



Supplementary Materials for

On the psychology of poverty

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Literature review search strategy

In order to identify causal studies of the effect of economic interventions on mental well-being, we conducted a comprehensive literature search, using the electronic databases IDEAS/RePeC, PubMed, and Social Science Research Network. Terms used to capture studies concerned with psychological outcomes were “mental health”, “psychological”, “neurobiological”, “well-being”, “stress”, “sadness”, “happiness”, “affect”, “emotion”, “depression”, and “cortisol”. We used the terms “income”, “poverty”, “poor”, “wealth”, “rich”, and “development” to capture studies concerning economic status, and “randomized trial”, “experiment”, “lottery”, “shock”, “exogenous”, “regression discontinuity”, and “instrumental variable” to capture studies with a causal interpretation.

We conducted a second literature search to identify studies of the relationship between affect and economic choice. As in the above search, there were no search restrictions on language, date, journal, or publication status. We conducted the search on the online databases IDEAS/RePeC, PubMed, and Social Science Research Network. The search terms used to find articles on affective state were “affect”, “happiness”, “sadness”, “stress”, “power”, “well-being”, “emotion”, “depression”, and “cortisol”, while the search terms used to identify studies related to choice were “economic choice”, “risk”, “rational”, “intertemporal”, “time preference”, “discounting”, “decision making”, “social preference”, and “loss aversion”. Members of the Economic Science Association mailing list suggested additional papers.

To assess relevance in both literature searches, we initially screened papers by title. Papers with plausibly applicable titles were further screened by their abstracts; we included them after reading them in full. When multiple versions of a paper were available, we selected the published version, or most recent working paper version in the case of unpublished manuscripts. After compiling the initial list from these sources, we asked scholars in the field if they had personally performed any research on the topic. We also asked them if they were aware of any relevant research that was not already included on the list. Finally, we examined citations from the identified papers to check for any relevant research that the other components of the literature searches might have missed. All papers identified in this fashion are listed below.

Factor structure of psychological variables

The literature we summarize in this paper refers to a number of different psychological constructs, such as happiness, sadness, stress, and depression. How are these constructs related to each other? In our view, to a first approximation, many of these constructs can be viewed on a single underlying psychological dimension, i.e. positive vs. negative affect. To show this, we conducted factor analysis on two datasets to ask whether the measures of psychological well-being measure similar constructs. The first dataset, from (32), contains data from the CESD depression questionnaire, a custom worries scale, Cohen's Perceived Stress Scale, the Happiness, Life Satisfaction, and Trust questions from the World Values Survey, a Locus of Control Index composed of the Rotter score and the World Value Survey question on locus of control, Scheier's Optimism Scale, and Rosenberg's Self-esteem Scale from

a large sample of Kenyan respondents. The second dataset, from (90), contains data from the happiness, life satisfaction, trust, and locus of control questions from the World Values Survey in 43 countries around the world. In **Table S1**, we show pairwise correlations between the variables; in **Fig. S1**, we show scree plots of the eigenvalues of the factors obtained in the factor analysis. We find significant and high correlations among many of the psychological variables in both datasets, suggesting that they are closely related. In addition, the first factor in the factor analysis has an eigenvalue of 0.80; i.e., an overwhelming proportion of the variance in the data can be explained by a single factor. Together, these results suggest that the different survey questions about psychological well-being are closely related.

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(A)

