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Due to *betrayal aversion*, people take risks less willingly when the agent of uncertainty is another person rather than nature. Individuals in four countries (Brazil, Switzerland, the United Arab Emirates and the United States) confronted either a binary-choice trust game or a risky decision offering the same payoffs and probabilities. Risk acceptance was calibrated by asking individuals their "minimal acceptable probability" (MAP) for securing the high payoff that would make them just willing to accept the risky rather than the sure payoff. People's MAPs are significantly higher when another person rather than nature determines the outcome. This indicates betrayal aversion.

Keywords: Risk aversion, betrayal aversion, social risk, cross-cultural experiments (JEL C72, C91)

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Risk aversion plays a central role in economic theory. It helps us understand why individuals insure and save, why investors do not place all their eggs in the basket offering the highest expected payoff, and why entrepreneurs earn a generous premium. But risk aversion alone may not account for people's willingness to take risk when the chance event is the action of other people rather than nature, for then additional considerations may enter.

We use the term "social risk" to describe situations where decisions by other human beings are the prime source of uncertainty. Many social risks—such as speculative bubbles, HIV and terrorism—are prominent today. In this paper, we focus on social risks where the agent of uncertainty is one other person, for example a salesperson who may or may not be accurately describing a product. In these situations, an individual (the principal) must decide whether to *trust* another person (the agent). Traditional decision analysis, now well incorporated into economic theory, would tell us that for a rational, self-interested individual "a risk is a risk is a risk." Assuming that there was no effect on future behavior, a decision maker facing the same payoffs and probabilities would make the same decision whether nature or the choice of another person resolves a lottery. This paper examines whether individuals actually behave this way.

Specifically, using a series of experiments, we compare individuals' willingness to take risks when the outcome is due to a chance device, as opposed to an identical odds-and-payoffs situation where the outcome depends on whether or not another player proves trustworthy. We find that people are much less willing to take a risk, when the source of the risk is another person rather than nature. We argue that this is due to "betrayal aversion."

Betrayal aversion matters significantly. Encouraging more risk taking is a prime theme in prescriptions for enhanced economic performance, and a vast array of economic transactions require trust in another party. Preston McAffee (2004), commenting on the Enron implosion, observed that market makers – he also included banks and insurance companies – are in the trust business. Indeed, the question of trust arises with every lawyer, every doctor, every job applicant, every salesperson, every individual operating in an environment of asymmetric information. Trust is required for an economy to function well (see, e.g., the empirical literature started by Stephen Knack and Philip Keefer 1997, and Raphael LaPorta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny 1997). Modern economies have many instruments, such as insurance and liability systems to encourage trust by diminishing the material costs of betrayal. But if people are averse to being betrayed, it will be important to decrease the likelihood of betrayal as well, for example through incentives acting on reputations.

The risks of betrayal bear two major differences from natural risks. First, the decision situation usually involves payoffs to the other player. People may care about the payoffs going to the other person, positively or negatively. Such *social preferences*—see Ernst Fehr and Klaus Schmidt (2002) for a survey—could influence principals' decisions, making them either less or more likely to accept a social risk than a natural risk.

Second, elements beyond mere outcome-based preferences may enter the utility function. When the principal trusts the agent, she in effect gambles on the agent's being trustworthy. If trust is violated, she will incur betrayal costs, a psychological loss above and quite apart from any material costs. Conversely, the principal will reap honor benefits if the agent is trustworthy. If principals are affected by such psychological benefits and

costs, this could lead trust decisions to differ from risky choices offering the same stakes and odds. Such behavior would suggest that people care about how outcomes came to be. In a seminal paper, Matthew Rabin (1993) introduced the relevance of such causal inferences into economics.[1]

If individuals have an aversion to betrayal, they will be less willing to take risks in a trust situation than in an equivalent situation where chance determines the outcome. We employ a novel experimental design that enables us to measure concerns about betrayal, about risk, and about payoffs to another player as revealed by choices made in real-money decisions.[2] We focus on binary-choice tasks and use the terms *high* and *low* for outcomes yielding individual payoffs to the principal that are higher or lower than the available *sure* payoff. We asked each principal to make one of the three following decisions:

(i) *Trust Game.* A choice between a sure thing and trusting an agent who can either honor or betray trust in a binary-choice trust game (TG) (Colin Camerer and Keith Weigelt 1988, David Kreps 1990). The principal's payoff will be high if the agent honors trust and low if he betrays trust.

