obligated motivation to perform acts of kindness and expected positive affect, multiple regression analyses were conducted. Gender, agentic motivation (*desire*), obligated motivation (*target expectation*), the two dummy-coded culture variables, and the interactions between motivation and the two culture variables were introduced in three separate multiple regression analysis predicting expected positive affect for the friend, acquaintance, and stranger scenarios. Continuous predictors (type of motivation) were centered before running the regression analysis. The results are presented in Table 3.4.

Table 3.4

Interaction Effect of Agentic and Obligated Motivation (Target Expectation) and Culture on Positive Affect

	Friend scenario		Acquaintance scenario		Stranger scenario	
	b	*SE*	*b*	*SE*	*b*	*SE*
Gender	0.23	.07 **	0.38	.11 ***	0.19	.09 *
Agentic motivation (desire)	0.44	.05 ***	0.52	.06 ***	0.28	.05 ***
Obligated motivation (expectation)	0.15	.05 **	0.16	.07 *	0.10	.06
Romanian	0.81	.07 ***	0.48	.11 ***	0.18	.09
American	0.79	.09 ***	0.54	.14 ***	0.40	.12 ***
Agentic motivation × Romanian	0.09	.06	0.10	.07	0.30	.06 ***
Agentic motivation × American	0.12	.08	-0.01	.10	0.12	.09
Obligated motivation × Romanian	-0.08	.06	-0.17	.08 *	-0.10	.07
Obligated motivation × American	-0.08	.07	-0.13	.10	-0.11	.09
R^2		.59		.46		.39

Note. Gender is a dummy coded variable, the reference category being male. Romanian and American are dummy-coded culture variables, the reference category being Japanese. Unstandardized regression coefficients are presented.

**p* < .05, ***p* < .01, ****p* < .001.

As expected (H2), regardless of closeness of target, agentic motivation (*desire*) predicted positive affect significantly (friend $b = .44$, $p < .001$; acquaintance $b = .52$, $p < .001$; stranger $b = .28$, $p < .001$). Also, agentic motivation had a stronger effect on positive affect in Romania, compared to Japan, when the target was a stranger (Romanian × *desire* stranger $b = .30$, $p < .001$), suggesting that Romanians might feel more positive affect from acting on their desire to help a person they do not know.

As for the effect of culture and obligated motivation on positive affect (H3), *target expectation* predicted positive affect only when the target was close or medium-close (friend $b = .15$, $p = .01$; acquaintance $b = .16$, $p = .02$). Furthermore, when the target was an acquaintance, obligated motivation had a weaker effect on positive affect in Romania, compared to Japan (Romanian × *expectation* acquaintance $b = -.17$, $p = .03$; Figure 3.1). Results suggest that Japanese might experience more positive emotions when meeting the expectations of their acquaintances, compared to Romanians.

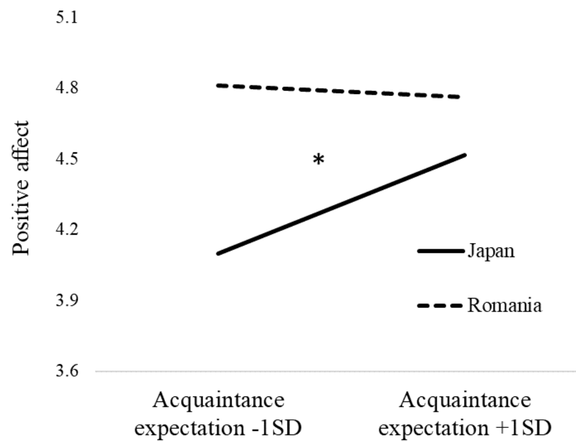

Figure 3.1. Interaction effect of culture and obligated motivation (target expectation) on positive affect for the acquaintance scenario

Moderating Effect of Community Ethic. To test H4-1, regression analyses were conducted predicting agentic motivation (*desire*) by obligated motivation (*target expectation*), endorsement of the Community Ethic, and their interaction. Gender and culture were introduced as control variables, and continuous predictors were centered before running the analysis. Results are presented in Table 3.5. The interaction between *target expectation* and Community ethic was significant for distant targets (Community × acquaintance *expectation* $b = .10$, $p = .03$; Community × stranger *expectation* $b = .07$, $p = .07$). Therefore, in the case of distant targets, participants with higher endorsement of the Community ethic had internalized their obligated motivation more fully.

Finally, to investigate whether endorsement of the Community Ethic interacts with obligation to help in predicting positive affect (H4-2), regression analyses predicting expected positive affect by endorsement of the Community Ethic, obligated motivation (*target expectation*), culture and gender, and the interaction between Community and obligated motivation, were conducted. Continuous predictors were centered. Results are reported in Table 3.6.

In the case of distant targets, the interaction was significant (Community × acquaintance

expectation $b = .11$, $p = .01$; Community × stranger *expectation* $b = .07$, $p = .04$; Figure 3.2). Accordingly, individuals who endorse Community ethic more strongly might gain more positive affect from meeting the expectations of distant targets.

Table 3.5

Interaction Effect of Obligated Motivation (Target Expectation) and Endorsement of the Community Ethic on Agentic Motivation (Desire)

	Friend scenario			**Acquaintance scenario**			**Stranger scenario**		
	b	*SE*		*b*	*SE*		*b*	*SE*	
Gender	0.40	.11	***	-0.15	.15		0.36	.14	**
Romanian	0.38	.11	***	0.77	.15	***	0.39	.13	**
American	0.41	.14	**	0.57	.18	**	0.48	.17	**
Obligated motivation (*expectation*)	0.28	.04	***	0.19	.05	***	0.21	.04	***
Community ethic	0.04	.05		0.03	.07		-0.04	.06	
Obligated motivation × Community	-0.05	.04		0.10	.05	*	0.07	.04	†
R^2		.17	***		.06	***		.07	***

Note. Gender is a dummy coded variable, the reference category being male. Romanian and American are dummy-coded culture variables, the reference category being Japanese. Unstandardized regression coefficients are presented.

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

Table 3.6

Interaction Effect of Obligated Motivation (Target Expectation) and Endorsement of the Community Ethic on Positive Affect

	Friend scenario			**Acquaintance scenario**			**Stranger scenario**		
	b	*SE*		*b*	*SE*		*b*	*SE*	
Gender	0.40	.09	***	0.27	.13	*	0.31	.11	**
Romanian	1.01	.09	***	0.86	.13	***	0.31	.11	**
American	1.01	.11	***	0.81	.16	***	0.56	.14	***
Obligated motivation (expectation)	0.22	.03	***	0.12	.04	**	0.10	.03	**
Community ethic	0.10	.04	**	0.13	.06	*	0.11	.05	*
Obligated motivation × Community	-0.02	.03		0.11	.04	**	0.07	.03	*
R^2		.33	***		.11	***		.07	***

Note. Gender is a dummy coded variable, the reference category being male. Romanian and American are dummy-coded culture variables, the reference category being Japanese. Unstandardized regression coefficients are presented.

*$p < .05$, **$p < .01$, ***$p < .001$.

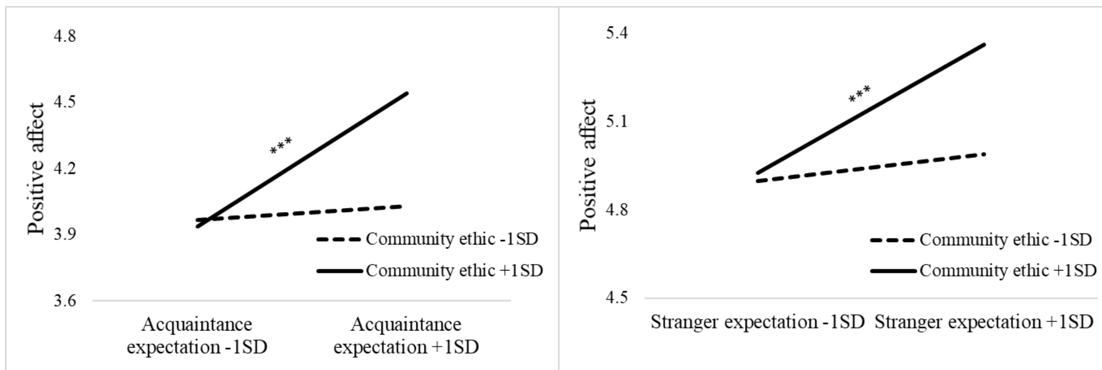

Figure 3.2. Interaction effect of community ethic and obligated motivation (target expectation) on positive affect for distant target scenarios.

Discussion

The purpose of Study 2a was to investigate the relationship between culture, moral reasoning, motivation to perform acts of kindness, and positive affect. Comparing three cultures, a Western (United States), an Eastern European (Romania) and an East-Asian culture (Japan), our study aimed to replicate and expand on past cross-cultural research investigating the association between agentic and obligated motivation to enact prosocial behavior, with a focus on individual endorsement of the Community ethic, and relationship with beneficiary. Scenarios in which the respondents had the chance to do small acts of kindness for different targets (close, medium, or distant) were employed, and participants were asked questions measuring, among others, their agentic motivation to perform the act (*desire* to do it), obligated motivation (*duty* and *target's expectation*), as well as *expected positive affect* (how good they would feel if they did it).

The first hypothesis was related to the association between agentic and obligated motivation. It was expected that, due to the prevalence of a duty-based morality, Japanese would have internalized more their role obligations, thus showing higher positive associations between agentic and obligated

motivation (Buchtel et al., 2018). Initially, two measures were used in order to tap into obligated motivation: *duty* to perform the act, and *target expectation*, and their association with agentic motivation (*desire* to perform the act) was explored. In all samples, *duty* and *desire* correlated highly, and so did *duty* and *expected positive affect*. Past research has showed that both Americans and Indians categorize duty/responsibility as an identified, and not extrinsic reason, and that for both samples, duty is positively related to satisfaction (Miller et al., 2011), suggesting it has a more internalized meaning than expected. Study 2a results corroborate these findings, drawing attention to the fact that the word "duty" might not fully capture social obligation, so using it as measure of obligated motivation alongside external expectations (as in Buchtel et al., 2018) might not be appropriate. Accordingly, the analyses were continued focusing mainly on *target expectation* as measure of obligated motivation, and the results supported H1. Compared to Romania, the relationship between *target expectation* and *desire* was stronger in Japan, when the target was an acquaintance or stranger. When the target was a close friend, there were no cultural differences, suggesting that participants have internalized their obligations toward close friends to the same degree, and this result is in accordance with past research showing cultural differences in participants' reactions to distant targets (Buchtel et al., 2018; Janoff-Bulman & Leggatt, 2002).

The second hypothesis predicted that agentic motivation to perform acts of kindness would be associated with positive affect regardless of culture, as suggested by SDT (Deci & Ryan, 2000), while the third predicted that obligated motivation would be more strongly associated with positive affect in Japan, as Japanese have internalized more fully their obligated reasons for helping (Buchtel et al., 2018). Agentic motivation to perform acts of kindness predicted positive affect regardless of target, and after controlling for the effects of gender and obligated motivation, so H2 was supported. Therefore, agentic motivation could be a key factor in determining whether engagement in prosocial behavior promotes the well-being of the benefactor, as its effect was robust across cultures and targets. This study adds to the

evidence linking autonomous motivation to help to higher well-being benefits for the helper (Nelson et al., 2015; Weinstein & Ryan, 2010).

However, concerning the stronger association between obligated motivation and positive affect in Japan (H3), the hypothesis was supported when the target was an acquaintance. Only when the target was of medium-closeness did significant cultural differences appear, as the relationship between obligated motivation and positive affect was stronger in Japan, compared to Romania. It is worth noting that in past research (Buchtel et al., 2018), which showed that obligated motivations are associated to positive emotions for Confucian heritage culture participants, the relationship with the target of the prosocial behavior was not investigated in detail. Study 2a addresses this limitation, thus clarifying in what situations obligated motivation is conducive to positive affect for participants from interdependent cultures. Summarizing the results, it can be said that obligated motivation is unlikely to be detrimental to positive affect (there were no negative associations observed). In fact, when the target is a close friend or an acquaintance, obligated motivation is positively associated with positive affect. Furthermore, Japanese might experience more positive affect when meeting the expectations of their acquaintances, compared to Romanians.

Finally, Study 2a proposed that the reason why Japanese show more congruence between fulfilling social expectations and a sense of agency, is the prevalence of a morality influenced by Confucianism, which emphasizes the moral value of meeting others' expectations and role-fulfilment (Rosemont & Ames, 2016). Although cultural endorsement of Confucianist values could not be measured directly, individuals' moral concerns about the importance of community values such as doing what others expect and preserving traditions were tapped into with the use of the Autonomy, Community and Divinity Scale (Guerra & Giner-Sorolla, 2010). Thus, it was hypothesized that, regardless of culture, individuals who show higher endorsement of the Community Ethic would have internalized social expectations (H4-1), and the results confirmed this pattern for distant targets. Consequently, moralizing

issues such as community duty fulfilment could lead to perceiving greater sense of agency in meeting distant others' expectations to help. Similarly, H4-2 investigated whether endorsement of the Community Ethic leads to a stronger association between obligated motivation and positive affect. Results supported H4-2, as individuals with higher endorsement of the Community norm exhibited a stronger relationship between social obligation (target expectation) and expected positive affect, when the target was an acquaintance or stranger. Therefore, endorsement of moral values pertaining to duty-fulfillment might lead to higher satisfaction when meeting the expectations of distant targets.

One of the limitations of Study 2a is that the cultural moderation could not be replicated when comparing the U.S. sample to Japan. Considering the amount of previous work that has shown lower internalization of social obligation in the case of Northern Americans compared to their Asian counterparts (Buchtel et al., 2018; Miller et al., 2011), failure to replicate these results with Study 2a's American sample needs to be addressed. There are two main reasons that could explain the lack of significant findings. One of them is the fact that the American sample was smaller than the other two (the Romanian sample was about three times larger), which might have made the detection of differences difficult. Another reason is the diversity of the American sample, as it was composed of mostly non-European American participants, and ethnic minorities are known to be higher in collectivism (Oyserman et al., 2002). In contrast, the Romanian sample was more uniform and larger. Targeting a larger sample composed of Anglo-Americans might be necessary in order to replicate the results.

Another limitation of this study concerns the measurement of agentic and obligated motivation to help, as only one question for each motivation type was used, so participants' answers might have been influenced by the specific wording of the questions. This problem should be addressed in future research by using more stable measurements of motivation. Furthermore, as all stimuli used were original, and comparisons were based on translations of these stimuli, interpretations of the cross-cultural differences observed should be made with caution. Moreover, this study used scenarios, which are highly

susceptible to social desirability bias. Future research should expand these results by focusing on real-life behaviors, using experimental designs and realistic settings and thus clarifying whether manipulating motivation to perform acts of kindness impacts the degree to which benefactors experience positive affect as a result, while taking into account cultural factors, relationship with target, and the role of moral reasoning.

3.2 Study 2b – Perceived social expectations and past prosocial behavior

Study 2b aimed to replicate and expand Study 2a, by addressing some of its limitations. First, as Study 2a did not identify significant differences between Japanese and Americans, possibly because of the small sample size and the ethnic variety of the U.S. sample, Study 2b targeted a bigger sample that is also more representative of European Americans, by collecting data on Amazon Mechanical Turk. Also, as Study 2a used a sample of university students, which might not be very representative of the whole population, in Study 2b, data were collected from adult participants on crowd-working platforms in Japan and the U.S. By increasing the representativeness of the samples, as well as statistical power, this study aims to obtain more robust results concerning the cultural moderation effect on the relationship between motivation to engage in prosocial behavior and positive affect.

Second, to overcome the limitations brought by using scenarios, which might lack reality and invite desirable responding, Study 2b asks participants to recall a real personal experience of help offering. Relationship with beneficiary was controlled by asking participants to refer to a situation in which they helped an acquaintance. This choice was based on past research, which revealed that the greatest cultural differences appear when targets of prosocial behavior are of medium closeness (Janoff-Bulman & Leggatt, 2002), as well as on the results of Study 2a, which showed that culture influences the association between motivation to help and positive affect only for medium close or distant targets. As simple recollection of past helping behavior can influence one's present mood (Wiwad & Aknin, 2017), participants were asked to recall a past act of kindness, evaluate their agentic (desire) and obligated motivation (perception of social expectation) to help the target, and report on their current affect. As Study 2a has shown that "social expectations" might be a better measure of obligation to help than "duty", Study 2b focuses on social expectation to help and investigates its effect on positive affect.

Furthermore, Study 2b extends Study 2a by also tapping into the role of satisfaction of basic

psychological needs. Considering that engaging into a task for controlled reasons (such as social expectations) could hinder satisfaction of basic psychological needs (Weinstein & Ryan, 2010), the mediating effect of basic psychological needs satisfaction on the relationship between social expectations and positive affect was also investigated.