	Depression (CESD)	Worries	Stress (Cohen)	Happiness (WVS)	Life satisfaction (WVS)	Trust (WVS)	Locus of control	Optimism (Scheier)	Self-esteem (Rosenberg)
Depression (CESD)	1.00								
Worries	0.35 (0.00)	1.00							
Stress (Cohen)	0.29 (0.00)	0.36 (0.00)	1.00						
Happiness (WVS)	-0.16 (0.00)	0.01 (0.81)	-0.03 (0.32)	1.00					
Life satisfaction (WVS)	-0.18 (0.00)	-0.23 (0.00)	-0.13 (0.00)	0.13 (0.00)	1.00				
Trust (WVS)	0.05 (0.07)	0.07 (0.01)	-0.02 (0.50)	0.06 (0.02)	-0.07 (0.00)	1.00			
Locus of control	0.08 (0.00)	0.07 (0.00)	-0.00 (0.97)	0.03 (0.21)	-0.04 (0.09)	-0.02 (0.50)	1.00		
Optimism (Scheier)	-0.22 (0.00)	-0.16 (0.00)	-0.15 (0.00)	0.12 (0.00)	0.14 (0.00)	-0.02 (0.39)	-0.04 (0.16)	1.00	
Self-esteem (Rosenberg)	0.03 (0.19)	0.12 (0.00)	0.07 (0.00)	-0.02 (0.36)	-0.00 (0.84)	0.05 (0.04)	0.01 (0.72)	-0.01 (0.65)	1.00

(B)

	Happiness	Life-satisfaction	Locus of control	Trust
Happiness	1.00			
Life-satisfaction	0.50 (0.00)	1.00		
Locus of control	0.11 (0.00)	0.19 (0.00)	1.00	
Trust	0.09 (0.00)	0.08 (0.00)	0.01 (0.00)	1.00

Table S1. Correlation matrix (p-values in parentheses) of the psychological variables in two datasets: **(A)** shows the correlations between the psychological outcome variables in the baseline dataset used in (32). They are: CESD depression score (91), Cohen’s Perceived Stress Scale (92), a custom worries scale, the happiness, life satisfaction, trust, and locus of control questions from the World Values Survey, Scheier’s Optimism Scale (93), and Rosenberg’s Self-Esteem Scale (94). Similarly, **(B)** shows the correlations between the World Value Survey questions on happiness, life satisfaction, trust, and locus of control questions in the original World Value Survey dataset ($N = 59,055$, 45 countries). In both cases, many psychological variables correlate highly with each other, suggesting that the different survey questions about psychological well-being may tap into similar underlying constructs.

