

The moderating role of kindness on the relation between trust and happiness

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Abstract

A number of studies show that trust enhances both national and individual happiness. However, the mechanism underlying this association remains unclear. The aim of this study was to investigate the role of kindness in explaining the link between trust and happiness. Specifically, it was hypothesized that the more people believe that they have done for others, the stronger is the link between trust and happiness. Ninety-one students participated in a trust game and then completed measures assessing levels of happiness, trust, and kindness. Results revealed that level of happiness was related to the frequency of acts of kindness and the level of trust showed in a trust game. This finding suggests that while trust alone is associated with happiness, being kind strengthens this relationship. It seems that without prosocial activity people may not derive much happiness from being trusting. Possible explanations for the effects obtained and limitations of the study are discussed.

Keywords Happiness · Trust · Kindness · Subjective well-being

Introduction

You must trust and believe in people or life becomes impossible
Anton Chekhov

Trusting others is a crucial element of social life. Most contracts in daily situations are incomplete as those involved do not possess all the necessary information about what might be expected by each side. Hence, being trustful enables the taking advantage of opportunities for mutually beneficial exchanges. In a world without trust, customers would always doubt the intentions of salespeople trying to sell them a new product, parents would never leave their children in someone else's care, and people would not share their best business or scientific ideas with others for fear that they might be stolen. Trust is vital for long, satisfying relationships, successful business transactions, a great

Trust is often linked to an expectation of positive rather than negative outcomes of the behavior of others (Ashraf et al. 2006; Johnson and Mislin 2011; Yamagishi and Yamagishi 1994). It is derived from general social attitudes regarding the world and social relations, and hence, it is essential for forming social capital (Putnam 2000). Trust develops in two contexts—interpersonal, where it relates to everyday interactions; and global, where it reflects a positive attitude towards society, public institutions, the whole country. Sometimes the two types of trust are described as *thick* trust,



atmosphere in the workplace, and a healthy functioning community that enhances the well-being of its members (Helliwell 2006; Putnam 2000). There is ample evidence showing that trust is essential for both individual and national well-being (Helliwell et al. 2016; Kroll 2008; Tov and Diener 2008). However, there is much about trust that is not yet understood. For example, is the generalized trust expressed in national surveys equal to the expression of trust on a daily basis? It is also unclear where trust comes from and whether it is based on expectations of reciprocity or promoted by kindness. To what extent do helping behaviors and positive attitudes toward others affect the association between trust and happiness? In the present study, the link between situational trust, happiness, and kindness is investigated.

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reserved for close associates, and *thin* trust referring to the general trust people have in strangers (Putnam 2000). Irrespective of the social context, the general role of trust is to provide people with the belief that they will not be exploited by another person (Wright 2000). Hence, it can be presumed that trust has the potential to strengthen social bonds, as it can lead to satisfactory cooperation among people, groups, or institutions. Some researchers claim that interpersonal trust may be manifested in deciding whether or not to hand control over a situation to another person (Dasgupta 1988; Grzelak 2001; Snijders and Keren 2001). Other scholars perceive trust as an investment (Berg et al. 1995), where people locate their trust in a trustee and expect the trustee to behave trustworthily.

On the basis of these approaches, trust games have been designed that measure trust in a social context in which the subject has to decide about the allocation of money between him- or herself and a stranger (Johnson and Mislin 2011). Several studies indicate that trust is related positively to earnings, economic growth, tolerance, social solidarity, volunteerism, cooperation, giving to charity, and optimism (Ashraf et al. 2006; Rothstein and Uslaner 2005; Tov and Diener 2008), which shows that it has great political, economic, social, and psychological value. Trust can affect a society's resilience in response to economic and social crises. For example, both Ireland and Iceland experienced extreme consequences of the financial crisis in 2007 yet managed to sustain their happiness level over the years; this is often explained by the exceptionally high social support in these countries (Helliwell et al. 2016). In Japan, the Great Earthquake led to heightened levels of trust and happiness in the region that experienced it (Yamamura et al. 2015). These examples indicate that the impact of crisis on a country's well-being can be moderated by level of trust; when its initial levels are high, society's happiness may be elevated even in times of distress.

In the last two decades, happiness and its determinants have received a lot of attention from psychologists. Scholars often treat happiness as an indicator of subjective well-being, addressing its two, interrelated dimensions—emotional and cognitive (Diener et al. 1999). The first is expressed in the dominance of positive emotions over negative emotions (Diener et al. 1991), while the latter is described as a quality of life judged by an individual as good (Veenhoven 1999). Among the substantial number of determinants of happiness that have been studied are the following: the frequency of experiencing positive emotions (Fredrickson 2001), optimism (Lyubomirsky et al. 2011), mindfulness (Brown and Ryan 2003), and the realization of intrinsic goals (Ryan and Deci 2001). Increases in income appear to

have a significant impact on happiness only in poor countries, where the fulfillment of basic needs is a constant issue. With the growth of a country's affluence, the importance of income in explaining levels of happiness decreases (Ahuvia 2002; Easterlin 2005; Veenhoven 2010).