(ii) *Risky Dictator Game.* A choice between a sure thing and a lottery in a binary-choice "risky dictator game" (RD)[3] that is structurally identical to the TG. The difference is that in the RD nature rather than the agent determines the payoffs that the principal and agent receive. As above, the lottery offers high and low payoffs for the principal. The agent is an inert recipient.

(iii) *Decision Problem.* A choice between a sure thing and a lottery in a binary-choice decision problem (DP) that is structurally identical in its payoffs to the

principal as the TG and the RD. In the decision problem, nature determines the principal's payoffs; no second person is affected. If the lottery is chosen, the principal's payoff can be high or low.

We introduce the risky dictator game to provide the base from which to measure betrayal aversion. We do not merely compare behavior between the trust game and the decision problem because we want to be able to differentiate between social preferences and betrayal aversion as possible motives for the principal's trust decision.

We expect people to care about betrayal. To examine whether betrayal aversion is a widespread phenomenon, we ran experiments with men and women in four disparate countries: Brazil, Switzerland, the United Arab Emirates (UAE), and the United States (USA). This paper seeks to assess the generality of betrayal aversion. Thus, we observe but do not make any predictions on how betrayal aversion differs across genders or countries. Our paper is organized as follows: the next section, I, introduces the experimental design, Section II presents the results, and Section III discusses some implications of our findings and concludes.

I. Experimental Design

In each of our three decision situations, the trust game, the risky dictator game and the decision problem, the principal had to choose between a sure thing and a lottery. The sure strategy resulted in a sure outcome and the lottery could yield the principal either a higher or a lower cash payoff than the sure outcome. The payoff structure for the trust game is summarized in Table 1.

Table 1 about here

In the trust game, if the principal chose the lottery, the agent determined the final payoffs. A money-maximizing agent would prefer 22 points to 15, and thus should betray trust, given that chance. Anticipating such behavior, a money-maximizing principal should choose the sure thing, producing the Nash Equilibrium, and receive 10 rather than 8. In the risky dictator game, the payoffs are the same, but nature (a random device) not the agent chooses between High and Low. In the decision problem, as well, nature chooses, but there are no agents, hence no second payoffs in the boxes. Each principal played one game only. In the trust and the risky dictator games, principals were randomly paired with an anonymous agent.

To calibrate risk acceptance in a given decision situation, we asked principals their "minimal acceptable probability" (MAP) for securing the high payoff that would make them just willing to accept the risky rather than the sure payoff. Principals were informed that their MAP would be used to decide whether they trusted (in the trust game) or engaged in a lottery (in the risky dictator game and decision problem) or whether they took the sure outcome. They were told that the process described in the next paragraphs would determine the final payoffs.

In the trust game, we simultaneously asked agents whether they would be trustworthy if given the opportunity (strategy method). We used the agents' responses to determine the proportion of trustworthy agents, that is, the probability that a principal would find trust rewarded. We labeled this probability p*, with a separate p* computed for each session of the trust game. Then we returned to each individual principal. She was informed of p*. If her MAP was less than or equal to the p* in her session, she was

assumed to trust. The outcome then depended on the prior decision of the agent with whom she was paired. She thus had a p*-chance of receiving the high outcome. If her MAP exceeded p*, her demands were too high and she and her agent each got the sure 10. Agents only knew that principals had to make a decision between the sure thing and trust but were not informed on the specifics of the MAP-procedure or that their decision would help determine p*.

In each country, the sessions of the trust game were run first. The average value of p* within a country was then used for its risky dictator games and its decision problems. Principals in those games were told that p* had been determined prior to the experiment, but not how.[4] After all the players had made their decisions, we revealed the value of p*. We resolved any lotteries by drawing a ball from an urn with (p*)100 green balls and (1-p*)100 blue balls. As in the trust game, if a principal's MAP was higher than p*, she was assumed to opt for Sure and earned the sure payoff. If her MAP was lower than or equal to p*, she had a p*-chance of winning the high payoff.

