

Appendix A: Table of publications included in each meta-analysis

Paper	<i>n</i>	SV effects	Reward SV effects	Penalty SV effects	Time Period	Task stage
(Abler et al. 2006)	11	Pos	Pos	.	.	.
(Acevedo et al. 2012)	17	Pos & Neg	Pos & Neg	.	Receipt	Primary
(Adcock et al. 2006)	12	Pos	Pos	.	.	.
(Akitsuki et al. 2003)	36	Pos	.	.	Receipt	Money
(Albrecht et al. 2011)	28	Pos	Pos	.	Decision	.
(Aron et al. 2004)	15	Neg	Neg	.	.	.
(Ballard and Knutson 2009)	16	Pos	Pos	.	Decision	.
(Barrós-Loscertales et al. 2010)	45	Pos & Neg	Pos	Neg	Receipt	Primary
(Beaver et al. 2006)	12	Pos & Neg	Pos	Neg	Receipt	.
(Berns et al. 2001)	25	Pos	.	.	Receipt	Primary
(Bjork and Hommer 2007)	20	Pos	Pos	.	Receipt	Money
(Bjork et al. 2004)	12	Pos & Neg	Pos	Pos & Neg	Receipt	Money
(Bjork et al. 2010)	24	Pos & Neg	Pos	Neg	Receipt	Money
(Blair et al. 2006)	21	Pos & Neg	.	.	Decision	.
(Bray et al. 2010)	44	Pos	Pos	.	Receipt	Money
(Brooks et al. 2011)	24	Pos	.	.	Receipt	.
(Camara et al. 2009)	17	Pos	.	.	Receipt	Money
(Camara et al. 2010)	35	Pos	.	.	Receipt	Money
(Campbell-Meiklejohn et al. 2008)	23	Pos	.	.	Receipt	Money
(Campbell-Meiklejohn et al. 2010)	28	Pos	Pos	.	Receipt	.
(Caria et al. 2011)	14	Pos	Pos	.	Receipt	Primary
(Carlson et al. 2011)	42	Pos	.	.	Receipt	Money
(Carretié et al. 2009)	18	Pos & Neg	Pos	Neg	Receipt	Primary
(Chambers et al. 2009)	7	Pos	.	.	Receipt	Primary
(Chapin et al. 2010)	21	Pos & Neg	.	.	Receipt	Primary
(Christakou et al. 2009)	19	Pos & Neg	.	.	Receipt	Money
(Chua et al. 2009)	12	Pos	.	.	Receipt	Money
(Cikara et al. 2011)	18	Pos & Neg	Pos	Neg	Receipt	.
(Clark et al. 2009)	15	Pos	Pos	.	Receipt	Money
(Cloutier et al. 2008)	48	Pos & Neg	Pos & Neg	.	Receipt	Primary
(Cohen et al. 2005)	17	Pos	Pos	.	Receipt	Money
(Cohen et al. 2010)	11	Pos	Pos	.	Receipt	Money
(Cohen et al. 2008)	15	Pos & Neg	.	.	Receipt	Money
(Colibazzi et al. 2010)	10	Neg	.	.	.	.
(Cooper and Knutson 2008)	12	Pos	.	.	.	.
(Cooper et al. 2009)	12	Pos & Neg	Pos	Neg	.	.
(Costa et al. 2010)	29	Pos & Neg	Pos	Neg	Receipt	.
(Crowley et al. 2010)	20	Pos & Neg	Pos	Neg	Receipt	Money
(Davey et al. 2010)	19	Pos	Pos	.	Receipt	.
(Daw et al. 2006)	14	Pos	Pos	.	Decision	.
(de Greck et al. 2011)	20	Pos	Pos	.	.	.
(Delgado et al. 2000)	9	Pos	.	.	Receipt	Money
(Delgado et al. 2003)	18	Pos & Neg	.	.	Receipt	Money
(Delgado, Miller et al. 2005)	17	Pos	.	.	Decision	.
(Delgado et al. 2008)	17	Pos	.	.	Receipt	Money

Paper	<i>n</i>	SV effects	Reward SV effects	Penalty SV effects	Time Period	Task stage
(Delgado, Frank et al. 2005)	12	Pos & Neg	Pos & Neg	.	Receipt	Money
(Dreher et al. 2008)	20	Pos	Pos	.	Receipt	Money
(Dreher et al. 2006)	31	Pos	Pos	.	.	.
(Elliott et al. 2004)	12	Pos	Pos	.	Receipt	Money
(Elliott et al. 2003)	12	Pos	Pos	.	Receipt	Money
(Engelmann et al. 2009)	20	Pos	.	.	.	.
(Erk et al. 2002)	12	Pos & Neg	Pos & Neg	.	Receipt	.
(Ernst et al. 2005)	30	Pos	Pos	Pos	Receipt	Money
(Figuee et al. 2011)	19	Pos	Pos	.	Receipt	Money
(FitzGerald et al. 2010)	17	Pos	Pos	.	Decision	.
(Fliebsbach et al. 2007)	33	Pos	Pos	.	Receipt	Money
(Frank et al. 2010)	6	Pos	.	.	Receipt	.
(Franklin and Adams 2011)	19	Pos	.	.	Receipt	.
(Fujiwara et al. 2009)	16	Pos & Neg	Pos	Neg	Receipt	Money
(Galvan et al. 2005)	12	Pos	Pos	.	.	.
(Gianaros et al. 2011)	76	Pos & Neg	Pos	Neg	Receipt	Money
(Gilman et al. 2012)	20	Pos & Neg	Pos	Neg	Receipt	Money
(Glocker et al. 2009)	16	Pos	.	.	Receipt	Primary
(Goldstone et al. 2009)	20	Pos	Pos	.	Receipt	.
(Gottfried et al. 2003)	13	Pos	Pos	.	Receipt	Primary
(Grabenhorst et al. 2010)	14	Pos & Neg	Pos & Neg	.	Receipt	Primary
(Grabenhorst and Rolls 2009)	12	Pos	.	.	Receipt	Primary
(Gradin et al. 2011)	20	Pos & Neg	Pos & Neg	.	Decision & Receipt	Primary
(Greening et al. 2011)	21	Pos & Neg	.	.	Receipt	Money
(Haase et al. 2011)	21	Pos & Neg	.	.	Receipt	Primary
(Hare et al. 2011)	19	Pos	Pos	.	Decision	.
(Harsay et al. 2011)	14	Pos	Pos	.	.	.
(Haruno et al. 2004)	8	Pos	Pos	.	Receipt	Money
(Holroyd et al. 2004)	11	Pos & Neg	.	.	Receipt	Money
(Hooker et al. 2008)	12	Pos & Neg	Pos	Neg	Receipt	.
(Howard-Jones et al. 2010)	16	Pos	.	Pos	Receipt	Money
(Hsu et al. 2005)	16	Pos	Pos	.	.	.
(Huettel 2006)	23	Pos	Pos	.	Receipt	Money
(Iyer et al. 2010)	17	Pos & Neg	.	.	Receipt	Money
(Izuma et al. 2008)	19	Pos	Pos	.	Receipt	Money
(Jacobson et al. 2010)	19	Pos	Pos	.	Receipt	Primary
(Kable and Glimcher 2007)	10	Pos	Pos	.	Decision	.
(Kable and Glimcher 2010)	22	Pos	Pos	.	Decision	.
(Kahnt et al. 2011)	20	Pos	.	.	Receipt	.
(Kim et al. 2007)	14	Pos	.	.	Decision	.
(Kim et al. 2011)	18	Pos & Neg	.	.	Receipt	Money & Primary
(Kim et al. 2006)	16	Pos	.	.	Decision & Receipt	Money
(King-Casas et al. 2005)	48	Pos	.	.	Receipt	Money
(Kirsch et al. 2003)	27	Pos	Pos	.	.	.
(Knutson, Adams et al. 2001)	8	Pos & Neg	Pos	Neg	.	.
(Knutson, Fong et al. 2001)	9	Pos	Pos	.	Receipt	Money
(Knutson et al. 2003)	12	Pos & Neg	Pos	Neg	Receipt	Money