Aside from material and individual qualities, a number of studies have investigated the social correlates of subjective well-being. One of the major sources of happiness is satisfactory relationships (Baumeister and Leary 1995; Ryan and Deci 2000). Relationships have a significant impact on emotional well-being, as they provide social support and comfort, and increase the level of positive affect (Christopher et al. 2004). Happy people are more sociable and spend more time with others (Diener and Seligman 2002; Waldinger and Schulz 2010). They are also better at cooperation and leading other groups (Argyle 2001). These studies show that happiness, although a subjective state, is deeply rooted in a social context and both of its components-emotional and cognitive-are to some extent determined by interpersonal contacts. This indicates a similarity between trust and happiness—both of them are affected by social interactions.

As in the case of trust, the level of happiness varies across nations. Several cultural characteristics can facilitate happiness—political freedom, social equality, social security, good relationships between bureaucracy and the people, public institutions that function properly and efficiently, cooperation, frequency of volunteerism, democratic attitudes, and a high level of trust (Tov and Diener 2008; Triandis 2000). These features can be observed in the happiest countries in the world, such as Denmark, Norway, and Switzerland (Helliwell et al. 2016). The role of trust in shaping a happy nation seems to be particularly significant, as it affects many other determinants of happiness such as positive attitudes towards institutions and other people, tolerance, frequency of experiencing positive emotions, and quality of social relations (Growiec and Growiec 2014; Kroll 2008; Rothstein and Uslaner 2005). Some scholars even claim that global well-being depends on the development of social trust in all nations (Wright 2000).

Current Study

Trust appears to be a powerful value that is related both to national and individual happiness. Yet, the mechanism underlying this association remains unclear. Given the ubiquity of trust, understanding precisely how it is related to happiness seems to be an important undertaking. Under what conditions would being trustful be linked to happiness? To the best of our knowledge, the factors responsible for the relationship between trust



and happiness have not received much empirical interest up to now. The present study aims to fill this gap by examining the role of kindness in determining the association between trust and happiness.

Kindness is often described as the pleasure derived from giving, doing kind things, or helping others (Otake et al. 2006). There are various links between kindness and emotional well-being which indicate that those two constructs are strongly related. First, positive affect, induced experimentally, as well as measured as a disposition, predicts helping behavior (Eisenberg 1991; Isen and Levin 1972; Lyubomirsky et al. 2005). Kind people experience more happiness and become even happier by practicing acts of kindness, or lovingkindness meditation, regularly (Fredrickson et al. 2008; Otake et al. 2006). Kind thoughts about others also increase social connection and a positive view of strangers (Hutcherson et al. 2008). According to the broaden and build theory, experiencing positive emotions builds social resources by, inter alia, increasing positive attitudes toward others (Fredrickson 2001). Hence, it seems that kindness can be both a cause and a result of elevated subjective well-being, because it is driven by positive emotions experienced while helping others.

There is also some evidence indicating a link between trust and kindness. In trust games, unconditional kindness predicts trustworthy behavior (Cox et al. 1991) and trust is often rewarded by reciprocity (Johnson and Mislin 2011; Ostrom 2003). Therefore, it could be assumed that trusting people would behave kindly more often because they are not afraid to invest in a relationship and believe that in future they will also be treated kindly. Some scholars claim that people do not have to be motivated by expectations of returned kindness. Instead, they can simply enjoy helping others (Ashraf et al. 2006). This seems plausible considering the emotional benefits that an individual derives from being kind to others.

This article has two purposes. First, it explores the role of kindness in predicting the relationship between trust and happiness. It was assumed that if kindness is related to an elevated level of positive affect and the level of positive affect influences the perception of other people, then, with a greater number of good deeds the favorable view of other people should be stronger. Thus, it was expected that, in a group of particularly kind people, the anticipated link between happiness and trust would be strongest. By testing this hypothesis, the present study contributes to a better understanding of the role of kindness as a factor underlying the relationship between trust and happiness.