The higher a principal's MAP, the higher p* must be for her to choose the risky strategy over the sure thing. Thus, the less one likes one or both outcomes flowing from the risky strategy, the higher will be one's MAP. This mechanism is incentive compatible: a rational principal should be indifferent between the sure thing and the gamble with the reported MAP, since individuals cannot affect the probability they receive in the lottery. Given our procedure, assuming that a principal adheres to the Substitution Axiom of von Neumann-Morgenstern utility, truth-telling is a dominant strategy.[5]

We then compared MAPs across the three decision situations. The three sets of MAPs and p', the value of p that makes the lottery actuarially fair, are the vital ingredients for our analysis. The difference between the MAPs in the trust game and the MAPs in the risky dictator game measures how much more willing principals are to take a risk against nature than to take the same risk relying on the trustworthiness of their agents. We take this magnitude to measure *betrayal aversion*, the net effect of the expected costs of betrayed trust less the expected benefits from honored trust. We hypothesize that betrayal aversion, the difference between the mean MAP in the trust game and that in the risky dictator game, will be positive: $\overline{MAP}_{TG} - \overline{MAP}_{RDG} > 0$.

The difference between the MAPs in the decision problem and the MAPs in the risky dictator game reveals how much more principals are willing to accept a lottery when another player will gain as well. We label this as their *social preference*, which could be positive or negative. Recent theoretical models and much empirical evidence suggest that principals may be motivated by altruism (James Andreoni and John Miller 2002), by efficiency gains to the dyad (Gary Charness and Rabin 2002), and by concerns about disparities in payoffs, i.e., inequality aversion (Fehr and Schmidt 1999, Gary Bolton and Axel Ockenfels 2000). For the numerical payoffs we employ, altruism and efficiency preferences would lead a principal to prefer the lottery in the risky dictator game to the lottery in the decision problem. Inequality aversion would reverse this preference, leading to a higher MAP in the risky dictator game than in the decision problem. The net influence of the two effects is unclear, and might well depend on the size of the payoffs. Accordingly, we make no prediction about the sign of social preferences ($\overline{MAP}_{DP} - \overline{MAP}_{RDG}$).

The difference between the MAPs in the decision problem and p' indicates principals' *risk aversion* (John W. Pratt 1964, Kenneth J. Arrow 1971). In accordance with most of the literature, we expect risk aversion to be positive: $\overline{MAP}_{DP} - p' > 0$.

614 subjects participated in our experiments: 182 in Brazil, 120 in Switzerland, 167 in the UAE, and 145 in the USA. All were randomly recruited students at universities. Subjects were anonymous in all experiments, identified only by code numbers. The payoffs were presented to subjects in a matrix form with neutral terminology; payoffs were given in points. Each point was converted to 1 Brazilian real, 1 Swiss frank, 1 UAE dirham, or 1 US dollar at the end of the experiment. Monetary amounts were scaled for parity, using the hourly wage of a student research assistant as the metric. Subjects earned a 10-point show up fee and received on average an additional 13 points for an experiment that took approximately 30-40 minutes.

To ensure the equivalence of experimental procedures across countries, we followed Alvin Roth, Vesna Prasnikar, Masahiro Okuno-Fujiwara and Shmuel Zamir (1991) on designs for multinational experiments. Thus, we controlled for currency, language and experimenter effects to the best of our ability. We had the instructions translated (and back-translated) from English to Portuguese and Arabic. (The experiments in Switzerland were conducted in English.) The experiments in Switzerland and the United Arab Emirates were conducted by the first author; the experiments in Brazil by the second author. Both these authors ran experimental sessions in the USA. No experimenter effects were found in the USA.

II. Results

Table A.1 in the Appendix presents summary statistics. It shows the mean MAPs in each decision situation. It also reports the value of p*, the likelihood of trustworthiness, for each country. Trustworthiness rates do not vary significantly across countries.

The differences between the mean MAPs provide measures of our three variables of interest, betrayal aversion, social preferences and risk aversion. Those measures are presented in Table 2. For example, consider betrayal aversion for Americans. On average, Americans require a 22% better chance of getting the high outcome to trust a human in the trust game than they do to choose the lottery in the risky dictator game.

Table 2 about here

Strikingly, all values in the table are positive, implying that betrayal aversion, positive social preferences, and risk aversion are general phenomena. To examine these differences in more detail, we use both rank-order methods and linear regression. Our experiments were run on a between-subjects basis. Hence, we have data from each individual for a single experiment.

