The Well-Being of Nations:
Linking Together Trust, Cooperation, and Democracy

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Abstract

The theme of this chapter is that cooperative and trusting social relationships tend to enhance

people's subjective well-being (happiness and life satisfaction), and that in turn positive feelings

of well-being tend to augment cooperation and trust. Extensive empirical work now supports the

fact that sociability, interpersonal warmth, community involvement, and interpersonal trust are

heightened by positive emotions. New analyses based on the World Value Survey show that

nations that are high on subjective well-being (SWB) also tend to be high on generalized trust,

volunteerism, and democratic attitudes. Additional analyses indicate that the association of SWB

to volunteerism and democratic attitudes is not fully accounted for by GDP per capita, freedom,

or filial piety. The implications of SWB for promoting greater cooperation and trust within

society and across nations is considered.

In his book, *Nonzero*, Robert Wright (2000) argues that the basic direction of human history is towards greater social and technological complexity and an increasing realization that all people are linked in a fundamental web of interdependence. That is, across every province and nation, the fact remains that we all live in the same world, navigating the course of humanity in the same proverbial boat. This basic fact of interdependence comes with an important implication: that the ultimate survival of all societies rests on finding solutions to social, political, and economic issues that are *non-zero-sum*.

In game theory, a zero-sum approach is one in which winning comes at the expense of others. In contrast, a non-zero-sum solution is one in which all parties gain something so that everyone is better off than before. For example, in the *tragedy of the commons*, a public resource is only sustainable to the extent that everyone uses it responsibly. If several individuals exploit too much of the resource for their own benefit, it is lost and *everyone* suffers. If individuals take only what they need, the resource is replenishable and in the long run, everyone benefits. Non-zero-sum solutions call for cooperation and trust among all parties. To preserve the resource for future use, people must be cooperative in fulfilling their needs. At the same time, in order to curb the impulse to hoard, individuals must trust that others will not hoard for themselves. The benefits are not only material resources as implied by the tragedy of the commons; there are also consequences for the happiness and contentment of individuals and entire communities. Wright's central thesis is that long-term *global* well-being depends heavily on cooperation and trust at the supranational level. There is a utilitarian ethic that undergirds the appeal of non-zero-sumness. That is, by regulating impulsive self-interest, the happiness of all people can be maximized. Although scholars debate how well people are able to follow this principle, the logic is intuitive: a society in which people can trust and cooperate with each other is likely to be

happier and more productive than a society paralyzed by rampant distrust and fear. The implication is that trust and cooperation provide the conditions for subjective well-being. Slightly less intuitive is the possibility that happiness causes and facilitates interpersonal trust and cooperation. In this chapter, we argue that subjective well-being both influences and is influenced by cooperation and trust. This bi-directional relationship is supported by empirical research. After reviewing this literature, we explore the association between national levels of subjective well-being and cooperation in our analyses of the World Values Survey. First, we briefly discuss the concepts of cooperation, trust, and subjective well-being.

<div align="center">Cooperation and Trust</div>

Cooperation involves working together toward a common goal. As we discuss later, cooperation is not necessarily opposed to competition. In competitive contexts such as sports, the interaction between competing teams requires that everyone observe the rules governing fair play. Thus, cooperation and competition can function together in a single activity. As Wright (2000) notes, zero-sumness on one level can even foster non-zero-sumness on another level. Competition between teams necessitates cooperation among members *within* a team. Cooperation is not inherently good or bad; people can work together to accomplish harmful, anti-social acts. However, any well-functioning society requires cooperation among its citizens.

What sort of factors facilitate cooperation in society? How do people decide to cooperate with others—especially those they do not know well? Wright (2000) points to two critical factors: communication and trust. Communication enables people to reach an understanding of common goals and an agreed upon means of attaining those goals. Trust provides people with assurance that their cooperation will not be exploited. Both communication and trust are more likely in enduring social relationships so that people are more likely to trust and cooperate with

close friends and relatives than a stranger. Putnam (2000) draws a distinction between the *thick* trust that exists among close associates, and the *thin* trust that may be felt for most people in general. He argues that greater community involvement can increase social capital, thereby fostering trust in one's fellow citizens. However, there are two forms of social capital that Putnam (2000) refers to as *bonding* and *bridging*. Bonding social capital refers to exclusive forms of relationships such as when people associate with each other to reinforce shared identities (e.g., support groups based on gender or ethnicity). In contrast, bridging social capital refers to more inclusive relationships based on certain causes (e.g., civil rights) or professional networks that emphasize broader identities. Bridging social capital can broaden one's social networks and expand one's sources of information, but the social ties are often weak. On the other hand, bonding social capital can provide emotional support and foster solidarity, but strong in-group loyalty can be accompanied by more hostility toward outgroups.

