

What is the Role of Culture in the Association of Relationships with Health?

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Abstract

There is now widespread recognition that relationships have important implications for health. To better understand this linkage, scholars have called for greater bridging between relationship science and the study of health. The goal of this paper is to raise awareness of another factor that needs to be incorporated into this area of study: culture. I recommend three steps that researchers can take to systematically incorporate culture into the study of relationships and health. First, I suggest four possible culture patterns to study: similarity, moderation, mediation, and novel constructs. Second, I suggest that theoretically meaningful cultural variation and multiple cultures be concurrently studied. The value of this strategy is highlighted via examples from three contexts that emphasize distinct approaches to self and emotion in relationships. Third, I suggest that key relationship processes in families and couples, two relationships with extensive implications for health, be studied. Selected studies of four relationship processes known to be relevant for health – expectations, formation and maintenance, emotions, and social support – are briefly reviewed to highlight the value of this focus. The theoretical and applied benefit of incorporating culture into the study of the association of relationships with health is discussed.

There is now widespread recognition that relationships matter for health. The empirical evidence showing that relationships that are close, warm, and supportive are linked with psychologically healthy and longer lives is well-established and continues to grow (e.g., Baumeister & Leary, 1995; Gable, Reis, Impett, & Asher, 2004; Holt-Lunstad & Smith, 2012; Holt-Lunstad, Uchino, Smith, & Hicks, 2007). Relationships can also be bad for health. When characterized by high levels of anger, aggression, neglect, coldness or simultaneously high levels of positivity and negativity, relationships are associated with dysregulation of psychological (i.e., emotion, cognition) and physiological systems (i.e., cardiovascular, endocrine, and immune) that are directly or indirectly tied to poor health outcomes (e.g., Repetti, Taylor, & Seeman, 2002; Rook, 1984; Uchino, 2013; Umberson & Montez, 2010). Recently, prominent scholars have articulated the need for greater bridging between relationship science and the study of health in order to develop a more complete understanding of the complex processes through which relationships are associated with health (Feeney & Collins, 2014; Pietromonaco, Uchino, & Dunkel-Schetter, 2013; Uchino, 2013). As research moves in this direction, the many factors that shape relationships will need to be incorporated into future studies. One of these factors is culture. The goal of this paper is to prompt the needed inclusion of cultural diversity into the study of relationships and health by (a) raising awareness of sociocultural variation in relationship processes that have implications for health and (b) proposing that researchers focus on four possible ways through which culture can shape the association of relationships with health.

Relationships and Health: Current Evidence

Research on the association of relationships with health has yielded one clear conclusion: relationships are central to psychological and physical health. Documented instances of long-term

isolation as well as an extensive and growing body of empirical research provide powerful evidence that a lack of social relationships disrupts development and impairs psychological and physical health (e.g., Haney, 2003; Holt-Lunstad & Smith, 2012; Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015; House, 2001; House, Landis, & Umberson, 1988; Itard, 1962; Luo, Hawkey, Waite, & Cacioppo, 2012; Steptoe, Shankar, Demakakos, & Wardle, 2013). Simply put, social isolation is associated with less healthy and shorter life.

Two types of relationships have been particularly linked with health: family relationships and couple relationships. Family relationships are typically the relationships that people are born into, and extensive evidence indicates that early family environments initiate relationship-relevant processes that shape psychological and physical health for the rest of our lives (e.g., Bowlby, 1969, 1973, 1980, 1988; Mikulincer & Shaver, 2007; Miller et al., 2011; Repetti et al., 2002). Within our family of origin relationships, we learn what to expect from our relationships, how we should treat others with whom we have a relationship, what rewards we should pursue, and what threats we should avoid. For the majority of people, family relationships also stand out for their longevity. More so than other relationships, family relationships are typically maintained and remain primary sources of support, throughout the life course (Cicirelli, 1995; Fingerman et al., 2010; Holt-Lunstad & Smith, 2012; Neyer, & Lang, 2003; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Couple relationships commonly begin to be formed in adolescence and typically become adults' primary bond in most Western societies (Huston, 2009; Karney & Bradbury, 2005; Kiecolt-Glaser & Newton, 2001; Smith, Baron, & Caska, 2014). Historically, couple relationships became an adult's primary bond through marriage (i.e., Coontz, 2005). For this reason, marriage has been a main focus of research on relationships and health with extensive evidence suggesting that couples exert a uniquely important influence on one another's health (e.g., Kiecolt-Glaser & Newton, 2001; Smith et al., 2014).

The pathways through which family and couple relationships can positively influence health are not yet well understood because this area of study has historically received less empirical attention than the study of negative processes. Psychologists' conceptual understanding of positive relationship processes and the ability to measure the effects of positive processes on health-relevant physiology are still developing (e.g., Feeney & Collins, 2014; Gable & Haidt, 2005; Kok et al., 2013). Nonetheless, it is understood that the benefits of relationships are primarily derived from *high-quality relationships*. High-quality relationships are characterized by high levels of closeness, warmth, and support and are embedded within daily life rhythms that reflect intimacy and interdependence (e.g., Feeney & Collins, 2014; Gable & Gosnell, 2011; Lakey & Orehek, 2011; Miller, 2012). In their meta-analysis of the association of relationships with mortality, Holt-Lunstad and Smith (2012) interpreted their findings as a conservative estimate of the effect of relationships because the majority of studies did not measure relationship quality but negative relationship processes are well documented to erode health.