Paper	<i>n</i>	SV effects	Reward SV effects	Penalty SV effects	Time Period	Task stage
(Knutson et al. 2004)	8	Pos	Pos	Pos	Receipt	Money
(Knutson et al. 2007)	12	Pos	Pos	.	Decision	.
(Knutson, Bhanji et al. 2008)	12	Pos & Neg	Pos	Neg	Receipt	Money
(Knutson, Wimmer et al. 2008)	15	Pos	.	.	Receipt	Money
(Koelsch et al. 2006)	11	Pos & Neg	.	.	Receipt	Primary
(Kosson et al. 2006)	19	Pos	.	.	Receipt	Money
(Krebs et al. 2012)	11	Pos & Neg	Pos & Neg	.	.	.
(Krebs et al. 2011)	19	Pos	Pos	.	.	.
(Kuhnen and Knutson 2005)	19	Pos	.	.	Receipt	Money
(Kumar et al. 2008)	18	Pos & Neg	Pos & Neg	.	Receipt	Primary
(Leknes et al. 2011)	18	Pos	Pos	.	Receipt	.
(Levita et al. 2009)	20	Neg	.	.	.	.
(Li et al. 2011)	20	Pos	.	.	Receipt	Money
(Lim et al. 2011)	20	Pos	Pos	.	Decision	.
(Linke et al. 2010)	33	Pos & Neg	.	.	Receipt	Money
(Liu et al. 2007)	15	Pos & Neg	.	.	Receipt	Money
(Luhmann et al. 2008)	20	Pos & Neg	Pos & Neg	.	Decision	.
(Luo et al. 2009)	37	Pos	Pos	.	.	.
(Marco-Pallarés et al. 2007)	12	Pos	.	.	Receipt	.
(Martin et al. 2009)	20	Pos	Pos	.	Receipt	Money
(Menon and Levitin 2005)	13	Pos	.	.	Receipt	Primary
(Miedl et al. 2010)	12	Pos	.	.	Receipt	Money
(Mobbs et al. 2003)	16	Pos	Pos	.	Receipt	.
(Montag et al. 2011)	33	Pos	.	.	Receipt	Primary
(Morris et al. 2012)	16	Pos	Pos	.	Receipt	Money
(Murayama et al. 2010)	28	Pos	.	.	Receipt	Money
(Nicolle, Bach et al. 2011)	17	Pos	.	.	Receipt	Money
(Nicolle, Fleming et al. 2011)	17	Pos & Neg	.	.	Receipt	Money
(Nieuwenhuis, Slagter et al. 2005)	14	Pos	.	.	Receipt	.
(Nieuwenhuis, Heslenfeld et al. 2005)	14	Pos	.	.	Receipt	Money
(O'Doherty et al. 2002)	8	Pos & Neg	Pos	Neg	Receipt	Primary
(Onoda et al. 2011)	30	Pos	Pos	.	.	.
(Ortigue et al. 2007)	36	Pos	Pos	.	Receipt	.
(Ossewaarde et al. 2011)	28	Pos	Pos	.	.	.
(Paulus and Frank 2006)	16	Pos	Pos	.	Decision	.
(Pessiglione et al. 2007)	18	Pos	Pos	.	Receipt	Money
(Peters and Büchel 2009)	22	Pos	Pos	.	Decision	.
(Petrovic et al. 2008)	13	Pos & Neg	Pos	Neg	Receipt	Money
(Phan et al. 2010)	36	Pos	.	.	Receipt	.
(Philiastides et al. 2010)	22	Pos & Neg	Pos & Neg	.	Decision	.
(Pine et al. 2009)	24	Pos	Pos	.	Decision	.
(Plassmann et al. 2008)	20	Pos & Neg	Pos & Neg	.	Receipt	Primary
(Plassmann et al. 2010)	19	Pos	.	Pos	Decision	.
(Pochon et al. 2002)	6	Pos & Neg	Pos & Neg	.	.	.
(Prévost et al. 2010)	18	Pos & Neg	Pos & Neg	.	Decision	.
(Ramnani and Miall 2003)	8	Pos	Pos	.	.	.
(Ramnani et al. 2004)	6	Pos & Neg	Pos & Neg	.	Receipt	Money

Paper	<i>n</i>	SV effects	Reward SV effects	Penalty SV effects	Time Period	Task stage
(Rao et al. 2008)	14	Neg	.	.	.	.
(Remijnse et al. 2005)	27	Pos & Neg	Pos	Neg	.	.
(Remijnse et al. 2006)	27	Pos & Neg	Pos	Neg	.	.
(Reuter et al. 2005)	12	Pos	.	.	Receipt	Money
(Rilling et al. 2004)	19	Pos	.	.	Receipt	Money
(Rilling et al. 2008)	30	Neg	.	.	.	.
(Rodriguez et al. 2006)	15	Pos & Neg	.	.	Receipt	.
(Rogers et al. 2004)	14	Pos	.	.	Decision & Receipt	Money
(Roiser et al. 2010)	23	Pos	Pos	.	Receipt	Money
(Rolls et al. 2003)	11	Pos & Neg	Pos	Neg	Receipt	Primary
(Rowe et al. 2008)	28	Pos	Pos	.	.	.
(Safron et al. 2007)	22	Pos & Neg	.	.	Receipt	Primary
(Sailer et al. 2007)	38	Pos	.	.	Receipt	Money
(Samanez-Larkin et al. 2007)	12	Pos & Neg	Pos	Neg	.	.
(Schaefer and Rotte 2007)	14	Pos	.	.	Receipt	.
(Schiffer et al. 2008)	12	Pos	.	.	Receipt	Primary
(Schlagenhauf et al. 2009)	15	Pos & Neg	Pos	Neg	.	.
(Schmitz et al. 2008)	10	Pos	Pos	.	.	.
(Serences 2008)	15	Pos	Pos	.	Receipt	Money
(Sescousse et al. 2010)	18	Pos	Pos	.	Receipt	Money & Primary
(Sharot et al. 2009)	13	Pos & Neg	Pos	.	Receipt	.
(Sharot et al. 2010)	12	Pos & Neg	.	Pos & Neg	.	.
(Simon et al. 2010)	24	Pos	Pos	.	Receipt	Money
(Singer et al. 2004)	11	Pos & Neg	Pos	Neg	Receipt	.
(Small et al. 2003)	9	Pos & Neg	Pos	Neg	Receipt	Primary
(Smith et al. 2011)	70	Pos	Pos	.	Receipt	Money
(Smith et al. 2009)	25	Pos & Neg	Pos & Neg	.	.	.
(Smith et al. 2010)	23	Pos	.	.	Receipt	Money & Primary
(Staudinger et al. 2011)	24	Pos	Pos	.	.	.
(Stice et al. 2011)	25	Pos	Pos	.	Receipt	Money & Primary
(Stoppel et al. 2011)	18	Pos	Pos	.	Receipt	Money
(Stoy et al. 2011)	12	Pos	Pos	Pos	.	.
(Ströhle et al. 2008)	10	Pos	Pos	.	.	.
(Talmi et al. 2009)	18	Pos	.	.	.	.
(Taylor et al. 2004)	12	Pos	Pos	.	.	.
(Tobler et al. 2007)	16	Pos	Pos	.	Receipt	Money
(Tom et al. 2007)	16	Pos	.	.	Decision	.
(Trautmann et al. 2009)	16	Pos & Neg	Pos	Neg	Receipt	Primary
(Tricomi and Fiez 2008)	11	Pos & Neg	.	.	Decision	.
(Tricomi et al. 2006)	13	Pos & Neg	.	.	.	.
(Tsukiura and Cabeza 2011)	20	Pos & Neg	Pos & Neg	.	Decision	.
(Tsukiura and Cabeza 2011)	20	Pos	.	.	Receipt	Primary
(Ullsperger and von Cramon 2003)	16	Pos & Neg	.	.	Receipt	.
(Ursu et al. 2008)	19	Pos & Neg	Pos & Neg	Neg	.	.
(van den Bos et al. 2007)	19	Pos & Neg	.	.	Receipt	Primary
(Van Leijenhorst et al. 2010)	15	Pos & Neg	.	.	Receipt	Money
(van Veen et al. 2004)	14	Pos	.	.	Receipt	.