The second contribution of the current study is the measurement of the association between trust and happiness not only by a self-descriptive questionnaire, but also by the use of

a trust game. In many studies, trust is measured by a single item from the World Values Survey (WVS), where participants have to declare whether people are generally worth trusting or whether it is better to be careful. However, the construct validity of this is often questioned (Delhey et al. 2011; Johnson and Mislin 2011), for several reasons. First, respondents may not consider their expectations carefully. Second, it is not entirely clear how they interpret the question (Camerer 2003)—do they think about strangers or acquaintances? Some scholars suggest that this item measures a willingness of society to engage in trustworthy behavior rather than trust (Glaeser et al. 2000). Thus, in the present study, in addition to this single question measure a trust game was used, which measures a behavioral response (situational trust) rather than an attitude or mental disposition. Trust games have become a popular way of measuring trust and an alternative to dispositional declarations (Johnson and Mislin 2011; Samson and Kostyszyn 2015). They seem to be particularly useful when trust is defined as handing control to another person. To the best of the author's knowledge, in studies of the relationship between happiness and trust this method has not yet been widely used. Using two different methods of measuring trust enables their comparison and the ability to check the extent to which they are related.

Method

Participants and Procedure

Ninety-one university students (71 women), aged 19–26 years (M=20.38; SD=1.16) were recruited for the study during their psychology classes. They did not receive any money for their participation. All participants were informed of the purpose and anonymity of the study, and their informed consent was obtained. First, subjects participated in a computer-based trust game. Then, they completed the happiness scale and answered questions about dispositional trust and acts of kindness.

Data Availability The datasets during and/or analyzed during the current study available from the corresponding author on reasonable request.

Materials

Trust

In order to measure *situational trust*, a trust game was used (Dasgupta 1988; Snijders and Keren 2001). This method was



based on the game invented by Dasgupta (1988). She explains the idea of the game by giving an example of a customer wanting to buy a car. The customer has two options—s/he can either enter or not enter the car store. S/he wants a car that is not likely to break down soon, so the decision about buying the car depends on the salesperson's trustworthiness. Dasgupta calls this likelihood a *reputation for being trustworthy*. If this reputation is high, the customer will buy a car. If it is low, s/he will not make a transaction. This situation is transferred to a game with two players, in which the first one has to trust the other and the second one can either make a favorable decision for both of them or choose to focus solely on his or her own benefits. Thus, situational trust is operationalized as a decision about passing control to the other person (partner).

In the game, participants have to make several decisions regarding the distribution of money. They may decide to allocate the money personally or to pass control to the other, unknown person who is able to give them a bigger or smaller payment than the guaranteed amount. At the beginning of the game, they are presented with the following instruction: "On the following screens you will be presented with a situation in which two persons participate: person A and person B. You are person A. Someone else, who you do not know, will be person B. Your task will be to make a decision regarding the money that both of you can receive. You will have two options: either you will make a decision on your own or you will leave it to the partner." Each person is presented with a decision tree example (see Fig. 1). Then the participants indicate who is to make the decision about payment in 12 scenarios (each presented in the form of a decision tree) that differ in terms of the amount of the money that can be received (the conditions for each option are presented in the Appendix Table 2). Since they do not know the decision made by the partner and have to make decisions sequentially, the game creates a situation of dependence.

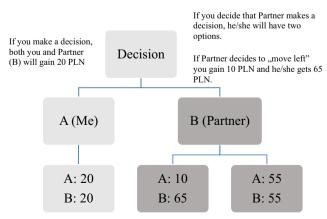


Fig. 1 Decision tree used in the trust game



Any time participants choose the guaranteed amount (A makes a decision) they score one point, and when they decide to pass the decision to the partner (B), they receive two points. Situational trust is a discrete variable with extreme values from 12 (always chooses A and keeps control) to 24 (always chooses B and passes over control). In the present study, this measure had good reliability at $\alpha = 0.80$.

As well as the game, which measured situational trust, general disposition was also measured (dispositional trust) in order to compare these two forms of trust. For this purpose, the item from the WVS was applied as a control variable. Although this measure is the subject of some methodological concerns that were addressed above, it allows for binary categorization and remains one of the most often used constructs for assessing how much trust one places in people who are not close friends or relatives (Johnson and Mislin 2012; Sapienza et al. 2013). Hence, it seemed reasonable to add the WVS trust question into the study, albeit not as a main variable.

Happiness

Happiness was measured by the *Subjective Happiness Scale* (Lyubomirsky and Lepper 1999), which was translated into Polish for the current study and then backtranslated by a bilingual person. The questionnaire consists of four items relating to subjective feelings about one's own happiness (the last item is reverse-coded, as it asks participants to what extent an unhappy characterization fits them). Participants respond on a 7-point Likert scale. A higher score indicates a higher level of subjective happiness. In the present study, the scale had good reliability, $\alpha = 0.83$.