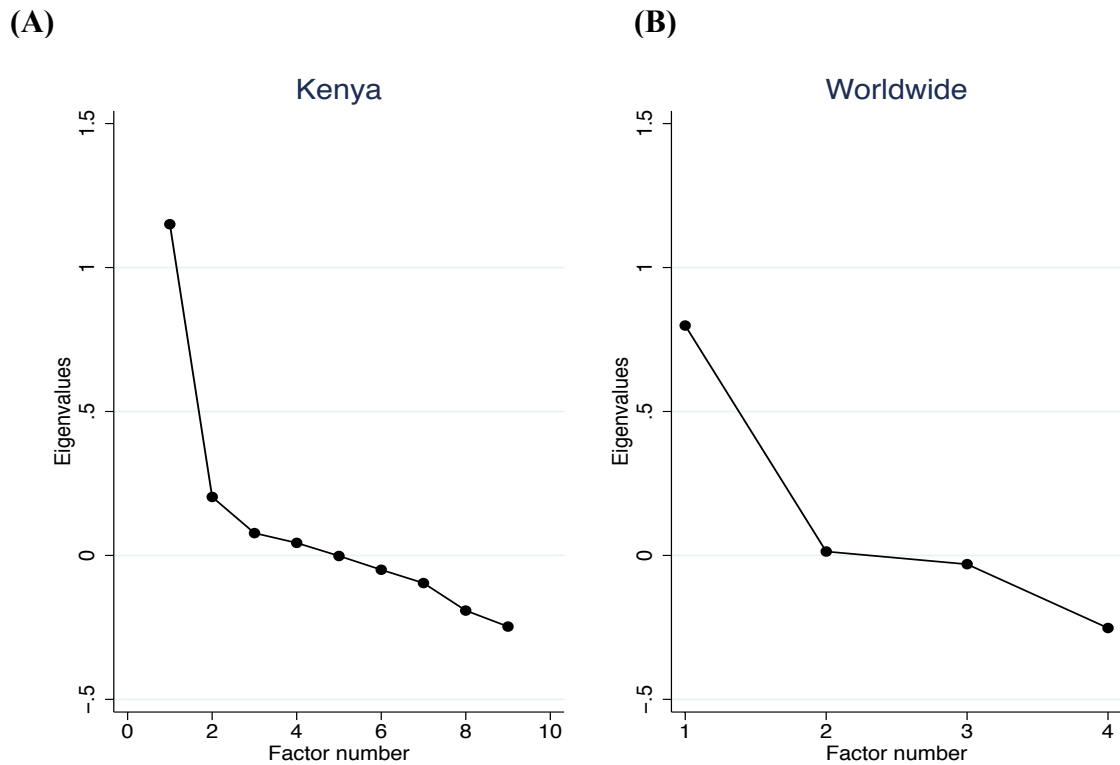


Fig. S1. Scree plots of the eigenvalues of the factors obtained by factor analysis on the psychological variables in two datasets: **(A)** shows the eigenvalues for the first 9 factors obtained through factor analysis on the psychological outcome variables (CESD depression score, Cohen’s Perceived Stress Scale, a custom worries scale, the WVS happiness, life satisfaction, trust, and locus of control questions, Scheier’s Optimism Scale, and Rosenberg’s Self-Esteem Scale) in the baseline dataset used in (32). The first factor has an eigenvalue of 1.15, the second factor an eigenvalue of 0.20 ($N = 1569$). Similarly, **(B)** shows eigenvalues for the first three factors obtained through factor analysis on the World Value Survey dataset in (90) for the happiness, life satisfaction, trust, and locus of control questions ($N = 59,055$, 45 countries). The first factor has an eigenvalue of 0.80, the second factor has an eigenvalue of 0.01. Thus, a single factor in both data sets accurately explains a large proportion of the variance in psychological well-being, suggesting that the different survey questions about psychological well-being may tap into similar underlying constructs.

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67. In our systematic review, we also identified two studies that found no effect of affect or stress on time preferences. One study (87) exposed subjects to an easy or difficult test, thus inducing feelings of relative success or failure, and then measured time-discounting. No effect of test difficulty on time-discounting was found. However, in this study, the time-preference task was administered at the end of a battery of behavioral tests; it is possible that the negative affect induction had already worn off by then. Alternatively, it is possible that the induction of mood through this manipulation is less powerful than movie clips or that subtly different types of affect may differentially affect time preference. Another study used the TSST to induce stress, then measured temporal discounting and found no effect (88). A potential explanation for this finding is that the

- TSST induces acute stress (i.e., concurrent glucocorticoid and noradrenergic activity), whereas hydrocortisone administration lacks some of the components of acute stress (e.g., noradrenergic coactivation). The lack of an effect of the TSST on discounting could thus suggest that acute stress does not affect discounting, whereas chronic stress may. This account is superficially consistent with a recent finding (89) showing that the combined administration of hydrocortisone and yohimbine, an α 2-adrenoceptor antagonist, has different behavioral consequences than hydrocortisone in isolation.
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Literature review on the impact of poverty on affect and stress

[Chronological order. “(in)consistent” indicates (in)consistency with the hypothesis that increases in poverty lead to negative affect and stress, while decreases lead to positive affect and reductions in stress.]

References	Type of intervention	Outcome variable	Result	Identification strategy
Arnetz et al. (1991) B. B. Arnetz, et al., Neuroendocrine and immunologic effects of unemployment and job insecurity. <i>Psychother. Psychosom.</i> 55 , 76-80 (1991).	Job loss	Cortisol	Significantly elevated cortisol levels among workers who were laid off. “consistent”	Natural experiment
Costello et al. (2003) E.J. Costello, S.N. Compton, G. Kessler, A. Angold, Relationships between poverty and psychopathology: a natural experiment. <i>J. Amer. Med. Assoc.</i> 290 (15), 2023-2029 (2003).	Casino payouts to Native American populations	Mental disorders	Fewer symptoms of conduct and oppositional defiant disorders; no effect on anxiety and depression symptoms. “mixed”	Natural experiment
Kling et al. (2007) J.R. Kling, J.B. Liebman, L.F. Katz, Experimental analysis of neighborhood effects. <i>Econometrica</i> 75 (1), 83-119 (2007).	Moving to Opportunity	Several mental health measures, 4-7 years after intervention	Moving to Opportunity reduced distress (K6), and increased calm and peaceful feelings; no effect on probability of a Major Depressive Episode “mixed”	RCT