Finally, Study 2b aimed to replicate the moderating effect of endorsement of the Community ethic on the relationship between obligated motivation to help and positive affect, which was observed in Study 2a. The following hypotheses were set.

H1: Japanese internalize social expectations more than Americans, showing a stronger positive association between agentic (desire) and obligated motivation (social expectation) to help.

H2: Agentic motivation to help (desire) is positively related to positive affect regardless of culture.

H3: Obligated motivation (social expectation) to help has a stronger positive effect on positive affect in Japan compared to the U.S.

H4-1: Participants who endorse the ethic of Community internalize social expectations more, showing a stronger positive association between agentic (desire) and obligated motivation (social expectations) to help, regardless of culture.

H4-2: Obligated motivation (social expectation) to help has a stronger positive effect on positive affect for participants who endorse the Community ethic, regardless of culture.

In addition, one hypothesis regarding the mediating role of basic psychological needs satisfaction was also set.

H5: Satisfaction of basic psychological needs mediates the relationship between obligated motivation (social expectation) to help and positive affect.

To test H5, a mediational model explaining why social expectations are differently related to affect in the two cultures is investigated. If social expectations are a form of controlled motivation to help, they could reduce satisfaction of basic psychological needs, which, in turn, reduce positive affect

(U.S. mediation model), but if social expectations are a form of autonomous motivation to help, they might increase satisfaction of basic psychological needs and, thus, positive affect (Japan mediation model).

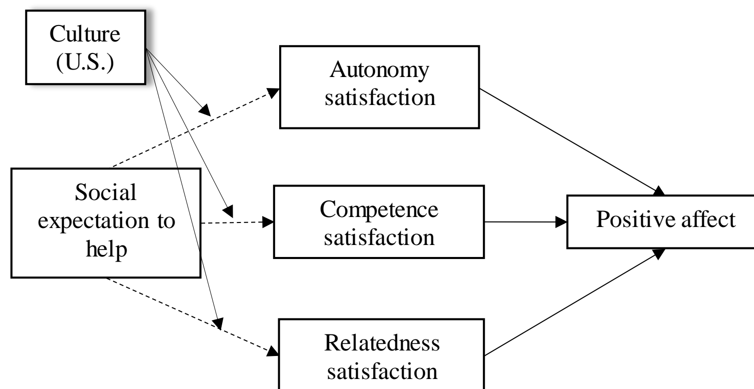

Figure 3.3. Hypothesized moderated mediation model representing the relationship between social expectations to help and positive affect as mediated by satisfaction of basic psychological needs. Dotted arrows represent negative associations, while solid arrows represent positive associations.

Method

Participants. Data were collected on the crowd-sourcing platforms of Amazon Mechanical Turk in the U.S. and Lancers, in Japan. One hundred eighty Japanese and 190 Americans participated. We excluded participants who withdrew their informed consent, those who were not Americans or Japanese, those who failed either of the two attention checks or who did not follow instructions for the kindness recollection task. Finally, the responses of 164 Japanese (86 males, *M*age 41.49, *SD* = 9.72, 57.9% college graduates) and 177 U.S. participants (93 males, *M*age 37.34, *SD* = 11.26, 51.9% college graduates, 72.9% Euro-Americans) were analyzed. There were no gender proportion differences between the two samples ($\chi^2 = 0.01$, $p = .92$), but Japanese were older than Americans ($t = 3.62$, $p < .001$).

Procedure. Participants were requested to recall their most recent act of kindness toward an acquaintance (neither family or close friend, nor stranger), and spend at least 3 minutes writing down the details of the interaction, focusing on what they had done and how it had made them feel. The instructions for the task are presented below.

> "First, think of an acquaintance you meet and speak with frequently. Think of a person who is neither a close friend or family, nor a complete stranger, but is someone you interact with very often. From now on, we will refer to the person you thought of as *your acquaintance*. Next, please recall the most recent situation that matches the description below: You did something kind for your acquaintance, something that benefited him/her."

Measures. As in Study 2a, participants' agentic (how much they wanted) and obligated motivation (how much their acquaintance expected them) to engage in the prosocial act they had just recalled was measured (1 = *Not at all*, 7 = *Very much*). Basic psychological needs satisfaction was measured using the nine satisfaction items from the Balanced Measure of Psychological Needs Scale (Sheldon & Hilpert, 2012), which is comprised of three factors: autonomy need satisfaction, competence need satisfaction, and relatedness need satisfaction (for factorial structure and measurement invariance of the scale, see Table 3.7).

Affect was measured with the PANAS (Watson, Clark, & Tellegen, 1988; Kawahito, Otsuka, Kaida, & Nakata, 2011), a scale comprised of two factors: positive affect and negative affect. Four items measuring happiness (Kitayama et al., 2000) were also added. To measure endorsement of duty-based ethics, the Ethic of Community subscale (10 items) from the Autonomy, Community and Divinity Scale (Guerra et al., 2013) was included. To check whether there were any cultural differences in closeness between participants and targets ("acquaintance" might mean different things in the two cultures), the Inclusion of Other in the Self Scale (Aron, Aron, & Smollan, 1992) was used. Furthermore, two items

screening participants for inattention were also included (e.g. For this item, please choose *No agreement*), and the responses of participants who failed either item were eliminated from the analyses.

Results

As an original translation of the Balanced Measure of Psychological Needs Scale (9 satisfaction items) was used, confirmatory factor analysis and measurement invariance tests were performed to ensure that the scale can be reliably used in the two cultures (see Table 3.7). Descriptive statistics, reliability of scales, cross-cultural comparisons and Pearson correlations are presented in Tables 3.8 and 3.9.

Table 3.7

Measurement Invariance of the Balanced Measure of Psychological Needs Scale (9 Satisfaction Items) in Japan and the U.S.

Model	χ^2		*df*	χ^2/df	CFI	RMSEA [90%CI]	$\Delta\chi^2$		Δdf	ΔCFI
Three-factor model	39.05	*	24	1.63	.990	.043 [.015, .067]				
Configural model	68.40	*	48	1.42	.983	.050 [.017, .075]	-		-	-
Metric model	77.01	*	54	1.43	.981	.050 [.020, .074]	8.61		6	.002
Scalar model	139.84	***	60	2.33	.932	.088 [.069, .108]	62.84	***	6	.049

Note. χ^2/df = chi-square divided by its degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation. $\Delta\chi2$ = Delta chi-square; Δdf = Delta degrees of freedom; N = 341. The three-factor model investigates the factor structure of the BMPNS on the whole sample (including Japanese and Americans). The configural model tests the three-factor model separately in the U.S. and Japan, expecting items to load on the same latent factors in the two cultures (configural invariance). The metric model forces the factor loadings to be the same across cultures (metric invariance). The scalar model constrains item intercepts to be equal across cultures (scalar invariance).

*$p < .05$, ***$p < .001$.

Table 3.8

Descriptive Statistics of Study Variables

	Japan (n =164)				United States (n =177)			
	α	***M***	***SD***	***SE***	**α**	***M***	***SD***	***SE***
1. Inclusion of other in self		2.71	1.21	.09		2.89	1.25	.09
2. Agentic motivation (desire)		5.45	1.19	.09		5.78	1.36	.10
3. Obligated motivation (target expectation)		3.98	1.70	.13		2.57	1.67	.13
4. Autonomy need satisfaction	.64	3.46	0.76	.06	.72	4.02	0.74	.06
5. Competence need satisfaction	.80	2.70	0.86	.07	.84	3.84	0.75	.06
6. Relatedness need satisfaction	.86	3.38	0.87	.07	.83	4.08	0.77	.06
7. Community ethic	.90	4.22	0.95	.07	.94	3.88	1.31	.10
8. Positive affect	.86	2.66	0.66	.05	.91	3.12	0.87	.07
9. Negative affect	.92	2.31	0.88	.07	.94	1.20	0.50	.04
10. Happiness	.73	3.07	0.76	.06	.78	3.13	0.84	.06

*$p < .05$, **$p < .01$, ***$p < .001$.

As there were no cross-cultural differences in inclusion of other in self ($t(339) = 1.30$, $p > .05$), it could be concluded that both samples had referred to similar targets in terms of closeness. Furthermore, because positive affect and happiness were strongly correlated in both cultures, an aggregate mean score was used for subsequent analyses (it was labeled aggregate positive affect).

Table 3.9

Pearson Correlations Between Study Measures by Culture

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Inclusion of other in self	-	.22 **	.23 **	.18 *	.11	.22 **	-.02	.19 *	-.05	.05
2. Agency (desire)	.02	-	.14	.19 *	-.01	.30 ***	-.05	.09	-.13	.30 ***
3. Obligation (target expectation)	.19 *	-.26 ***	-	-.01	.21 **	.18 *	-.04	.08	-.09	.13
4. Autonomy need satisfaction	.05	.31 ***	-.25 **	-	.27 **	.49 ***	.04	.32 ***	-.29 ***	.51 ***
5. Competence need satisfaction	.08	.16 *	-.13	.49 ***	-	.35 ***	.06	.52 ***	-.08	.29 ***
6. Relatedness need satisfaction	-.01	.30 ***	-.33 ***	.55 ***	.44 ***	-	.05	.33 ***	-.28 ***	.42 ***
7. Community ethic	.08	.09	-.02	.15	.05	.09	-	.06	-.13	.08
8. Positive affect	.17 *	.20 **	-.11	.48 ***	.47 ***	.37 ***	.26 **	-	.11	.53 ***
9. Negative affect	.15 *	-.21 **	.24 **	-.29 ***	-.10	-.17 *	-.03	-.13	-	-.31 ***
10. Happiness	-.03	.19 *	-.18 *	.49 ***	.35 ***	.36 ***	.25 **	.73 ***	-.46 ***	-

Note. Results for the U.S. sample are presented below the diagonal, and results for the Japanese sample are presented above the diagonal.

*$p < .05$, **$p < .01$, ***$p < .001$.

Effect of Obligated Motivation (Social Expectations) on Agentic Motivation (Desire to Help). To test the predictions, multiple regression analyses were conducted. Culture (dummy-coded as Japan = 0 and U.S. = 1), perceived social expectation (mean-centered), and their interaction were included in the regression model to predict agency (desire to help). The interactions between culture and perceived social expectation on desire to help (β=-.30, p <.001) was significant. The negative association between perceived social expectation and agency was weaker in Japan than in the U.S (simple slope Japan b = 0.09, p = .12; simple slope U.S. b = -0.22, p < .001). Therefore, H1 was supported.

Effect of Agentic and Obligated Motivation on Affect. First, agentic motivation (mean-centered), culture, and their interaction were included in the regression model to predict aggregate positive affect. The main effect of agentic motivation was marginally-significant (β=.15, p =.05), while the interaction with culture was non-significant (β=.04, p =.60). The analyses were repeated using negative affect as dependent variable. The main effect of agentic motivation was significant (β=-.14, p =.03), but the interaction with culture was not (β=.02, p =.73). Consequently, regardless of culture, participants who reported they wanted to help more tended to experience more positive affect and less negative affect. Therefore, H2 was partially supported.

Next, obligated motivation (mean-centered), culture, and their interaction were included in the regression model to predict affect. The interaction between culture and perceived social expectation on aggregate positive affect (β=-.18, p =.02), and negative affect (β=.16, p = .01) were significant. The negative association between perceived social expectation and aggregate positive affect was weaker in Japan than in the U.S (simple slope Japan b = 0.02, p = .42; simple slope U.S. b = -0.06, p = .09). In contrast, the positive relationship between expectation and negative affect was stronger in the U.S (simple slope Japan b = -0.04, p = .17; simple slope U.S. b = 0.07, p = .03). Therefore, H3 was supported.

Moderating Effect of Community Ethic. To investigate the role of endorsement of community ethic, culture, and the interaction between community ethic (centered) and perceived social expectation (centered) were introduced in the regression model to predict agency and affect. However, none of the interactions were significant (expectation × community on agency β=-.08, *p* =.14; expectation × community on aggregate positive affect β=.03, *p* =.51; expectation × community on negative affect β=-.01, *p* =.72), so Hypothesis 4-1 and 4-2 were not supported.

Mediating Role of Basic Psychological Needs. Finally, to explore whether perceived social expectation hinders satisfaction of the needs for autonomy, competence, and relatedness in the U.S, but not in Japan, an unconstrained model was tested. The model allowed coefficients to vary between cultures (see Figure 3.3; for information on the constrained model, see Table 3.10).

Table 3.10

Multigroup Path Analyses Predicting Affect

Model predicting aggregate positive affect	CFI	RMSEA [90%CI]	AIC	BIC	$\Delta\chi^2$	Δdf	ΔCFI
Unconstrained multigroup model	1	0	2842.36	2980.31	-	-	-
Constrained model (equal regression coefficients)	.939	.134 [.085, .187]	2856.87	2967.99	28.50 ***	7	.061
Constrained model (free EX - REL)	.973	.096 [.037, .156]	2845.74	2960.69	15.37 *	6	.027
Constrained model (free EX - REL and EX - COM)	.990	.065 [.000, .137]	2840.97	2959.76	8.60	5	.010
Model predicting negative affect	**CFI**	**RMSEA [90%CI]**	**AIC**	**BIC**	**$\Delta\chi^2$**	**Δdf**	**ΔCFI**
Unconstrained multigroup model	1	0	2890.56	3028.51	-	-	-
Constrained model (equal regression coefficients)	.890	.152 [.103, .204]	2911.03	3022.15	34.46 ***	7	.110
Constrained model (free EX - REL)	.938	.122 [.069, .181]	2899.89	3014.84	21.33 **	6	.062
Constrained model (free EX - REL and EX - COM)	.962	.106 [.045, .171]	2895.13	3013.91	14.56 *	5	.038
Constrained model (free EX - REL, EX - COM, and REL - NA)	.981	.084 [.000, .160]	2891.40	3014.01	8.83	4	.019

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; AIC = Akaike information criterion; BIC = Bayesian information criterion; $\Delta\chi^2$ = Delta chi-square; Δdf = Delta degrees of freedom; ΔCFI = Delta CFI; EX=social expectation, REL=relatedness need, COM=competence need, NA=negative affect. N = 341. Partially-constrained models were constructed by freeing, one by one, the paths that showed the largest cross-cultural differences in direction and strength.

*$p < .05$, **$p < .01$, ***$p < .001$.

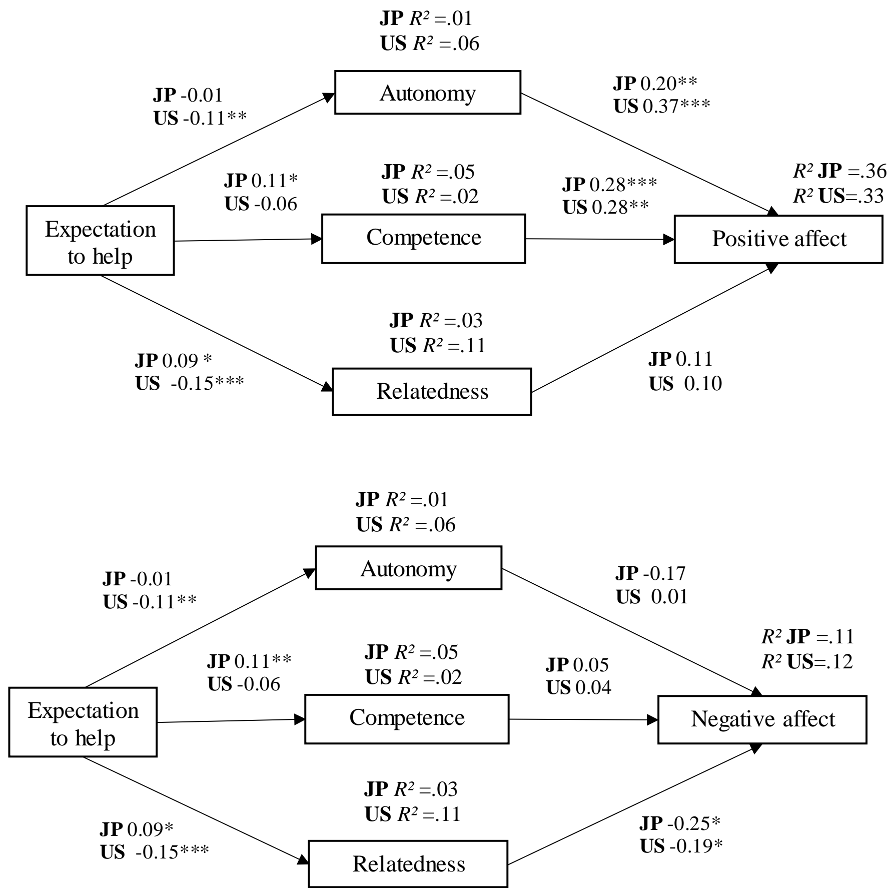

Figure 3.3. Unconstrained model representing the mediating effect of basic psychological needs satisfaction on the relationship between perceived social expectation to help and affect. The model assumes residual covariances between mediators. Unstandardized regression coefficients are reported. JP = Japan, US = United States.