High-quality relationships are theorized to benefit health through at least three distinct paths. First, everyday emotion-laden social interactions in which people come together, share daily life events, and affirm their social bonds are thought to generate a global sense of social connection and social support that directly benefit psychological health and physical health (e.g., Lakey & Orehek, 2011; Thoits, 2011). Second, emotion-laden social interactions that generate and prolong positive emotions as well as undo the physiological effects of negative emotions directly benefit psychological health and may also benefit physical health (Fredrickson & Levenson, 1998; Gable et al., 2004). Both positive emotion experience and expressive display have been linked with happier and longer life (e.g., Harker & Keltner, 2001; Pressman & Cohen, 2005, 2007). Third, high-quality relationships may motivate health-promoting behavior, such as physical activity or seeking appropriate medical care, and deter unhealthy behaviors, such as smoking and excessive drinking (Newman & Roberts, 2013).

In contrast, the pathways through which family and couple relationships adversely affect health are well studied and better understood. Two seminal reviews provide key conclusions from this research. Repetti et al. (2002) reviewed approximately 53 studies of family environments and concluded that family relationships that are high in conflict and aggression and/or are cold, unsupportive, or neglectful set the stage for the development of poor health by promoting health-harming behaviors and disrupting health-relevant cognitive, emotional, and biological systems. Kiecolt-Glaser and Newton (2001) reviewed 64 studies of marriage and concluded that marital interactions characterized by negative emotion, negative cognitions, and negative communication directly impact biological systems (e.g., cardiovascular, endocrine, and immune) that influence health outcomes and increase the likelihood of poor psychological health as well as health-harming habits (e.g., smoking, excessive eating, excessive drinking). Notably, the overwhelming majority of the studies reviewed by Repetti et al. (2002) and Kiecolt-Glaser and Newton (2001) were derived from samples of Americans of European background. This is not surprising. It reflects the reality that most research on the association of relationships with health has been generated from this distinct cultural context.

Altogether, extensive evidence indicates that relationships can promote emotions, cognitions, and behaviors that shape both psychological and physical health outcomes. Under the best of circumstances, relationships are associated with better health at the beginning of life (i.e., birth outcomes; Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993), social behaviors that foster and protect health throughout the life course (i.e., meaningful social integration, self-care; Mason & Sbarra, 2013), and the length of life itself (Holt-Lunstad & Smith, 2012). Under the worst of circumstances, the opposite pattern prevails. As yet, though, culture variation in relationship processes that have implications for the association of relationships with health is a topic that has received very limited empirical attention.

Culture

Culture saturates all human social life. It is the filter through which people's thoughts and behaviors pass as they are processed into subjective experience (e.g., Cohen, 2009; Dressler, 2004; Heine, Lehman, Peng, & Greenholtz, 2002; Markus & Kitayama, 1991; Triandis, 1995). It also serves as a social map that allows people to navigate through the rules, norms, and expectations of their societies. For this reason, definitions of culture frequently emphasize its role in knowing how to "function adequately" within a particular society, with relationships regarded as central to this adequate functioning (e.g., Dressler, 2004; Markus & Kitayama, 1991; Triandis, 1995). To put it plainly, culture is embedded in the social context in which all people's relationships and health unfold.

The role of culture in the relationship–health association can unfold in at least four ways that are visually depicted by Figures 1–4. All four figures use an example whereby the association of a relationship process (operationalized as emotional positivity of daily social interaction) with a health behavior, physiology, or outcome (operationalized as frequency of social interaction, cardiovascular indicators of parasympathetic activity, and reduced likelihood of heart disease) is studied in three cultural contexts. I use and recommend at least three contexts for two reasons. First, the study of culture needs to extend past two group comparisons. All too often, two group comparisons inadvertently contribute to the impression that a dominant cultural context is the desirable norm and/or that cultural diversity is limited to two types of variation. Second, three cultural contexts increase the likelihood that researchers will be guided by theoretically meaningful variation, rather than convenience, when selecting cultural contexts to study. The four are as follows:

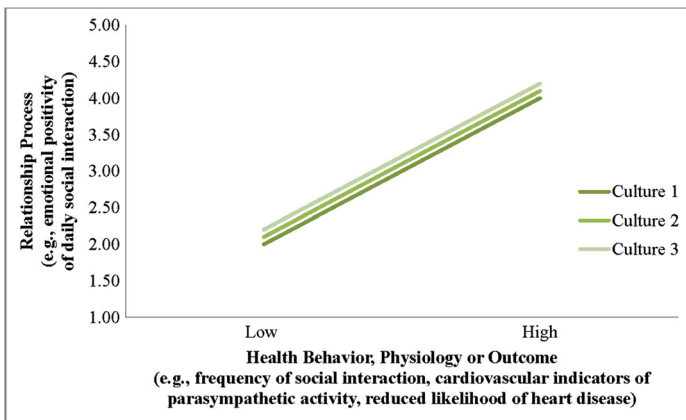


Figure 1 Multiple cultures show a similar pattern of relationships and health associations.