References	Type of intervention	Outcome variable	Result	Identification strategy
Gardner & Oswald (2007) J. Gardner, A. J. Oswald, Money and mental wellbeing: A longitudinal study of medium-sized lottery wins. <i>J. Health Econ.</i> 26 (1), 49-60 (2007).	Lottery payouts	Mental strain as measured by GHQ	Increase in GHQ scores (1.4 points after 2 years, compared to non-winners or small winners). “consistent”	Natural experiment
Paxson & Schady (2007) C. Paxson, N. Schady, Does money matter? The effects of cash transfers on child health and development in rural Ecuador. <i>World Bank Working Paper</i> (2007).	Cash transfer	Depression	No effect. “inconsistent”	RCT
Kuhn et al. (2008) P.J. Kuhn, P. Kooreman, A.R. Soetevent, A. Kapteyn, The own and social effects of an unexpected income shock: evidence from the Dutch Postcode Lottery. <i>NBER Working Paper</i> No. w14035 (2008).	Lottery payouts	Happiness	No effect 6 months later. “inconsistent”	Natural experiment
Apouey & Clark (2009) B.H. Apouey, A. Clark, Winning big but feeling no better? The effect of lottery prizes on physical and mental health. <i>IZA Discussion Paper</i> 4730, (2009).	Lottery payouts	Score on general health questionnaire	Improved general mental health. “consistent”	Natural experiment

References	Type of intervention	Outcome variable	Result	Identification strategy
Ozer et al. (2009) E.J. Ozer, L. Fernald, J.G. Manley, P.J. Gertler, Effects of a conditional cash transfer program on children's behavior problems. <i>Pediatrics</i> 123 (4), e630-e637 (2009).	CCT (Oportunidades)	Aggression; anxiety; depression	Decreased aggression in children, no effects on anxiety and depression “mixed”	RCT but compares participants to non-participants.
Ssewamala et al. (2009) F.M. Ssewamala, C.-K Han, T.B. Neilands, Asset ownership and health and mental health functioning among AIDS-orphaned adolescents: findings from a randomized clinical trial in rural Uganda. <i>Soc. Sci. Med.</i> 69 (2), 191–198 (2009).	Economic empowerment intervention (matched savings accounts, mentorship, financial management workshops)	Self-esteem	Increased self-esteem. “consistent”	RCT
Fernald & Gunnar (2009) L. Fernald, M.R. Gunnar, Effects of a poverty-alleviation intervention on salivary cortisol in very low-income children. <i>Soc. Sci. Med.</i> 68 (12), 2180-2189 (2009).	CCT (Oportunidades)	Cortisol	Reduction in cortisol in children “consistent”	RCT but compares participants to non-participants.
Case (2010) A. Case, Does money protect health status? Evidence from South African pensions. <i>NBER Working Paper</i> No. w8495 (2010).	Pension payments	Self-reported mental health	Improved mental health. “consistent”	Natural experiment