Thus, bonding and bridging both have advantages and disadvantages. Based on this distinction, one might expect bridging but not bonding social capital to increase generalized trust. However, Uslaner (2002) argues that voluntary associations may not always foster generalized trust because they often bring together people with similar interests and perspectives. Such groupings seem to provide little basis for generalizing trust to anonymous others who are more likely to be different from ourselves. Instead, Uslaner proposes that generalized trust reflects an optimistic worldview. Optimistic people are less concerned with being exploited and are more resilient in their efforts to trust and cooperate with others. Optimism also remains positively associated with well-being, even after controlling for education and income (Uslaner, 1998). Whether cooperation and trust are fostered by social connections or optimism, it is important to note that the latter two are both associated with subjective well-being.

Subjective Well-Being

The field of subjective well-being (SWB) refers to the scientific study of happiness and life satisfaction. SWB consists of emotional and cognitive components (Diener, Suh, Lucas, & Smith, 1999). Emotional well-being is reflected in frequent experiences of pleasant emotions and infrequent experiences of unpleasant emotions. The cognitive component of SWB refers to a global evaluation of one's life, often assessed as life satisfaction. The cognitive and emotional components are often correlated so that people with high life satisfaction tend to report more frequent pleasant emotions than those with low life satisfaction (Diener & Fujita, 1995).

SWB is an important value for many societies and is not limited to Western or industrialized nations (Diener, 2000). Over the past two decades, research has illuminated a number of important determinants of SWB. These include differences among individuals in their personalities or emotional predispositions. For example, extraversion is frequently associated with pleasant affect, and neuroticism with unpleasant affect (Costa & McCrae, 1980). Some people are simply more likely to experience pleasant or unpleasant emotions in part because they pay more attention to pleasant or unpleasant stimuli (Derryberry & Reed, 1994). SWB is also affected by the fulfillment of basic needs. When basic needs are not met, the well-being of individuals and societies tends to decrease (Diener, Diener, & Diener, 1995). However, once basic needs are regularly met, other factors become important such as self-development and social relationships. This might explain why income leads to stronger increases in SWB in poorer countries, but has a smaller impact on well-being as the wealth of a nation increases (Diener & Diener, 1995; Oishi, Diener, Lucas, & Suh, 1999). Money and material resources *do* increase SWB—even beyond the level required for basic subsistence (Diener et al., 1995). After a yearly income of roughly $10,000, however, increases in SWB begin to level off.

Aside from personality and material resources, one of the most important determinants of SWB is having social relationships. Diener and Seligman (2002) compared the happiest (top 10%) of a college student sample with the unhappiest individuals (bottom 10%). The happiest individuals reported stronger relationships with friends, family, and romantic partners than those who were unhappy. Even more telling, the unhappiest 10% reported spending more time alone and less time with friends and family. Experience sampling studies in which participants provide reports of their emotions at random moments during the day reveal that people tend to experience more pleasant emotions when they are with others than when they are alone (Oishi, Diener, Scollon, & Biswas-Diener, 2003). Close relationships provide us with opportunities to experience love, joy, and affection, and married individuals consistently report being happier than those who are not married (Myers, 2000). In contrast, the experience of widowhood has a lasting negative impact on happiness. In a 15-year longitudinal study, those who were widowed did not return to prior levels of happiness until eight years later, on average (Lucas, Clark, Georgellis, & Diener, 2003). There is also some evidence that social isolation and loneliness are detrimental to long-term health, and some of these effects have been measured physiologically. Compared to socially integrated individuals, lonely individuals possess higher levels of cortisol (a sign of stress) and poorer immune system functioning (Cacioppo et al., 2000).

In sum, personality, material resources, and social relationships all are critical determinants of SWB. The last finding is of special relevance for our discussion because it highlights the relation between social capital and SWB. According to Putnam (2000), another reason why social capital might increase volunteerism is that individuals with rich social networks are more likely to be *asked for help* by others in their network. If this is correct, an association between SWB and increased sociability would have important implications for

cooperation and trust. Indeed, previous researchers found SWB to be a strong correlate of generalized trust, even after controlling for demographic factors (Brehm & Rahn, 1997; Rahn & Transue, 1998). Next, we review evidence of mutual influence between SWB on the one hand, and cooperation and trust on the other.