We first conduct Mann-Whitney U tests to avoid making assumptions about functional form or error distribution. This rank-order procedure enables us to control for the effects of gender and countries separately, yet derive an overall measure of our three variables of interest: betrayal aversion, social preferences, and risk aversion. If the null hypothesis of no difference across the three decision situations in choice behavior (subjects' MAPs) were satisfied, the test statistic for each country-gender group would have mean 0, with variance and standard deviation of 1. Our primary goal is to determine

whether each of our three phenomena is significant in the aggregate (across the four countries) once we control for country and gender. Our test statistics comprise 8 normal deviates. The null would posit their sum to be 0, their variance to be 8, and their standard deviation to be $\sqrt{8} = 2.828$. Adding the z-scores together and dividing by 2.828 gives an aggregate z score. The z-statistics are shown in Table 3.[6]

Table 3 about here

The results in some of the cells are significant on their own, but our primary interest is in the aggregate measures of our three phenomena—combining both genders in the four nations. On an aggregate basis, all three phenomena prove to be significant, with betrayal and risk aversion very strongly so. Since the UAE has the highest score for both genders for each of the three phenomena, we recomputed excluding the UAE to see whether the results persist. The resulting aggregate z-scores are: betrayal aversion, 3.87**; social preferences, 1.53; and risk aversion, 4.30**. In short, the results change little: risk and betrayal aversion are still significant at the 1%-level but social preferences are now no longer significant (two-tailed tests). We summarize our results:

Result 1: Subjects are betrayal averse.

As predicted, MAPs in the trust game substantially exceed those in the risky dictator game, thereby revealing betrayal aversion.

Result 2: Generally, people have positive social preferences.

We made no prediction about the sign of social preferences, but find them to be positive. In absolute magnitude, the social preference results are much smaller than those for either betrayal or risk aversion (and no longer significant without the UAE). This may be because inequality aversion tends to counterbalance altruism or efficiency concerns.

Alternatively, concerns about others' payoffs and efficiency may simply matter relatively little.

Result 3: Subjects are risk averse.

As predicted, MAPs in the decision problem substantially exceed p', revealing risk aversion.

To examine Results 1 to 3 in a framework more traditional in economics, we ran OLS-regressions with individual MAPs as the dependent variable (Table 4). Although our dependent variable is bounded on [0,1], the linear form of the regression can be a reasonably good approximation to the population regression function, since our independent variables are bounded as well. Moreover, none of our predicted dependent variables falls close to the boundaries of the [0,1] range. The independent variables are the three decision scenarios, gender and the four countries. The risky dictator game, the United States, and men are our omitted groups.

Table 4 about here

These regressions results generally reproduce the findings of our nonparametric tests. They suggest that betrayal aversion is a robust phenomenon: MAPs in the trust game significantly exceed MAPs in the risky dictator game in each of our specifications. In Column 2, we control for gender and country. Women demand somewhat higher MAPs than do men, and Emiratis are substantially more averse to taking risk than are Americans.[7] In Columns 3 to 5, we include a number of interaction variables. Columns 4 and 5 show that when we control for the Emiratis' particularly pronounced degree of betrayal aversion, the difference between the MAPs in the trust game and the risky dictator game decreases but remains economically and statistically significant.

III. Discussion and Conclusions

People are less willing to take a risk when another person rather than nature determines the outcome. We conducted our study in four countries—Brazil , Switzerland, the United Arab Emirates and the United States—that differ in their continents, political structures, economic systems, cultures, religions and histories. The goal was to examine whether betrayal aversion is a general phenomenon. Our experiments show that in each of the four countries, people sacrifice much more expected monetary value to avoid being betrayed than they sacrifice to avoid losing in a lottery offering the same odds and payoffs. This difference in behavior is not due to the differential impact that natural and social risks might have on subjects' own payoffs versus payoffs to others. Rather, people are more concerned about social risks than about natural risks when we hold constant the consequences on one's own and other's payoffs. We also find evidence for heterogeneity in behavior across countries. Future research will explore cross-country differences in detail by including more countries in a given region.

Our results accord with recent findings in social psychology. Work by Jonathan J. Koehler and Andrew Gershoff (2003) suggests that people are deeply concerned about betrayal. Their recent survey on criminal and product safety betrayals found that subjects felt worse and assigned larger (hypothetical) punishments to intentional betrayals than to accidental non-fulfillments that have the same payoff consequences. Intentional betrayals violate a duty or break a promise, which produces a second source of utility loss to the principal. Recent findings in neuroscience provide complementary evidence for betrayal aversion. Michael Kosfeld, Markus Heinrichs, Paul J. Zak, Urs Fischbacher and Fehr (2005) employed the neuropeptide oxytocin, which has been shown to promote

prosocial behavior in animals. They found that humans given oxytocin took social risks more readily, but not natural risks, and concluded that the substance decreased agents' "exploitation aversion," a sister concept to betrayal aversion.