References	Type of intervention	Outcome variable	Result	Identification strategy
<p>Jagannathan et al. (2010) R. Jagannathan, M.J. Camasso, U. Sambamoorthi, Experimental evidence of welfare reform impact on clinical anxiety and depression levels among poor women. <i>Soc. Sci. Med.</i> 71(1), 152-160 (2010).</p>	Welfare reform	Depression; anxiety	Increased depression, but reduced anxiety; heterogeneous treatment effect. “mixed”	RCT
<p>Rosero & Oosterbeek (2011) J. Rosero, H. Oosterbeek, Trade-offs between different early childhood interventions: evidence from Ecuador. <i>Tinbergen Institute Discussion Paper</i> 11-102/3 (2011).</p>	Home visits	Mother's psychological well-being	Improved psychological well-being. “consistent”	RDD (discontinuity in the funding scheme of home visits and child care centers)
<p>Ozer et al. (2011) E.J. Ozer, L. Fernald, A. Weber, E.P. Flynn, T.J. VanderWeele, Does Alleviating Poverty Affect Mothers' Depressive Symptoms? A Quasi-Experimental Investigation of Mexico's Oportunidades Programme. <i>Int. J. Epidemiol.</i> 40(6), 1565–76 (2011).</p>	CCT (Oportunidades)	Depression	Lower depression (and behavioral problems inventory, BPI). “consistent”	RCT but compares participants to non-participants.

References	Type of intervention	Outcome variable	Result	Identification strategy
<p>Devoto et al. (2011) F. Devoto, E. Duflo, P. Dupas, W. Pariente, V. Pons, Happiness on tap: piped water adoption in urban Morocco. <i>NBER Working Paper</i> No. w16933 (2011).</p>	Access to running water	Happiness	Increased happiness. “consistent”	RCT
<p>Forget (2011) E.L. Forget, The town with no poverty: The health effects of a Canadian guaranteed annual income field experiment. <i>Can. Public Pol.</i> 37(3), 283-305 (2011).</p>	Guaranteed annual income	Hospitalization for mental health problems	Decreased hospitalization for mental health problems. “consistent”	Natural experiment; propensity score matching
<p>Tseng & Petrie (2012) F.M. Tseng, D. Petrie, Handling the endogeneity of income to health using a field experiment in Taiwan. <i>Dundee Discussion Papers in Economics</i> 263, (2012).</p>	Pensions	Depression; life satisfaction	Decrease in depression, no effects on life satisfaction. “mixed”	Natural experiment (cash injection for senior farmers), DiD

References	Type of intervention	Outcome variable	Result	Identification strategy
<p>Finkelstein <i>et al.</i> (2012) A. Finkelstein, <i>et al.</i>, The Oregon health insurance experiment: evidence from the first year. <i>The Q. J. Econ.</i> 127(3), 1057-1106 (2012).</p>	Insurance lottery	Self-reported mental health	Insured were more likely to report good mental health (30 days), and less likely to screen positive for depression. They also displayed large increases in happiness. “consistent”	RCT
<p>Ssewamala <i>et al.</i> (2012) F. M. Ssewamala, T. B. Neilands, J. Waldfogel, L. Ismayilova, The impact of a comprehensive microfinance intervention on depression levels of AIDS-orphaned children in Uganda. <i>J. Adolescent Health</i> 50(4), 356-352 (2012).</p>	Economic empowerment intervention (matched savings accounts, mentorship, financial management workshops)	Depression	Decreased depression. “consistent”	RCT

References	Type of intervention	Outcome variable	Result	Identification strategy
<p>Mendolia (2013) S. Mendolia, The impact of job loss on family mental health. <i>School of Economics University of New South Wales Working Paper</i> (2013).</p>	Job loss	Family mental health	Poorer mental health in families exposed to job loss. “consistent”	Natural experiment
<p>Ludwig et al. (2013) J. Ludwig, et al., Long-term neighborhood effects on low-income families: evidence from Moving to Opportunity. <i>NBER Working Paper</i> No. w18772 (2013).</p>	Moving to Opportunity	Distress, happiness; 10-15 years after intervention	Moving to Opportunity reduced distress (K6), and increased happiness. Large effects. Significant effects especially among women and young people 10-15 years later. “consistent”	RCT
<p>Cesarini et al. (2013) D. Cesarini, E. Lindqvist, R. Östling, B. Wallace, Estimating the causal impact of wealth on health: Evidence from the Swedish lottery players. <i>New York University Working Paper</i> (2013).</p>	Lottery payouts	Anxiolytics consumption	Decrease in consumption of anxiolytics. “consistent”	Natural experiment

