Bursting Your Balloon: Examining Differences in Self-Other Decision Making Using the BART Task

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Foreword

Submitted in partial fulfilment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.

Abstract

Making risky decisions for oneself and the role affect play in that process has been extensively studied. In contrast however, little is known about the process of risky decision making on behalf of others. This thesis explores risky decision making, whether making risky decisions for others differs from making them for oneself, and if so how. Furthermore, it examines if positive and negative affect differentially affect decision making for others versus oneself. Participants were 37 undergraduate psychology students. Age ranged from 21 to 38 years (M = 24.46, SD =3.83), 32 were female and 5 were male. Participants were randomly assigned conditions. They either had to make decisions for themselves or to make decisions for a nonspecific family member. Decisions were measured using the BART task and positive and negative affect was assessed with the PANAS scale. The results showed that there was no difference between groups regarding decision making. Positive affect was associated with increased risk but negative affect was unrelated to risky decision making. Finally, affect did not differentially affect decision making for others versus oneself. Future studies should use a more holistic approach to further our understanding of decision making as a whole.

Keywords: self-other, decision making, risk, affect

Ágrip

Áhrif tilfinninga á ákvarðanatöku hefur verið vel rannsakað á undanförnum árum og áratugum. Ákvarðanataka hefur í flestum tilvikum verið rannsökuð með einstaklingin í huga og ákvarðanir er varða hann sjálfan en það hvernig einstaklingur tekur ákvarðanir fyrir aðra hefur lítið verið rannsakað. Tilgangur þessarar rannsóknar er því að skoða hvort áhættusamar ákvarðanir eru ólíkar eftir því hvort að ákvörðun er tekin fyrir sjálfan sig eða fyrir einhvern annan. Einnig er kannað hvort tilfinningar hafi ólík áhrif á þessar tvær tegundir ákvarðanatöku. Þátttakendur voru 37 grunnnemar í sálfræði við Háskólann í Reykjavík. Aldur þátttakenda var á bilinu 21 til 38 ár (M = 24.46, SD =3.83) og af þeim 37 nemendum sem tóku þátt voru 32 konur og 5 karlar. Þátttakendum var skipt tilviljunarkennt í tilraunahópa. Ákvarðanir voru mældar með BART prófinu en PANAS kvarðinn var notaður til að kanna jákvæðar og neikvæðar tilfinningar. Þátttakendur tóku jafn áhættusamar ákvarðanir fyrir sjálf sig og aðra. Jákvæð tengsl voru á milli jákvæðra tilfinninga og því að taka áhættusamar ákvarðanir. Engin tengsl fundust fyrir neikvæðar tilfinningar. Samverkun milli tilfinninga og ákvörðunartöku milli tilraunahópa var ekki marktæk. Framtíðar rannsóknir ættu að horfa til heildrænnar nálgunar við rannsóknir á ákvarðanatöku.

Efnisorð: ákvarðanataka, áhætta, tilfinningar

Bursting Your Balloon: Examining Differences in Self-Other Decision Making Using the BART Task

Decision making is integral part of our daily life and is one of the fundamental things that make us human. How and why we decide is therefore an important area of research. How to make a decision is the process, act or method of settling a dispute or a question that leads to a final decision (*Random House Webster's unabridged dictionary*, 1997). Sometimes decisions are made in an environment considered to be risky and unsafe. What is considered unsafe or risky is for each individual to interpret. All decisions thus carry a type of risk, where risk is considered a variance in outcome or the possibility of an undesirable outcome (Mishra, 2014). There is a large body of research concerned with how we make risky decisions (Bechara, Damasio, Tranel, & Damasio, 1997; Finucane, Alhakami, Slovic, & Johnson, 2000; Kahneman & Tversky, 1979; Kray, 2000). The majority of the work has been focused on the decisions we make on our own behalf. The situation may arise where we need to make a decision, possibly a high risk one, for someone else. Decisions made by doctors, politicians or teachers for example could have a substantial impact on society at large. The literature indicates a difference between making decisions on your own behalf or for someone else because of the "role" the decision maker is in. Zikmund-Fisher, Sarr, Fagerlin and Ubel (2006) asked participants to make medical decisions for themselves as patients and also for others as physicians, medical directors or as a parent. When making decisions on their own behalf they were less likely to choose active treatment than for others and consequently took less risk. Research has also shown that people perceive others to make more risky decisions than themselves and furthermore people aren't very reliable for estimating the risk preference for others (Hsee & Weber, 1997). There has been a growing stream of research in recent years with emphasis on self-other decision making but the findings have been inconclusive with some researchers finding decisions to be more and less risky in various aspects of self-