Acts of Kindness

In order to measure this variable, participants answered a question about how much good they have done to other people throughout their life. Responses were given on a scale from 1 (nothing at all) to 7 (a lot). Measuring kindness using simple scales has been used previously and has proved to be a good indicator of this variable (see Otake et al. 2006).

Results

The results indicated that happiness was associated with level of situational trust ($\rho = 0.29$, p < .01), dispositional trust ($\rho = 0.23$, p < .05), and the number of acts of kindness done to others ($\rho = 0.32$, p < .01). A moderate correlation was also

observed between situational trust and dispositional trust ($\rho = 0.29$, p = .01). Kindness was associated with neither situational trust ($\rho = -0.08$, p = .34) nor dispositional trust ($\rho = -0.02$, p = .82).

Analyses Based on Categorization as Trusting or Careful

On the basis of the dispositional trust measure, the sample was divided into two groups—those who believed that people can be trusted (n = 29), and those who believed that one should be very careful (n = 62). The levels of the three measured variables were then compared between the two groups (see Table 1).

Analyses indicated that there were significant differences for situational trust and happiness—participants who believed that people can be trusted were more likely to trust a stranger in a trust game and declared higher levels of happiness in comparison with the "careful" group. However, no differences between the groups willing and not willing to trust were found for number of acts of kindness.

Moderation Analyses

In order to test the hypothesis that number of acts of kindness affects the relationship between trust (predictor) and happiness (criterion) a moderation analysis was conducted using the PROCESS macro model for SPSS (Hayes 2013). Because of the unequal distribution of men and women in the sample, sex was used as a covariate in this analysis. The analysis showed good adjustment of the model to the data [F(4,85) = 6.43, p] $<.001, R^2 = .23$]. Main effects were observed for the predictor situational trust, t(90) = 3.03, p < 0.01, CI[0.04, 0.17] and moderator number of acts of kindness, t(90) = 2.53, p < .05, CI [0.07, 0.55]. Sex applied in the model as a covariate was not significant, t(90) = .01, p = .99, CI [-0.58, 0.59]. Consistent with the hypothesis, an interaction was observed for situational trust and number of acts of kindness, t(90) = 2.19, p < 0.05, CI [0.01, 0.16]. The results showed that the more participants had done for others, the stronger the relationship between situational trust and happiness observed. Figure 2 presents the relationship between situational trust and happiness at the three values of centered moderator: low (-1 SD from mean), average (mean) and high (+1 SD from mean).

Analysis of the significance region using the Johnson-Neyman technique indicated that this effect was significant for 78% of participants with higher ratings for acts of kindness. Relationship between situational trust and happiness became significant at the value of acts of kindness .33 points below the average (M = 5.17), t(89) = 1.99, p = .05, b = .076, CI[0.00, 0.15]. As the level of moderator rose it became more positive, reaching its highest at M + 1.83, t(89) = 3.54, p < .001, b = .25, CI[0.11, 0.40].

A similar calculation was conducted with the variables dispositional trust (predictor), act of kindness (moderator), happiness (criterion), and sex as a covariate. The analysis again showed good adjustment of the model to the data, although the size of variance explained was smaller compared with the model with situational trust as a predictor, F(4,85) = 3.54, p = .01, $R^2 = .14$. Main effects were observed for dispositional trust, t(90) = -2.35, p < .05, CI [-1.05, -0.09] and number of acts of kindness, t(90) = 2.51, p < .05, CI [0.07, 0.57]. However, the interaction between dispositional trust and kindness was not significant t(90) = -0.63, p = .52, CI [-0.66, 0.34]. Sex measured as a covariate was also not significant, t(90) = 0.04, p = .97, CI [-0.61, 0.63].

Discussion

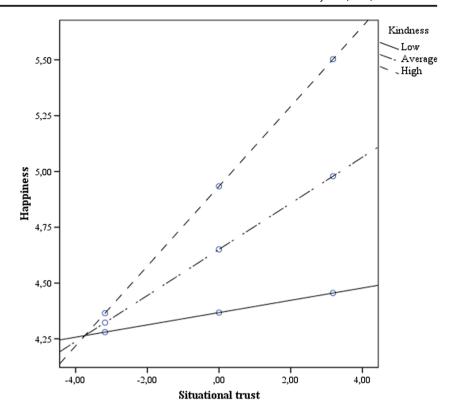
The present study aimed to investigate the role of kindness in predicting the association between situational trust and happiness. As was hypothesized, the more people declared they had done for others, the stronger the link between trusting as measured in a trust game and happiness. These results seem to support the proposition that kindness strengthens the link between trust and happiness because it enhances a favorable view of other people, especially since for participants with a low level of kindness the relationship between expressing trust in a trust game and happiness was not significant. What is more, several conceptualizations indicate that the element underlying both trust and kindness is a positive attitude toward others (Ashraf et al. 2006; Putnam 2000; Snijders and Keren 2001; Tov and Diener 2008). Favorable evaluations and faith