$^*p < .05$, $^{**}p < .01$, $^{***}p < .001$.

The indirect effects of perceived social expectation on positive and negative affect through satisfaction of basic psychological needs were calculated separately, using bootstrapping with 1000 samples. The indirect effect on aggregate positive affect through satisfaction of the need for autonomy was negative for Americans (estimate = -.04, 95% CI [-.08, -.01]), suggesting that perceived social expectation hinders

satisfaction of the need for autonomy, which leads to lower positive affect. In contrast, in Japan, the indirect effect through satisfaction of the need for competence was positive (estimate = .03, 95% CI [.01, .06]). Therefore, for Japanese, perceiving social expectations to help leads to a sense of competence, which increases positive affect. Furthermore, when estimating the effects on negative affect, for Americans, the indirect effect through satisfaction of the need for autonomy was positive (estimate = .02, 95% CI [.01, .05]), suggesting that perceiving social expectations to help leads to lower sense of autonomy, which increases negative affect. The 95% CI of all other indirect effects included zero (see Table 3.11). These results supported H5.

Table 3.11

Direct and Indirect Effects of Expectation to Help on Affect by Culture

	Japan (*n* =164)	US (*n* =177)
Expectation - Aggregate positive affect (direct effect)	-.01 [-.05, .05]	.01 [-.06, .06]
Expectation - Aggregate positive affect (indirect effect)		
Through Autonomy	-.01 [-.02, .01]	**-.04 [-.08, -.01]**
Through Competence	**.03 [.01, .06]**	-.02 [-.05, .01]
Through Relatedness	.01 [-.01, .03]	-.01 [-.04, .01]
Expectation - Negative affect (direct effect)	-.04 [-.12, .04]	**.05 [.01, .10]**
Expectation - Negative affect (indirect effect)		
Through Autonomy	.01 [-.02, .03]	**.02 [.01, .05]**
Through Competence	.01 [-.02, .03]	-.01 [-.02, .01]
Through Relatedness	-.02 [-.05, .01]	-.01 [-.02, .02]

Note. Unstandardized estimates are presented. 95% confidence intervals are presented between brackets. Bolded effects are significant.

Discussion

This study aimed to replicate the moderating effect of culture on the association between agentic and obligated motivations to help observed in Study 2a. The results indicated that Japanese internalize social

expectations to help more than Americans. Study 2b affords further evidence for the incongruence between responding to perceived social expectations and sense of agency in Western cultures (Goyal et al., 2019; Weinstein & Ryan, 2010). In addition, by investigating the role of satisfaction of the needs for autonomy, competence, and relatedness, this study offers an explanation for why perceived social expectation has contrasting effects on affect in the two cultures. In line with previous research suggesting that well-being is achieved through different pathways in independent versus interdependent cultures (Kitayama et al., 2010), perceiving social expectation to help had positive effects on affect for the interdependent Japanese fostering a sense of being socially competent (more satisfaction of the need for competence). Given these results, Japanese derive more positive affect from expected helping, probably because being responsive to other people's needs is an important cultural task for interdependent individuals (Markus, 2016). In contrast, perceived social expectation lowered satisfaction of the need for autonomy and decreased positive affect for Americans, suggesting that social expectations are thought of as being imposing by independent individuals. Consequently, Japanese may experience more satisfaction from helping others when it is strongly expected, while the opposite would be true for Americans.

This study has some limitations. Although participants were asked to recall helping someone, report on their past motivations, and state their current affect, because of the correlational nature of the study, the direction of causality is unclear. Therefore, experimentally manipulating motivation is necessary in order to draw conclusions regarding causality. Another issue is that agentic and obligated motivation were measured by only one item each, so more reliable measures of motivation need to be used in future studies. Finally, as we could not replicate the moderating effect of endorsement of community ethic on the association between obligation, agency, and affect observed in Study 2a, more research is needed in order to establish whether differences in moral reasoning play a role in the cultural moderation effects. Overall, the results of this study suggest that, in opposition to the tension prevalent

in Western thought between individual sense of agency and social role fulfillment, meeting social obligations might not reduce agency and satisfaction for individuals from interdependent cultures.

3.3 General discussion

The purpose of Study 2 was to investigate the role played by motivation in determining the amount of satisfaction derived from engaging in prosocial behavior for participants from different cultures. Employing the theoretical framework of self-determination theory (Deci & Ryan, 2000), a distinction was made between motivation that comes from a sense of volition and choice (labeled agentic motivation) and motivation that comes from external pressures (obligated motivation). As shown in previous studies (Weinstein & Ryan, 2010), it was expected that engaging in prosocial behavior in order to meet social expectations (having an obligated motivation) would diminish satisfaction of the needs for autonomy, competence and relatedness. However, this association was hypothesized to be weaker among participants with interdependent cultural backgrounds, who have been shown to internalize social obligations to a higher degree than Western, independent participants (Baron & Miller, 2000; Buchtel et al., 2018; Goyal et al., 2019; Miller et al., 2011). Furthermore, Study 2 aimed to explore a possible reason why individuals from more interdependent cultures internalize obligations to a higher degree: endorsement of a morality based on values such as duty fulfillment and abiding by the norms of one's social group.

Targeting both university students (Study 2a) and adults (Study 2b), the results of Study 2 corroborated in supporting the hypothesis that obligated motivation to help has contrasting effects on affect depending on participants' cultural background. Study 2a showed that, compared to Romanians, Japanese internalize social obligations to help a distant target to a higher degree, and expect they would feel more satisfaction from meeting those obligations. Study 2b revealed that compared to Americans, Japanese derive more satisfaction of the need for competence and more positive affect from meeting the expectations to help of their acquaintances. Overall, these two studies point out that behaving in accordance with the expectations of others has a more positive effect on Japanese benefactors.

As for the role of endorsement of the ethic of community, Study 2a showed that, regardless of their cultural background, participants who place more value on community norms derive more satisfaction from meeting social obligations. This result might suggest that the cultural moderation observed (Japanese internalizing social expectations to a higher degree) could be due to the cultural prevalence of an ethic discourse which moralizes fulfilment of social duties (Shweder et al., 1997). However, the moderating effect of Community ethic could not be replicated in Study 2b, so more research is necessary in order to establish the role played by individual moral values in the internalization of expectations.

Study 2 adds to the cross-cultural literature on internalization of social expectations (e.g. Miller et al., 2011) by bringing evidence from Japan and Romania. While past research compared Indians (Baron & Miller, 2000; Goyal et al., 2019; Miller et al., 2011) or Chinese (Buchtel et al., 2018) to European Americans, this is the first study to include an important representative of interdependent cultures, which has also been under the influence of Confucianism: Japan. Furthermore, by also including an ambivalent (both independent and interdependent) European culture (Romania), the study extends previous research which focused mainly on Euro-Americans or Canadians (e.g. Buchtel et al., 2018), thus supporting the generalizability of findings.

Study 2 has a number of limitations. First, issues concerning the validity and reliability of the measures tackling agentic and obligated motivation should also be overcome by using scales with better psychometric qualities. Second, as the moderating effect of culture was observed only when comparing Japanese to Romanians in Study 2a and Japanese to Americans in Study 2b, drawing conclusions about the relative position of Romania to the U.S. and Japan remains difficult. Therefore, research comparing all three cultures in a single study need to be conducted. Finally, the most significant limitation of Study 2 is related to its correlational nature, which makes the discussion of causality difficult. Manipulating motivation in an experimental design is needed for more robust results to be obtained. Study 3 aims to

address this problem by experimentally investigating the effect of social expectations to help on affect in different cultures.

Chapter 4 The Effect of Social Expectations to Help on Positive Affect and Prosocial Effort

Study 2a revealed that Japanese show a stronger positive association between perception of social expectation to help and positive affect than Romanians, and Study 2b replicated the cultural moderation effect, comparing Japanese to Americans. Overall, Study 2 hinted to the fact that, compared to Romanians and Americans, who experience less positive affect when they perceive that the target expects their help, Japanese might feel as much or even more positive affect when responding to the expectations of distant others. However, because Study 2 employed scenarios and recollection of past prosocial behavior, desirable responding and memory biases could question the validity of findings. Furthermore, as both Study 2a and Study 2b were correlational, the direction of causality remains unclear. Consequently, manipulating obligation to engage in prosocial behavior, as well as employing actual helping behavior (not recalled or imagined) is necessary in order to increase the validity of the results so far.

Two studies were designed to address these limitations. Based on past research (Janoff-Bulman & Leggatt, 2002) and the results of Study 2a, which showed that the cultural moderation effect on the association between target expectation and benefactors' positive affect emerges only when the target is distant, prosocial behavior toward distant targets, such as acquaintances (Study 3a) and strangers (Study 3b) was investigated. These two studies aimed to answer the following research questions: (1) does the cultural moderation effect observed in Study 2 replicate when experimentally manipulating obligation to help? (2) does the cultural moderation effect replicate when using actual helping behavior as experimental task? and (3) does endorsement of the Community ethic moderate the effect of obligation on positive affect in an experimental design?

To answer the first question, obligation to help was experimentally manipulated in both Study

3a and Study 3b. In Study 3a, Japanese and American participants were asked to recall a situation when they helped someone because the target requested them (high obligation/expectation) or a situation in which they helped without being requested (low obligation/expectation). In Study 3b, obligation to help was manipulated through the instructions for the helping task, Japanese and American participants in the high obligation condition being told that the target expects their help, so they should help, while participants in the low obligation condition were told it is their choice whether to help or not. By experimentally manipulating obligation, its effect on positive affect could be more clearly investigated.

To answer the second question, in Study 3b, a helping task was included in the experiment, participants having the opportunity to make an actual contribution to a beneficiary, and a measure of objective contribution (prosocial effort) was calculated. It was hypothesized that the negative effect of obligation to help on positive affect derived from actually helping the beneficiary would be moderated by culture.

To answer the third question, participants' endorsement of the community ethic was measured in both Study 3a and Study 3b. It was expected that the negative effect of obligation to help on positive affect would be weaker for participants who endorse the community ethic.

4.1 Study 3a – Effect of request for help on need satisfaction and positive affect

In Study 3a, past helping experiences of participants from two cultures (Japan and the U.S.) are compared, and the effect of recalling an instance of non-requested (autonomous) helping versus an instance of requested (obligated) helping, on need satisfaction and affect is investigated.

The hypotheses for Study 3a are described below.

H1: Request for help reduces state positive affect, relative to the non-requested help condition, and the effect is mediated by reduced satisfaction of basic psychological needs.

H2: Culture moderates the above negative effect of request on positive affect, the effect being weaker in Japan than in the U.S. (see Figure 4.1).

H3: Endorsement of the Community Ethic moderates the negative effect of request on positive affect, the effect being weaker for participants high in Community ethic.

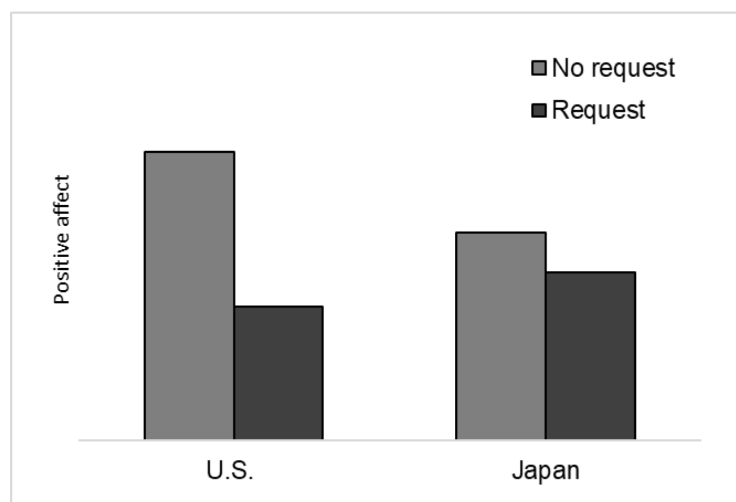

Figure 4.1. Hypothesized interaction between culture and existence of request for help on positive affect (H2)

Method

Participants. Data were collected on Amazon Mechanical Turk (in America) and Lancers (in Japan). Initially, 201 American participants and 259 Japanese participants participated in the study in exchange for $1.5. After eliminating participants who withdrew their informed consent (n = 1), participants who were not American or Japanese (n = 3), participants who failed either of the two inattention check items (n = 14), those who did not follow the instructions for the helping task (see Results; n = 58), the responses of 215 Japanese participants (110 males, 103 females, 2 unknown, M_{age} = 40.97, SD = 9.55; 62.32% had a college degree or higher) and 169 American participants (93 males, 76 females, M_{age} =37.79, SD = 10.20; 78.1% Euro-Americans; 60.35% had a college degree or higher) were analyzed. There were no differences in gender distributions between cultures (χ^2 (1, 383) = 0.31, p = .57), but Japanese were significantly older than Americans (t (382) = 3.14, p = .01). As for the number of participants in each experimental condition, there were 114 Japanese (53 males, 59 females, 2 unknown) and 94 Americans (53 males, 41 females) in the non-requested help condition and 101 Japanese (57 males, 44 females) and 75 Americans (40 males, 35 females) in the requested help condition.

Experimental Design. The experimental design was 2 (request: no request vs request) × 2 (culture: Japan vs U.S.) between-subjects design. Existence of request was manipulated. Participants in the no request helping condition were told to recall a recent situation in which they did something kind for an acquaintance voluntarily, without being requested. Participants in the requested helping condition were told to recall a situation in which they helped someone because the target requested their help.

Procedure. Participants were invited to participate in an online study on social interactions. They were randomly allocated to one of two experimental conditions: requested help or non-requested help. First,

all participants were asked to think of an acquaintance they meet and talk with often. Then, they were asked to recall the most recent situation in which they did something kind for that acquaintance. The instructions for the recollection task differed by experimental condition. In the non-requested help condition, the description of the situation participants had to recall was: *Although your acquaintance didn't request it directly, you did something kind for him/her, something that benefited him/her*, while in the requested help condition, the instructions were *Although you didn't want to do so very much, because your acquaintance requested it directly, you did something kind for him/her, something that benefited him/her.* Next, all participants were asked to spend three minutes (or more) writing down what happened and how they felt in the situation they had recalled. After that, they responded to the questionnaires described in the Measures section. At the end, participants were debriefed and were offered the possibility to withdraw their informed consent.

Measures. As a check of manipulation, two questions were included. One question measured agentic motivation (how much participants really wanted to help) and another question measured obligated motivation (how much the target expected them to help), on a scale from 1 = *not at all*, to 7 = *very much*. Also, to make sure participants referred to a target of medium closeness, participants were asked to respond to the Inclusion of Other in the Self Scale (Aron et al., 1992). To measure need satisfaction, the need satisfaction subscale of the Balanced measure of psychological needs scale (as in Study 2b) was used (Sheldon & Hilpert, 2012) and participants were asked to evaluate how much need satisfaction they felt when helping their acquaintance. Affect was measured with the PANAS (Kawahito et al., 2011; Watson et al., 1988). Four items measuring happiness (elated, relaxed, calm, happy) were also added (Kitayama et al., 2000). Again, participants evaluated how they felt during the episode they had just recalled. To measure endorsement of the community ethic, the Community Ethic subscale from the short version of the Autonomy, Community and Divinity scale (Guerra & Giner-Sorolla, 2010; Guerra et al.,

2013) was used. As demographics, age, gender, whether they are an international student or not, and ethnicity (in the U.S.) were measured. In addition, two items screening for inattention were also used.

Results

Content of Helping Episodes. First, to verify whether participants followed the instructions for the recollection task, the descriptions of the helping episode recalled were read, and participants whose descriptions made no sense (e.g. one participant copy-pasted the instructions for the task in the essay-box), participants who were in the no-request helping condition but described an instance of requested helping, and participants in the requested helping condition who described an instance of helping in which there was no explicit request (the latter were numerous, especially in the U.S.) were eliminated.

Descriptive Statistics of the Main Study Variables. Internal consistency, means and standard deviations of main study variables by country are presented in Table 4.1. The negative affect scale showed floor effects in the U.S. (skew = 1.83, kurtosis = 3.31), so we excluded it from subsequent analyses.