References	Type of intervention	Outcome variable	Result	Identification strategy
<p>Haushofer & Shapiro (2013) J. Haushofer, J. Shapiro, Household response to income changes: Evidence from an unconditional cash transfer program in Kenya. <i>Massachusetts Institute of Technology Working Paper</i> (2013).</p>	Cash transfer	Psychological well-being; cortisol	Increased psychological well-being; cortisol only reduced with large transfers. “consistent”	RCT
<p>Chemin et al. (2013) M. Chemin, J. de Laat, J. Haushofer, Poverty and stress: rainfall shocks increase levels of the stress hormone cortisol. <i>Massachusetts Institute of Technology Working Paper</i> (2013).</p>	Income shock	Psychological well-being; cortisol	Elevated cortisol levels and decreased psychological well-being in farmers hit with a negative income shock. “consistent”	Natural experiment
<p>Baird et al. (2013) S. Baird, J. de Hoop, B. Özler, Income Shocks and adolescent mental health. <i>J. Hum. Resour.</i> 48(2), 370–403 (2013).</p>	Cash transfer	Distress	Reduced distress among adolescent girls, though effects were smaller when additional transfers were conditional on them attending school. “consistent”	RCT

Literature review on the impact of affect and stress on risk taking

[Chronological order. “(in)consistent” indicates (in)consistency with hypothesis that fear and stress decrease risk taking, while reductions of fear and stress increase it]

References	Affect/Stress induction	Outcome variable	Result	Induction method
Raghunathan & Pham (1999) R. Raghunathan, M.T. Pham, All negative moods are not equal: motivational influences on anxiety and sadness on decision making. <i>Organ. Behav. Hum. Dec.</i> 79 (1), 56-77 (1999).	Anxiety, sadness	Risk aversion	Anxious subjects show higher risk aversion. “consistent”	Reading task
Lerner & Keltner, 2001 J.S. Lerner, D. Keltner, Fear, anger, and risk. <i>Journal of Personality and Social Psychology</i> , 81 (1), 146-159 (2001).	Fear, anger	Risk estimates	Fear increases pessimistic risk estimates. “consistent”	Describing situations that induce fear
Lerner et al., 2003 J.S. Lerner, R.M. Gonzalez, D.A. Small, B. Fischhoff, Effects of fear and anger on perceived risks of terrorism: A national field experiment. <i>Psychological Science</i> , 14 (2), 144-150 (2003).	Fear, anger	Risk estimates	Fear increases pessimistic risk estimates. “consistent”	Describing fear/anger/sadness induced by September 11 attacks

References	Affect/Stress induction	Outcome variable	Result	Induction method
<p>Mather et al. (2009) M. Mather, M. Gorlick, N. Lighthall, To brake or accelerate when the light turns yellow? Stress reduces older adults risk taking in a driving game. <i>Psychol. Sci.</i> 20(2), (2009).</p>	Stress	Risk aversion	Increases risk aversion. “consistent”	Cold pressor
<p>Porcelli & Delgado (2009) A.J. Porcelli, M.R. Delgado, Acute stress modulates risk taking in financial decision making. <i>Psychol. Sci.</i> 20(3), 278–283 (2009).</p>	Stress	Risk aversion	Higher risk aversion in gains domain, more risk seeking in loss domain. “consistent in gains domain”	Cold pressor
<p>Lighthall et al. (2009) N. Lighthall, M. Mather, M. Gorlick, Acute stress increases sex differences in risk seeking in the balloon analogue risk task. <i>PLoS One</i> 4(7), (2009).</p>	Stress	Risk aversion	Under stress, women take less risk, while men take more. However, the stress induction did not lead to higher cortisol in men. “consistent in women”	Cold pressor