Paper	<i>n</i>	SV effects	Reward SV effects	Penalty SV effects	Time Period	Task stage
(Vartanian and Goel 2004)	12	Pos	Pos	.	Receipt	.
(Viinikainen et al. 2010)	17	Pos & Neg	Pos & Neg	Pos & Neg	Receipt	Primary
(Volz et al. 2005)	15	Neg	.	.	.	.
(Vrticka et al. 2008)	16	Pos & Neg	.	.	Receipt	.
(Walter et al. 2009)	16	Pos	Pos	.	Receipt	Money
(Watson et al. 2007)	16	Pos	Pos	.	Receipt	.
(Weil et al. 2010)	12	Pos	Pos	.	Receipt	Money
(Wittmann et al. 2005)	16	Pos	Pos	.	.	.
(Wittmann, Daw et al. 2008)	15	Pos	Pos	.	Receipt	Money
(Wittmann, Schiltz et al. 2008)	25	Pos	Pos	.	.	.
(Wrase et al. 2007)	14	Pos & Neg	Pos	Neg	Receipt	Money
(Wright et al. 2011)	14	Pos	Pos	.	Receipt	Money
(Wunderlich et al. 2010)	24	Pos	Pos	.	Decision	.
(Xue et al. 2009)	13	Pos	.	.	Decision & Receipt	Money
(Ye et al. 2011)	16	Pos	Pos	.	.	.
(Yoshida et al. 2010)	12	Pos	Pos	.	Receipt	Money
(Yu et al. 2010)	18	Pos	.	.	Receipt	Money
(Zalla et al. 2000)	10	Pos & Neg	Pos & Neg	Pos & Neg	Receipt	.
(Zhang et al. 2011)	13	Pos & Neg	.	Pos & Neg	Receipt	.
(Zink et al. 2004)	16	Pos	Pos	.	Receipt	Money

Appendix B: List of included publications

- Abler B, Walter H, Erk S, Kammerer H, Spitzer M. 2006. Prediction error as a linear function of reward probability is coded in human nucleus accumbens. *NeuroImage*. 31:790-795.
- Acevedo BP, Aron A, Fisher HE, Brown LL. 2012. Neural correlates of long-term intense romantic love. *Social Cognitive and Affective Neuroscience*. 7:145-159.
- Adcock RA, Thangavel A, Whitfield-Gabrieli S, Knutson B, Gabrieli JDE. 2006. Reward-motivated learning: Mesolimbic activation precedes memory formation. *Neuron*. 50:507-517.
- Akitsuki Y, Sugiura M, Watanabe J, Yamashita K, Sassa Y, Awata S, Matsuoka H, Maeda Y, Matsue Y, Fukuda H. 2003. Context-dependent cortical activation in response to financial reward and penalty: An event-related fMRI study. *NeuroImage*. 19:1674-1685.
- Albrecht K, Volz KG, Sutter M, Laibson DI, von Cramon DY. 2011. What is for me is not for you: Brain correlates of intertemporal choice for self and other. *Social Cognitive and Affective Neuroscience*. 6:218-225.
- Aron AR, Shohamy D, Clark J, Myers C, Gluck MA, Poldrack RA. 2004. Human midbrain sensitivity to cognitive feedback and uncertainty during classification learning. *Journal of Neurophysiology*. 92:1144-1152.
- Ballard K, Knutson B. 2009. Dissociable neural representations of future reward magnitude and delay during temporal discounting. *NeuroImage*. 45:143-150.
- Barrós-Loscertales A, Ventura-Campos N, Sanjuán-Tomás A, Belloch V, Parcet M-A, Avila C. 2010. Behavioral activation system modulation on brain activation during appetitive and aversive stimulus processing. *Social Cognitive and Affective Neuroscience*. 5:18-28.
- Beaver JD, Lawrence AD, van Ditzhuijzen J, Davis MH, Woods A, Calder AJ. 2006. Individual differences in reward drive predict neural responses to images of food. *Journal of Neuroscience*. 26:5160-5166.
- Berns GS, McClure SM, Pagnoni G, Montague PR. 2001. Predictability modulates human brain response to reward. *Journal of Neuroscience*. 21:2793-2798.
- Bjork JM, Hommer DW. 2007. Anticipating instrumentally obtained and passively-received rewards: A factorial fMRI investigation. *Behavioural Brain Research*. 177:165-170.
- Bjork JM, Knutson B, Fong GW, Caggiano DM, Bennett SM, Hommer DW. 2004. Incentive-elicited brain activation in adolescents: Similarities and differences from young adults. *Journal of Neuroscience*. 24:1793-1802.

Bjork JM, Smith AR, Chen G, Hommer DW. 2010. Adolescents, adults and rewards: Comparing motivational neurocircuitry recruitment using fMRI. *PloS One*. 5:e11440.

Blair K, Marsh AA, Morton J, Vythilingam M, Jones M, Mondillo K, Pine DC, Drevets WC, Blair JR. 2006. Choosing the lesser of two evils, the better of two goods: Specifying the roles of ventromedial prefrontal cortex and dorsal anterior cingulate in object choice. *Journal of Neuroscience*. 26:11379-11386.

Bray S, Shimojo S, O'Doherty JP. 2010. Human medial orbitofrontal cortex is recruited during experience of imagined and real rewards. *Journal of Neurophysiology*. 103:2506-2512.

Brooks SJ, O'Daly OG, Uher R, Friederich H-C, Giampietro V, Brammer M, Williams SCR, Schiöth HB, Treasure J, Campbell IC. 2011. Differential neural responses to food images in women with bulimia versus anorexia nervosa. *PloS One*. 6:e22259.

Camara E, Rodriguez-Fornells A, Münte TF. 2009. Functional connectivity of reward processing in the brain. *Frontiers in Human Neuroscience*. 2:19.

Camara E, Rodriguez-Fornells A, Münte TF. 2010. Microstructural brain differences predict functional hemodynamic responses in a reward processing task. *Journal of Neuroscience*. 30:11398-11402.

Campbell-Meiklejohn DK, Bach DR, Roepstorff A, Dolan RJ, Frith CD. 2010. How the opinion of others affects our valuation of objects. *Current Biology*. 20:1165-1170.

Campbell-Meiklejohn DK, Woolrich MW, Passingham RE, Rogers RD. 2008. Knowing when to stop: The brain mechanisms of chasing losses. *Biological Psychiatry*. 63:293-300.

Caria A, Venuti P, de Falco S. 2011. Functional and dysfunctional brain circuits underlying emotional processing of music in autism spectrum disorders. *Cerebral Cortex*. 21:2838-2849.

Carlson JM, Foti D, Mujica-Parodi LR, Harmon-Jones E, Hajcak G. 2011. Ventral striatal and medial prefrontal BOLD activation is correlated with reward-related electrocortical activity: A combined ERP and fMRI study. *NeuroImage*. 57:1608-1616.

Carretié L, Ríos M, de la Gándara BS, Tapia M, Albert J, López-Martín S, Alvarez-Linera J. 2009. The striatum beyond reward: Caudate responds intensely to unpleasant pictures. *Neuroscience*. 164:1615-1622.