The Effects of Cooperation and Trust on SWB

Cooperation and trust can have both short-term and long-term effects on SWB. Cooperative interactions may have short-term effects by evoking positive affect and attitudes. When participants engaged in a structured cooperative activity with a member of a stigmatized social group (former mental patients), they developed more positive attitudes of the group in general than when they worked individually in the presence of the stigmatized person (Desforges et al., 1999). Tasks that are performed within cooperative contexts rather than competitive or individualistic contexts result in better performance as well as increased self-esteem (Stanne, Johnson, & Johnson, 1999). However, the way competition is structured is also important. For instance, Tauer and Harackiewicz (2004) found that youth enjoyed shooting free throws in the context of *intergroup* competition more than they did in an individually competitive context. Intergroup competition involves elements of *both* cooperation and competition: *cooperation with* team members to shoot a joint number of free throws *in competition with* the performance of an opposing team. Thus, cooperation and competition can be combined to enhance task enjoyment.

Cooperation and trust also have long-term implications for well-being. Compared to individualistic efforts, cooperative tasks more effectively increase social support (Stanne, et al., 1999). Such cooperative efforts may promote positive relationships with others in working toward common goals and help individuals to build upon their social resources, which are among the strongest correlates of SWB (Diener & Fujita, 1995). By facilitating the development of

social relationships, then, trust and cooperation can contribute to SWB. In contrast, *pervasive* distrust of others can interfere with the development of rewarding relationships. Consistent with this argument, college females who were taught to not trust strangers in their childhood also reported greater loneliness and fear of intimacy than students who were not taught to be distrustful (Terrell, Terrell, & Von Drashek, 2000). Loneliness, in turn, is associated with stress (Cacioppo et al., 2000). Although more research is needed, these findings support the possibility of a causal relation from trusting attitudes to reduced loneliness and greater SWB.

Trust also facilitates cooperation with others. High trusters were more responsive to cooperative messages than competitive messages from other participants in a social dilemma (Parks, Henager, & Scamahorn, 1996). Trust may encourage cooperation by reducing the fear of being taken advantage of. However, even when one experiences fear, strong trust may override it. For example, Yamagishi and Sato (1986) operationalized trust by comparing friends with strangers in a public goods dilemma. Among strangers, contributions to public goods were reduced when participants either feared exploitation or were motivated by greed. However, among friends, fear and greed were less predictive of contributions. The researchers proposed that even when fear and greed are experienced among friends, people are more likely to retain their mutual trust or decide not to free-ride on their friends.

Organizational research attests to the importance of a trusting, cooperative work environment for productivity and job satisfaction. By relying on a tacit understanding that employees and supervisors operate in a trustworthy manner, organizations can avoid the costs of monitoring the behaviors of all employees (Kramer, 1999). Such measures not only cost time and money, but they may lead employees to feel distrusted, and to infer that their co-workers must be untrustworthy as well. Feeling distrusted, in turn, can undermine intrinsic motivation,

with negative implications for job satisfaction and performance. Enzle and Anderson (1993) found that when participants were surveillanced for controlling reasons (e.g, to make sure they followed instructions), they were less engaged with a free-play activity. Not only is it important for employees to feel that they are trusted, it is also important for them to trust their employers. Positive emotions are enhanced when people feel they are being evaluated by a trustworthy authority figure who is using accurate methods (De Cremer, 2004). When an authority is perceived as untrustworthy, people report lower positive emotions regardless of accuracy.

Finally, Lu and Argyle (1991) found that positive attitudes toward group leisure activities predicted greater happiness six months later, even after controlling for prior levels of extraversion and happiness. These findings suggest that attitudes that support positive social interactions like cooperation may also promote and sustain happiness over time.

The Effects of SWB on Cooperation and Trust

A consistent finding in psychological research is that positive moods promote helping behavior and cooperation (Eisenberg, 1991). Much of the evidence relies on experiments that manipulate mood, suggesting that positive moods lead to prosocial behavior. However, *dispositional* positive affect also exhibits similar effects (for a review see Lyubomirsky, King, & Diener, 2005). We review the effects of positive mood and positive affectivity at the individual and group level, and then consider the potential benefits of happiness at the societal level.

Individual Level Effects

In a classic study, Isen and Levin (1972) induced positive mood by leaving a dime in a phone booth. People who found the dime after using the phone were more likely than those who did not to help a nearby confederate who dropped papers on the ground. People in a positive mood were also more willing to help co-workers (Baron & Bronfen, 1994), more likely to

volunteer for future experiments (Aderman, 1972; Isen & Levin, 1972), and more likely to prefer

cooperation over competition (Aderman, 1972; Barsade, 2002; Forgas, 1998) than people in

neutral or negative moods. Although, negative moods occasionally induce helping, the findings

are more consistent for positive mood (Eisenberg, 1991; however, see Eisenberg & Eggum, this

volume, for an analysis of how sympathy contributes to helping behavior). Dispositional

happiness (or trait positive affectivity) is also associated with greater helping. Happy people

report more helping behavior in the past (Krueger, Hicks, & McGue, 2001), as well as greater

willingness and intention to help others (Williams & Shiaw, 1999).