References	Affect/Stress induction	Outcome variable	Result	Induction method
<p>Heilman et al. (2010) R. M. Heilman <i>et al.</i>, Emotion regulation and decision making under risk and uncertainty. <i>Emotion</i> 10(2), 257 (2010).</p>	Fear	Risk aversion	Risk aversion can be undone by assuaging the fear. “consistent”	Film
<p>Kugler et al. (2012) T. Kugler, T. Connolly, L.D. Ordóñez, Emotion, decision, and risk: betting on gambles versus betting on people. <i>J. Behav. Decis. Making</i> 25(2), 123-134 (2012).</p>	Fear	Risk aversion	Higher risk aversion in fear state. “consistent”	Writing task
<p>Conte et al. (2013) A. Conte, M.V. Levati, C. Nardi, The role of emotions on risk preferences: an experimental approach. <i>Jena Economic Research Papers</i> No. 2013-046 (2013).</p>	Fear (and sadness, joviality, anger)	Risk aversion	Fear leads to more risk seeking behavior. “inconsistent”	Film
<p>Cohn et al. (2013) A. Cohn, J. Engelmann, E. Fehr & M. Maréchal. Evidence for countercyclical risk aversion: an experiment with financial professionals. <i>UBS International Center of Economics in Society Working Paper</i> No. 004 (2013).</p>	Stress, fear	Risk aversion	Higher stress/fear subjects were more risk averse. “consistent”	High or low unpredictable electrical shocks

References	Affect/Stress induction	Outcome variable	Result	Induction method
Guiso et al. (2013) L. Guiso, P. Sapienza & L. Zingales. Time varying risk aversion. <i>NBER Working Paper</i> No. w19284 (2013).	Fear	Risk aversion	Higher fear subjects were more risk averse. “consistent”	Film
Kandasamy et al. (2013) N. Kandasamy et al., Cortisol shifts financial risk preferences. <i>P. Natl. Acad. Sci. USA</i> (2013).	Cortisol	Risk aversion	No effect on risk taking with acute cortisol, but decreased risk taking from chronic cortisol administration. “consistent”	Administered cortisol
Cingl & Cahlikova (2013) L. Cingl, J. Cahlikova, Risk preferences under acute stress. <i>IES Working Paper</i> No. 17/2013 (2013).	Stress	Risk aversion	Stressed subjects displayed higher risk aversion. “consistent”	Trier Social Stress Test

References	Affect/Stress induction	Outcome variable	Result	Induction method
<p>Drichoutis & Nayga (2013) A.C. Drichoutis, R.M. Nayga Jr., Eliciting risk and time preferences under induced mood states. <i>J. Behav. Exp. Econ.</i> 45, 18-27 (2013).</p>	Negative/positive mood states	Time and risk preference	Negative mood increased risk aversion while positive mood had no effect on risk taking. However, the results depend on whether risk takers are modelled as expected utility maximizers or as rank-dependent utility maximizers. “inconsistent”	Success/failure experience in an easy/hard test
<p>Engelmann et al. (2013) J. Engelmann et al., The neural circuitry of affect-induced distortions of trust. <i>University of Zurich Working Paper</i> (2013).</p>	Fear and stress	Social risk-taking of first movers in a trust game	Subjects anticipating aversive shocks show less trust in strangers in a trust game, i.e. they are less willing to accept socially constituted risks. “consistent”	Tactile stimulation
<p>Kim & Lee (2013) Y.-I. Kim, J. Lee, The Long-Run Impact of Traumatic Experience on Risk Aversion. <i>Sogang University Working Paper</i> (2013).</p>	Exposure to conflict	Risk preference	Exposure to conflict is associated with greater risk aversion. “consistent”	Korean War

References	Affect/Stress induction	Outcome variable	Result	Induction method
<p>Callen <i>et al.</i> (2013) M. Callen <i>et al.</i>, Violence and Risk Preference: Experimental Evidence from Afghanistan. UCSD Working Paper (2013).</p>	<p>Exposure to violence</p>	<p>Risk preference</p>	<p>Exposure to violence is associated with greater risk aversion. “consistent”</p>	<p>Afghanistan War</p>

Literature review on the impact of affect and stress on time discounting

[Chronological order. “(in)consistent” indicates (in)consistency with the hypothesis that negative affect and stress increase discounting, while positive affect and the absence of stress decrease it. Studies on self-control are included in this review due to its close relationship to time discounting.]