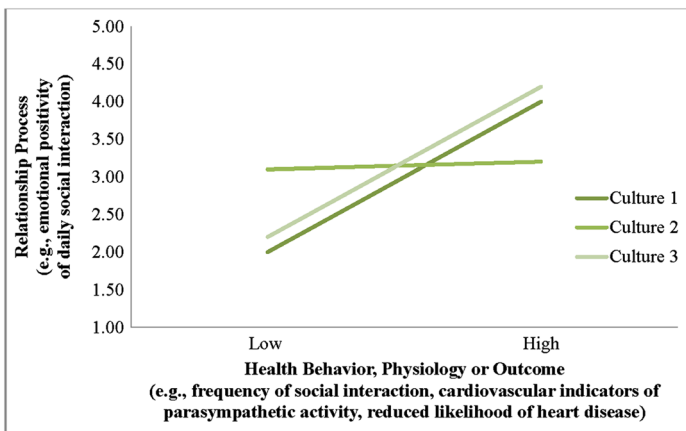


Figure 2 Multiple cultures show moderation of a relationships and health association.

- Possible Role of Culture #1: Multiple cultures vary in the way some aspect of relationships is approached, but the pattern of relationships–health associations across contexts is the same. This possibility is illustrated in Figure 1. This pattern would provide evidence for the generalizability of a particular relationship and health association.
- Possible Role of Culture #2: Multiple cultures vary in the way some aspect of relationships is approached, and this variation changes the relative strength of the relationships–health associations in at least one context. This possibility is illustrated in Figure 2. This pattern would provide evidence that culture moderates a particular relationship and health association.
- Possible Role of Culture #3: Multiple cultures vary in the way some aspect of relationships is approached, and this variation exerts effects on a pathway through which a relationship process is associated with health in at least one context. That is, a cultural variable may be found to directly or indirectly mediate *how* a relationship process is associated with health. Figure 3 illustrates this possible pattern in one cultural context (the same pattern may or may not be observed in the other two contexts studied). Altogether, the observed pattern of associations could provide evidence that a cultural variable can mediate the association of a relationship process with a health behavior, physiology, or outcome.

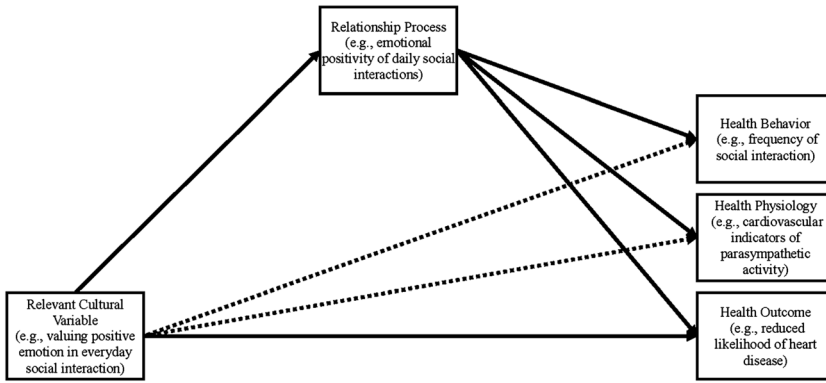


Figure 3 A cultural variable mediates the association of a relationship process with health (may only be observed in one group or multiple groups).

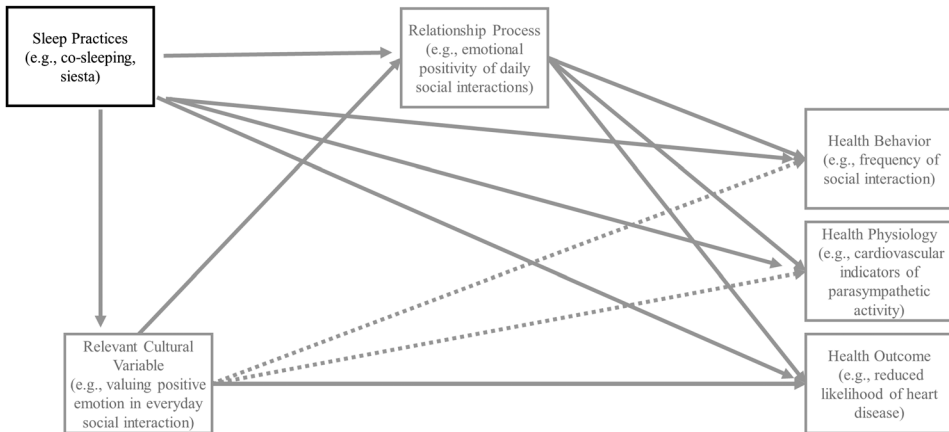


Figure 4 A cultural variable that has not been studied generates new knowledge and questions of relevance for understanding the association of relationships with health.