Why might positive mood facilitate helping and cooperation? One possibility is that

positive mood increases positive thoughts, which may lead to more favorable evaluations of

others. Participants who were exposed to a positive newscast were not only more cooperative in

a subsequent task, they also *expected* others in the group to cooperate compared to participants

who watched a negative newscast (Hornstein, LaKind, Frankel, & Manne, 1975). Positive mood

also enhances interest in social and prosocial activities (Cunningham, 1988b), increases liking

for other people, and leads to more intimate self-disclosures in social interactions (Cunningham,

1988a). These findings suggest that individuals who experience positive affect are more inclined

to trust others, and this is supported by research (Dunn & Schweitzer, 2005).

However, not only might happy people be more trusting, but others might be more likely

to trust *them*. Dispositionally happy people tend to be more likeable than depressed individuals

(Lyubomirsky et al., 2005). Women who smiled in their yearbook photo were rated as more

affiliative and less hostile by observers who interacted with them, as well as by coders who only

saw their photos (Harker & Keltner, 2001). Compared to unhappy people, happy people were

rated as morally good and more likely to go to Heaven (King & Napa, 1998). When negotiating,

people in positive moods were more likely to not only make deals, but to *honor* those deals in an interpersonal setting (Forgas, 1998). Thus, happy people may behave in ways that communicate their trustworthiness, and this can encourage others to be more cooperative with them.

Organizational and Group Level Effects

The relations among happiness, trust, and cooperation may yield important benefits in the workplace. Diener, Nickerson, Lucas, and Sandvik (2002) found that cheerfulness in college predicted job satisfaction and income nineteen years later. The helpfulness of happy people also appears to generalize to the workplace. Reviews of organizational citizenship behaviors (OCB) find a modest correlation between positive affectivity and altruistic behaviors at work (Borman, Penner, Allen, & Motowidlo, 2001; Organ and Ryan, 1995), and both trait and mood measures of positive affect separately predict intentions to engage in OCB (Williams & Shiaw, 1999).

However, happy people do not blindly and invariably trust and cooperate with others. Rather, the effects of positive mood on cooperation may depend on contextual factors such as current goals (Sanna, Parks, & Chang, 2003) or perceived social norms (Hertel, Neuhof, Theuer, & Kerr, 2000). For example, in a public goods game, Hertel et al. (2000) manipulated participants' expectancies about the average contribution of other players so that perceived norms were either cooperative (high average contribution) or uncooperative (low average contribution). In the cooperative norm condition, positive mood led to greater cooperation than negative mood after the first block of trials. In contrast, no effect of mood was found in the *uncooperative* norm condition. Hertel et al. suggested that in a positive mood, people might rely on social heuristics (such as group norms) to guide their behavior.

Thus, happy individuals do not function in a bubble; the surrounding work environment can facilitate or reduce mood effects. Consistent with this idea, Forgas (1998) found that

negotiation was most cooperative when two bargaining groups were *both* in a positive mood. In contrast, a happy group that negotiates with a sad group tends to cooperate less. This trend may be due to the strong preference of sad groups for competition over cooperation. However, sad groups were still more likely to cooperate with happy groups than with another sad group— another indication that happy people may invite trust and cooperation from others.

The above research suggests that a positive work environment may be just as important as individual happiness. Management teams with high average trait positive affect reported greater cooperativeness and less conflict on group projects (Barsade, Ward, Turner, & Sonnenfeld, 2000). Greater cooperation among happy work groups might explain the greater productivity and lower turnover rates in such groups (see Diener & Seligman, 2004).

Implications for Society

Inglehart and colleagues (2000; Inglehart & Klingemann, 2000) have argued that life satisfaction may be necessary (though not sufficient) for the sustainability of democracies. Although democratic countries generally exhibit a higher quality of life, it is also important to consider that no society can function well when most of its citizens are discontent. High life satisfaction may not only indicate that people's needs are fulfilled, it might also help legitimize the government in the eyes of its citizens. Indeed, life satisfaction has been associated with greater confidence in the government (Brehm & Rahn, 1997).

However, the benefits of a happy citizenry might extend beyond the mere fact of stability to the *flourishing* of entire communities. Thoits and Hewitt (2001) suggested that high well-being may be an important resource for individuals to draw upon, enabling them to contribute more time to volunteering. They found that well-being predicted the amount of volunteer work three years later, and that this relation was fully mediated by involvement with community

organizations. The authors suggested that well-being may facilitate social integration, which in turn provides individuals with greater opportunities for volunteering. The reciprocal relation was also found. That is, volunteer work at Time 1 predicted well-being three years later. Thus, the relation between well-being and volunteerism may be bi-directional (cf. Piliavin, this volume).