Chambers ES, Bridge MW, Jones DA. 2009. Carbohydrate sensing in the human mouth: Effects on exercise performance and brain activity. *Journal of Physiology*. 587:1779-1794.

Chapin H, Jantzen K, Kelso JaS, Steinberg F, Large E. 2010. Dynamic emotional and neural responses to music depend on performance expression and listener experience. *PloS One*. 5:e13812.

Christakou A, Brammer M, Giampietro V, Rubia K. 2009. Right ventromedial and dorsolateral prefrontal cortices mediate adaptive decisions under ambiguity by integrating choice utility and outcome evaluation. *Journal of Neuroscience*. 29:11020-11028.

Chua HF, Gonzalez R, Taylor SF, Welsh RC, Liberzon I. 2009. Decision-related loss: Regret and disappointment. *NeuroImage*. 47:2031-2040.

Cikara M, Botvinick MM, Fiske ST. 2011. Us versus them: Social identity shapes neural responses to intergroup competition and harm. *Psychological Science*. 22:306-313.

Clark L, Lawrence AJ, Astley-Jones F, Gray N. 2009. Gambling near-misses enhance motivation to gamble and recruit win-related brain circuitry. *Neuron*. 61:481-490.

Cloutier J, Heatherton TF, Whalen PJ, Kelley WM. 2008. Are attractive people rewarding? Sex differences in the neural substrates of facial attractiveness. *Journal of Cognitive Neuroscience*. 20:941-951.

Cohen JR, Asarnow RF, Sabb FW, Bilder RM, Bookheimer SY, Knowlton BJ, Poldrack RA. 2010. A unique adolescent response to reward prediction errors. *Nature Neuroscience*. 13:669-671.

Cohen MX, Elger CE, Weber B. 2008. Amygdala tractography predicts functional connectivity and learning during feedback-guided decision-making. *NeuroImage*. 39:1396-1407.

Cohen MX, Young J, Baek J-M, Kessler C, Ranganath C. 2005. Individual differences in extraversion and dopamine genetics predict neural reward responses. *Cognitive Brain Research*. 25:851-861.

Colibazzi T, Posner J, Wang Z, Gorman D, Gerber A, Yu S, Zhu H, Kangarlou A, Duan Y, Russell Ja, Peterson BS. 2010. Neural systems subserving valence and arousal during the experience of induced emotions. *Emotion*. 10:377-389.

Cooper JC, Hollon NG, Wimmer GE, Knutson B. 2009. Available alternative incentives modulate anticipatory nucleus accumbens activation. *Social Cognitive and Affective Neuroscience*. 4:409-416.

Cooper JC, Knutson B. 2008. Valence and salience contribute to nucleus accumbens activation. *NeuroImage*. 39:538-547.

Costa VD, Lang PJ, Sabatinelli D, Versace F, Bradley MM. 2010. Emotional imagery: Assessing pleasure and arousal in the brain's reward circuitry. *Human Brain Mapping*. 31:1446-1457.

Crowley TJ, Dalwani MS, Mikulich-Gilbertson SK, Du YP, Lejuez CW, Raymond KM, Banich MT. 2010. Risky decisions and their consequences: Neural processing by boys with Antisocial Substance Disorder. *PloS One*. 5:e12835.

Davey CG, Allen NB, Harrison BJ, Dwyer DB, Yücel M. 2010. Being liked activates primary reward and midline self-related brain regions. *Human Brain Mapping*. 31:660-668.

Daw ND, O'Doherty JP, Dayan P, Seymour B, Dolan RJ. 2006. Cortical substrates for exploratory decisions in humans. *Nature*. 441:876-879.

de Greck M, Scheidt L, Bölter AF, Frommer J, Ulrich C, Stockum E, Enzi B, Tempelmann C, Hoffmann T, Northoff G. 2011. Multimodal psychodynamic psychotherapy induces normalization of reward related activity in somatoform disorder. *World Journal of Biological Psychiatry*. 12:296-308.

Delgado MR, Frank RH, Phelps EA. 2005. Perceptions of moral character modulate the neural systems of reward during the trust game. *Nature Neuroscience*. 8:1611-1618.

Delgado MR, Locke HM, Stenger Va, Fiez JA. 2003. Dorsal striatum responses to reward and punishment: Effects of valence and magnitude manipulations. *Cognitive, Affective & Behavioral Neuroscience*. 3:27-38.

Delgado MR, Miller MM, Inati S, Phelps EA. 2005. An fMRI study of reward-related probability learning. *NeuroImage*. 24:862-873.

Delgado MR, Nystrom LE, Fissell C, Noll DC, Fiez JA. 2000. Tracking the hemodynamic responses to reward and punishment in the striatum. *Journal of Neurophysiology*. 84:3072-3077.

Delgado MR, Schotter A, Ozbay EY, Phelps EA. 2008. Understanding overbidding: Using the neural circuitry of reward to design economic auctions. *Science*. 321:1849-1852.

Dreher J-C, Kohn P, Berman KF. 2006. Neural coding of distinct statistical properties of reward information in humans. *Cerebral Cortex*. 16:561-573.

Dreher J-C, Meyer-Lindenberg A, Kohn P, Berman KF. 2008. Age-related changes in midbrain dopaminergic regulation of the human reward system. *Proceedings of the National Academy of Sciences of the United States of America*. 105:15106-15111.

Elliott R, Newman JL, Longe OA, Deakin JFW. 2003. Differential response patterns in the striatum and orbitofrontal cortex to financial reward in humans: A parametric functional magnetic resonance imaging study. *Journal of Neuroscience*. 23:303-307.

Elliott R, Newman JL, Longe OA, Deakin JFW. 2004. Instrumental responding for rewards is associated with enhanced neuronal response in subcortical reward systems. *NeuroImage*. 21:984-990.

Engelmann JB, Damaraju E, Padmala S, Pessoa L. 2009. Combined effects of attention and motivation on visual task performance: Transient and sustained motivational effects. *Frontiers in Human Neuroscience*. 3:4.

Erk S, Spitzer M, Wunderlich AP, Galley L, Walter H. 2002. Cultural objects modulate reward circuitry. *NeuroReport*. 13:2499-2503.

Ernst M, Nelson EE, Jazbec S, McClure EB, Monk CS, Leibenluft E, Blair J, Pine DS. 2005. Amygdala and nucleus accumbens in responses to receipt and omission of gains in adults and adolescents. *NeuroImage*. 25:1279-1291.

Figeo M, Vink M, de Geus F, Vulink N, Veltman DJ, Westenberg H, Denys D. 2011. Dysfunctional reward circuitry in obsessive-compulsive disorder. *Biological Psychiatry*. 69:867-874.

FitzGerald THB, Seymour B, Bach DR, Dolan RJ. 2010. Differentiable neural substrates for learned and described value and risk. *Current Biology*. 20:1823-1829.

Fliessbach K, Weber B, Trautner P, Dohmen T, Sunde U, Elger CE, Falk A. 2007. Social comparison affects reward-related brain activity in the human ventral striatum. *Science*. 318:1305-1308.

Frank S, Laharnar N, Kullmann S, Veit R, Canova C, Hegner YL, Fritsche A, Preissl H. 2010. Processing of food pictures: Influence of hunger, gender and calorie content. *Brain Research*. 1350:159-166.

Franklin RG, Adams RB. 2011. The reward of a good joke: Neural correlates of viewing dynamic displays of stand-up comedy. *Cognitive, Affective & Behavioral Neuroscience*. 11:508-515.

Fujiwara J, Tobler PN, Taira M, Iijima T, Tsutsui K-I. 2009. Segregated and integrated coding of reward and punishment in the cingulate cortex. *Journal of Neurophysiology*. 101:3284-3293.

Galvan A, Hare TA, Davidson M, Spicer J, Glover G, Casey BJ. 2005. The role of ventral frontostriatal circuitry in reward-based learning in humans. *Journal of Neuroscience*. 25:8650-8656.