Our conclusions are based on the observed differences in MAPs between the trust game and the risky dictator game. One might argue that in addition to (or in place of) betrayal cost and traditional arguments, other elements could enter a principal's utility function. For example, the controllability of risk has been identified as an important determinant of the perception and the acceptability of natural risks (e.g., Paul Slovic 2000). The literature on controllability in risk taking does not focus, however, on risks due to the choices of another human. Thus, it does not tell us whether a principal perceives social risks as less controllable than natural risks. Arguments could be made either way.

Be you Shamus or Shakespeare, betrayal is a central theme of human behavior. Whether in the modern era or the ancient world, agents at times betray their principals. The executives of Enron and Tyco betrayed their shareholders, and Cassius betrayed Caesar. The implications of our strong findings on betrayal aversion are that shareholders would prefer a 1% chance of losing half their value due to a natural catastrophe than an equivalent chance and loss due to the malfeasance of corporate leaders; similarly, that political leaders would rather risk a 1% chance of being killed by accident than by a subordinate. Betrayal costs are real and significant, and thus require attention in our understanding of decision-making.

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[1] Subsequent theoretical and empirical work reinforces the importance people assign to the source of the outcomes, not merely their payoffs. See, e.g., Sally Blount (1995), Kevin A. McCabe, Mary L. Rigdon and Vernon L. Smith (2003), Martin Dufwenberg and Georg Kirchsteiger (2004), and Armin Falk and Urs Fischbacher (2005).

[2] Using a different approach, which did not control for payoffs to another person, Catherine C. Eckel and Rick K. Wilson (2004) found that people's willingness to take risk in a standard risky choice task was hardly related to their willingness to trust another person. See also a previous paper (2004) by two of the authors, which starts addressing some these issues in a U.S. context, and a recent working paper by three of the authors (2005). The authors' papers are not cited to preserve anonymity.

[3] The "dictator" component of the name comes because the principal gets to dictate which payoff branch is chosen, much like in the standard dictator game (Daniel Kahneman, Jack Knetsch and Richard Thaler 1986). The "risky" component comes because in contrast to the standard game, there is a chance node on one branch.

[4] In practice, the value of p* was written on a slip hidden in an envelope visibly posted to the blackboard.

[5] It is strictly dominant if people assign positive probability to values of p* in the immediate neighborhood of their MAP. Our procedure is related to the Becker-DeGroot-Marshak elicitation procedure, but unlike it, we do not generate p* randomly from a uniform distribution.

[6] All significance values are for two-tailed tests, though arguably they should be one-tailed for betrayal aversion and risk aversion, since we predict a specific direction.

[7] Our gender results are compatible with other experimental studies on risk-taking and trust where women have been found to be more risk averse and less likely to trust strangers than men (e.g., Edward L. Glaeser, David I. Laibson, Jose A. Scheinkman and Christine L. Soutter 2000, Nancy Buchan, Rachel Croson and Sara Solnick 2003, and for overviews, Croson and Uri Gneezy 2004 and Eckel and Philip Grossman, forthcoming). For a discussion of cross-cultural differences in attitudes to risk, see, e.g., Elke U. Weber and Christopher K. Hsee (2000), and in willingness to trust, e.g., Croson and Buchan (1999) and our working paper (2005).

Table 1: Payoff table for the trust game

		Agent	
		High	Low
Principal	Sure	10 ; 10	10 ; 10
	Trust	15 ; 15	8 ; 22

Table 2: Preference phenomena: Betrayal aversion, social preferences and risk aversion

	Betrayal aversion $\overline{MAP}_{TG} - \overline{MAP}_{RDG}$	**Social preferences** $\overline{MAP}_{DP} - \overline{MAP}_{RDG}$	**Risk aversion** $\overline{MAP}_{DP} - p'$
All	0.17	0.11	0.23
Women	0.19	0.12	0.27
Men	0.12	0.03	0.16
Brazil	0.08	0.04	0.18
Switzerland	0.11	0.10	0.21
UAE	0.33	0.16	0.35
USA	0.22	0.05	0.08

Table 3: Significance of betrayal aversion, social preferences and risk aversion, by gender and country, based on rank order tests.