<div align="center">Analyses From The World Value Survey</div>

Using data from the second (1990-1991) and third (1995-1997) waves of the World Value Survey (WVS; Inglehart et al., 2003), we examined the relation among subjective well-being, trust, and cooperation at the nation level. Our analyses include 13 nations from the second wave, and 45 nations from the third wave of the WVS (see Appendix).

Main Variables

All items were averaged across participants within each nation. We computed *SWB* by averaging two items measuring happiness and life satisfaction; scores range from 1 (dissatisfied and not at all happy) to 7 (satisfied and very happy). *Trust* scores reflect the percentage of respondents within a nation who believe that most people can be trusted. Previous analyses of the WVS have included trust and life satisfaction in a composite measure of "self-expression values" (Inglehart & Welzel, 2003). Values such as life satisfaction, trust, and tolerance reflect a regard for individual integrity. In our analyses, we dissect these self-expression values in order to more fully explore the relation of SWB and trust to cooperation.

We examined cooperation at the nation level in two ways. First, we examined mean levels of *volunteerism* (both the level of involvement and the number of voluntary associations). Second, we examined democratic attitudes and beliefs because such attitudes may reflect a cooperative orientation towards governance, political participation, and civic life. These measures included two indices of tolerance. The first is the percentage of respondents in a nation

who believe that *tolerance is an important quality* for their children to possess. The WVS also

presented respondents with a list of commonly stigmatized groups (e.g., homosexuals, people of

different race, etc) and asked them to indicate which, if any, they would not like to have as a

neighbor. Thus, our second measure was an index of *intolerance* created by summing up the

number of groups that were mentioned as undesirable neighbors.

We also created two overall measures of positive and negative attitudes towards

democratic systems. *Positive attitudes* were the average of two items: the extent to which

democracy was viewed as a "good way of governing" one's country, and the belief that

democracy is "better than any other form of government." *Negative attitudes* were the average

of three items assessing the belief that democracies have poor economic systems, are

characterized by indecision and squabbling, and are not good at maintaining order. Other items

we examined concerned attitudes toward *competition*, *autocracy* (government by a strong leader

with no elections), *preference for a cooperative leader*, and *perceived democracy* (the percent of

respondents who believe the country is run for all people instead of just a "few big interests").

Respondents were also asked to prioritize a list of goals for their nation (e.g., fighting

crime). These items have been used previously to measure postmaterialist values. According to

Inglehart (2000), as wealth increases in a society, the emphasis shifts from economic growth to

quality of life concerns. In our analyses, we concentrate on three of these goals: building a more

humane society, giving people more say in their jobs and communities, and giving people more

say on important government issues. Scores on these items reflect the percentage of respondents

who selected the item as a major priority for their country for the next ten years.

Finally, we included three variables as economic, political, and cultural indicators. For

each nation, we obtained data on real *GDP per capita* in constant 1996 dollars from the Penn

World Tables (Heston, Summers, & Aten, 2002). We also obtained ratings of civil liberties and

political rights for each nation from the *Freedom in the World* surveys (Freedom House, 2005).

These ratings range from 1 (*highest level of freedom)* to 7 (*lowest level of freedom*). We reversed

scored these ratings and averaged them so that high scores reflect societies with greater *freedom*.

As a measure of social culture, we adapted a forced-choice item from the WVS assessing

attitudes toward respect for parents. Respondents indicated whether they believed either that one

should always love one's parents regardless of their faults, or that one is not obligated to love

one's parents if they have not earned it through their attitudes and behaviors. We averaged these

responses within nations, and normalized the distribution by applying an inverse transformation

so that high scores reflected greater *filial piety*. In societies where filial piety is emphasized,

close familial bonds may be highly valued and a stronger distinction might be made between

ingroups and outgroups (Triandis, 1989). Thus, filial piety can be seen as a type of bonding

social capital (Putnam, 2000) and might be associated with less generalized trust. When

appropriate, data were transformed in order to normalize the distribution. For all analyses, we

used an alpha level of .05 to evaluate statistical significance.