- **Possible Role of Culture #4:** A culture may approach some aspect of relationships with a unique value or practice. The study of this factor can generate new knowledge and questions of relevance for understanding the association of relationships with health. In some cases, this new knowledge may even overturn existing assumptions about the association of relationships and health. Figure 4 illustrates this possible pattern using the example of sleep practices, operationalized as couple or family co-sleeping or routine afternoon naps called *siesta* that have been historically common in Mediterranean and Latin American societies. In this example, both co-sleeping and siesta may be implicated in relationship processes that are relevant for the association of relationships with health. On the positive side, these practices may promote feelings of social connection (co-sleeping) and be physically restorative (siesta). On the negative side, they might disrupt sleep (co-sleeping) or circadian rhythms (siesta).

In the next section, I highlight these possible patterns with relevant examples from the limited existing empirical literature on the role of culture in the association of relationships with health.

Insights for Relationships and Health from Culture

Incorporating culture into the study of relationships and health requires that researchers be guided by theoretically meaningful cultural variation as well as a spirit of inclusion toward the many forms of culture that are largely absent from the empirical literature (Cohen, 2009; Henrich, Heine, & Norenzayan, 2010). For the study of relationships and health, one theoretically important dimension of cultural variation is the extent to which people consider the self to be interdependent with important others or independent from important others (e.g., Markus & Kitayama, 1991). To be interdependent means that the preferences and needs of important others are incorporated into everyday life as well as major life events. To be independent of others means to be able to meet one's own preferences and needs without relying on important others in everyday life as well as major life events. Another theoretically important dimension of cultural variation is the extent to which people regard emotion as a factor that facilitates or disrupts their important relationships (e.g., Markus & Kitayama, 1991; Ruby, Falk, Heine, & Villa, 2012).

These two factors, the link of self in relationship to others and the regard of emotions as relationship facilitators or disruptors, can be of direct relevance to health processes and outcomes. For example, Morling, Kitayama, and Miyamoto (2003) found that the pregnancy coping of American women of European background and Japanese women was consistent with cultural norms for interdependence and independence. American women rated acceptance, a way of coping that emphasizes acknowledgement of circumstances that cannot be changed, as an important way of coping. This emphasis on the self's role in coping with life circumstances fits culturally independent ideals. Japanese women rated social assurance, which emphasizes interconnection and social support from others, as an important way of coping. Social assurance fits culturally interdependent ideals. In this example, the role of culture is consistent with moderation (Figure 2). However, additional research could examine the possibility of a mediation pattern (Figure 3) where interdependence may explain the extent to which social assurance from one's social relationships benefits psychological health and perhaps physical health in the form of pregnancy outcomes (i.e., infant birth weight). A second example comes from the study of the role of emotion expression in health outcomes. Extensive research suggests that suppressing emotion is problematic in cultural contexts that value expressing the emotions one feels (e.g., Consedine, Magai, & Bonnano, 2002). However, in cultural contexts that value emotion suppression as a way to avoid disrupting important relationships, emotions can be suppressed without negative consequence for psychological health (Soto, Perez, Kim, Lee, & Minnick, 2011). The Soto et al. (2011) findings showed that the extent to which emotion suppression was predictive of depressed mood was moderated by varying cultural ideals about emotion expression, a pattern consistent with Figure 2.

The two examples above highlight that theoretically meaningful variation can provide useful insights for better understanding the role of culture in the association of relationships with health. In the US, at least three groups – Americans of European, Latino, and East Asian backgrounds – vary along these dimensions. Americans of European background are typically immersed in the US's dominant Anglo-Protestant culture, and most have been in the country for 3+ generations (e.g., Markus & Kitayama, 1991; Sanchez-Burks, 2003). Among Americans of European background, it is typical to regard the self as independent and separate from others, including one's important relationships. At the same time, emotion expression that reflects internal experience is also highly valued (Le & Impett, 2013; Markus & Kitayama, 1991). In contrast, many Americans of Latino and East Asian backgrounds are either immigrants or the US-born children of immigrants who actively retain cultures of origin (e.g., Pew Research Center, 2013). Members of these groups typically regard the self to be interdependent with important others (e.g., Marin & VanOss Marin, 1991; Markus & Kitayama, 1991; Sabogal, Marin, Otero-Sabogal, VanOss Marin, & Perez-Stable, 1987). However, these two groups also

differ from each other on the emotion dimension. In Latino contexts, ideal emotional experiences are higher in positive emotion than in East Asian contexts (Ruby et al., 2012). Latinos also value harnessing positive emotion expression to generate and maintain smooth and rewarding social interaction (e.g., Holloway, Waldrip, & Ickes, 2009). In East Asian contexts, low arousal emotion experience (Tsai, 2007) and managing emotions so as to avoid disrupting important relationships (Taylor et al., 2004) are valued.

These three contexts, Americans of European, Latino, and East Asian backgrounds, thus present an opportunity to study three theoretically meaningful configurations that are relevant for understanding the interplay of culture, relationship quality, and health. The three configurations are as follows: (A) high independence, self-focused emotion with high expression; (B) high interdependence, other-focused emotion with high positive expression; and (C) high interdependence, moderated emotion expression. Of course, not all people from these backgrounds will neatly fit these configurations, but the needed variation for the study of culture will be readily found at the group level. In the next section, I draw from the research literature to provide examples of how these three configurations of self and emotion shape four key processes in family and couple relationships – relationship expectations, relationship formation and maintenance, emotions, and social support. These processes were selected because all are known to be relevant for health and the study of culture has been incorporated to some degree in all four. As such, they serve as appropriate examples from which to discuss the implications of relationship processes for better understanding the association of relationships with health.