Gianaros PJ, Manuck SB, Sheu LK, Kuan DCH, Votruba-Drzal E, Craig AE, Hariri AR. 2011. Parental education predicts corticostriatal functionality in adulthood. *Cerebral Cortex*. 21:896-910.

Gilman JM, Smith AR, Ramchandani VA, Momenan R, Hommer DW. 2012. The effect of intravenous alcohol on the neural correlates of risky decision making in healthy social drinkers. *Addiction Biology*. 17:465-478.

Glocker ML, Langleben DD, Ruparel K, Loughhead JW, Valdez JN, Griffin MD, Sachser N, Gur RC. 2009. Baby schema modulates the brain reward system in nulliparous

women. *Proceedings of the National Academy of Sciences of the United States of America*. 106:9115-9119.

Goldstone AP, Prechtl de Hernandez CG, Beaver JD, Muhammed K, Croese C, Bell G, Durighel G, Hughes E, Waldman AD, Frost G, Bell JD. 2009. Fasting biases brain reward systems towards high-calorie foods. *European Journal of Neuroscience*. 30:1625-1635.

Gottfried JA, O'Doherty J, Dolan RJ. 2003. Encoding predictive reward value in human amygdala and orbitofrontal cortex. *Science*. 301:1104-1107.

Grabenhorst F, Rolls ET. 2009. Different representations of relative and absolute subjective value in the human brain. *NeuroImage*. 48:258-268.

Grabenhorst F, Rolls ET, Parris BA, D'Souza AA. 2010. How the brain represents the reward value of fat in the mouth. *Cerebral Cortex*. 20:1082-1091.

Gradin VB, Kumar P, Waiter G, Ahearn T, Stickle C, Milders M, Reid I, Hall J, Steele JD. 2011. Expected value and prediction error abnormalities in depression and schizophrenia. *Brain*. 134:1751-1764.

Greening SG, Finger EC, Mitchell DGV. 2011. Parsing decision making processes in prefrontal cortex: Response inhibition, overcoming learned avoidance, and reversal learning. *NeuroImage*. 54:1432-1441.

Haase L, Green E, Murphy C. 2011. Males and females show differential brain activation to taste when hungry and sated in gustatory and reward areas. *Appetite*. 57:421-434.

Hare TA, Schultz W, Camerer CF, O'Doherty JP, Rangel A. 2011. Transformation of stimulus value signals into motor commands during simple choice. *Proceedings of the National Academy of Sciences of the United States of America*. 108:18120-18125.

Harsay HA, Cohen MX, Oosterhof NN, Forstmann BU, Mars RB, Ridderinkhof KR. 2011. Functional connectivity of the striatum links motivation to action control in humans. *Journal of Neuroscience*. 31:10701-10711.

Haruno M, Kuroda T, Doya K, Toyama K, Kimura M, Samejima K, Imamizu H, Kawato M. 2004. A neural correlate of reward-based behavioral learning in caudate nucleus: A functional magnetic resonance imaging study of a stochastic decision task. *Journal of Neuroscience*. 24:1660-1665.

Holroyd CB, Nieuwenhuis S, Yeung N, Nystrom L, Mars RB, Coles MGH, Cohen JD. 2004. Dorsal anterior cingulate cortex shows fMRI response to internal and external error signals. *Nature Neuroscience*. 7:497-498.

Hooker CI, Verosky SC, Miyakawa A, Knight RT, D'Esposito M. 2008. The influence of personality on neural mechanisms of observational fear and reward learning. *Neuropsychologia*. 46:2709-2724.

- Howard-Jones PA, Bogacz R, Yoo JH, Leonards U, Demetriou S. 2010. The neural mechanisms of learning from competitors. *NeuroImage*. 53:790-799.
- Hsu M, Bhatt M, Adolphs R, Tranel D, Camerer CF. 2005. Neural systems responding to degrees of uncertainty in human decision-making. *Science*. 310:1680-1683.
- Huettel SA. 2006. Behavioral, but not reward, risk modulates activation of prefrontal, parietal, and insular cortices. *Cognitive, Affective & Behavioral Neuroscience*. 6:141-151.
- Iyer A, Lindner A, Kagan I, Andersen RA. 2010. Motor preparatory activity in posterior parietal cortex is modulated by subjective absolute value. *PLoS Biology*. 8:e1000444.
- Izuma K, Saito DN, Sadato N. 2008. Processing of social and monetary rewards in the human striatum. *Neuron*. 58:284-294.
- Jacobson A, Green E, Murphy C. 2010. Age-related functional changes in gustatory and reward processing regions: An fMRI study. *NeuroImage*. 53:602-610.
- Kable JW, Glimcher PW. 2007. The neural correlates of subjective value during intertemporal choice. *Nature Neuroscience*. 10:1625-1633.
- Kable JW, Glimcher PW. 2010. An "as soon as possible" effect in human intertemporal decision making: Behavioral evidence and neural mechanisms. *Journal of Neurophysiology*. 103:2513-2531.
- Kahnt T, Grueschow M, Speck O, Haynes J-D. 2011. Perceptual learning and decision-making in human medial frontal cortex. *Neuron*. 70:549-559.
- Kim H, Adolphs R, O'Doherty JP, Shimojo S. 2007. Temporal isolation of neural processes underlying face preference decisions. *Proceedings of the National Academy of Sciences of the United States of America*. 104:18253-18258.
- Kim H, Shimojo S, O'Doherty JP. 2006. Is avoiding an aversive outcome rewarding? Neural substrates of avoidance learning in the human brain. *PLoS Biology*. 4:e233.
- Kim H, Shimojo S, O'Doherty JP. 2011. Overlapping responses for the expectation of juice and money rewards in human ventromedial prefrontal cortex. *Cerebral Cortex*. 21:769-776.
- King-Casas B, Tomlin D, Anen C, Camerer CF, Quartz SR, Montague PR. 2005. Getting to know you: Reputation and trust in a two-person economic exchange. *Science*. 308:78-83.
- Kirsch P, Schienle A, Stark R, Sammer G, Blecker C, Walter B, Ott U, Burkart J, Vaitl D. 2003. Anticipation of reward in a nonaversive differential conditioning paradigm and the brain reward system: An event-related fMRI study. *NeuroImage*. 20:1086-1095.

- Knutson B, Adams CM, Fong GW, Hommer D. 2001. Anticipation of increasing monetary reward selectively recruits nucleus accumbens. *Journal of Neuroscience*. 21:RC159.
- Knutson B, Bhanji JP, Cooney RE, Atlas LY, Gotlib IH. 2008. Neural responses to monetary incentives in major depression. *Biological Psychiatry*. 63:686-692.
- Knutson B, Bjork JM, Fong GW, Hommer D, Mattay VS, Weinberger DR. 2004. Amphetamine modulates human incentive processing. *Neuron*. 43:261-269.
- Knutson B, Fong GW, Adams CM, Varner JL, Hommer D. 2001. Dissociation of reward anticipation and outcome with event-related fMRI. *Neuroreport*. 12:3683-3687.
- Knutson B, Fong GW, Bennett SM, Adams CM, Hommer D. 2003. A region of mesial prefrontal cortex tracks monetarily rewarding outcomes: Characterization with rapid event-related fMRI. *NeuroImage*. 18:263-272.
- Knutson B, Rick S, Wimmer GE, Prelec D, Loewenstein G. 2007. Neural predictors of purchases. *Neuron*. 53:147-156.
- Knutson B, Wimmer GE, Kuhnen CM, Winkielman P. 2008. Nucleus accumbens activation mediates the influence of reward cues on financial risk taking. *NeuroReport*. 19:509-513.
- Koelsch S, Fritz T, v. Cramon DY, Müller K, Friederici AD. 2006. Investigating emotion with music: An fMRI study. *Human Brain Mapping*. 27:239-250.
- Kosson DS, Budhani S, Nakic M, Chen G, Saad ZS, Vythilingam M, Pine DS, Blair RJR. 2006. The role of the amygdala and rostral anterior cingulate in encoding expected outcomes during learning. *NeuroImage*. 29:1161-1172.
- Krebs RM, Boehler CN, Egner T, Woldorff MG. 2011. The neural underpinnings of how reward associations can both guide and misguide attention. *Journal of Neuroscience*. 31:9752-9759.
- Krebs RM, Boehler CN, Roberts KC, Song AW, Woldorff MG. 2012. The involvement of the dopaminergic midbrain and cortico-striatal-thalamic circuits in the integration of reward prospect and attentional task demands. *Cerebral Cortex*. 22:607-615.
- Kuhnen CM, Knutson B. 2005. The neural basis of financial risk taking. *Neuron*. 47:763-770.
- Kumar P, Waiter G, Ahearn T, Milders M, Reid I, Steele JD. 2008. Abnormal temporal difference reward-learning signals in major depression. *Brain*. 131:2084-2093.
- Leknes S, Lee M, Berna C, Andersson J, Tracey I. 2011. Relief as a reward: Hedonic and neural responses to safety from pain. *PloS One*. 6:e17870.