Results

SWB and trust were positively correlated (*r* = .39; see Table 1) as found in previous

analyses of the WVS (Inglehart, 1999). SWB and trust were both associated with greater value

placed on tolerance, less intolerance of neighbors, higher GDP per capita, greater freedom, and

lower levels of filial piety. Both the level of volunteer involvement and the number of voluntary

memberships were positively associated with SWB, but not with trust. However, the *nature* of

volunteer involvement may also be important. Putnam (1993) maintained that interpersonal trust

is likely to arise from involvement in *horizontal* organizations where members participate as

equals. The exact nature of involvement is unclear from the WVS data. We examined specific voluntary memberships and found that the level of trust in a nation correlated with the level of involvement in unions ($r = 28$, $p = .05$). To the extent that unions often rely on collective action in the interest of all members, this may support Putnam's arguments (see also Radcliffe, this volume). In contrast, memberships in other types of organizations (e.g., church, arts, political parties, etc.) were mostly unrelated to trust.

Interestingly, neither SWB nor trust were associated with attitudes toward competition. Nor were positive attitudes toward competition associated with volunteering or valuing tolerance. Thus, as other researchers have argued (Stanne et al., 1999; Tauer & Harackiewicz, 2004), competition is not inherently opposed to cooperation. The form that competition takes is an important consideration. The WVS asks respondents whether competition is good because it motivates hard work and new ideas, but it does not specify the type of competition. This might explain why societies that value tolerance do not necessarily oppose competition. In contrast, in those societies where *intolerance* is high, competition tends to be viewed more positively ($r = .36$). Perhaps in these societies, zero-sum competition is emphasized because it justifies inequities and intolerant attitudes. On the other hand those countries in which intolerance is high also tend to be less wealthy, have less freedom, and greater filial piety. Thus intolerance and competition might follow from conditions in which resources are scarce, and relationships with one's family or ingroup become tighter as a matter of survival

Table 2 presents the correlations of SWB and trust with various democratic attitudes. Here, trust and SWB show an interesting divergent but supportive pattern of correlations. For instance, SWB is associated with more positive attitudes toward democracy, greater *perceived* democracy, and more importance placed on giving people more say on important government

decisions. Trust but not SWB was significantly associated with less negative attitudes toward democracy. Preference for a cooperative leader was not correlated with SWB and had only a weak positive association with trust. Nevertheless, *both* SWB and trust were correlated with less approval of autocratic governance, and greater importance placed on building a more humane society and giving people more say in one's job and community. Taken together these findings suggest that national levels of SWB and trust are associated with a greater preference for participatory and cooperative approaches in government and civic life.

Interestingly, GDP per capita was not associated with either positive or negative attitudes toward democracy. However, several other attitudes do correlate with the wealth of a nation. As GDP per capita also correlates with SWB and trust, it is possible that some of the observed relations among SWB, trust, and cooperative behaviors and attitudes are due to the wealth of a nation, rather than its level of SWB or trust *per se*. Therefore, we conducted a series of regression analyses predicting volunteering and democratic attitudes from SWB and trust, after controlling for wealth, freedom, and filial piety. These analyses are presented in Table 3.

SWB and trust were no longer significant predictors of tolerance after controlling for other variables. For example, valuing tolerance appears to be strongly predicted by filial piety. In societies where filial piety is high and ingroup bonds are presumably stronger, people are less likely to mention tolerance as an important quality for their child to possess. This may mean that tolerance is not a salient value in these societies, rather than that tolerance is negatively regarded. In terms of intolerance, per capita GDP seems to account for much of the variance previously associated with trust and SWB. A number of explanations are possible. Diener, Diener, and Diener (1995) found that wealthier nations tended to have greater equality in terms of income and access to education. Education in turn might reduce stereotypic beliefs about stigmatized

groups. Alternatively, intolerance may be a reflection of security needs. In wealthy nations,

basic needs are better met and people are more likely to feel safe and secure. As a result, they

might also feel less threatened by neighbors who are different from them.

After controlling for filial piety, trust was no longer significantly associated with negative

attitudes toward democracy. Societies that value filial piety appear to hold more negative

attitudes toward democracy ($\beta = .63$, $p < .05$). However, mean level attitudes for most nations

fall between 2 and 3 on a 4-point Likert scale. This suggests that countries that are high on filial

piety agree only slightly that democracies are flawed and inefficient, while countries that are

lower on filial piety only *disagree* slightly with these beliefs. Thus, few countries fully despise

democracy. Rather, these associations may be due to greater sense of empowerment among

individualistic nations (e.g., the Scandinavian countries), which tend to be lower on filial piety.

After controlling for wealth, freedom, filial piety, and trust, SWB was no longer

predictive of the importance placed on either building a more humane society or giving people

more say on important government matters. However, SWB continued to show a strong relation

with several other variables. For instance, the relation between SWB and volunteering does not

appear to be fully accounted for by GDP per capita. These findings are consistent with those of

Thoits and Hewitt's (2001), who found evidence for a bi-directional relation between well-being

and volunteering, even after controlling for family income. Thus, in countries, where SWB is

high, people may be more likely to possess the psychological resources (e.g., optimism,

resilience, sociability) to engage in volunteer work. At the same time, increasing volunteer

involvement may also increase social capital and subsequently, well-being.