Table 4.1

Internal Consistency and Mean Scores of Study Variables

	Japan (*n* =215)			U.S. (*n* =169)		
	α	***M***	***SD***	**α**	***M***	***SD***
1. Agentic motivation (desire)	-	4.65	1.52	-	4.81	1.93
2. Obligated motivation (expectation)	-	4.39	1.79	-	3.18	2.10
3. Inclusion of Other in Self		2.47	1.26		2.91	1.21
4. Autonomy need	.79	3.33	0.94	.74	3.78	0.96
5. Competence need	.78	2.82	0.91	.84	3.41	1.02
6. Relatedness need	.82	3.15	0.88	.88	3.45	1.07
7. Community ethic	.91	4.12	1.03	.93	3.93	1.20
8. Positive affect	.82	2.74	0.66	.91	3.02	0.90
9. Happiness	.74	2.95	0.85	.83	2.88	1.02
10. Negative affect	.90	2.01	0.81	.88	1.35	0.51

Check of Manipulation. To check whether the manipulation had succeeded, the effect of request (no request vs request) and its interaction with culture (U.S. vs Japan) on the two motivation items was investigated. It was expected that participants in the requested help condition have lower agentic motivation (wanting to help less), and higher obligated motivation (perceiving that the target expects their help more) than participants in the no-request help condition.

First, for the item measuring agentic motivation (*want*), the main effect of request ($F(1, 380) = 126.97$, $p < .001$, $\eta^2_p = .250$), as well as the interaction between request and culture ($F(1, 380) = 13.70$, $p < .001$, $\eta^2_p = .034$) were significant, but the main effect of culture was not significant ($F(1, 380) = 1.18$, $p = .276$, $\eta^2_p = .001$). Overall, participants in the requested helping condition had lower agentic motivation, but the difference in agentic motivation between requested and non-requested helping was smaller for Japanese (non-request $M = 5.21$, $SD = 1.29$, request $M = 4.01$, $SD = 1.51$; $F(1, 213) = 39.53$, $p < .001$, $\eta^2_p = .156$) than for Americans (non-request $M = 5.82$, $SD = 1.34$, request $M = 3.52$, $SD = 1.77$; $F(1, 167) = 93.94$, $p < .001$, $\eta^2_p = .359$; See Figure 4.2)

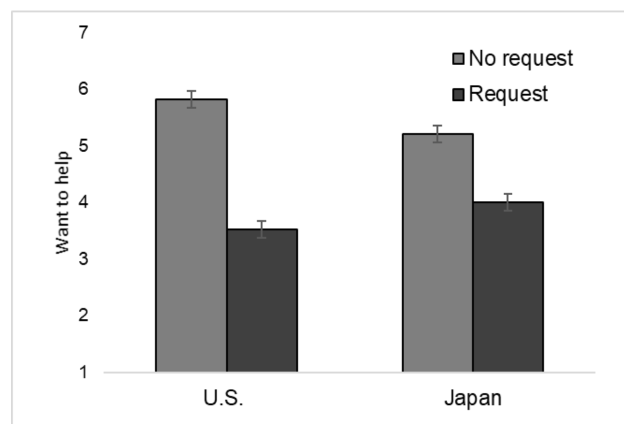

Figure 4.2. Interaction effect of request and culture on agentic motivation to help

For the item measuring obligated motivation (*perceived target expectation*), the main effect of request ($F(1, 380) = 312.68$, $p < .001$, $\eta^2_p = .451$), and culture ($F(1, 380) = 68.56$, $p < .001$, $\eta^2_p = .138$), as well

as the interaction between request and culture ($F(1, 380) = 15.52$, $p < .001$, $\eta^2_p = .039$) were significant. Overall, Japanese and participants in the requested helping condition evaluated that the target expects their help more, but the difference between requested and non-requested helping in target expectation was smaller for Japanese (non-request $M = 3.42$, $SD = 1.68$, request $M = 5.49$, $SD = 1.17$; $F(1, 213) = 106.3$, $p < .001$, $\eta^2_p = .332$) than for Americans (non-request $M = 1.76$, $SD = 1.22$, request $M = 4.97$, $SD = 1.51$; $F(1, 167) = 234.80$, $p < .001$, $\eta^2_p = .584$; see Figure 4.3).

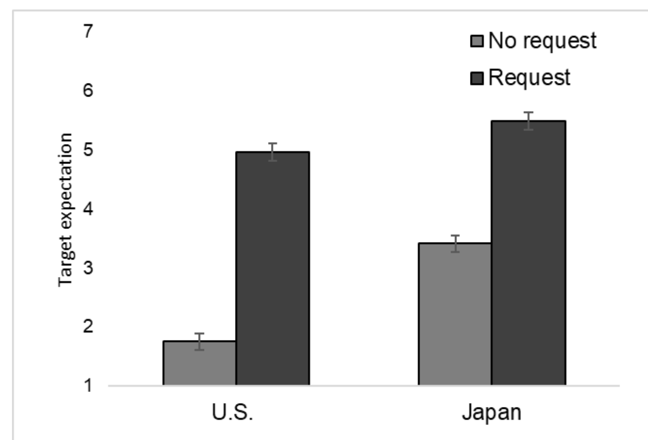

Figure 4.3. Interaction effect of request and culture on obligated motivation to help (perceived target expectation)

Results for the check of manipulation showed that overall, participants in the non-request helping condition had higher agentic motivation and lower obligated motivation to help, perceiving that the target expects their help less than participants in the requested help condition. Furthermore, the significant interaction with culture showed that request did not lower Japanese participants' agentic motivation as much as it did in the case of the American participants, and that Japanese tend to think that the target expects their help even when help is unrequested, hinting to the importance of reading others' mind in the Japanese culture.

Effect of Request on Inclusion of Other in Self. To check whether there are any differences in perceived closeness with target between the two experimental conditions, we investigated the effect of request on inclusion of other in self. Neither the main effect of request ($F(1, 380) = 0.48$, $p = .488$, $\eta^2_p = .001$), nor the interaction with culture was significant ($F(1, 380) = 1.90$, $p = .168$, $\eta^2_p = .004$), but the main effect of culture was ($F(1, 380) = 11.79$, $p < .001$, $\eta^2_p = .029$), Japanese having overall lower scores than Americans (see Table 4.1). This result shows that the existence of request did not influence evaluated closeness with target, but that Japanese might have referred to more distant targets than Americans.

Effect of Request on Satisfaction of Basic Psychological Needs. The effect of request on satisfaction of basic psychological needs was investigated. First, in the case of autonomy need satisfaction, the main effects of culture ($F(1, 380) = 25.04$, $p < .001$, $\eta^2_p = .056$), and request ($F(1, 380) = 88.59$, $p < .001$, $\eta^2_p = .189$) were significant, but the interaction effect was non-significant ($F(1, 380) = 1.68$, $p = .195$, $\eta^2_p = .004$). Therefore, overall, Japanese and participants in the requested help condition experienced lower satisfaction of the need for autonomy. In the case of competence need, only the main effect of culture was significant ($F(1, 380) = 35.57$, $p < .001$, $\eta^2_p = .087$), Japanese having lower scores, while the main effect of request ($F(1, 380) = 2.27$, $p = .132$, $\eta^2_p = .006$), and the interaction effect ($F(1, 380) = 0.02$, $p = .870$, $\eta^2_p < .001$) were not significant. In the case of satisfaction of the need for relatedness, the main effect of culture ($F(1, 380) = 9.45$, $p = .002$, $\eta^2_p = .022$) and the main effect of request ($F(1, 380) = 23.74$, $p < .001$, $\eta^2_p = .058$) were significant, but the interaction effect was not ($F(1, 380) = 2.08$, $p = .149$, $\eta^2_p = .005$). Overall, Japanese, and participants in the requested help condition, had lower scores for satisfaction of the need for relatedness (see Figure 4.4).

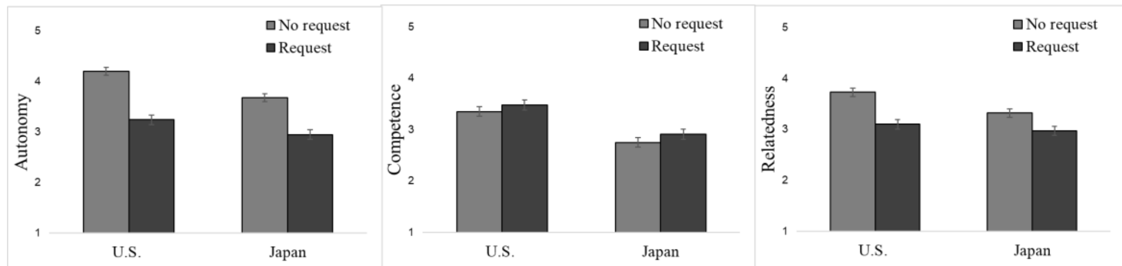

Figure 4.4. Effect of request for help and culture on satisfaction of basic psychological needs

Effect of Request on Positive Affect and Happiness. First, the interaction effect of culture and request on positive affect was investigated. The main effects of culture ($F(1, 380) = 13.73$, $p < .001$, $\eta^2_p = .031$) and request ($F(1, 380) = 52.26$, $p < .001$, $\eta^2_p = .120$), as well as the interaction ($F(1, 380) = 7.62$, $p = .006$, $\eta^2_p = .019$) were significant (see *Figure 4.5*). In the case of happiness, the main effect of request ($F(1, 380) = 74.38$, $p < .001$, $\eta^2_p = .163$), and the interaction ($F(1, 380) = 5.49$, $p = .019$, $\eta^2_p = .014$) were significant, but the main effect of culture was not ($F(1, 380) = 0.66$, $p = .415$, $\eta^2_p = .002$).

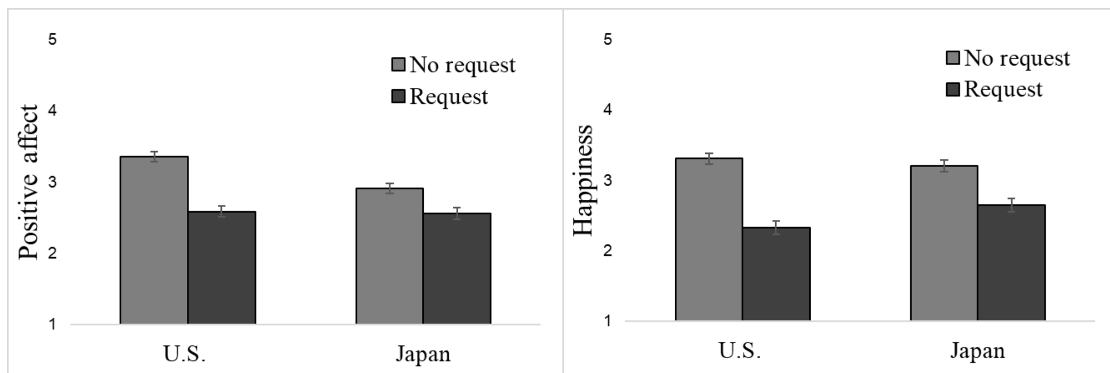

Figure 4.5. Interaction effect of request for help and culture on positive affect and happiness

Overall, participants in the requested help condition experienced less positive affect and happiness, but the difference was smaller for Japanese (Positive affect: non-request $M = 2.91$, $SD = 0.57$, request $M = 2.56$, $SD = 0.70$; $F(1, 213) = 16.68$, $p < .001$, $\eta^2_p = .072$; Happiness: non-request $M = 3.21$, $SD = 0.73$, request $M = 2.65$, $SD = 0.86$; $F(1, 213) = 27.00$, $p < .001$, $\eta^2_p = .112$) than for Americans (Positive affect:

non-request M = 3.36, SD = 0.76, request M = 2.59, SD = 0.89; $F(1, 167) = 36.45$, $p < .001$, $\eta^2_p = .179$; Happiness: non-request M = 3.31, SD = 0.89, request M = 2.33, SD = 0.91; $F(1, 167) = 49.13$, $p < .001$, $\eta^2_p = .227$).

Effect of Request on Positive Affect and Happiness Mediated by Satisfaction of Basic Psychological Needs. To investigate whether request reduces positive affect and happiness by reducing satisfaction of basic psychological needs, multiple group path analysis was conducted (maximum likelihood estimation method and bootstrap for 1000 samples). Existence of request (dummy coded as 0 = no request, 1 = request) was treated as an exogenous variable, satisfaction of basic psychological needs as parallel mediators, and affect as endogenous variables. The model assumed residual correlations between mediators. The models predicting positive affect and happiness were investigated separately (see Figure 4.6 and Figure 4.7).

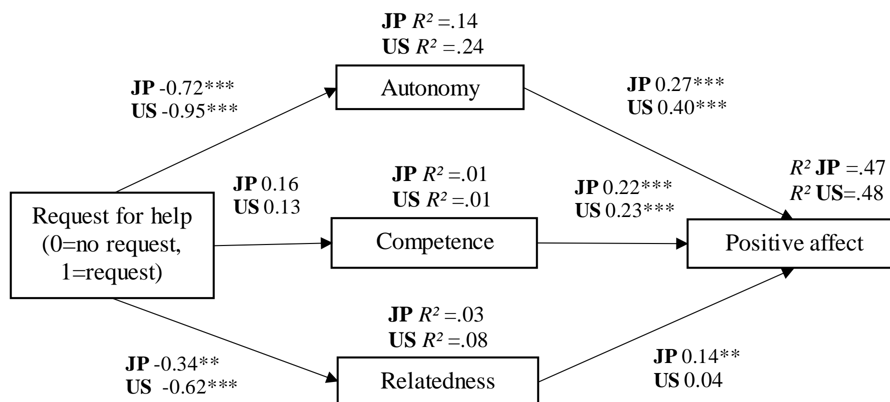

Figure 4.6. Unconstrained multigroup path model representing the mediating effect of basic psychological needs on the relationship between request for help and positive affect. Unstandardized regression coefficients are reported. The model assumes residual covariances between mediators.

**$p < .01$, ***$p < .001$.

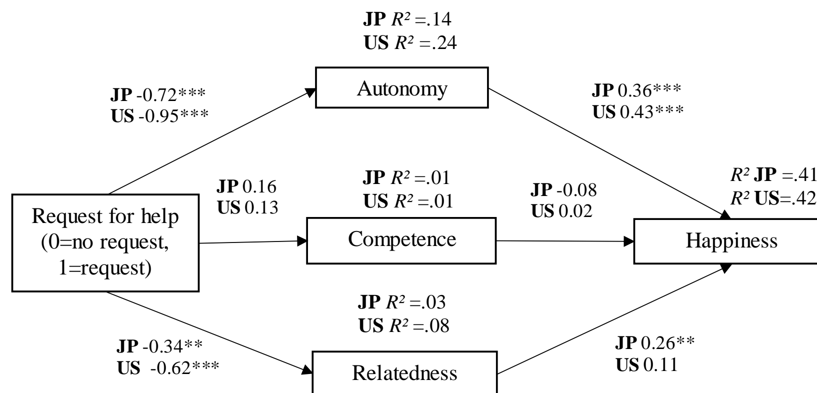

Figure 4.7. Unconstrained multigroup path model representing the mediating effect of basic psychological needs on the relationship between request for help and happiness. Unstandardized regression coefficients are reported. The model assumes residual covariances between mediators.

$^{**}p < .01$, $^{***}p < .001$.

First, in the case of positive affect, the mediating effect through satisfaction of autonomy need was significant in the U.S. In Japan, both the mediating effect of relatedness need and that of autonomy need were significant. Similarly, in the case of happiness, only the mediating effect through satisfaction of autonomy need was significant in the U.S. In Japan, both the mediating effect of relatedness need and that of autonomy need were significant (see Table 4.2).

Table 4.2

Direct and Indirect Effects of Request for Help on Positive Affect and Happiness by Culture

	Japan (*n* =215)	U.S. (*n* =169)
Request - Positive affect (direct effect)	**-.14 [-.28, -.01]**	**-.38 [-.63, .11]**
Request - Positive affect (indirect effect)		
Through Autonomy	**-.19 [-.28, -.11]**	**-.38 [-.58, -.22]**
Through Competence	.03 [-.01, .09]	.03 [-.03, .10]
Through Relatedness	**-.04 [-.10, -.01]**	-.02 [-.12, .06]
Request - Happiness (direct effect)	-.19 [-.41, .02]	**-.49 [-.84, -.17]**
Request - Happiness (indirect effect)		
Through Autonomy	**-.26 [-.40, -.14]**	**-.41 [-.61, -.22]**
Through Competence	-.01 [-.05, .01]	.01 [-.03, .03]
Through Relatedness	**-.09 [-.19, -.02]**	-.07 [-.18, .02]

Note. 95% CI are presented between brackets. Bolded effects are significant

Interaction between Endorsement of the Community Ethic and Request on Positive Affect and Happiness. The two-way interaction effect between endorsement of the community ethic (centered) and request, on positive affect and happiness was investigated using multiple regression. Culture (dummy coded as Japan = 0, U.S. = 1) was included in the analysis as a control variable. In the case of positive affect, the main effect of culture, request, and the interaction between request and community were significant (culture $b = 0.26$, $p < .001$; request: $b = -0.53$, $p < .001$; community $b = -0.01$, $p = .710$; community × request $b = 0.14$, $p = .031$). Similarly, in the case of happiness, the main effect of request was significant and the interaction between request and community was marginally significant (culture $b = -0.08$, $p = .325$; request: $b = -0.74$, $p < .001$; community $b = 0.01$, $p = .964$; community × request $b = 0.14$, $p = .071$). In the requested help condition, participants who endorsed the community ethic experienced more positive affect (non-requested help community simple slope $b = -0.02$, $p = .630$; requested help community simple slope $b = 0.12$, $p = .010$) and more happiness (non-requested help community simple slope $b = -0.01$, $p = .951$; requested help community simple slope $b = 0.13$, $p = .013$; see Figure 4.8).