Table 1 Comparison of levels of situational trust, happiness and acts of kindness in groups with different levels of dispositional trust

	Most people can be trusted		Need to be very careful		p	d	95% CI
	\overline{M}	SD	\overline{M}	SD			
Situational trust	20.21	2.74	17.88	3.11	.001	.79	[0.98, 3.66]
Happiness	5.03	1.04	4.44	1.11	.019	.55	[0.99, 1.08]
Acts of kindness	5.17	1.10	5.15	0.83	.89	.02	[-0.39, 0.44]



Fig. 2 Effect of situational trust on happiness at different levels of kindness



in the best intentions of strangers can lead to more helping behaviors and a readiness to pass control to another person when there is a chance of making a profit. As a result, the level of well-being increases. Trust alone can be a predictor of happiness but it seems that kindness strengthens this effect, and without at least some prosocial activity people will not derive much happiness from being trustful.

Nevertheless, no direct links between trust and acts of kindness were found. This implies that concepts based on prosocial behavior as a main explanation of trust may not fully capture this phenomenon (Ashraf et al. 2006). Perhaps, trust is based on both altruism and expected reciprocity, not just one of them. This seems particularly plausible given the fact that both of these elements seem to originate from a positive attitude toward others (in order to expect reciprocity one has to believe that the other has the best intentions in mind). However, there are also substantial differences between reciprocity and altruism, which may explain the lack of direct associations. As Snijders and Keren (2001) argue, reciprocity stems from obligation, which is conditional and based on the previous behavior of the "truster." In contrast, altruism implies engagement in genuine prosocial behavior that does not arise from a previous commitment or expectation of any external reward (Szuster 2005). Certainly, further studies on this issue to clarify the mechanisms connecting and separating trust from kindness would be highly desirable.

The goal of this study was also to examine the differences between various forms of measuring trust, with specific reference to the trust game (situational trust)—a method that has received little attention from studies concerning subjective well-being. First of all, the two types of measured trust were correlated, but only moderately. Also, consistent with expectations about interrelation between these constructs, subjects who believed that most people could be trusted also showed more trust during the game than those who declared themselves to be more cautious. As predicted, both types of trust were related to happiness. Participants who believed that most people could be trusted were happier than those who preferred to be careful. Similarly, the more often they passed control to the stranger in the game, the higher their level of happiness.

Interestingly, the expected interaction between trust and kindness was not observed when dispositional trust was applied as an independent variable. Both types of trust are related to happiness, but only situational trust interacts with kindness. This might indicate that, in line with previous evidence, they constitute two different forms of trust (Camerer 2003; Johnson and Mislin 2011; Snijders and Keren 2001). The question from the WVS is often believed to measure a willingness to engage in trustworthy behavior (Glaeser et al. 2000), whereas in the trust game, trust is operationalized as a decision about handing over control of a situation to another person. The former may arise from social attitudes regarding the world (Putnam 2000), while the latter may be the result of previous experiences in everyday interactions including contacts with strangers. Perhaps the global, abstract judgment regarding trust measured by the item from the WVS might not translate



to daily interactions such as helping and supporting others and relates only partially to behavioral indicators of trust such as passing control of a situation to another person. That could explain why frequency of acts of kindness strengthens the relationship between trust and happiness only in the case of situational trust.

Limitations of the Study and Future Directions

The study has several limitations that need to be addressed. First of all, whereas trust games are widely used as an indicator of behavioral of trust, it is not entirely clear how behavior in the trust game should be interpreted. There are several motivations other than trust per se that can determine trust game behavior, such as attitudes towards risk-taking, the wish to do "the right thing," or betrayal aversion (Ashraf et al. 2006; Bohnet and Zeckhauser 2004; Butler et al. 2016). For example, participants may act trustworthily not because they are trustful but rather because they do not want to feel guilt arising from falling short of the other person's expectations (Battigalli and Dufwenberg 2007). Thus, in future studies it would be advisable to explore this issue and investigate participants' motivations underlying being trustful.

What is more, the trust game measured a behavioral response regarding the distribution of money but did not measure actual interaction between the two sides. This has both strengths and weaknesses. A major advantage is that the results obtained are not affected by the reciprocity rule or reactions to others' actions. Instead, this technique measures trust in a social situation where the outcome of the interaction cannot be predicted right away. Trust is considered as a decision taken under risk (Snijders and Keren 2001), because participants cannot verify the intentions of the other person. This corresponds with the majority of daily situations in which people are unable to ascertain the honesty of the interlocutor at the moment of interaction. For example, as customers we do not usually know whether a salesperson recommending a new product has our best intentions in mind. Hence, the decision whether to follow his or her advice and risk buying either a good or a bad product needs to be based on trust.