Relationship expectations

Cultural variation in expectations for family relationships is widely studied. Among Americans of European background, expectations for independence in family relationships is evident in preferences for nuclear family households and openness to moving far away from one's family (Fuligni, Tseng, & Lam, 1999; Magaña & Smith, 2006b; Oishi, 2010). Among Americans of Latino and East Asian backgrounds, expectations for interdependence are revealed in preferences for households that include parents, adult children, and minor children, frequent face-to-face contact among family members, and willingness to incorporate the opinions of family members into one's important life decisions (Campos, Ullman, Aguilera, & Dunkel-Schetter, 2014; Fuligni et al., 1999; Sabogal et al., 1987). These expectations are directly relevant to many factors implicated in the association of relationships with health. For example, the likelihood of social integration, a key factor that predicts length of life (e.g., Holt-Lunstad & Smith, 2012), is likely to vary by cultural context. Similarly, the extent to which relationship quality is available in contexts that emphasize relationships that one is born into and cannot easily dissolve may have important implications for health.

In terms of family relationships, some cultural variation in relationship expectations is captured by a construct called *familism*. Familism is a way of valuing family that emphasizes prioritizing one's obligations to family over the self, perceiving family as a first source of social support, and engaging in decision-making that takes into consideration the needs of family members (e.g., Campos, Ullman et al., 2014; Sabogal et al., 1987). It is one of a number of specific values that emphasize prioritizing others before the self (e.g., Schwartz et al., 2010). Familism values are held by people across a wide variety of sociocultural contexts but are most widely studied in US Latinos, where familism values are a socially desirable norm (e.g., Campos, Ullman et al., 2014; Lugo Steidel & Contreras, 2003; Sabogal et al., 1987). Little research has been conducted across sociocultural contexts that fit the sample configurations on topics relevant to the association of relationships with health. One study that has suggests a role of culture consistent with Figures 1 and 3. First, familism values were found to predict higher psychological health only indirectly

via a pathway of high-quality relationship factors (i.e., closeness and support) (Campos, Ullman et al., 2014), a mediation pattern consistent with Figure 3. Second, the mediation pattern was observed for all three samples studied, Americans of European, Latino, and Asian backgrounds, a pattern consistent with Figure 1 (Campos, Ullman et al., 2014). Notably, some research indicates that familism is also associated with responses to relationship conflict that can be health-harming. For example, Zayas and Pilat (2008) found that familism is implicated in the high rate of attempted suicide in Latinas in response to family relationship conflict. To date, familism appears to have a mixed pattern of benefits and costs for health (Campos, Ullman et al., 2014; Schwartz et al., 2010). The role that familism values play in the association of relationships with health is thus one that is ripe for additional study.

In terms of couple relationships, historically great cultural variation across the world has given way in the last century to dominant US cultural ideals that emphasize love as the basis for long-term couple bonds and marriage (Coontz, 2005). The focus on love has fostered a priority on intimacy, pleasure, and personal satisfaction that has not historically been the primary criteria for couple relationship formation, including in Latin America and East Asia (Coontz, 2005; Hirsch, 2003; Yan, 1997; Yan, 2002). These expectations are particularly prevalent among Americans of European background (e.g., Miller, 2012). They are also prevalent among Americans of Latino and Asian backgrounds, although members of these groups may be more willing to take into account practical considerations (e.g., fit with family, demographic similarities) raised by parents and other important relationships (Buunk, Park, & Duncan, 2010; Phinney, Kim-Jo, Osorio, & Vilhjalmssdottir, 2005; Zhang & Kline, 2009). The prevalence of love-based ideals for couples suggests that studies of the association of relationships with health in couples from the three contexts may often – but not always – fit Figure 1, where similar patterns are observed across contexts.

Despite the increasingly shared preference for love-based couple bonds across human societies, there is evidence that sociocultural contexts continue to shape couple expectations and experience. A few relationship scholars, for example, have suggested that cultural interdependence has implications for adult attachment and relationship quality (Campos, Rojas Perez, & Guardino, 2014forthcoming; Friedman et al., 2010). Adult attachment is the term that captures stable expectations about close others that develop in response to early life experience. Avoidance is the dimension of attachment characterized by distance from others due to expectations that people will not be there for you in times of distress. Avoidance is theorized to be more problematic in contexts where cultural interdependence is prevalent because avoidance is at odds with interdependence (e.g., Friedman et al., 2010). Consistent with this theorizing, Friedman et al. (2010) found avoidance to be more strongly associated with relationship problems in Mexican and Asian couples than US couples of European background. These findings suggest that avoidance in the context of cultural interdependence may predict relationship problems that strengthen the association of negative relationship patterns with poor health, a moderation pattern that would be consistent with Figure 2.