References	Affect/Stress induction	Outcome variable	Result	Induction method
Seeman & Schwarz (1974) G. Seeman, J.C. Schwarz, Affective state and preference for immediate versus delayed reward. <i>J. Res. Pers.</i> 7(4), 384-394 (1974).	Positive or negative mood	Discounting	More discounting after failure than after success “consistent”	Experience of success or failure
Fry (1975) P.S. Fry, Affect and resistance to temptation. <i>Dev. Psychol.</i> 11(4), 466-472 (1975).	Positive or negative mood	Self-control	Less self-control under negative than positive mood “consistent”	Thinking about positive vs. negative events
Moore et al. (1976) B. S. Moore, A. Clyburn and B. Underwood, The role of affect in delay of gratification. <i>Child Development</i> 47(1), 273-276 (1976).	Positive or negative mood	Discounting	More discounting under negative than positive mood “consistent”	Thinking about sad, neutral or happy events
Schwarz & Pollack (1977) J.C. Schwarz, P.R. Pollack, Affect and delay of gratification. <i>J. Res. Pers.</i> 11(2), 147-164 (1977).	Positive or negative mood	Discounting	More discounting under negative than positive mood “consistent”	Thinking about positive vs. negative events

References	Affect/Stress induction	Outcome variable	Result	Induction method
Fedorikhin & Patrick (2010) A. Fedorikhin, V.M. Patrick, Positive mood and resistance to temptation: the interfering influence of elevated arousal. <i>J. Consum. Res.</i> 37 (4), 698-711 (2010).	Positive mood	Self-control	Greater self-control under positive mood. “consistent”	Film
Ifcher & Zarghamee (2011) J. Ifcher, H. Zarghamee, Happiness and time preference: the effect of positive affect in a random-assignment experiment. <i>Am. Econ. Rev.</i> 101 (7), 3109–3129 (2011).	Happiness	Discounting	Happy subjects discount less. “consistent”	Film
Lerner et al. (2013) J.S. Lerner, Y. Li, E.U. Weber, <i>The financial costs of sadness. Psychol. Sci.</i> 24 (1), 72–79 (2013).	Sadness	Discounting	Sad subjects discounted more. “consistent”	Film
Cornelisse et al. (2013) S. Cornelisse, et al., Time-dependent effect of hydrocortisone administration on intertemporal choice. <i>SSRN Working Paper Series</i> (2013).	Cortisol	Discounting	Subjects administered cortisol discounted more. “consistent”	Administered cortisol

References	Affect/Stress induction	Outcome variable	Result	Induction method
Drichoutis & Nayga (2013) A.C. Drichoutis, R.M. Nayga Jr., Eliciting risk and time preferences under induced mood states. <i>J. Behav. Exp. Econ.</i> 45 , 18-27 (2013).	Negative/positive mood states	Time and risk preference	No effect on time discounting “inconsistent”	Success/failure experience in an easy/hard test
Haushofer et al. (2013) J. Haushofer, et al., No effects of psychosocial stress on intertemporal choice. <i>PloS one</i> 8 (11), e78597 (2013).	Stress	Discounting	No effect. “inconsistent”	Trier Social Stress Test
DeSteno et al. (2014) D. DeSteno et al., Gratitude: A Tool for Reducing Economic Impatience. <i>Psychological Science</i> , advance online publication, doi:10.1177/0956797614529979	Gratitude, happiness	Discounting	Gratitude decreases time discounting “consistent”	Describing situations that induce gratitude/happiness