However, if the notion that trust is a combination of altruism and reciprocity is correct, then it would be advisable to use a trust game that includes interaction between two sides. That would allow for controlling reciprocity and observing how it affects trust and its association with happiness. Therefore, it would be highly desirable to employ additional groups in future studies in which the possibility of reciprocity is either allowed or precluded.

Furthermore, it should be noted that the study sample consisted mainly of women. Although sex was applied as a controlled variable in all analyses and proved to be not significant, in the future a more balanced sample is highly recommended. The measure of dispositional trust consisted of a one-

item scale which, although widely used, entails a number of controversies regarding the interpretation of the results (Johnson and Mislin 2011). It would be useful to apply a longer questionnaire with good psychometric properties. Additionally, the current study measured frequency of acts of kindness conducted by a person in the past. It would also be beneficial to investigate how training in practicing acts of kindness (consisting, for example, of performing five random acts per week—see Sheldon and Lyubomirsky 2012) would affect the relationship between trust and happiness. In future it would also be advisable to add more control variables, because some of them—such as e.g. wealth, religiosity, and perhaps also some psychological traits like openness to experience or neuroticism—could potentially confound the relationship under investigation.

As a low level of trust has a bad effect not only on subjective well-being but also on social capital and society's resilience in response to crises (Helliwell et al. 2016; Putnam 2000; Tov and Diener 2008), it seems desirable to initiate actions that would help to rebuild it. Perhaps the most efficient way of raising social trust in groups and societies would be to design trainings and social campaigns in which both trust and kindness were developed. If people had the chance to learn to trust others through practicing kindness, it could elevate their level of happiness and hence they might be willing to become involved in even more prosocial behaviors. This could have the potential of improving not only their subjective well-being, but also the social capital of countries.

The aim of the study presented in this article was to explore the role of kindness as a mechanism underlying association between happiness and trust. It was expected that the more people believe that they have done for others, the stronger would be the relationship between trust and happiness. Results confirmed these predictions, indicating that while trust alone was associated with happiness, being kind reinforced this relationship. Hence, kindness towards others seems to be vital for deriving happiness from being trusting.

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Compliance with ethical standards

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Conflict of Interest Author has received Funding Grant from The Maria Grzegorzewska Pedagogical University (grant number BSTP 27/17-I).



Appendix

 Table 2
 Twelve scenarios

 applied in a trust game

Who makes a decision?		Situation 1		Situation 2	Situation 2		Situation 3	
		A receives	B receives	A receives	B receives	A receives	B receives	
A: Participant	a	20	20	20	20	20	20	
B: Partner	b1	10	25	10	30	10	35	
	b2	30	30	30	30	30	30	
Who makes a decision?		Situation 4		Situation 5		Situation 6		
		A receives	B receives	A receives	B receives	A receives	B receives	
A: Participant	a	20	20	20	20	20	20	
B: Partner	b1	10	25	10	30	10	35	
	b2	40	40	40	40	40	40	
Who makes a decision?		Situation 7		Situation 8		Situation 9		
		A receives	B receives	A receives	B receives	A receives	B receives	
A: Participant	a	20	20	20	20	20	20	
B: Partner	b1	15	25	15	30	15	35	
	b2	30	30	30	30	30	30	
Who makes a decision?		Situation 10		Situation 11		Situation 12		
		A receives	B receives	A receives	B receives	A receives	B receives	
A: Participant	a	20	20	20	20	20	20	
B: Partner	b1	15	25	15	30	15	35	
	b2	40	40	40	40	40	40	

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References

- Ahuvia, A. C. (2002). Individualism/collectivism and cultures of happiness: A theoretical conjecture on the relationship between consumption, culture and subjective well-being at the national level. *Journal of Happiness Studies*, *3*(1), 23–36. https://doi.org/10.1023/A: 1015682121103.
- Argyle, M. (2001). *The Psychology of Happiness*. New York: Taylor & Francis.
- Ashraf, N., Bohnet, I., & Piankov, N. (2006). Decomposing trust and trustworthiness. *Experimental Economics*, *9*(3), 193–208. https://doi.org/10.1007/s10683-006-9122-4.
- Battigalli, P., & Dufwenberg, M. (2007). Guilt in games. *The American Economic Review*, 97(2), 170–176. https://doi.org/10.1257/aer.97.2.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. https://doi.org/10.1037// 0033-2909.117.3.497.
- Berg, J., Dickhaut, J., & McCabe, K. A. (1995). Trust, reciprocity, and social history. *Games and Economic Behavior*, 10, 290–307. https://doi.org/10.1006/game.1995.1027.