Levita L, Hare TA, Voss HU, Glover G, Ballon DJ, Casey BJ. 2009. The bivalent side of the nucleus accumbens. *NeuroImage*. 44:1178-1187.

Li J, Delgado MR, Phelps EA. 2011. How instructed knowledge modulates the neural systems of reward learning. *Proceedings of the National Academy of Sciences of the United States of America*. 108:55-60.

Lim S-L, O'Doherty JP, Rangel A. 2011. The decision value computations in the vmPFC and striatum use a relative value code that is guided by visual attention. *Journal of Neuroscience*. 31:13214-13223.

Linke J, Kirsch P, King AV, Gass A, Hennerici MG, Bongers A, Wessa M. 2010. Motivational orientation modulates the neural response to reward. *NeuroImage*. 49:2618-2625.

Liu X, Powell DK, Wang H, Gold BT, Corbly CR, Joseph JE. 2007. Functional dissociation in frontal and striatal areas for processing of positive and negative reward information. *Journal of Neuroscience*. 27:4587-4597.

Luhmann CC, Chun MM, Yi D-J, Lee D, Wang X-J. 2008. Neural dissociation of delay and uncertainty in intertemporal choice. *Journal of Neuroscience*. 28:14459-14466.

Luo S, Ainslie G, Giragosian L, Monterosso JR. 2009. Behavioral and neural evidence of incentive bias for immediate rewards relative to preference-matched delayed rewards. *Journal of Neuroscience*. 29:14820-14827.

Marco-Pallarés J, Müller SV, Münte TF. 2007. Learning by doing: An fMRI study of feedback-related brain activations. *NeuroReport*. 18:1423-1426.

Martin LE, Potts GF, Burton PC, Montague PR. 2009. Electrophysiological and hemodynamic responses to reward prediction violation. *NeuroReport*. 20:1140-1143.

Menon V, Levitin DJ. 2005. The rewards of music listening: Response and physiological connectivity of the mesolimbic system. *NeuroImage*. 28:175-184.

Miedl SF, Fehr T, Meyer G, Herrmann M. 2010. Neurobiological correlates of problem gambling in a quasi-realistic blackjack scenario as revealed by fMRI. *Psychiatry Research*. 181:165-173.

Mobbs D, Greicius MD, Abdel-Azim E, Menon V, Reiss AL. 2003. Humor modulates the mesolimbic reward centers. *Neuron*. 40:1041-1048.

Montag C, Reuter M, Axmacher N. 2011. How one's favorite song activates the reward circuitry of the brain: Personality matters! *Behavioural Brain Research*. 225:511-514.

Morris RW, Vercammen A, Lenroot R, Moore L, Langton JM, Short B, Kulkarni J, Curtis J, O'Donnell M, Weickert CS, Weickert TW. 2012. Disambiguating ventral

striatum fMRI-related bold signal during reward prediction in schizophrenia. *Molecular Psychiatry*. 17:280-289.

Murayama K, Matsumoto M, Izuma K, Matsumoto K. 2010. Neural basis of the undermining effect of monetary reward on intrinsic motivation. *Proceedings of the National Academy of Sciences of the United States of America*. 107:20911-20916.

Nicolle A, Bach DR, Driver J, Dolan RJ. 2011. A role for the striatum in regret-related choice repetition. *Journal of Cognitive Neuroscience*. 23:845-856.

Nicolle A, Fleming SM, Bach DR, Driver J, Dolan RJ. 2011. A regret-induced status quo bias. *Journal of Neuroscience*. 31:3320-3327.

Nieuwenhuis S, Heslenfeld DJ, Alting von Geusau NJ, Mars RB, Holroyd CB, Yeung N. 2005. Activity in human reward-sensitive brain areas is strongly context dependent. *NeuroImage*. 25:1302-1309.

Nieuwenhuis S, Slagter HA, von Geusau NJA, Heslenfeld DJ, Holroyd CB. 2005. Knowing good from bad: Differential activation of human cortical areas by positive and negative outcomes. *European Journal of Neuroscience*. 21:3161-3168.

O'Doherty JP, Deichmann R, Critchley HD, Dolan RJ. 2002. Neural responses during anticipation of a primary taste reward. *Neuron*. 33:815-826.

Onoda K, Okamoto Y, Kunisato Y, Aoyama S, Shishida K, Okada G, Tanaka SC, Schweighofer N, Yamaguchi S, Doya K, Yamawaki S. 2011. Inter-individual discount factor differences in reward prediction are topographically associated with caudate activation. *Experimental Brain Research*. 212:593-601.

Ortigue S, Bianchi-Demicheli F, Hamilton AFdC, Grafton ST. 2007. The neural basis of love as a subliminal prime: An event-related functional magnetic resonance imaging study. *Journal of Cognitive Neuroscience*. 19:1218-1230.

Ossewaarde L, van Wingen GA, Kooijman SC, Bäckström T, Fernández G, Hermans EJ. 2011. Changes in functioning of mesolimbic incentive processing circuits during the premenstrual phase. *Social Cognitive and Affective Neuroscience*. 6:612-620.

Paulus MP, Frank LR. 2006. Anterior cingulate activity modulates nonlinear decision weight function of uncertain prospects. *NeuroImage*. 30:668-677.

Pessiglione M, Schmidt L, Draganski B, Kalisch R, Lau H, Dolan RJ, Frith CD. 2007. How the brain translates money into force: A neuroimaging study of subliminal motivation. *Science*. 316:904-906.

Peters J, Büchel C. 2009. Overlapping and distinct neural systems code for subjective value during intertemporal and risky decision making. *Journal of Neuroscience*. 29:15727-15734.

Petrovic P, Pleger B, Seymour B, Klöppel S, De Martino B, Critchley H, Dolan RJ. 2008. Blocking central opiate function modulates hedonic impact and anterior cingulate response to rewards and losses. *Journal of Neuroscience*. 28:10509-10516.

Phan KL, Sripada CS, Angstadt M, McCabe K. 2010. Reputation for reciprocity engages the brain reward center. *Proceedings of the National Academy of Sciences of the United States of America*. 107:13099-13104.

Philiastides MG, Biele G, Heekeren HR. 2010. A mechanistic account of value computation in the human brain. *Proceedings of the National Academy of Sciences of the United States of America*. 107:9430-9435.

Pine A, Seymour B, Roiser JP, Bossaerts P, Friston KJ, Curran HV, Dolan RJ. 2009. Encoding of marginal utility across time in the human brain. *Journal of Neuroscience*. 29:9575-9581.

Plassmann H, O'Doherty J, Shiv B, Rangel A. 2008. Marketing actions can modulate neural representations of experienced pleasantness. *Proceedings of the National Academy of Sciences of the United States of America*. 105:1050-1054.