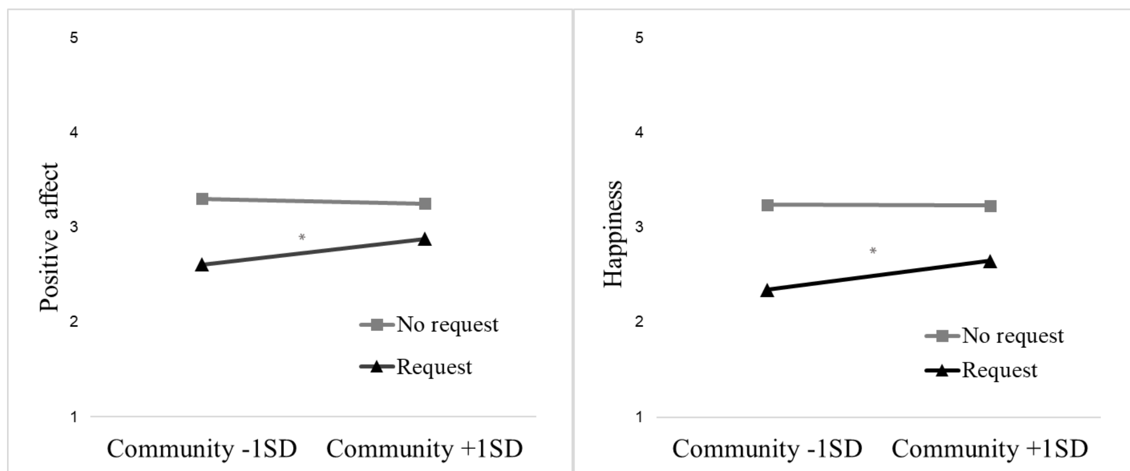

Figure 4.8. The interaction effect between request and endorsement of the community ethic on positive affect and happiness. Culture is controlled for in the analyses.

Discussion

The purpose of Study 3a was to replicate the results of Study 2 using an experimental design and manipulation of obligation to help. Investigating Japanese and American adults' past experiences of helping an acquaintance, this study aimed to test the moderating role of culture and endorsement of the community ethic on the relationship between obligation to help (operationally defined as direct request for help from the beneficiary) and positive affect.

As request was expected to influence participants' agentic and obligated motivation to help the target, a check-of-manipulation was conducted, and its results revealed that participants in the requested help condition had lower agentic motivation (wanting to help the target less), and higher obligated motivation (thinking that the target expects their help more) than participants in the non-requested help condition. This result confirmed that the instructions for the task were effective in creating two distinct experimental condition, one in which participants had low agentic motivation and high obligated motivation, and one in which participants had high agentic motivation and low obligated motivation. However, a significant interaction with culture on the two manipulation check items was also observed. In the case of agentic motivation, there was a bigger difference in how much Americans wanted to help the target between the requested and the non-requested conditions, compared to their Japanese counterparts, suggesting that a direct request can affect more dramatically Americans' agentic motivation. Even more noteworthy is the interaction effect on the item measuring obligated motivation. While in the requested help condition, both American and Japanese reported that they thought the target expects their help, Japanese tended to perceive that the target expects their help even when help was not directly requested. This result reveals the importance of mind reading and indirect communication for Japanese. Putting oneself in other people's shoes, trying to guess their thoughts, needs and intentions, and adjust one's behavior in order to meet others' unspoken expectations is an important cultural skill that Japanese

learn to master in their daily lives (Markus, 2016; Markus & Kitayama, 1991). Furthermore, as Japanese pay much attention not to hurt others' feelings or elicit indebtedness, they would not offer support unless it is something that the target expects, and is therefore, needed (Morling et al., 2015). Japanese participants must, therefore, evaluate whether their help is needed and expected before offering it, in order not to create unnecessary indebtedness.

As for the effect of request on affect, in line with previous research grounded in self-determination theory (Weinstein & Ryan, 2010), it was expected that obligation to help would have a negative effect on positive affect, mediated by reduction in satisfaction of basic psychological needs (H1). Results supported H1. In both Japan, and the U.S., participants who recalled a requested help situation felt less positive affect, and the effect was significantly mediated by thwarted autonomy need. Consequently, participants who recalled a situation in which they helped because the target requested their help felt less autonomous in behavior, which led to experiencing less positive affect, compared to participants who recalled a situation of unrequested help offering. This can be explained by participants' low autonomous motivation to help the target in the requested help condition.

Second, replicating Study 2 and past cross-cultural research showing that participants from interdependent cultures derive more satisfaction from meeting social obligations (Buchtel et al., 2018), Study 3a aimed to test the hypothesis that the negative effect of obligation on positive affect would be weaker for Japanese than for Americans (H2). H2 was also supported. The difference in experienced positive affect between participants who recalled a requested help experience and those who recalled an unrequested help experience was smaller for Japanese than for Americans. This result suggests that, while being obligated to help might considerably reduce satisfaction derived from behaving prosocially for Americans, there may be little differences in experienced positive affect between obligated and non-obligated Japanese benefactors.

However, despite the difference between obligated and non-obligated help in positive affect

being smaller for Japanese, it is important to note that obligation did have a significant *negative* effect for Japanese, too. This result is in contrast with the findings of Study 2, in which there was a significant *positive* association between perceived target expectation and positive affect in Japan. So, although Study 2 suggested that Japanese might feel better when the target expects their help than when not, Study 3a revealed that direct request (thus high target expectation) reduces positive affect (although not as much as for Americans). There are two possible reasons for this. First, unlike Study 2, where participants' subjective evaluation of target expectation was measured, Study 3a focused on the existence of request for help, which is a more objective expression of target expectation. Therefore, while in Study 2, participants might have thought they were reading targets' minds and meeting these (possibly unspoken) expectations, which can be a satisfying experience, in Study 3a, participants had no choice but to help, because of the existence of explicit request, which might have been a coercive, unsatisfying experience. The second possible reason lies in the way instructions for the task were formulated. The instructions for the requested help condition specifically asked participants to recall a situation in which they *didn't initially want to help*, but helped eventually, due to an explicit request. Considering that Study 2 showed that Japanese internalize target expectations, wanting to do what is expected of them, the instructions for Study 3 might not have captured this congruence between others' expectations and own desire to respond to them, forcing Japanese to think of a situation of in which others' wishes were not internalized. As Japanese evaluated being less connected to beneficiaries than Americans, it is possible that they might have thought of helping more distant targets, whose expectations they did not internalize fully. Possibly because of insufficient internalization of other's expectations, Japanese participants in Study 3a reported they did not feel as much positive affect as when no requests had been made.

Finally, the third hypothesis concerning the moderating role of endorsement of the Community ethic on the relationship between request for help and positive affect was also supported. Participants who endorsed the ethic of Community more, experienced more positive affect when responding to a

request for help. This result replicates Study 2a, suggesting that the moral values endorsed by individuals can influence the satisfaction derived from responding to social expectations, participants who moralize the norms imposed by their social group experiencing more positive affect when responding to the direct requests of others.

The limitations of Study 3a are connected to its design and the experimental task used. As people were asked to recall a helping situation and evaluate how they had felt when helping, memory biases and desirable responding might have influenced their answers. Furthermore, participants recalled different prosocial behaviors which might have required different amounts of effort, so inherent idiosyncrasies were difficult to control. To address these limitation, Study 3b, which gave participants the opportunity to actually engage in prosocial behavior, was designed.

4.2 Study 3b - Effect of social expectations to help on actual prosocial effort

Study 3a revealed that culture and endorsement of the community ethic moderate the relationship between social expectations to help and positive affect in an experimental design. However, in Study 3a, recalled prosocial behavior was investigated, and memory biases might have masked the causal relationship between prosocial behavior engagement and positive affect. To address this issue, Study 3b employed an actual prosocial task.

In Study 3b, Japanese and American adult participants were given the opportunity to perform prosocial behavior toward a stranger. The prosocial task was to read a graduate student's cover letter for a job, and to offer advice on how to improve the letter. Social expectations to help were manipulated through the instructions for the prosocial task. Participants were randomly allocated to one of two experimental conditions: low obligation to help or high obligation to help. Those in the low obligation helping condition were told they are free to do the prosocial task however they like. Participants in the high obligation helping condition were told that the student expects them to offer thoughtful advice, so they should do so.

As in Study 3a, the following three main hypotheses were set:

H1: High obligation to help reduces state positive affect, relative to the low obligation help condition, and the effect is mediated by reduced satisfaction of basic psychological needs.

H2: Culture moderates the above negative effect of obligation on positive affect, the effect being weaker in Japan than in the U.S. (see Figure 4.9).

H3: Endorsement of the community ethic moderates the negative effect of obligation on positive affect, the effect being weaker for participants high in community ethic.

In addition, as real prosocial behavior was used in this study, one hypothesis referring to the actual contribution made by participants was also set up.

H4: Obligation to help has a negative effect on prosocial effort, but culture moderates this relationship, the effect being weaker in Japan than in the U.S.

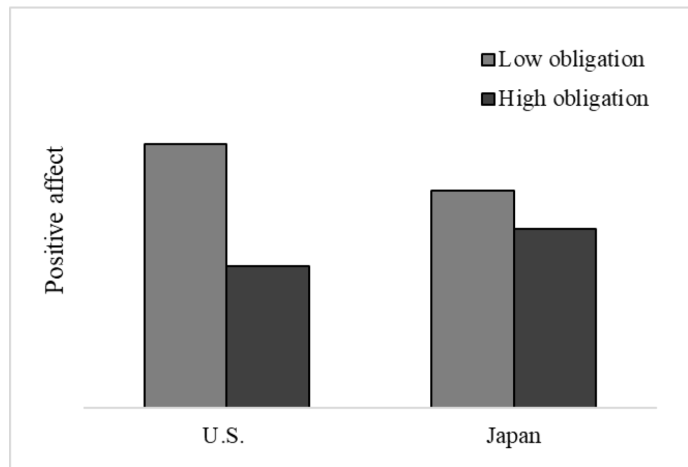

Figure 4.9. Hypothesized interaction between culture and obligation to help on positive affect

Method

Participants. Data were collected on Amazon Mechanical Turk (in America) and Lancers (in Japan). Initially, 250 American participants and 189 Japanese participants participated in the study in exchange for $2. After eliminating participants who withdrew their informed consent (n = 7), participants who were not American or Japanese (n = 5), participants who failed either of the two inattention check items (n = 14), those who did not follow the instructions for the helping task (n = 1), those who answered in less than 5 minutes (n = 3; median response time had been 11.78 minutes) and participants who responded with the same answer on all items of two or more questionnaires (n = 18), the responses of 178 Japanese participants (91 males, 83 females, 4 unknown, *M* age = 39.87, *SD* = 9.24; 65.16% had a college degree or higher) and 213 American participants (114 males, 97 females, 2 unknown, *M* age =38.40, *SD* = 11.02; 73.23% Euro-Americans; 61.50% had a college degree or higher) were analyzed. There were no

differences in gender distributions (χ^2 (1, 391) = 0.05, p = .81) and no significant age differences (t (389) = 1.43, p = .15) between cultures. As for the number of participants in each experimental condition, there were 89 Japanese (45 males, 42 females, 2 unknown) and 104 Americans (53 males, 51 females) in the low obligation condition and 89 Japanese (46 males, 41 females, 2 unknown) and 109 Americans (61 males, 46 females, 2 unknown) in the high obligation help condition.

Experimental Design. The experimental design is 2 (obligation salience: low obligation help vs high obligation help) x 2 (culture: Japan vs U.S.) between-subjects design. Obligation was manipulated through the instructions for the prosocial task. Participants read a cover letter of a student and were asked to provide advice on how to improve the letter (Grant & Gino, 2010). In the low obligation helping condition, participants were told it is their choice how many comments or pieces of advice they offer. In the high obligation helping condition, participants were told it is their obligation to write as many comments as possible, because it is what the student expects them to do. The instructions were similar to the ones used to manipulate autonomous motivation in Experiment 4 in the Weinstein and Ryan (2010) study.

Procedure. Participants were invited to participate in a study on social skills. The study was carried out online, using the Qualtrics platform. On the informed consent page, they were informed they would read a cover letter and offer advice to the student who wrote it (Student S), then respond to some questionnaires. Participants who offered their informed consent were randomly allocated to one of the two experimental conditions: low obligation or high obligation. After reading the instructions, all participants were presented with a cover letter. The cover letter was written by a student at a Japanese state university who was informed of the purpose of our research, and who provided consent to use her letter in our research (see Appendix D). The student was offered feedback from participants who

provided permission to do so.

Instructions for the prosocial task changed depending on the experimental condition. In the low obligation condition, participants read the following instructions: *FEEL FREE to write as many pieces of advice/words of encouragement as you can come up with*, while in the high obligation condition, the instructions were *Because Student S really EXPECTS YOUR HELP, you SHOULD write as many pieces of advice/words of encouragement as you can come up with*.

After reading the letter, all participants wrote down something in the space provided. After writing down their comments, participants were asked to evaluate how much they contributed, and whether they offer researchers permission to show what they have written to student S.

Next, all participants responded to the questionnaires described in the Measures section. At the end, participants were debriefed and were offered the possibility to withdraw their informed consent.

Measures. First, as control variables, permission, sense of contribution, liking and prosocial effort were used. To check for permission, participants were asked whether they allow experimenters to communicate their advice to student S (*yes*/ *no*). To measure subjective sense of contribution, participants evaluated how much they thought their advice would benefit Student S (1= not at all, to 7 = very much). To measure liking, one item was used ("I like Student S very much as a person"; 1 = strongly disagree, 7 = strongly agree; Wayne & Ferris, 1990). As for prosocial effort, the number of characters used to write advice to Student S were counted.

Next, as a check of manipulation, agentic (how much they really wanted to help) and obligated motivation (how much student S expected them to help) were measured, on a scale from 1 = not at all, to 7 = very much.

As in Study 3a, the Balanced Measure of Psychological Needs Scale (Sheldon & Hilpert, 2012), PANAS (Kawahito et al., 2011; Watson et al., 1988), four items measuring happiness (Kitayama

et al., 2000), and the Community Ethic subscale (Guerra & Giner-Sorolla, 2010; Guerra et al., 2013) were included in the questionnaire. In addition, questions on age, gender, whether they are an international student or not, ethnicity in the U.S., and two items screening for inattention were used.

Results

Internal consistency, means, and standard deviations of main study variables by country are presented in Table 4.3. The happiness subscale had low internal consistency in Japan and the negative affect scale showed floor effects in the U.S. (skew = 2.68, kurtosis = 8.04), so they were excluded from subsequent analyses. Furthermore, as only one American participant and five Japanese participants refused to give permission to communicate their advice to Student S, permission was not included in subsequent analyses.

Table 4.3

Internal Consistency and Mean Scores of Study Variables

	Japan (*n* =178)			U.S. (*n* =213)		
	α	***M***	***SD***	**α**	***M***	***SD***
1. Agentic motivation (desire)	-	5.37	1.27	-	6.29	1.06
2. Obligated motivation (expectation)	-	3.84	1.54	-	4.82	1.68
3. Prosocial effort	-	267.99	124.30	-	424.50	209.81
4. Sense of contribution	-	3.90	1.27	-	5.20	1.37
5. Liking	-	5.10	1.30	-	5.46	1.18
6. Autonomy need	.70	3.42	0.79	.69	3.95	0.76
7. Competence need	.83	2.79	0.89	.83	3.81	0.85
8. Relatedness need	.85	3.35	0.89	.86	4.08	0.90
9. Community ethic	.90	4.06	1.00	.93	3.72	1.21
10. Positive affect	.82	2.87	0.61	.92	3.10	0.89
11. Happiness	.51	2.74	0.63	.73	2.71	0.87
12. Negative affect	.84	1.99	0.63	.86	1.15	0.29

Note. Means presented for prosocial effort are raw scores representing number of letters used to write advice to Student S, and were calculated after excluding two extreme variables.