Relationship formation and maintenance

Relationship formation is less relevant to family relationships but central to couple relationships. In the configuration A setting of Americans of European background, where independence and self-focused emotion expression that reflects internal experience are emphasized, the formation of couple relationships may play a particularly important role in one's social integration and, in turn, health. For example, research on health in men, perhaps the most culturally independent of European American samples, indicates that men who are socially integrated into couple relationships engage in healthier behaviors (i.e., less likely to smoke,

less likely to drink and drive) whereas widowed men experience health declines and greater mortality risk (Mason & Sbarra, 2013). It remains to be seen whether these patterns are also observed in configuration B and C contexts where greater emphasis is placed on family relationships. One possibility is that men from configuration B and C contexts draw from family of origin to maintain high levels of social integration that protect health even in the absence of a couple relationship. For men from configuration B backgrounds (Latino), a cultural emphasis on positive emotion expression may also increase one's likelihood of forming non-family relationships. These possibilities, which could fall into a Figure 2 or 3 pattern of moderation or mediation, merit further study and could help researchers understand cultural mechanisms that promote social integration into relationships.

Research also indicates that relationship maintenance processes are culturally variable in ways that have implications for relationship quality and, in turn, health. In terms of family relationships, the work of Telzer, Masten, Berkman, Lieberman, and Fuligni (2010) indicates that members of cultures that emphasize meeting obligations to family members feel rewarded by engaging in behaviors consistent with those values. These researchers had a sample of US participants of Latino and European backgrounds take part in a resource distribution task where they could either keep money for themselves or give it to family members in need. Both groups shared similar amounts of money to family in need. However, the Latino sample also showed activation in the reward areas of the brain when they gave money to family. These findings are indicative of a Figure 2 pattern of cultural moderation. It would be interesting to explore if these findings extend to configuration C. This additional context could help tease apart whether interdependence per se or interdependence blended with emotional positivity is key to experiencing relationship maintenance behavior as rewarding. Subsequent studies could then examine whether experiencing reward from relationship maintenance behavior contributes to high relationship quality and positive health behaviors, favorable health physiology, and good health outcomes.

In terms of couple relationships, there is evidence that relationship-serving biases, a tendency to perceive that one's relationships are of higher quality than those of others, occur in more than one cultural context. These biases are theorized to help people stay in committed couple relationships (Murray, Holmes, & Griffin, 1996a, 1996b). At least one study has found that Japanese, Asian Canadian, and European Canadian samples report similar levels of relationship-serving bias (Endo, Heine, & Lehman, 2000). This suggests that relationship-serving biases may fit Figure 1, with this cognitive tendency helping people across varied cultural backgrounds stay socially integrated in couple relationships.

It is also possible that both these family and couple relationships maintenance processes fit better with a Figure 3 model. In this case, the cultural value placed on experiencing reward in fulfilling family obligations or viewing relationship partners more positively than the self may be distinct mediating pathways that actively maintain social integration in high-quality relationships and the better health behaviors, psychological health, and physical outcomes that derive from those relationships. These possibilities merit future study to better understand the many ways that people enter and stay in high-quality relationships that have implications for health.

Emotions

Emotions are central to relationships (e.g., Keltner & Haidt, 2001; Shiota, Campos, Keltner, & Hertenstein, 2004) and have long been recognized as a rich space of sociocultural variation (Mesquita, Frijda, & Scherer, 1997). Recent studies highlight the importance of this topic for health (e.g., Curhan et al., 2014; Pressman, Gallagher, Lopez, & Campos, 2014; Soto et al., 2011). The few studies that have examined cultural variation in emotion within relationship

settings suggest that this is an important area for future research. As with the other key processes reviewed, this area of research has implications for understanding how much of the association of relationships with health is driven by the quality of one's relationships. In this case, this area of research also raises questions about the very nature of relationship quality – to what extent are positive emotion processes a necessary component of high-quality relationships and/or relationships that benefit health?

This area of research has primarily studied emotion in the context of couple relationships. For example, Shiota, Campos, Gonzaga, Keltner, and Peng (2010) examined emotion complexity in the social interactions of US young adult couples of European and Asian backgrounds. Cultural scholars have theorized that the worldviews of members of Asian cultures include greater acceptance of contradiction (Peng & Nisbett, 1999). Consistent with this view, Shiota et al. (2010) found that couples from Asian backgrounds were more likely to report simultaneously experiencing opposing emotional states. That is, the Asian couples studied reported love experience at the same time as more emotionally negative experiences (e.g., shame, contempt, anger) in the course of interactions intended to elicit teasing, social support, jealousy, and love. Williamson and colleagues (2012) studied the emotion-laden interactions of newlywed American couples of European background and Mainland Chinese couples and found that emotionally positive processes were less predictive of relationship satisfaction in Mainland Chinese couples. Emotionally negative behaviors, however, did predict lower relationship satisfaction among Mainland Chinese husbands. Both studies suggest that relationships that simultaneously include positivity and negativity can be culturally appropriate. This may or may not be equivalent to ambivalent relationships that other research has established to have negative implications for health physiology (e.g., Uchino et al., 2012). However, both studies raise questions about whether the role of positive emotion in high-quality relationships fits a Figure 1 pattern and whether the negative association of relationship ambivalence with health may be moderated by cultural contexts where interdependence is blended with moderated emotion (C configuration).