After controlling for wealth and freedom, countries that are high on SWB continue to

have higher mean levels of perceived democracy, positive attitudes toward democracy, greater

disapproval of autocratic rule, and less intolerant attitudes. Moreover, wealth and freedom do not fully account for the relation between SWB and the increasing value placed on giving people more say in one's job and community, although freedom remained a significant predictor.

Although more research is needed, the findings above generally support our contention that SWB and cooperation have important social implications. In societies where SWB is high, people tend to prefer a government and civic life in which all people can participate. Just as well, in societies where community participation (i.e., volunteerism) is high, people tend to be happier. Although we did not find consistent relations between trust and democratic attitudes after controlling for other variables, it should be noted that many of these variables are intercorrelated. For example, societal levels of generalized trust were strongly linked to the endorsement of filial piety ($r = -.72$). If societal levels of trust reflect cultural beliefs about human nature or social relations that are strongly embodied in filial attitudes, then the substantive meaning of trust could be lost when controlling for filial piety. Cultural knowledge can have important influences on trust and cooperation (Wong & Hong, 2005; Yuki, Maddux, Brewer, & Takemura, 2006). Thus, in some cases, we may be over-controlling for these variables in the regression models. Given the strong link between GDP per capita and SWB then, it is interesting that SWB should maintain strong links with several democratic and cooperative attitudes after controlling for wealth. These findings support previous arguments that SWB plays an important role in sustaining and legitimizing participatory forms of government such as democracy (Inglehart & Klingemann, 2000).

Discussion

Recent analyses indicate troubling social trends in the U.S. According to several researchers, generalized trust has declined over the past few decades among American teenagers

and adults (Rahn & Transue, 1998; Putnam, 2000; Uslaner, 2002). Various causes have been proposed from increases in materialistic values (Rahn & Transue, 1998) to decreasing social capital (Putnam, 2000) to greater economic inequality (Uslaner, 2002).

Our analyses indicate that societies that are high on SWB are also higher on trust, volunteerism, and several democratic attitudes—even after controlling for GDP per capita and freedom. Although attitudes are subjective, it is worth pointing out that volunteer involvement is a fairly objective behavioral indicator. It is therefore impressive that national SWB should manifest strong relations to the number of associations that people join in a society. A critical implication of our results is that SWB accompanies both attitudes *and* behaviors that are conducive to building a more trusting, cooperative society. Although our analyses do not speak to causality, both directions of influence are supported by research. Experimental data suggest that positive emotions and greater SWB play a causal role by fostering greater sociability, trust, and cooperation. In positive moods, people tend to view others and be viewed *by* others more positively, show increased preference for cooperation, and are more likely to be active and involved in their communities. At the same time, trust and cooperation are important tools for building social connections, which are key ingredients for sustained happiness.

We do not argue that increasing SWB is the panacea for all our social ills. Positive emotions do not invariably lead to more trust and cooperation; social norms (Hertel et al., 2000) are also important. However, we do contend that SWB is a *necessary* condition for a flourishing society. No society can count on sustaining trust and cooperation when its citizens are discontented. The strong relation between national levels of SWB and cooperation underscore this point.

As nations around the world press on with economic development and establishing political stability, greater cooperation must occur on the international stage. This will entail the recognition and acceptance of common goals that all countries must work toward. Promoting subjective well-being should be one of these goals. If all countries are fundamentally interdependent, then sustaining the well-being of any single nation should be in the interests of all other nations. To the extent that SWB facilitates trust and cooperation, the promotion of SWB through international acts of goodwill is the quintessential non-zero-sum solution.

To this end, it will be necessary to develop national indicators that move beyond economic indices (Diener, 2000; Diener & Seligman, 2004; Diener & Tov, 2005). Traditionally, economic measures have been used as a proxy for well-being—and with good reason. Economic development is strongly linked to SWB. Particularly when an economy is developing and the fulfillment of basic needs are at risk, GDP per capita has a clear impact on SWB. However, as societies become wealthier, the utility of objective economic indicators of well-being diminishes. As Radcliffe (this volume) shows, other structural aspects of society such as welfare provisions and union organization are also associated with aggregate levels of SWB. We agree with him that social institutions can be structured in ways that optimize cooperation and well-being. In order for this to happen, local and national governments need to be involved, and changes in well-being must be monitored in ways that can inform policy decisions. National measures of trust, community feelings, life satisfaction, pleasant and unpleasant affect need to be developed and implemented over successive periods of time. Consequently, room must be made on national agendas for maximizing well-being in addition to the maximizing economic output.