Check of Manipulation. First, to check whether the manipulation had succeeded, the effect of obligation and its interaction with culture on the two motivation items was investigated. For the item measuring agentic motivation (*desire*), neither the main effect of obligation ($F(1, 387) = 0.69$, $p = .404$, $\eta^2_p = .001$), nor the interaction with culture ($F(1, 387) = 0.76$, $p = .382$, $\eta^2_p = .001$) were significant, but the effect of culture was ($F(1, 387) = 59.33$, $p < .001$, $\eta^2_p = .133$), suggesting that, compared to Americans, Japanese had, overall, lower agentic motivation to engage in the task (see Table 4.3). As the effect of obligation was not significant, the manipulation did not influence how much participants wanted to engage in the task (there were no differences in agentic motivation between the low obligation and high obligation help conditions). Second, for perceived target expectation, the main effect of obligation was significant ($F(1, 387) = 11.77$, $p < .001$, $\eta^2_p = .029$), and so was the effect of culture ($F(1, 387) = 36.37$, $p < .001$, $\eta^2_p = .084$), but the interaction was not significant ($F(1, 387) = 2.57$, $p = .109$, $\eta^2_p = .006$). Participants in the high obligation condition considered that Student S expects their help more than participants in the low obligation condition. Also, overall, Japanese tended to evaluate Student S' expectations as lower than their American counterparts. Therefore, the experimental manipulation succeeded in creating two experimental conditions in which target expectation differed significantly (see Figure 4.10).

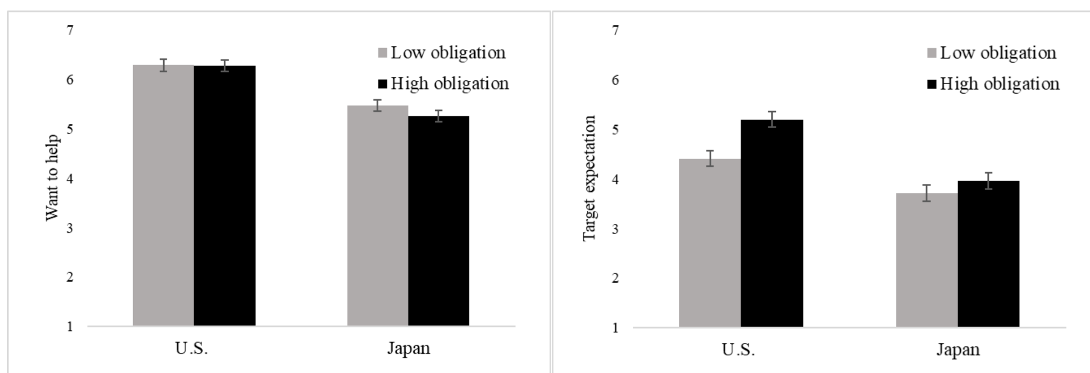

Figure 4.10. Effect of culture and obligation to help on agentic (desire) and obligated motivation (target expectation.

Apart from the check of manipulation, to verify whether there are any differences in liking of the student and subjective contribution between the two experimental conditions, the interaction between obligation and culture on liking and sense of contribution was investigated. In the case of liking, neither the main effect of obligation ($F(1, 387) = 0.44$, $p = .506$, $\eta^2_p = .001$) nor the interaction with culture were significant ($F(1, 387) = 1.63$, $p = .201$, $\eta^2_p = .004$), but the main effect of culture was significant ($F(1, 387) = 8.19$, $p = .004$, $\eta^2_p = .020$), suggesting that participants liked Student S to the same degree regardless of experimental condition, but Americans tended to like the student more than Japanese (see Table 4.3). Similarly, in the case of sense of contribution, neither the main effects of obligation ($F(1, 387) = 0.24$, $p = .621$, $\eta^2_p < .001$) nor the interaction were significant ($F(1, 387) = 0.01$, $p = .944$, $\eta^2_p < .001$), but the main effect of culture was significant ($F(1, 387) = 92.44$, $p < .001$, $\eta^2_p = .193$), suggesting that participants considered they contributed to same degree regardless of experimental condition, but Americans thought they contributed more than Japanese did (Table 4.3).

Effect of Obligation to Help on Basic Psychological Needs. The interaction effect of culture and obligation on satisfaction of basic psychological needs was investigated. First, in the case of autonomy need satisfaction, the main effect of culture was significant ($F(1, 387) = 44.21$, $p < .001$, $\eta^2_p = .102$), but the main effect of obligation ($F(1, 387) = 0.26$, $p = .606$, $\eta^2_p < .001$) and the interaction effect ($F(1, 387) = 0.18$, $p = .669$, $\eta^2_p < .001$) were non-significant. In the case of competence need, the main effect of culture was significant ($F(1, 387) = 137.05$, $p < .001$, $\eta^2_p = .262$), the main effect of experimental condition was marginally significant ($F(1, 387) = 3.85$, $p = .050$, $\eta^2_p = .009$), participants in the high obligation condition having lower scores than participants in the low obligation condition (low obligation $M = 3.43$, $SD = 1.00$, high obligation $M = 3.27$, $SD = 1.01$), and the interaction effect was non-significant ($F(1, 387) = 0.78$, $p = .377$, $\eta^2_p = .002$). In the case of relatedness need, the main effect of culture was significant, Japanese having lower scores than Americans ($F(1, 387) = 63.44$, $p < .001$, $\eta^2_p = .140$), but

the main effect of experimental condition ($F(1, 387) = 0.78$, $p = .377$, $\eta^2_p = .002$), and the interaction effect ($F(1, 387) = 1.32$, $p = .251$, $\eta^2_p = .003$) were non-significant.

Effect of Obligation to Help on Positive Affect. The interaction effect of culture and obligation on positive affect was investigated. The effect of culture was significant ($F(1, 387) = 7.99$, $p = .004$, $\eta^2_p = .020$), Americans having higher positive affect scores than Japanese (see Table 4.3), but the effect of obligation ($F(1, 387) = 0.06$, $p = .801$, $\eta^2_p < .001$) and the interaction effect ($F(1, 387) = 2.41$, $p = .120$, $\eta^2_p = .006$) were not significant.

Moderating Effect of Community Ethic. To investigate the hypothesis that endorsement of the community ethic moderates the relationship between obligation to help and positive affect, multiple regression analyses were conducted. Culture was introduced in the analysis as a control variable. Obligation (0 = low obligation, 1 = high obligation) and culture (0 = Japan, 1 = U.S.) were dummy coded, and endorsement of the community ethic was centered before the analysis. Only the main effects of culture and endorsement of the community ethic were significant (community $b = 0.15$, $p = .002$; obligation: $b = -0.02$, $p = .761$; culture $b = 0.27$, $p < .001$; community × obligation $b = 0.01$, $p = .788$). Americans and participants who endorsed the community ethic more strongly experienced more positive affect, regardless of experimental condition.

Effect of Obligation on Prosocial Effort. To investigate the hypothesis that obligation has a negative effect on prosocial effort, which is moderated by culture (H4), multiple regression analysis was conducted. First, a measure of prosocial effort (the number of characters used for the task) was computed (Japanese characters were transformed to letters before analyses). Number of characters used ranged from 58 to 2945 in Japan ($M = 283.03$, $SD = 235.85$), and from 21 to 2549 in the U.S. ($M = 434.47$, SD

= 254.96). Two extreme values were identified, one in each culture, and they were eliminated before proceeding with the analyses (after elimination, Japan M = 267.99, SD = 124.3, min = 58, max = 739, U.S. M = 424.5, SD = 209.81, min = 21, max = 1246 letters).

The main effect of obligation on prosocial effort was not significant ($F(1, 385) = 0.42, p = .513, \eta^2_p = .020$), but the effect of culture ($F(1, 385) = 76.68, p < .001, \eta^2_p = .166$) and the interaction were significant ($F(1, 385) = 4.28, p = .039, \eta^2_p = .011$)[1]. Simple effect analyses revealed that, while in the U.S., participants tended to use less characters in the obligated help condition ($F(1, 210) = 2.49, p = .116, \eta^2_p = .011$), the opposite was true for Japanese ($F(1, 175) = 2.37, p = .125, \eta^2_p = .013$); see *Figure 4.11*).

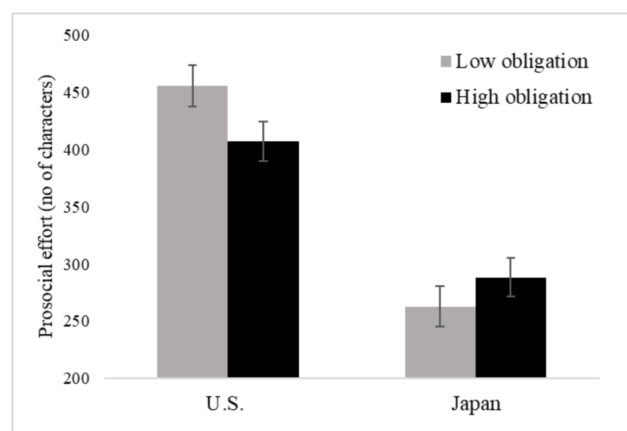

Figure 4.11. Interaction effect of culture and obligation to help on prosocial effort

Additional Analyses. Although a significant interaction appeared between culture and obligation on prosocial effort, their interaction on positive affect was not significant, suggesting that the relationship between prosocial effort and positive affect might not be straightforward. To explore the relationship between prosocial effort and positive affect, the three-way interaction between culture (dummy), obligation (dummy) and prosocial effort (standardized) on positive affect was investigated using multiple

[1] Because the excluded Japanese extreme value was from the high obligation condition, and the U.S. extreme value, from the low obligation condition, including these two values increased the strength of the interaction effect between obligation and culture on effort (when including these values, the effect of culture × obligation on prosocial effort became $F(1, 387) = 6.21, p = .013, \eta^2_p = .015$).

regression.

The main effect of obligation (*b* = -0.09, *p* =.496), culture (*b* = 0.05, *p* = .688), and prosocial effort (*b* = -0.09, *p* = .513), as well as the interaction between culture and obligation (*b* = 0.26, *p* = .15), effort and obligation (*b* = 0.14, *p* = .446), and the three-way interaction between culture, effort and obligation (*b* = -0.24, *p* = .23) on positive affect were not significant. However, the interaction between culture and effort was marginally significant (*b* = 0.28, *p* =.068), the strength of the association between effort and positive affect being stronger in the U.S. Simple slope analysis showed that in the U.S., effort was significantly associated to positive affect in the low obligation (*b* = 0.20, *p* = .002), but not in the high obligation help condition (*b* = 0.08, *p* = .264). In Japan, the association between effort and positive affect was not significant neither in the high obligation help condition (*b* = 0.05, *p* = .657), nor in the low obligation help condition (*b* = -0.07, *p* = .558; Figure 4.12).

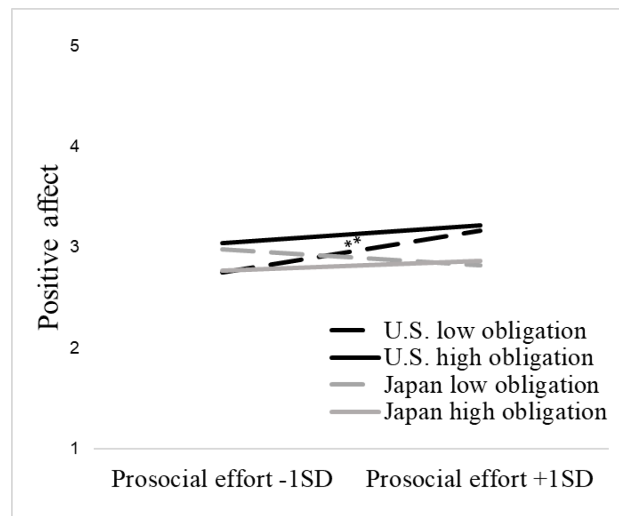

Figure 4.12. Interaction effect of culture, obligation and prosocial effort on positive affect.

Discussion

The purpose of this research was to investigate the moderating effect of culture on the association

between obligated motivation to engage in actual prosocial behavior and positive affect. In line with previous research (Weinstein & Ryan, 2010), it was hypothesized that individuals would experience more positive affect when engaging in the prosocial task for agentic reasons (feeling free to do so), than for obligated reasons (feeling coerced to do so; H1). However, it was also expected that this relationship would be weaker for people from interdependent cultures for which responding to social expectations is more desirable (Miller et al., 2017; H2), and for people who endorse the community ethic to a higher degree (H3).

First, the results of the check-of-manipulation revealed that the instructions were effective in creating two conditions that differed in obligated motivation. Although there were no differences in agentic motivation between conditions (participants reported they wanted to help as much whether the target expected their help or not), significant differences were observed in obligated motivation, participants evaluating that the target expects their help more in the high obligation help condition, compared to the low obligation help condition. However, unlike Study 3a, experimental condition did not interact significantly with culture in determining motivation, although a tendency was observed for Japanese to evaluate that the target expects their help as much in the low obligation help condition as in the high obligation help condition. Again, this pattern of results suggests that Japanese are more prone than Americans to think about others' unspoken needs and expectations.

As for the effect of obligation on affect, feeling obligated to help did not lead to less positive affect, therefore H1 was not supported. Furthermore, neither culture, nor endorsement of the community ethic significantly interacted with obligation in determining positive affect, so H2 and H3 were also not supported. Only H4, which assumed a significant interaction between culture and obligation to help on prosocial effort, was supported. There are two possible reasons for the insignificant findings concerning positive affect, which are discussed below.

The Importance of Contribution. Although it was expected that engaging in prosocial behavior for different reasons (agentic vs obligated) has different effects on positive affect, there is the possibility that simply engaging in the task is not enough for it to affect well-being. More than mere engagement, actually contributing to the welfare of another person might be necessary in order for prosocial behavior to be satisfying. Therefore, when investigating the role of actual contribution (how much effort participants put into the task), obligation salience interacted with culture in determining the amount of effort put into the task, such that Americans put less effort into writing advice when obligation was salient than when it was not (H4 supported). The pattern was opposite for Japanese, who tended to write slightly more when obligated, though the difference was small. Therefore, it can be concluded that obligation salience reduced motivation to make effort for Americans, but tended to increase motivation to make effort for Japanese.

However, if obligation leads to less engagement in the task for Americans, shouldn't it lead to less positive affect, too, supporting the main hypothesis? One possible reason why the interaction between obligation salience and culture on prosocial effort did not replicate for positive affect is that the relationship between prosocial effort and positive affect was not straightforward. When investigating the three-way interaction between obligation salience, prosocial effort, and culture on positive affect, a more complex picture emerged. First, overall, there was a tendency for the relationship between prosocial effort and positive affect to be weaker for Japanese than for Americans (the two-way interaction between culture and prosocial effort on positive affect being marginally significant).

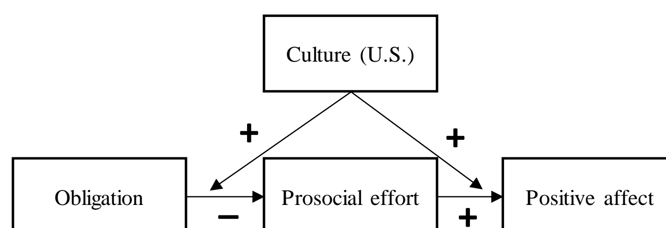

Figure 4.12. Theoretical schema describing the results of Study 3b

The relationship between contribution and positive affect was straightforward for Americans in the low obligation help condition: when feeling free to engage in the task, Americans who contributed more experienced more positive affect, but Japanese felt the same regardless of contribution. As prosocial effort was not related to positive affect in the high obligation help condition neither for Americans, nor for Japanese, the pattern of results concerning the effect of obligation salience and culture on prosocial effort did not replicate for positive affect.

Meaning of Experimental Manipulation. In this research, an experimental condition in which participants felt free to engage in the task was compared to one in which participants felt obligated to engage in the task because the beneficiary was expecting them to do so. However, considering that participants were crowd-workers who engaged in the activity for money, it is possible that the low obligation condition was not perceived to be non-obligatory enough, as participants felt obligated to engage in the task in order to receive payment. Therefore, what was initially considered to be a low obligation and a high obligation condition, might have been, actually, two high obligation conditions, one in which participants felt obligated to respond to the expectations of the experimenter (in order to get payment), and one in which participants felt obligated to respond to both the expectations of the experimenter, and the expectations of the target. Future research should address this problem by eliminating the expectation of the experimenter in the obligated condition, and by creating a truly agentic help condition, in which participants actually have the choice whether to help or not.

4.3. General discussion

The purpose of Study 3 was to replicate the results of Study 2 in an experimental design including a manipulation of target expectation to help. It was hypothesized that target expectation reduces need satisfaction and, thus, positive affect derived from engaging in prosocial behavior, but this association is weaker for Japanese, and for participants who endorse the community ethic more strongly.