Social support

Social support, the feeling that one is valued, cared for, and can count on others in time of need (Cohen & Wills, 1985; Taylor, 2011; Wills, 1991), as well as the many behaviors intended to convey support, may be the most well-studied key process implicated in the relationships–health link. An extensive literature drawn primarily from studies of Americans of European background and samples from European countries (configuration A) suggests that social support is advantageous for psychological health and can buffer individuals against threats to the functioning of physiological systems (i.e., cardiovascular, endocrine, immune) posed by prolonged exposure to stress (e.g., Taylor, 2011). Social support is also implicated in moving people toward or away from health behaviors (e.g., eating, exercise, smoking/drinking) that are directly or indirectly linked with disease and mortality (Newman & Roberts, 2013).

The evidence in favor of social support's benefits for health physiology and outcomes, however, is largely from studies that have examined *perceived support*, the feeling that others would be there for you as needed (Taylor, 2011). The findings from studies of *received support*, the actual behaviors that people engage in to communicate support, are more mixed (e.g., Bolger & Amarel, 2007). Research from the configuration A cultural context suggest that received support carries the risk of undermining independence by communicating that the receiver cannot independently manage the demands of their situation; when this occurs, psychological health suffers (e.g., Bolger & Amarel, 2007).

Social support research has systematically studied sociocultural variation. This work has largely focused on comparing Americans of European background with Americans of East

Asian backgrounds or samples from East Asian countries (configurations A and C). A major finding from this body of research is that people from East Asian backgrounds are less likely to openly seek social support than Americans of European background (e.g., Taylor et al., 2004). This pattern stems from a sociocultural emphasis on maintaining relationship harmony by not disrupting one's social network with open support requests (e.g., Taylor et al., 2004). However, this does not mean that members of East Asian cultures do not need or benefit from social support. Rather, the sociocultural context provides an alternative pathway that emphasizes thoughtful provision of what Kim and colleagues have termed "implicit support", whereby members of one's social network anticipate the support that is needed and provide it without being asked or without making their supportive efforts explicit (e.g., Kim, Sherman, & Taylor, 2008). Culturally appropriate support has been linked with favorable health-relevant physiology (Kim et al., 2008), a pattern consistent with a Figure 2 moderation pattern.

Social support exchanges are less studied in Latinos in the US or Latin America (configuration B), but the cultural values in these sociocultural contexts emphasize turning to family as a first source of support (e.g., Sabogal et al., 1987). There is some indication in the literature that US Latinos report high levels of perceived and received support (Almeida, Molnar, Kawachi, & Subramanian, 2009; Kaniasty & Norris, 2000) and, at times, report higher levels of perceived social support than US East Asian counterparts (Campos, Busse et al., 2014; Campos, Ullman et al., 2014). In addition, emerging work is showing that perceived support is associated with more favorable cortisol patterns in response to a stress task among US Latinos but not in non-Latinos of European and East Asian backgrounds (Isas et al., in preparation). These findings indicate that social support processes are distinct in configuration B and C contexts. They may also indicate that a sociocultural emphasis on interdependence that is blended with positive emotion may maximize the benefits of social support for health-relevant processes and outcomes. This is an intriguing possibility for understanding the association of relationships with health, but much research needs to be done to better understand this topic.

Moving Forward

Incorporating culture into the study of the association of relationships with health is likely to yield important theoretical and applied insights. The studies reviewed in this paper were selected to help move this topic forward by highlighting the importance of studying sociocultural variation in key processes – relationship expectations, relationship formation and maintenance, emotions, and social support – and key relationships – family and couples – that have implications for the association of relationships with health. I recommend that researchers systematically study at least four possible ways that sociocultural variation may unfold and give thoughtful consideration to studying multiple contexts. To date, very few studies have done this. For this reason, the goal of this paper has been to "raise awareness" rather than review a robust body of empirical research. Scholars have called for research that bridges relationship science and the study of the association of relationships with health (e.g., Pietromonaco et al., 2013; Uchino, 2013). That bridge also needs to connect to culture.

The sample patterns that I used in Figures 1–4 highlight that psychologists should be mindful that studies of both similarities and differences are needed to better understand how culture matters for the association of relationships with health. It is just as important to know that positive and negative emotions play a similar role in relationship quality and health across cultures as it is to know that the role of these emotions in relationship quality and health varies by cultural context. Similarly, it is important to test multiple models of influence, the possibility of both moderator and mediator, in the same study. Testing only one possible pattern at a time makes it difficult to fully understand the role of culture. At this time, positive emotions appear to

be differently associated with relationship satisfaction across cultural contexts (e.g., Campos, Keltner, Beck, Gonzaga, & John, 2007; Williamson et al., 2012). This knowledge can help researchers further test the role of emotions – for whom and when are the emotions experienced within relationships tied to good or poor health behaviors, physiology, or outcomes? Future findings can then be used to develop interventions that are appropriate for wider groups of people or tailored to distinct contexts.