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Table 1.

Intercorrelations Among SWB, Volunteering, Attitudes, and Societal Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. SWB	--									
2. Trust	.39**	--								
3. Vol. Inv.[a]	.46***	.16	--							
4. Vol. No.[a]	.37**	.20	.96***	--						
5. Tolerance Imp.	.53***	.39**	.24†	.25†	--					
6. Intolerance	-.61***	-.37**	-.10	-.11	-.63***	--				
7. Competition	-.07	-.03	.16	.18	-.06	.36**	--			
8. GDP/capita[a]	.50***	.49***	-.04	-.03	.65***	-.71***	-.32*	--		
9. Freedom	.43**	.38**	.01	.00	.58***	-.57***	-.30*	.79***	--	
10. Filial Piety	-.42**	-.72***	-.04	-.10	-.64***	.52***	-.01	-.69***	-.50***	--

Note. N = 58. SWB = average of life satisfaction and happiness; Vol. Inv. = level of volunteer

involvement; Vol. No. = number of voluntary memberships; Tolerance Imp. = importance of

one's child possessing tolerance.

[a]Data were transformed via natural log.

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

Table 2.

Correlations of SWB, Trust, and GDP/capita with Democratic Attitudes

Variable	SWB	Trust	GDP/cap.[a]	N
Democracy (Positive Attitude)	.51**	.26†	.05	43
Democracy (Negative Attitude)	-.23	-.34*	-.04	41
Autocracy	-.52***	-.35*	-.37*	42
Cooperative Leader	-.03	.27†	.13	42
Perceived Democracy	.44**	.28†	.14	41
Value More Humane Society	.42**	.43**	.63***	57
Value More Say in Job/Community	.51***	.43**	.69***	58
Value More Say in Government[b]	.40**	.14	.59***	58

Note.

[a]Data were transformed via natural log. [b]Data were transformed via arcsine of the square root.

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

Table 3.

Regression Analyses Predicting Volunteering and Democratic Attitudes

	Standardize Regression Coefficients (β)						
Dependent Variable	GDP/cap.[a]	Freedom	Filial Piety	Trust	SWB	R^2	N
Vol.Inv.[a]	-.46[†]	.09	.14	.22	.62***	.34	54
Vol.No.[a]	-.45[†]	.07	.01	.22	.48**	.24	54
Tolerance Imp.	.07	.24	-.52**	-.18	.18	.54	53
Intolerance	-.53**	-.01	-.06	-.05	-.32**	.59	54
Pos.Dem	-.72**	.15	-.62**	-.01	.58***	.51	41
Neg.Dem	.42	.13	.63*	-.09	-.21	.34	40
Autocracy	.11	-.05	.38	-.01	-.41*	.38	40
Perceived Dem.	-.29	.20	.03	.25	.44**	.26	44
Humane Soc.	.56*	-.03	.00	.12	.09	.44	55
More Say (J/C)	.20	.46**	-.11	-.01	.21*	.69	55
More Say (Govt)[b]	.37	.26	-.05	-.25	.18	.40	55

Note. Vol. Inv. = level of volunteer involvement; Vol. No. = number of voluntary memberships;

Tolerance Imp. = importance of one's child possessing tolerance; Dem.Pos. = positive attitudes

toward democracy; Dem.Neg. = negative attitudes toward democracy; Autocracy = approval of

strong leader with no elections; Perc.Dem. = perceived democracy; Humane Soc. = value more

humane society; More Say (J/C) = value more say in jobs and community; More Say (Gov) =

value more say on important government decisions.

[a]Data were transformed via natural log. [b]Data were transformed via arcsine of the square root.

[†]$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

Appendix

Analyses of the World Values Survey includes nations from the 1990-1993 wave (Austria,

Belgium, Canada, Czech Republic, Denmark, France, Iceland, Ireland, Italy, Netherlands,

Portugal, Romania, Slovakia) and the 1995-1997 wave (Argentina, Armenia, Australia,

Azerbaijan, Bangladesh, Belarus, Bosnia and Herzegovina, Brazil, Britain, Bulgaria, Chile,

China, Columbia, Croatia, Dominican Republic, Estonia, Finland, Georgia, Ghana, India, Japan,

Latvia, Lithuania, Macedonia, Mexico, Moldova, Nigeria, Norway, Peru, Philippines, Poland,

Russia, South Africa, Serbia and Montenegro, Slovenia, Spain, Sweden, Switzerland, Taiwan,

Turkey, Ukraine, Uruguay, United States, Venezuela, Germany).