	Betrayal aversion		**Social preferences**		**Risk aversion**	
	Women	**Men**	**Women**	**Men**	**Women**	**Men**
Brazil z	0.64	0.74	0.57	0.10	1.48	1.93*
Switzerland z	0.86	1.98*	0.41	1.17	2.69**	2.06*
UAE z	3.66**	3.07**	2.33*	1.04	5.84**	2.89**
United States z	2.32*	2.93**	- 0.29	1.78	2.37*	0.00
Aggregate z	5.73**		2.51**		6.81**	

* significant at 5%; ** significant at 1%.

Table 4: Determinants of minimal acceptable probabilities (MAPs)

	MAPs (1)	MAPs (2)	MAPs (3)	MAPs (4)	MAPs (5)
Trust Game	0.171**	0.179**	0.167**	0.132**	0.124**
	(0.034)	(0.033)	(0.045)	(0.037)	(0.047)
Decision Problem	0.111**	0.080*	0.074	0.054	0.050
	(0.035)	(0.033)	(0.047)	(0.040)	(0.051)
Women		0.056*	0.042	0.055*	0.044
		(0.027)	(0.048)	(0.027)	(0.048)
Brazil		0.037	0.036	0.040	0.040
		(0.037)	(0.037)	(0.037)	(0.037)
Switzerland		0.045	0.046	0.045	0.046
		(0.041)	(0.041)	(0.041)	(0.041)
UAE		0.222**	0.222**	0.125*	0.126*
		(0.037)	(0.037)	(0.058)	(0.058)
Trust Game x Women			0.027		0.019
			(0.066)		(0.065)
Decision Prob. x Women			0.013		0.010
			(0.066)		(0.066)
Trust Game x UAE				0.197*	0.196*
				(0.076)	(0.077)
Decision Problem x UAE				0.097	0.097
				(0.071)	(0.071)
Constant	0.409**	0.305**	0.312**	0.331**	0.335**
	(0.025)	(0.035)	(0.040)	(0.037)	(0.042)
Observations	376	374	374	374	374
R-squared	0.06	0.18	0.18	0.19	0.19

Standard errors in parentheses , * significant at 5%; ** significant at 1%.

Appendix

Table A.1: MAPs in three decision situations

	Trust Game		Risky Dictator Game		Decision Problem	
All						
Mean	**0.58**		**0.41**		**0.52**	
Median	0.60		0.39		0.50	
N	[133]		[115]		[128]	
Women						
Mean	**0.63**		**0.44**		**0.56**	
Median	0.70		0.48		0.6	
N	[55]		[55]		[69]	
Men						
Mean	**0.54**		**0.42**		**0.45**	
Median	0.55		0.34		0.45	
N	[78]		[60]		[59]	
Brazil (p*=0.35)						
Mean	**0.51**		**0.43**		**0.47**	
Median	0.50		0.38		0.49	
N	[49]		[32]		[30]	
SWI (p*=0.28)						
Mean	**0.51**		**0.40**		**0.50**	
Median	0.55		0.42		0.50	
N	[25]		[24]		[22]	
UAE (p*=0.32)						
Mean	**0.81**		**0.48**		**0.64**	
Median	0.80		0.48		0.70	
N	[28]		[30]		[51]	
USA (p*=0.29)						
Mean	**0.54**		**0.32**		**0.37**	
Median	0.5		0.29		0.3	
N	[31]		[29]		[25]	
	Women	Men	Women	Men	Women	Men
Brazil						
Mean	**0.51**	**0.51**	**0.43**	**0.44**	**0.50**	**0.43**
N	[27]	[22]	[15]	[16]	[19]	[11]
Switzerland						
Mean	**0.62**	**0.46**	**0.48**	**0.32**	**0.52**	**0.45**
N	[7]	[18]	[11]	[13]	[8]	[14]
UAE						
Mean	**0.86**	**0.77**	**0.46**	**0.51**	**0.66**	**0.61**
N	[14]	[14]	[15]	[15]	[31]	[20]
United States						
Mean	**0.61**	**0.50**	**0.38**	**0.28**	**0.39**	**0.36**
N	[12]	[19]	[13]	[16]	[11]	[14]