Plassmann H, O'Doherty JP, Rangel A. 2010. Appetitive and aversive goal values are encoded in the medial orbitofrontal cortex at the time of decision making. *Journal of Neuroscience*. 30:10799-10808.

Pochon JB, Levy R, Fossati P, Lehericy S, Poline JB, Pillon B, Le Bihan D, Dubois B. 2002. The neural system that bridges reward and cognition in humans: An fMRI study. *Proceedings of the National Academy of Sciences of the United States of America*. 99:5669-5674.

Prévost C, Pessiglione M, Météreau E, Cléry-Melin M-L, Dreher J-C. 2010. Separate valuation subsystems for delay and effort decision costs. *Journal of Neuroscience*. 30:14080-14090.

Ramnani N, Elliott R, Athwal BS, Passingham RE. 2004. Prediction error for free monetary reward in the human prefrontal cortex. *NeuroImage*. 23:777-786.

Ramnani N, Miall RC. 2003. Instructed delay activity in the human prefrontal cortex is modulated by monetary reward expectation. *Cerebral Cortex*. 13:318-327.

Rao H, Korczykowski M, Pluta J, Hoang A, Detre JA. 2008. Neural correlates of voluntary and involuntary risk taking in the human brain: An fMRI Study of the Balloon Analog Risk Task (BART). *NeuroImage*. 42:902-910.

Remijne PL, Nielen MMA, Uylings HBM, Veltman DJ. 2005. Neural correlates of a reversal learning task with an affectively neutral baseline: An event-related fMRI study. *NeuroImage*. 26:609-618.

Remijnse PL, Nielen MMA, van Balkom AJLM, Cath DC, van Oppen P, Uylings HBM, Veltman DJ. 2006. Reduced orbitofrontal-striatal activity on a reversal learning task in obsessive-compulsive disorder. *Archives of General Psychiatry*. 63:1225-1236.

Reuter J, Raedler T, Rose M, Hand I, Gläscher J, Büchel C. 2005. Pathological gambling is linked to reduced activation of the mesolimbic reward system. *Nature Neuroscience*. 8:147-148.

Rilling JK, Goldsmith DR, Glenn AL, Jairam MR, Elfenbein Ha, Dagenais JE, Murdock CD, Pagnoni G. 2008. The neural correlates of the affective response to unreciprocated cooperation. *Neuropsychologia*. 46:1256-1266.

Rilling JK, Sanfey AG, Aronson Ja, Nystrom LE, Cohen JD. 2004. Opposing BOLD responses to reciprocated and unreciprocated altruism in putative reward pathways. *NeuroReport*. 15:2539-2543.

Rodriguez PF, Aron AR, Poldrack RA. 2006. Ventral-striatal/nucleus-accumbens sensitivity to prediction errors during classification learning. *Human Brain Mapping*. 27:306-313.

Rogers RD, Ramnani N, Mackay C, Wilson JL, Jezzard P, Carter CS, Smith SM. 2004. Distinct portions of anterior cingulate cortex and medial prefrontal cortex are activated by reward processing in separable phases of decision-making cognition. *Biological Psychiatry*. 55:594-602.

Roiser JP, Stephan KE, den Ouden HEM, Friston KJ, Joyce EM. 2010. Adaptive and aberrant reward prediction signals in the human brain. *NeuroImage*. 50:657-664.

Rolls ET, Kringelbach ML, de Araujo IET. 2003. Different representations of pleasant and unpleasant odours in the human brain. *European Journal of Neuroscience*. 18:695-703.

Rowe JB, Eckstein D, Braver T, Owen AM. 2008. How does reward expectation influence cognition in the human brain? *Journal of Cognitive Neuroscience*. 20:1980-1992.

Safron A, Barch B, Bailey JM, Gitelman DR, Parrish TB, Reber PJ. 2007. Neural correlates of sexual arousal in homosexual and heterosexual men. *Behavioral Neuroscience*. 121:237-248.

Sailer U, Robinson S, Fischmeister FPS, Moser E, Kryspin-Exner I, Bauer H. 2007. Imaging the changing role of feedback during learning in decision-making. *NeuroImage*. 37:1474-1486.

Samanez-Larkin GR, Gibbs SEB, Khanna K, Nielsen L, Carstensen LL, Knutson B. 2007. Anticipation of monetary gain but not loss in healthy older adults. *Nature Neuroscience*. 10:787-791.

Schaefer M, Rotte M. 2007. Favorite brands as cultural objects modulate reward circuit. *NeuroReport*. 18:141-145.

Schiffer B, Krueger T, Paul T, de Greiff A, Forsting M, Leygraf N, Schedlowski M, Gizewski E. 2008. Brain response to visual sexual stimuli in homosexual pedophiles. *Journal of Psychiatry & Neuroscience*. 33:23-33.

Schlagenhauf F, Sterzer P, Schmack K, Ballmaier M, Rapp M, Wrase J, Juckel G, Gallinat J, Heinz A. 2009. Reward feedback alterations in unmedicated schizophrenia patients: Relevance for delusions. *Biological Psychiatry*. 65:1032-1039.

Schmitz N, Rubia K, van Amelsvoort T, Daly E, Smith A, Murphy DGM. 2008. Neural correlates of reward in autism. *British Journal of Psychiatry*. 192:19-24.

Serences JT. 2008. Value-based modulations in human visual cortex. *Neuron*. 60:1169-1181.

Sescousse G, Redouté J, Dreher J-C. 2010. The architecture of reward value coding in the human orbitofrontal cortex. *Journal of Neuroscience*. 30:13095-13104.

Sharot T, De Martino B, Dolan RJ. 2009. How choice reveals and shapes expected hedonic outcome. *Journal of Neuroscience*. 29:3760-3765.

Sharot T, Shiner T, Dolan RJ. 2010. Experience and choice shape expected aversive outcomes. *Journal of Neuroscience*. 30:9209-9215.

Simon JJ, Walther S, Fiebach CJ, Friederich H-C, Stippich C, Weisbrod M, Kaiser S. 2010. Neural reward processing is modulated by approach- and avoidance-related personality traits. *NeuroImage*. 49:1868-1874.

Singer T, Kiebel SJ, Winston JS, Dolan RJ, Frith CD. 2004. Brain responses to the acquired moral status of faces. *Neuron*. 41:653-662.

Small DM, Gregory MD, Mak YE, Gitelman D, Mesulam MM, Parrish T. 2003. Dissociation of neural representation of intensity and affective valuation in human gustation. *Neuron*. 39:701-711.

Smith AB, Halari R, Giampetro V, Brammer M, Rubia K. 2011. Developmental effects of reward on sustained attention networks. *NeuroImage*. 56:1693-1704.

Smith BW, Mitchell DGV, Hardin MG, Jazbec S, Fridberg D, Blair RJR, Ernst M. 2009. Neural substrates of reward magnitude, probability, and risk during a wheel of fortune decision-making task. *NeuroImage*. 44:600-609.

Smith DV, Hayden BY, Truong T-K, Song AW, Platt ML, Huettel SA. 2010. Distinct value signals in anterior and posterior ventromedial prefrontal cortex. *Journal of Neuroscience*. 30:2490-2495.

Staudinger MR, Erk S, Walter H. 2011. Dorsolateral prefrontal cortex modulates striatal reward encoding during reappraisal of reward anticipation. *Cerebral Cortex*. 21:2578-2588.

Stice E, Yokum S, Burger KS, Epstein LH, Small DM. 2011. Youth at risk for obesity show greater activation of striatal and somatosensory regions to food. *Journal of Neuroscience*. 31:4360-4366.

Stoppel CM, Boehler CN, Strumpf H, Heinze H-J, Hopf J-M, Schoenfeld MA. 2011. Neural processing of reward magnitude under varying attentional demands. *Brain Research*. 1383:218-229.