In Study 3a participants were asked to recall either an instance of non-requested help they had offered (low target expectation) or an instance of requested help (high target expectation). Results supported the three main hypotheses. It was shown that participants felt, overall, less need satisfaction and positive affect when recalling requested (vs non-requested) help, but culture and endorsement of the community ethic moderated this association, Japanese and participants who endorsed the community ethic experiencing almost as much positive affect when help was requested as when it was not. Therefore, Study 3a experimentally replicated the conclusions based on Study 2' correlational analysis. However, it remained unclear whether not only recalling, but also actually engaging in prosocial behavior for agentic versus obligated reasons has different effects on positive affect, so Study 3b, which included an actual prosocial task, was designed. Study 3b failed to replicate Study 2 and Study 3a, as no differences were observed in experienced positive affect when help was offered for obligated or agentic reasons. However, the results of Study 3b suggested that, although obligation did not influence affect, it might influence the degree of effort made for the prosocial task. A significant interaction between obligation to help and culture was observed in the case of prosocial effort, suggesting that obligation might reduce Americans' effort to engage in the prosocial task, but might increase the effort of Japanese. Due to the fact that effort was not significantly associated to positive affect, a similar interaction with culture was not observed when treating affect as a dependent variable.

Some reasons why obligation to help did not influence affect significantly in Study 3b have

been already discussed, namely, the importance of not just engaging in the task, but actually making a contribution, and the possible failure of the experimental manipulation, which might have created two high obligation help conditions. There are, however, some other important differences between Study 3b and Study 3a, which might have contributed to the non-significant findings observed. The most notable difference is the relationship between benefactor and beneficiary. In Study 3a, the focus was on helping an acquaintance, but Study 3b implied helping a complete stranger whose existence participants might not have believed. As Study 2a showed that the cultural moderation on the association between target expectation and positive affect was significant only when the target was an acquaintance, and not when it was a stranger or friend (a result replicating past research, see Janoff-Bulman & Leggatt, 2002), it is possible that there are no cultural differences in satisfaction derived from helping strangers for agentic or obligated reasons. However, this still does not explain why obligation did not have a main effect on positive affect, as observed in past research (Weinstein & Ryan, 2010). Another difference between Study 3b and Study 3a is the fact that, in Study 3b, participants actually had to engage in the prosocial task and evaluate how they felt when doing so. However, the task was, first of all, a paid work task, so participants might have experiencing it as less satisfying (Niemiec, Soenens, & Vansteenkiste, 2014) as they would have if they had engaged in prosocial behavior in their daily lives, without being paid, as it was the case in Study 3a. These differences might have influenced the results and contributed to the failure in replicating the results of Study 2 and 3a.

Despite these limitations, Study 3 adds to the literature on the cultural moderation of the relationship between obligation to help and positive affect (Buchtel et al., 2018; Miller et al., 2011), bringing experimental evidence. Unlike past research, which employed scenarios and mainly correlational designs, Study 3 hints to the causal relationship between obligation and affect, suggesting that a sense of obligation can be manipulated and it can affect how people of different cultures engage in prosocial behavior and the amount of satisfaction they derive from doing so.

Chapter 5 Implications and Future Directions

The purpose of this research was to clarify the relationship between engagement in prosocial behavior and benefactors' positive affect beyond the Western world, interpreting results from the perspective of self-determination theory (Deci & Ryan, 2000). In three studies, employing both correlational and experimental designs, results corroborated to show the positive effects of prosocial behavior engagement. The results of the three studies are presented schematically in Figure 5.1. The conclusions of each study are described below.

Study 1 revealed that, regardless of one's cultural background, the more frequently one conducts small acts of kindness, the happier they are. This result replicates previous research showing that altruism is positively associated with well-being (e.g Aknin et al., 2013; Piliavin, 2003). Furthermore, this study adds to the literature based on self-determination theory, revealing that prosocial behavior is intrinsically satisfying, leading to experiencing more autonomy, competence, and relatedness (e.g. Martela & Ryan, 2016a, 2016b; Nelson et al., 2015). This research is one of the few studies that have investigated the mediating role of all three basic psychological needs on non-Western samples, showing that not only satisfaction of the need for relatedness (as suggested in Jiang, Zeng, Zhang, & Wang, 2016), but also satisfaction of the needs for competence and autonomy have independent explanatory effects in Asian cultures.

Study 2 focused on individuals' motivation to behave prosocially, and showed that social expectations to help have contrasting effects on positive affect depending on culture. Overall, Japanese experienced more positive affect from meeting social expectations than Americans and Romanians. This result is in line with previous cross-cultural research showing that people from interdependent cultures internalize the expectations of others to a higher degree, deriving more satisfaction from meeting them,

than people from independent cultures (Baron & Miller, 2000; Buchtel et al., 2018; Goyal et al., 2019; Miller et al., 2011). This study extends the generalizability of previous findings by bringing evidence from Japan and Romania, and also tests a possible explanation of the cultural moderation: endorsement of a duty-based morality. Compared with previous findings which have only theoretically discussed the importance of moral reasoning (Buchtel et al., 2018; Miller, 1997), Study 2 actually measured individuals' endorsement of the ethic of Community, and showed that people who value community norms internalize the expectations of others more. In addition, this research also focused on the relationship between benefactor and beneficiary, revealing that cultural differences are largest when their relationship is of medium distance (see also Janoff-Bulman and Leggatt, (2002), for a similar conclusion). The results suggest that Westerners construe autonomy and social expectations as incompatible, while Asians find congruence between what they want and what others want, and that morality could play a role in shaping their experiences.

Finally, Study 3 manipulated social expectations, showing that, compared to Japanese, Americans feel less satisfied when helping someone in response to a direct request, and that they make less effort to help someone when it is highly expected of them. These results are in accordance with previous studies on Western samples, which have shown that experimentally manipulated expectations to help diminish satisfaction (Weinstein & Ryan, 2010). However, no other studies have so far experimentally tested the effect of motivation to help cross-culturally. This study extends previous correlational cross-cultural research (Janoff-Bulman & Leggatt, 2002), by clarifying the causal relationship between motivation to help and satisfaction in individuals with different cultural backgrounds.

The three studies included in this dissertation bring further support to self-determination theory (Deci & Ryan, 2000), revealing that prosocial behavior satisfies basic psychological needs and that motivation to engage in prosocial behavior plays an important role in determining whether

benefactors experience positive affect as result of their prosocial acts. The implications of this research, as well as its limitations and future directions are discussed in the next sections.

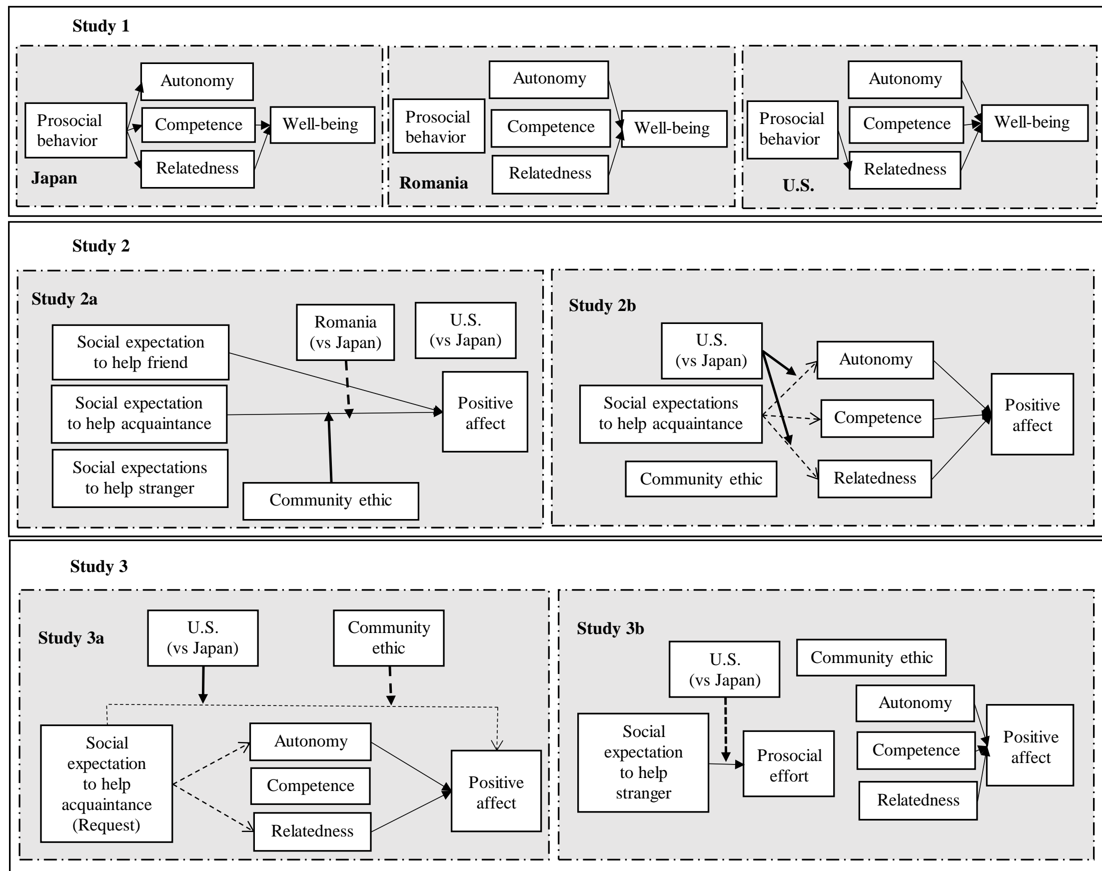

Figure 5.1. Results of the three studies. Solid lines represent positive associations. Dotted lines represent negative associations.

5.1. Theoretical and practical implications

Implications for Theory. The three studies described have the following theoretical implications: 1) they bring support for self-determination theory providing evidence from non-Western cultures, 2) reveal that the concept of autonomy can be expressed in different ways, depending on participants' cultural background, and 3) point out a possible explanatory factor for cultural differences observed in previous research (moral reasoning).

First, this research brings additional support to self-determination theory (SDT), showing that autonomous prosocial behavior engagement leads to positive affect because it fulfills the three psychological needs that are considered to be fundamental for performance and thriving, according to SDT (Deci & Ryan, 2000). In addition, this research brings further evidence for the importance of autonomous motivation (operationalized here as participants' sense of volition to engage in prosocial behavior) and its positive effect on individuals' well-being. According to SDT, being autonomously motivated to engage in an activity is associated to higher performance and satisfaction (e.g. Sheldon & Elliot, 1998), and this applies to engagement in prosocial behavior, as well (e.g. Gagné, 2003; Nelson et al., 2015; Pavey, Greitemeyer, & Sparks, 2012; Wu, Zhang, Guo, & Gros-Louis, 2017). This research revealed that participants who wanted to engage in prosocial behavior experienced more satisfaction from doing so, regardless of their cultural background.

Second, this research suggests that the Western naïve conceptualization of autonomy as independence and resistance to exterior influences does not capture the true meaning of what an autonomous person is from the perspective of self-determination theory (Chirkov, 2014). SDT theorists emphasize the fact that autonomy should not be equated to individualism or separateness; autonomy refers to full endorsement of one's willingly enacted behaviors, while its opposite, heteronomy, refers to behaviors being controlled by exterior forces regardless of one's will (Chirkov et al., 2003).

Accordingly, a reason to act such as "meeting social expectations" should not be considered a controlled/extrinsic reason for action in itself, because whether it is a self-determined reason or not depends on its degree of internalization. People could meet social expectations unwillingly, feeling pressured into doing so (a controlled type of motivation), or unreluctantly, endorsing them as one's own (an autonomous type of motivation). Replicating previous cross-cultural research (Goyal et al., 2019; Miller et al., 2011; Tripathi et al., 2018), this study reveals that social expectations inhibit autonomous motivation (and could, therefore, be considered controlled reasons in the SDT framework) only in Western cultures (e.g. United States), but not in Asian cultures (e.g. Japan). While for Westerners, social obligations are experienced as hindering individual autonomy, for people from interdependent cultures, there is no conflict between sense of autonomy and responding to social expectations. This study shows that culture affects the degree of internalization of social expectations, and thus, what it means to be an autonomous person. People from independent cultures might feel less autonomous when meeting the expectations of other people, while people from interdependent cultures might experience autonomy when responding to the wishes and requests of others (Miller, Goyal, et al., 2017). Accordingly, social obligations should not be readily equated to controlled motivation, as they could be fully internalized and autonomously experienced in some cultures.

Third, although past research suggested that people from different cultures internalize social obligations more due to endorsement of a morality based on duty-fulfilment (Confucian ethics in China; Buchtel et al., 2018) and *dharma* in India (Miller, 1997)), participants' moral values were not measured in those studies. This research addresses the limitation by measuring individuals' endorsement of a morality based on duty, tradition, and loyalty, in the form of the ethic of community (Guerra & Giner-Sorolla, 2010; Shweder et al., 1997). Evidence was brought showing that individuals who place more moral value on respecting the norms of one's community internalize social obligations to a higher degree. Thus, it is possible that the reason why Japanese internalize social expectations to help to a higher degree

than Americans and Romanians is that they might be more exposed to a culturally-construed morality in which community ethics are given priority. However, as the effect of endorsement of the community ethic was not significant in some of the studies included in this research, the results should be interpreted as preliminary findings opening the way for future investigations.

Implications for Measurement. First, this research provides an easy to use measure of frequency of performing prosocial behavior, and its validated translations in three cultures. The scale can be used as a measure of prosociality in future research. Considering its short number of items and the fact that it showed good reliability and construct validity in the three cultures under investigation, the Kindness Frequency Scale has advantages over older, longer measures (e.g. Rushton, Chrisjohn, & Fekken, 1981).

In addition, the results of this research have some implications that are relevant for the construction of self-determination measures. Due to the fact that meeting social expectations was shown to be internalized to different degrees by people with different cultural backgrounds, caution should be taken when scoring items referring to other people's wishes and requests (see Jiang & Gore, 2016, which present a scale containing controlled motivation items such as "I am pursuing this goal because other people expect me to"). Although such items could be considered a good measure of controlled motivation for Western participants, researchers might find that Asians show high positive correlations between such items (supposed to measure controlled motivation), and items measuring autonomous motivation. Self-determination scales should be able to capture the distinction between individuals who internalize social expectations and those who do not, and not assume social expectations to be controlling. Caution is also recommended when employing aggregate motivation measures such as the Relative Autonomy Index (RAI; e.g. Grolnick & Ryan, 1989), which subtracts controlled reasons such as meeting expectations from autonomous reasons such as interest. Before aggregating motives to form an index of autonomy, researchers should verify that autonomous and controlled reasons are indeed negatively correlated

(controlled reasons reflecting low autonomy), and, if not, separate the two in analysis and interpretation.

Practical Implications. By re-acknowledging the importance of agency in determining whether kind behavior is conducive to positive affect, this study suggests that autonomy-support should be a central aspect of individual and community interventions aiming to enhance well-being and promote prosocial behavior, regardless of the cultural background of individuals. In moral-education, community health programs, and individual happiness-increasing interventions, practitioners should make sure that participants' choice is encouraged. Second, in cultures where social expectations are more fully internalized, such as Japan, reminding individuals of the expectations of close others might motivate them to engage in a specific behavior, which in turn could lead to the experience of positive affect. Therefore, a culturally-informed intervention should place emphasis on social expectations only in cultures in which others' expectations are not pressive and detrimental to individuals' sense of agency. Third, this research suggests that the effects of motivation to engage in prosocial behavior on the well-being of the benefactor might differ depending on the relationship between the helper and the helpee. Therefore, counselors and educators should pay attention not only to participants' behaviors, but also to their interpersonal relationships. Overall, this research offers a few hints pertaining to the design and implementation of culturally-informed moral education and mental health programs having prosociality as main feature.

5.2. Limitations and future directions

The studies presented in this dissertation have a number of limitations, including the existence of alternative explanations, sampling biases, translation issues and measurement issues. The limitations, alongside suggestions to overcome them and extend the generalizability of results in future research, are discussed below.

Alternative Explanations. Although this research suggests some interpretations of the findings, the potential for alternative explanations could be imputed.

Concerning the direction of causality in the association between engagement in prosocial behavior and experience of positive affect, this dissertation could not provide a conclusive answer. Study 1 employed correlational design, so inverse causality cannot be excluded. Previous research has shown that happier people are more prone to helping others (Aknin et al., 2018; Isen & Levin, 1972), so it is possible that people who are more satisfied with their lives are also more generous, performing acts of kindness more frequently. Studies 2 and 3 also cannot establish the causal direction, as prosocial behavior enactment and its effect on positive affect was not contrasted to a control condition in which prosocial behavior was not performed. However, considering the vast literature showing that prosocial behavior causes positive affect (Curry et al., 2018), a possible causal relationship between engagement in prosocial behavior and affect cannot be dismissed. Future studies should experimentally clarify the direction of causality, while also evidencing the effect of autonomous and controlled help on positive affect in comparison with a no-help condition.