The use of three cultural context samples (configurations A, B, and C) highlight the importance of studying theoretically meaningful cultural variation. This is critical to advancing knowledge of the role of culture in the association of relationships with health. However, these sample contexts are just three of many, many possibilities. It is important for researchers to have an inclusive approach that brings in many forms of culture, including the cultures of people that have been historically marginalized. It is equally important that researchers acknowledge the distinct cultural context of samples that derive from dominant culture contexts. By now, it is almost clichéd to point out that the psychological database, including the relationships and health database, is drawn largely from middle-class or affluent European American samples (e.g., Henrich et al., 2010). However, it is still the case that the uniqueness of this specific context and the constraints it poses for generalizability are seldom explicitly acknowledged (Henrich et al., 2010).

It is my hope that this paper inspires readers to view the study of culture as one approach to answering some of the most pressing questions about relationships and health. For example, a focus on culture can help researchers to understand factors that help people become socially integrated into important relationships and stay integrated in ways that reap benefits for health. Conversely, a focus on culture can also help researchers to understand factors that keep people socially integrated in relationships that negatively affect health. Another example is social support. A focus on culture can help researchers understand multiple forms and paths to the benefits of social support, including perhaps the conditions under which the benefits of social support may be maximized or minimized. A third example is the role of emotions in relationship quality. Currently, researchers conceptualize relationship quality as including high levels of positive emotion, but it is not clear if relationships need to meet this criterion to be beneficial for health. Finally, a focus on culture may highlight important trade-offs. Cultural independence may facilitate dissolving relationships that compromise health. Cultural interdependence may normalize caregiving and additional other-focused behaviors that are relevant for health. Consistent with this latter view, there is some indication that the cultural interdependence eases (but does not undo) the burdens of caregiving that are known to overwhelm providers (Magaña & Smith, 2006b).

The study of culture may also highlight contexts whose patterns are particularly relevant for understanding the association of relationships with health. At least one line of research on US Latinos suggests that sociocultural approaches that emphasize interdependence in the context of warmth, close and supportive relationships with family may maximize the benefits of relationships for health. This sociocultural configuration is theorized to contribute to the Latino Epidemiological Paradox, a pattern whereby immigrant Latinos in the US experience better than expected health outcomes (e.g., Markides & Coreil, 1986). The paradox pattern has been most extensively documented at the beginning of life, among mothers and their new infants, and at the end of life, in databases that tally the age of mortality for all causes (e.g., Abraído-Lanza, Dohrenwend, Ng-Mak, & Turner, 1999; Martin et al., 2005; Ruiz, Steffen, & Smith, 2013). A better understanding of the relational factors that contribute to this phenomenon may provide researchers with novel tools for augmenting the benefits that relationships can have for health.

Readers may ask if culture is more relevant for particular aspects of health over others – perhaps health behaviors, physiology, or one or more specific psychological and physical health outcomes.

The answer is that this is not likely. Culture is central to, and embedded within, both relationships and health. For this reason, I have been purposely broad and expansive. The future empirical database will greatly benefit from the systematic study of multiple contexts, multiple aspects of relationships, and multiple facets of health.

In all societies, dominant cultural ideals contain information about how people *should* be. The social behaviors that are normative and approved are those that are consistent with dominant cultural ideals. Relationships, in particular, are often managed according to overt rules and norms about how one should feel and behave in these contexts. Although it may be obvious, it is worth repeating that individual people vary in the extent to which their personal values align with the predominant values of their culture (e.g., Dressler, Balieiro, Ribeiro, & Dos Santo, 2007). Indeed, there is evidence that people fare best when their individual tendencies are good cultural fits (e.g., Dressler & Bindon, 2000). To date, this point is conceptually understood but rarely studied. Additionally, culture is dynamic and always changing – some ideas catch on, and those that are relevant for relationships are likely to also be relevant for health (e.g., Greenfield, 2013). These areas of cultural variation are not yet well studied. Thus, it will be important to study these individual differences as well as cultural changes over time.

As the evidence of the importance of relationships for health grows, there is a rising call for interventions and policies that reflect this knowledge (e.g., Umberson & Montez, 2010). But before we can move to public health campaigns aimed at helping people to cultivate high-quality relationships, we first need to more fully understand the role of relationships in health behaviors, physiology, and psychological and physical health outcomes. To do this, we need to ensure that the great cultural diversity in relationships is systematically incorporated into future research and that we explicitly acknowledge the cultural contexts that are well studied. By doing so, an understanding of the association of relationships with health that is more inclusive and representative of the great sociocultural variability with which humans approach their relationships will be achieved. In turn, interventions and policies that follow can be implemented in ways that maximize the benefits that relationships can have for health for all people.

Short Biography

Belinda Campos is an Associate Professor in the Department of Chicano/Latino Studies at the University of California, Irvine and an affiliate of the School of Medicine PRIME-LC Program and the Department of Psychology and Social Behavior at the University of California, Irvine. She received her PhD in Social-Personality Psychology from the University of California, Berkeley and held postdoctoral positions at the University of California, Los Angeles Department of Psychology and at the Center for the Everyday Lives of Families in the Department of Anthropology. Campos studies factors that promote high-quality relationships, with a particular focus on understanding how sociocultural context shapes relationship experiences in ways that benefit health. The findings of her work show that sociocultural contexts that emphasize prioritizing others before the self (e.g., Latino and East Asian) can be beneficial for relationships and protective of health.

Note

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