- Bohnet, I., & Zeckhauser, R. (2004). Trust, risk and betrayal. *Journal of Economic Behavior & Organization*, 55(4), 467–484. https://doi.org/10.1016/j.jebo.2003.11.004.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. https://doi.org/10.1037/0022-3514.84.4.822.
- Butler, J. V., Giuliano, P., & Guiso, L. (2016). Trust and cheating. *The Economic Journal*, 126, 1703–1738. https://doi.org/10.1111/ecoj. 12271.
- Camerer, C. (2003). Behavioral game theory: Experiments in strategic interaction. Princeton, NJ: Princeton University Press.
- Christopher, A. N., Kuo, S. V., Abraham, K. M., Noel, L. W., & Linz, H. E. (2004). Materialism and affective well-being: The role of social support. *Personality and Individual Differences*, 37, 463–470. https://doi.org/10.1016/j.paid.2003.09.015.
- Cox, T. H., Loebel, S. A., & McCleod, P. L. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior in a group task. *Academy of Management Journal*, 34, 827–847. https://doi.org/10.2307/256391.
- Dasgupta, P. (1988). Trust as a commodity. In D. Gambetta (Ed.), *Trust. Making and breaking cooperative relations* (pp. 49–72). Oxford: Basil Blackwell.
- Delhey, J., Newton, K., & Welzel, C. (2011). How general is trust in "most people"? Solving the radius of trust problem. *American Sociological Review*, 76(5), 786–807. https://doi.org/10.1177/0003122411420817.
- Diener, E., & Seligman, M. E. (2002). Very happy people. *Psychological Science*, *13*(1), 81–84. https://doi.org/10.1111/1467-9280.00415.
- Diener, E., Sandvik, E., & Pavot, W. (1991). Happiness is the frequency, not the intensity, of positive versus negative affect. In F. Strack, M.



- Argyle, & N. Schwarz (Eds.), *Subjective well-being* (pp. 119–139). Oxford: Pergamon Press.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. E. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276–302. https://doi.org/10.1037/0033-2909.125.2.276.
- Easterlin, R. A. (2005). Building a better theory of well-being. In L. Bruni & L. Porta (Eds.), *Economics and happiness* (pp. 29–64). Oxford: Oxford University Press.
- Eisenberg, N. (1991). Meta-analytic contributions to the literature on prosocial behavior. *Personality and Social Psychology Bulletin*, 17, 273–282. https://doi.org/10.1177/0146167291173007.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226. https://doi.org/10.1037//0003-066x.56.3.218.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045–1062. https://doi.org/10.1037/a0013262.
- Glaeser, E. L., Laibson, D. I., Scheinkman, J. A., & Soutter, C. L. (2000). Measuring trust. *Quarterly Journal of Economics*, 115(3), 811–846. https://doi.org/10.1162/003355300554926.
- Growiec, K., & Growiec, J. (2014). Trusting only whom you know, knowing only whom you trust: The joint impact of social capital and trust on happiness in CEE countries. *Journal of Happiness Studies*, 15(5), 1015–1040. https://doi.org/10.1007/s10902-013-9461-8
- Grzelak, J. (2001). O intencjach, kontroli i zaufaniu. In D. Doliński & B. Weigl (Eds.), *Od myśli i uczuć do decyzji i działań* (pp. 91–110). Warszawa: Wydawnictwo Instytutu Psychologii PAN.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analyses. New York: Guilford Press.
- Helliwell, J. F. (2006). Well-Being, social capital and public policy: What's new? *The Economic Journal*, 116(510), C34–C45. https://doi.org/10.1111/j.1468-0297.2006.01074.x.
- Helliwell, J., Huang, H., & Wang, S. (2016). The distribution of the world happiness. In J. Helliwell, R. Layard, & G. Sachs (Eds.), World Happiness Report 2016 (pp. 8–49). New York: Sustainable Development Solutions Network.
- Hutcherson, C. A., Seppala, E. M., & Gross, J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion*, 8(5), 720–724. https://doi.org/10.1037/a0013237.
- Isen, A. M., & Levin, P. F. (1972). Effect of feeling good on helping: Cookies and kindness. *Journal of Personality and Social Psychology*, 21, 384–388. https://doi.org/10.1037/h0032317.
- Johnson, N. D., & Mislin, A. A. (2011). Trust games: A meta-analysis. Journal of Economic Psychology, 32(5), 865–889. https://doi.org/ 10.1016/j.joep.2011.05.007.
- Johnson, N. D., & Mislin, A. (2012). How much should we trust the World Values Survey trust question? *Economics Letters*, 116(2), 210–212. https://doi.org/10.1016/j.econlet.2012.02.010.
- Kroll, C. (2008). Social capital and the happiness of nations: The importance of trust and networks for life satisfaction in a cross-national perspective. Bruxelles: Peter Lang Publishing.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness. Preliminary reliability and construct validation, Social Indicators Research, 46, 137–155. https://doi.org/10.1023/a: 1006824100041.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131*, 803–855. https://doi.org/10.1037/0033-2909.131.6.
- Lyubomirsky, S., Dickerhoof, R., Boehm, J. K., & Sheldon, K. M. (2011).