Another factor that has not been controlled and could have influenced the results of this research is religion. Although in this dissertation it was hypothesized that Americans and Romanians would differ from Japanese because of their more independent self-construal, religiosity could be another

important explanatory variable of cultural differences. Americans and Romanians are both more religious than Japanese, and religion provides numerous rules considering the enactment of prosocial behavior. While for the non-religious Japanese, responding to other people's expectations to help might be more important for their well-being, responding to God's expectations could play a more important role for the religious Americans and Romanians. Future research should look into the role of religiosity and clarify how religion can explain the cultural differences observed.

Finally, although this research looked into the effect of social expectations to help on benefactors' positive affect, it remains unclear what people understand by "social expectations" in the first place, and what high social expectations actually entail for participants from different cultures. For example, expectations might in fact reflect necessity, as people who need help more might expect it more, and individuals might perceive that others expect help when help is relatively more necessary. As necessity was neither measured nor controlled for in this research, it is difficult to draw a conclusion pertaining to the relationship between beneficiaries' needs and their expectations, and whether responding to greater needs enhances benefactors' satisfaction. Future research should clarify the role of necessity, by separating need from expectation and investigating their independent contributions to positive affect.

Sampling Biases. Some limitations concerning sampling should also be mentioned. First, most of the data collected in this research came from respondents on crowd-working platforms. Some researchers point out that online respondents show "satisficing" (the tendency not to put sufficient effort into responding to the survey), and attention checks should be used to screen out participants who give inappropriate answers (e.g. Oppenheimer, Meyvis, & Davidenko, 2009). In this study, attention checks were used and inappropriate data were excluded from the analyses. However, questions about the quality of online data remains, especially when using sensitive measures (e.g. affect) as in the current research.

Online respondents tend to engage in different tasks while responding to the survey, so controlling the factors that could influence their responses (e.g. emotions) is nearly impossible. Future research should replicate the results of the current research in a more controlled experimental setting (in the laboratory), as well as in more ecologically valid environments.

Another sampling issue is related to the difficulty of obtaining data from Romania. Although this research aimed to compare three cultures, Romanian data was included in only half of the studies conducted. The evidence gathered is too limited to draw conclusions about the relative position of Romanians compared to Americans and Japanese. In order to clarify whether Romanians are more similar to Americans or to Japanese, and what unique characteristics they show when compared to respondents from other cultures, more research, employing more representative samples of Romanians respondents, is necessary.

Finally, although this research talks about culture as a moderator of the associations investigated, it is difficult to draw conclusions about the role of "culture" when hypotheses are tested in only three countries. A more culturally-diverse population should be targeted in future studies.

Translation Issues. Another important limitation is related to the use of translations. This study addresses topics that are heavily influenced by philosophical and cultural traditions, such as kindness and morality. It is possible that the meaning of the key concepts employed in this study differs between cultures, so that participants may refer to different things when responding to the questionnaires. When it comes to the complex domain of morality, the meanings associated with its central concepts may differ in important ways. For example, in this study, participants were asked to evaluate to what degree they rely on different criteria when evaluating whether someone else's behavior is *morally* right or wrong, and when doing so, the usual translations of the term "moral", which are "*doutoku*" in Japanese and "*moral*" in Romanian, were employed. Although there might be small differences in the meanings of the

words referring to morality in the United States and Romania, not the same thing can be said about the meaning of "*doutoku*" in Japan. Concerning the origin of the words, the Japanese word "*doutoku*" is comprised of two Chinese characters, one being "道", meaning "way", and the other being "徳", meaning "virtue". Together, they suggest the path that must be followed in order for one to become a become a virtuous person. The word "*moral*" has Latin origins, and refers to "customs". Although today's "*doutoku*" in Japanese, and "*moral*" in English and Romanian have similar dictionary definitions (referring to the principles of right and wrong behavior), the lay definitions of morality may not correspond in the three languages. First, in the more religious United States and Romania, morality might be more often associated with religious principles, while in non-religious Japan, it may not. Second, the meaning of the Japanese word "*doutoku*" may be more strongly associated with school-based education, as the school curriculum includes a moral education class that is referred to as "*doutoku*". The contents discussed in *doutoku* classes include moral virtues such as kindness, justice, or respect, as well as good manners, such as greetings (Khan, 1997), which may not be perceived as spheres of morality in the United States and Romania. Classes with similar contents exist in the United States and Romania, under the names of "Character Education" and "Civic Education", respectively (Smith, 2013), but they do not employ the word "moral". It is possible that for Americans and Romanians, morality is something that is educated at home or in the church, while *doutoku* may be something that is also educated in schools and covers a wider domain of behaviors that includes manners and customs, as well. From this point of view, in Japan, the meaning of the word "*doutoku*" may be closer to the domain of the ethic of community (which deals with rules concerning the proper behaviors that maintain harmony in one's social group), than is "*moral*" in the United States and Romania. In addition, lay conceptions of morality (*doutoku*) in Japan are closely related to kindness and other-concern. An analysis of the definitions of morality offered by Japanese university students reveled that morality is mainly defined in terms of reading other people's minds and being kind to others (Sakuda & Nakayama, 2018). Although harm and justice are also core concepts of

morality in the Western world (Shweder et al., 1997), the responses of Japanese students show considerable emphasis on putting oneself in another person's shoes and meeting the unspoken needs of another, which is a very particular expression of the Japanese culture (Markus, 2016). The studies included in this dissertation cannot answer the question of whether the meaning of morality is the same of differs between cultures, and whether participants had similar domains in mind when giving their answers to the questionnaire. Future studies should address this issue by inquiring into the meaning of morality across cultures, through an in-depth qualitative approach that may back-up and enrich the quantitative findings of the current research.

Measurement Issues. Some issues concerning measurement of the central variables should be discussed. First, measurement invariance was not established for all scales included in the research, so it is inappropriate to draw any conclusions about cultural differences. Second, scales with better psychometric properties should be used to tap into agentic and obligated motivation. Third, many of the measures included in these studies referred to desirable behaviors and intentions, and might have invited desirable responding. Stronger manipulations of obligation and social expectations, as well as more objective measures of prosocial behavior (e.g. behavioral observation, quantifiable amount of effort) and emotional experience (e.g. physiological or neurological measures) are also required.

Employing better measures and more representative samples, future research should clarify the processes through which culture shapes people's experiences. Targeting not only a more culturally diverse population, but actually manipulating culture, could shed light onto its effect on individuals' behavior and mental health. This research offers only a preliminary view on the importance of culture in structuring how people interact with each other and the benefits they derive from it.

5.3 Conclusions

This dissertation presents three studies which point out the cultural differences in the conceptualization of agency as it relates to prosocial behavior. Adding to self-determination theory literature, this research shows that autonomously motivated prosocial behavior satisfies the basic psychological needs of autonomy, competence, and relatedness, thus promoting positive affect and life satisfaction. It also reveals the contrasting effects of social expectations to engage in prosocial behavior in different cultures, showing that in the interdependent Japan, meeting others' expectations to help is more intrinsically satisfying and more closely related to positive affect than in the more independent Romania and the U.S. In addition, this research is one of the first to bring empirical evidence suggesting that the moral values endorsed by individuals might shape the degree of internalization of social expectations to engage in prosocial behavior. More specifically, individuals who endorse the ethic of community, placing moral importance on duty fulfilment and abiding by the norms of one's group, show greater internalization of social expectations, which translates into more satisfaction of basic psychological needs and more positive affect, when engaging in expected prosocial behavior.

As suggested by the results of these three studies, the association between engagement in prosocial behavior and benefactors' positive affect is more complex than initially presumed, being influenced by factors such as motivation to behave prosocially, the cultural background of the benefactor, benefactors' moral values, the relationship between benefactor and beneficiary, or the existence of a direct request for help. Accordingly, it is difficult to respond to the question of *whether simply engaging in prosocial behavior is conducive to the experience of positive affect*, without discussing all these other factors that potentially affect the degree of satisfaction derived from other-benefitting action. Considering the complexity of human interaction and the myriad of norms and expectations shaping

prosocial behavior, this research may only provide a rather ambiguous answer to the former question: *it is not straightforward*.

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Appendices

Appendix A

Study 1 Kindness Frequency Questionnaire

Kindness Frequency Questionnaire English Version

Choose the answer that conforms to the frequency with which you have carried out the following behaviors during the last month (1=Never, 2=Once, 3=A few times, 4=Often, 5=Very often). However, please exclude cases in which you have carried out these behaviors as part of your job or other public function, or for which you received monetary rewards.

In the last month...

1. I have offered food or objects to someone.
2. I have lent some things to someone.
3. I have actively listened to someone's worries and tried to cheer them up.
4. I have taken time to teach or explain something to someone.
5. I have helped someone by doing something in their place.
6. I have helped someone by holding or carrying their things.
7. I have given directions to someone.
8. I have helped someone with work or school activities, although it was not my responsibility.
9. I have accompanied someone to their destination although it was not my own.

Kindness Frequency Questionnaire Romanian Version

Cât de des ai acționat astfel în ultima lună? (1=niciodată, 2=o data, 3=mai mult de o data, 4=des, 5=foarte des). Atenție! Ignoră cazurile în care ai realizat aceste acțiuni ca parte a jobului sau funcției publice pe care o deții, și cazurile în care ai primit recompensă financiară.

În ultima lună...

1. Am oferit mâncare sau obiecte cuiva.
2. Am împrumutat cuiva niște obiecte.
3. Am ascultat în mod activ grijile cuiva, și am încercat să îl/o încurajez.
4. Am oferit din timpul meu pentru a explica sau a învăța ceva pe cineva.
5. Am ajutat pe cineva făcând ceva în locul lui/ei.
6. Am ajutat pe cineva ținând-i sau cărându-i lucrurile.
7. Am explicat cuiva cum să ajungă la destinație.
8. Am ajutat pe cineva în realizarea unor sarcini de serviciu sau școlare, deși nu eram obligat/ă să o fac.
9. Am însoțit pe cineva până la destinația lui/ei, deși nu era și destinația mea.

Kindness Frequency Questionnaire Japanese Version

ここ一ヶ月、以下のようなことをどれぐらいの頻度で行いましたか（1＝していない，2＝1度ぐらい，3＝数回ある，4＝よくある，5＝とてもよくある）。ただし、職務や公的役割として行われるもの、報酬が支払われるものは除きます。

ここ一ヶ月…

1. 他の人に食べ物、または品物を提供した。
2. 他の人にものを貸した。
3. 他の人の悩み事を積極的に聞いてあげて、励まそうとした。
4. 他の人に丁寧に教えたり、説明した。
5. 他の人の代わりに、何かを行って手助けした。
6. 他の人のために、荷物を運ぶのを手伝ったり、持ってあげた。
7. 他の人に道案内をした。
8. 自分にそのような義務がなくても、他の人の仕事や学校の課題を手伝った。
9. 自分の目的地でない場所であっても、寄り道して、他の人の行きたい場所について行った。

Appendix B

Study 2a Scenarios

The six kindness scenarios used are presented below. The scenarios were gender-matched and presented in random order. The following is the female version.

Friend scenario 1 (providing emotional support)

A close (female) friend calls you and tells you she has just broken up with her partner, whom she had been dating for many years. Given that your friend seems to be having a difficult time, you wonder whether you should suggest meeting with her to talk about it, and hopefully, cheer her up. However, you are extremely busy, and making time for your friend would mean having to leave a lot of unfinished work for the next day.

Friend scenario 2 (offering a customized present)

Tomorrow is your close (female) friend’s birthday and you have not found the right present for her yet. Knowing that your friend likes personalized presents very much, you consider ordering a customized object that conveys a particular message. To do so, you must decide the content of the message, any appropriate photos, and the actual present, and then place the order, finally going to the shop to pick it up. This requires substantial time and effort, and you are pretty busy.

Acquaintance scenario 1 (working more to cover for someone)

You have been assigned to work with a female colleague you are not very close to, to complete a very complex and time consuming project. You know that your colleague is already working on another big project and is very busy. Considering your colleague’s situation, you wonder whether to assume the more

difficult part of the project in order to lessen the burden on her. However, assuming the most difficult part of the project would require a lot of time and effort from you.

Acquaintance scenario 2 (offering a souvenir)

You spend the last day of your vacation in another city, looking for souvenirs. You remember that a female colleague you are not very close to told you how much she appreciates a certain product that can be found only in the area you are visiting. Considering that the product cannot be found in your city and your colleague likes it very much, you wonder whether you should buy it and offer it to her. However, your luggage is already filled with things, and this would add to the weight.

Stranger scenario 1 (giving directions)

It's 8 o'clock in the evening and you are in front of the train station, waiting for a bus. A young woman you do not know, who clearly seems to be a tourist, is waiting next to you. The woman looks confused and heads towards the nearby tourist information desk. However, the desk is only open until 6 pm, so she comes back, looking disappointed and confused. You wonder whether to ask if she needs directions for a certain destination. However, giving directions to the tourist might take some time and you are very tired and want to get home as soon as possible.

Stranger scenario 2 (making change)

It's early in the morning and you are waiting in line at the coffee and food vending machine. Ahead of you are two young women who are together. One of them buys coffee, when the other realizes she has only big banknotes that the vending machine does not receive. The first woman tells her that she is also out of change. Considering that the nearby stores are closed, you wonder whether you should offer to make change. However, you do not have too much change yourself, so changing money for the young

woman in front of you could leave you without enough change to buy all the things you wanted from the vending machine.

Appendix C

Study 2a Scenario Questions

Question wordings varied depending on the content of the scenario. Below are the questions used for the first female friend scenario (providing emotional support).

1. [Duty] How much do you feel it is your duty to suggest to your friend to meet and talk about it? (1 - *I don't feel it is my duty to act, at all*, 7 - *I feel it is my duty to act, very much*)

2. [Desire] How much do you feel you really want to suggest to your friend to meet and talk about it? (1 - *I don't feel I really want to act, at all*, 7 - *I feel I really want to act, very much*)

3. [Expected own positive affect] How good would it make you feel if you suggested to your friend to meet and talk about it? (1 - *If I acted, it would not make me feel any good*, 7 - *If I acted, it would make me feel very good*)

4. [Expected own negative affect] How bad would it make you feel if you DIDN'T suggest to your friend to meet and talk about it? (1 - *If I didn't act, it would not make me feel bad at all*, 7 - *If I didn't act, it would make me feel very bad*)

5. [Moral worth] By suggesting to your friend to meet and talk, how much would it make you feel that you are a moral person? (1- *It would not make me feel moral*, 7 - *It would make me feel considerably moral*)

6. [Moral blame] By NOT suggesting to your friend to meet and talk, how much would it make you feel that you are a less moral person? (1 - *It would not make me feel less moral*, 7 - *It would make me feel considerably less moral*)

7. [Target expectation] How much do you think your friend expects you to suggest to her to meet and talk about it? (1 - *She is not expecting it at all*, 7 - *She is expecting it very much*)

8. [Target positive and negative affect] If you did suggest to her to meet and talk, how much do you think your friend would feel… (1 - *Not at all*, 7 - *Very much*)

...grateful

...indebted

...helpless

...pleasantly surprised

...happy

...embarrassed

9. [Cost] How much effort would meeting your friend to talk impose upon you? (1 - *It wouldn't impose any effort*, 7- *It would impose a lot of effort*).

Appendix D

Study 3b Cover Letter

******** ****** ******* Research Institute

Dear *** *******,

With this letter and the attached resume, I would like to express my sincere interest in the Research Assistant position available.

The reason I am applying for the position of Research Assistant at the ******** ****** ******* Research Institute is because by working here, my contribution to society through my research activity becomes salient. I am currently conducting research as a graduate student and I present the results to the public through academic conferences and journal articles. However, I am not certain about the extent of the impact of my research on society. If I cannot see the contribution I make to society, I sometimes fail to find meaning in conducting research. However, as a researcher working at the ******** ****** ******* Research Institute, this contribution is clear, and I can get a sense of the significance of my research. For this reason, I am extremely interested in the Research Assistant position available.

The following research skills demonstrate my qualification for this position:

-experience as research assistant conducting data analysis, experience as teaching assistant for the ******** ********* ******* class, which is a compulsory course at ******** University Faculty of ***********, and experience as tutor for foreign students, offering support with daily living and graduate school entrance examinations.

-from the first year of graduate school I have actively participated in academic conferences and worked

on journal article submissions. Currently, I have submitted one article to ********** Journal of Research on ***********, and have undergone three rounds of revision. I have participated in local and international conferences, and this year, I have been assigned as chairperson for an international conference oral presentation session.

-experience as organizer for the Young Researcher Program of the Association of ************ *************.

In order to conduct my research, I have participated in numerous activities, striving to improve my *********** communication skills and widen my social network. Making the most of these experiences, I am continuously working to improve my research abilities.

Although I am still a second year graduate student and my research abilities do not yet match the level of senior researchers, I will do my best to be of help to the Institute. Thank you for your consideration. I look forward to speaking with you soon.

****** ********** **********

University Graduate School of ********* **** ******** ************