Stoy M, Schlagenhaut F, Schlochtermeyer L, Wrase J, Knutson B, Lehmkuhl U, Huss M, Heinz A, Ströhle A. 2011. Reward processing in male adults with childhood ADHD: A comparison between drug-naïve and methylphenidate-treated subjects. *Psychopharmacology*. 215:467-481.

Ströhle A, Stoy M, Wrase J, Schwarzer S, Schlagenhaut F, Huss M, Hein J, Nedderhüt A, Neumann B, Gregor A, Juckel G, Knutson B, Lehmkuhl U, Bauer M, Heinz A. 2008. Reward anticipation and outcomes in adult males with attention-deficit/hyperactivity disorder. *NeuroImage*. 39:966-972.

Talmi D, Dayan P, Kiebel SJ, Frith CD, Dolan RJ. 2009. How humans integrate the prospects of pain and reward during choice. *Journal of Neuroscience*. 29:14617-14626.

Taylor SF, Welsh RC, Wager TD, Phan KL, Fitzgerald KD, Gehring WJ. 2004. A functional neuroimaging study of motivation and executive function. *NeuroImage*. 21:1045-1054.

Tobler PN, O'Doherty JP, Dolan RJ, Schultz W. 2007. Reward value coding distinct from risk attitude-related uncertainty coding in human reward systems. *Journal of Neurophysiology*. 97:1621-1632.

Tom SM, Fox CR, Trepel C, Poldrack RA. 2007. The neural basis of loss aversion in decision-making under risk. *Science*. 315:515-518.

Trautmann SA, Fehr T, Herrmann M. 2009. Emotions in motion: Dynamic compared to static facial expressions of disgust and happiness reveal more widespread emotion-specific activations. *Brain Research*. 1284:100-115.

Tricomi E, Delgado MR, McCandliss BD, McClelland JL, Fiez JA. 2006. Performance feedback drives caudate activation in a phonological learning task. *Journal of Cognitive Neuroscience*. 18:1029-1043.

Tricomi E, Fiez JA. 2008. Feedback signals in the caudate reflect goal achievement on a declarative memory task. *NeuroImage*. 41:1154-1167.

- Tsukiura T, Cabeza R. 2011. Remembering beauty: Roles of orbitofrontal and hippocampal regions in successful memory encoding of attractive faces. *NeuroImage*. 54:653-660.
- Tsukiura T, Cabeza R. 2011. Shared brain activity for aesthetic and moral judgments: Implications for the Beauty-is-Good stereotype. *Social Cognitive and Affective Neuroscience*. 6:138-148.
- Ullsperger M, von Cramon DY. 2003. Error monitoring using external feedback: Specific roles of the habenular complex, the reward system, and the cingulate motor area revealed by functional magnetic resonance imaging. *Journal of Neuroscience*. 23:4308-4314.
- Ursu S, Clark KA, Stenger VA, Carter CS. 2008. Distinguishing expected negative outcomes from preparatory control in the human orbitofrontal cortex. *Brain Research*. 1227:110-119.
- van den Bos W, McClure SM, Harris LT, Fiske ST, Cohen JD. 2007. Dissociating affective evaluation and social cognitive processes in the ventral medial prefrontal cortex. *Cognitive, Affective & Behavioral Neuroscience*. 7:337-346.
- Van Leijenhorst L, Zanolie K, Van Meel CS, Westenberg PM, Rombouts SARB, Crone EA. 2010. What motivates the adolescent? Brain regions mediating reward sensitivity across adolescence. *Cerebral Cortex*. 20:61-69.
- van Veen V, Holroyd CB, Cohen JD, Stenger VA, Carter CS. 2004. Errors without conflict: Implications for performance monitoring theories of anterior cingulate cortex. *Brain and Cognition*. 56:267-276.
- Vartanian O, Goel V. 2004. Neuroanatomical correlates of aesthetic preference for paintings. *NeuroReport*. 15:893-897.
- Viinikainen M, Jääskeläinen IP, Alexandrov Y, Balk MH, Autti T, Sams M. 2010. Nonlinear relationship between emotional valence and brain activity: Evidence of separate negative and positive valence dimensions. *Human Brain Mapping*. 31:1030-1040.
- Volz KG, Schubotz RI, von Cramon DY. 2005. Frontomedian activation depends on both feedback validity and valence: fMRI evidence for contextual feedback evaluation. *NeuroImage*. 27:564-571.
- Vrticka P, Andersson F, Grandjean D, Sander D, Vuilleumier P. 2008. Individual attachment style modulates human amygdala and striatum activation during social appraisal. *PloS One*. 3:e2868.
- Walter H, Kammerer H, Frasch K, Spitzer M, Abler B. 2009. Altered reward functions in patients on atypical antipsychotic medication in line with the revised dopamine hypothesis of schizophrenia. *Psychopharmacology*. 206:121-132.

Watson KK, Matthews BJ, Allman JM. 2007. Brain activation during sight gags and language-dependent humor. *Cerebral Cortex*. 17:314-324.

Weil RS, Furl N, Ruff CC, Symmonds M, Flandin G, Dolan RJ, Driver J, Rees G. 2010. Rewarding feedback after correct visual discriminations has both general and specific influences on visual cortex. *Journal of Neurophysiology*. 104:1746-1757.

Wittmann BC, Daw ND, Seymour B, Dolan RJ. 2008. Striatal activity underlies novelty-based choice in humans. *Neuron*. 58:967-973.

Wittmann BC, Schiltz K, Boehler CN, Düzel E. 2008. Mesolimbic interaction of emotional valence and reward improves memory formation. *Neuropsychologia*. 46:1000-1008.

Wittmann BC, Schott BH, Guderian S, Frey JU, Heinze H-J, Düzel E. 2005. Reward-related fMRI activation of dopaminergic midbrain is associated with enhanced hippocampus-dependent long-term memory formation. *Neuron*. 45:459-467.

Wrase J, Kahnt T, Schlagenhauf F, Beck A, Cohen MX, Knutson B, Heinz A. 2007. Different neural systems adjust motor behavior in response to reward and punishment. *NeuroImage*. 36:1253-1262.

Wright ND, Symmonds M, Fleming SM, Dolan RJ. 2011. Neural segregation of objective and contextual aspects of fairness. *Journal of Neuroscience*. 31:5244-5252.

Wunderlich K, Rangel A, O'Doherty JP. 2010. Economic choices can be made using only stimulus values. *Proceedings of the National Academy of Sciences of the United States of America*. 107:15005-15010.

Xue G, Lu Z, Levin IP, Weller JA, Li X, Bechara A. 2009. Functional dissociations of risk and reward processing in the medial prefrontal cortex. *Cerebral Cortex*. 19:1019-1027.

Ye Z, Hammer A, Camara E, Münte TF. 2011. Pramipexole modulates the neural network of reward anticipation. *Human Brain Mapping*. 32:800-811.

Yoshida W, Seymour B, Friston KJ, Dolan RJ. 2010. Neural mechanisms of belief inference during cooperative games. *Journal of Neuroscience*. 30:10744-10751.

Yu R, Mobbs D, Seymour B, Calder AJ. 2010. Insula and striatum mediate the default bias. *Journal of Neuroscience*. 30:14702-14707.

Zalla T, Koehler E, Pietrini P, Basso G, Aquino P, Sirigu A, Grafman J. 2000. Differential amygdala responses to winning and losing: A functional magnetic resonance imaging study in humans. *European Journal of Neuroscience*. 12:1764-1770.

Zhang W, Qin S, Guo J, Luo J. 2011. A follow-up fMRI study of a transferable placebo anxiolytic effect. *Psychophysiology*. 48:1119-1128.

Zink CF, Pagnoni G, Martin-Skurski ME, Chappelow JC, Berns GS. 2004. Human striatal responses to monetary reward depend on saliency. *Neuron*. 42:509-517.