 Becoming happier takes both a will and a proper way: An

- experimental longitudinal intervention to boost well-being. *Emotion, 11*(2), 391–402. https://doi.org/10.1037/a0022575.
- Ostrom, E. (2003). Toward a behavioral theory linking trust, reciprocity, and reputation. In E. Ostrom & J. Walker (Eds.), *Trust and reciprocity: Interdisciplinary lessons from experimental research* (pp. 19–79). New York: Russel Sage Foundation.
- Otake, K., Shimai, S., Tanaka-Matsumi, J., Otsui, K., & Fredrickson, B. L. (2006). Happy people become happier through kindness: A counting kindnesses intervention. *Journal of Happiness Studies*, 7(3), 361–375. https://doi.org/10.1007/s10902-005-3650-z.
- Putnam, R. D. (2000). Bowling alone: The collapse and revival of American community. In New York: Simon & Schuster.
- Rothstein, B., & Uslaner, E. M. (2005). All for all: Equality, corruption, and social trust. *World Politics*, 58(01), 41–72. https://doi.org/10.1353/wp.2006.0022.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55, 68–78. https://doi.org/10.1037// 0003-066x.55.1.68.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141.
- Samson, K., & Kostyszyn, P. (2015). Effects of Cognitive Load on Trusting Behavior–An Experiment Using the Trust Game. *PLoS One*, 10(5), e0127680. https://doi.org/10.1371/journal.pone. 0127680.
- Sapienza, P., Toldra-Simats, A., & Zingales, L. (2013). Understanding trust. *The Economic Journal*, 123(573), 1313–1332. https://doi. org/10.1111/ecoj.12036.
- Sheldon, K. M., & Lyubomirsky, S. (2012). Achieving sustainable new happiness: Prospects, practices, and prescriptions. *Positive psychology in practice*, 127–145. https://doi.org/10.1002/9780470939338. ch8.
- Snijders, C., & Keren, G. (2001). Do you trust? Whom do you trust? When do you trust? Advances in Group Processes, 18, 129–160. DO. https://doi.org/10.1016/s0882-6145(01)18006-9.
- Szuster, A. (2005). W poszukiwaniu źródeł i uwarunkowań ludzkiego altruizmu. Warszawa: Wydawnictwo Instytutu Psychologii PAN.
- Tov, W., & Diener, E. (2008). The well-being of nations: Linking together trust, cooperation, and democracy. In B. A. Sullivan, M. Snyder, & J. L. Sullivan (Eds.), Cooperation: The political psychology of effective human interaction (pp. 323–342). Malden, MA: Blackwell.
- Triandis, H. C. (2000). Cultural syndromes and subjective well-being. In E. Diener & E. M. Suh (Eds.), *Culture and subjective well-being* (pp. 13–36). Cambridge, MA: The MIT Press.
- Veenhoven, R. (1999). Quality-of-life in individualistic society. Social Indicators Research, 48(2), 159–188. https://doi.org/10.1023/a: 1006923418502.
- Veenhoven, R. (2010). What we know. In L. Bormans (Ed.), *The World Book of Happiness* (pp. 338–346). Tielt: Lannoo Uitgeverij.
- Waldinger, R. J., & Schulz, M. S. (2010). What's love got to do with it? Social functioning, perceived health, and daily happiness in married octogenarians. *Psychology and Aging*, 25(2), 422–431. https://doi. org/10.1037/a0019087.
- Wright, R. (2000). *Nonzero: The logic of human destiny*. New York: Pantheon Books.
- Yamagishi, T., & Yamagishi, M. (1994). Trust and commitment in the United States and Japan. *Motivation and Emotion*, 18(2), 129–166. https://doi.org/10.1007/bf02249397.
- Yamamura, E., Tsutsui, Y., Yamane, C., Yamane, S., & Powdthavee, N. (2015). Trust and happiness: Comparative study before and after the Great East Japan Earthquake. *Social Indicators Research*, 123(3), 919–993. https://doi.org/10.1007/s11205-014-0767-7.