other decisions making (Hsee & Weber, 1997; Jonas, 2005; Kray, 2000; Polman, 2010; Polman, 2012a; Zikmund-Fisher et al., 2006).

While the area of research for self-other decision making continues to grow there has been a lack of studies examining the role of affect regarding self-other decision making. Studies have shown that affect plays an important role in the decision making process. Early theories of decision making focused primarily on logic. Theories that rely solely on logic have been criticized for being impractical in real life as individuals usually do not calculate every outcome. In everyday life individuals think of the highest value of an opportunity forgone but not in terms of odds and value such as monetary funds (Parkin, 2014). It is now generally recognized that affect has a big impact on decision making and that it does not rely only on logic (Dunn, Dalgleish, & Lawrence, 2006). However, the use of logic is undeniably important when decisions are made, in conjunction with other aspects of decision making.

Affect supplies an easier and more efficient approach to decision making in a complex environment other than only relying on logic (Slovic, Peters, Finucane, & MacGregor, 2005) thus the combination of logic and affect is essential. One approach to link affect with logic is the affect heuristic. The affect heuristic is introduced in an article by Slovic, Finucane, Peters, & MacGregor (2004). It describes how affective responses can occur automatically and very fast. Similar to other theories of decision making the affect heuristic assumes that most decisions are made under a certain type of risk. According to the heuristic approach risk is either a feeling or an analysis. Risk as feelings is a faster and more automatic process. Risk as an analysis uses reason and logic to analyze a situation. The affect heuristic therefore offers an approach to account for both feelings and logic. When making risky decisions people depend on their judgement and it is often based on what people think, how they feel and the outcomes of past decisions. Alhakami & Slovic (1994) showed that the affect heuristic is a guiding force in how people perceived risk and benefit. Their research found

that if individuals liked a particular event or an activity they would be more likely to judge the risk associated as low and benefit highly and for that reason take more risk when making decisions. Individuals that report higher positive affect are more likely to notice positive events happening and are less likely to notice negative events happening and therefore they take more risk (MacLeod & Campbell, 1992).

In summary, the literature regarding differences in self-other decision making has been inconclusive as decision making is an extremely expansive phenomenon and this area of research lacks a more holistic approach for examining decision making. The combination of self-other decision making with affect is a step towards a broader view of what effects decision making and to see both how and what has an effect on self-other decision making. The purpose of this thesis is, thus, to explore the influence affect has on self-other decision making. Although there have been inconsistencies, majority of studies have shown that individuals make more risky decision for others. The following hypothesis were proposed based on the literature: 1) That individuals take more risk for others than they do for themselves and 2) Higher positive affect results in higher risk taking. Furthermore the aim of the study was to also explore, because of lack of research, if negative affect would be associated with risky decision making and if the effect of affect is different when making decisions on your own behalf or for others.

Method

Participants

Participants were recruited from a pool of undergraduate psychology students at Reykjavík University in Iceland. The study was advertised by email and by going to classes and asking for participation. Sixty five participants signed up for the study and 37 responded to an email asking them to schedule a time to partake in the study. All of the 37 students that responded completed the study. Participants received course credit for their participation. Of

the 37 students who participated there were 32 women and five men. The age of the participants ranged from 21 to 38 years of age (M = 24.46, SD = 3.83).

Measures

The Positive and Negative Affect Schedule (PANAS) was used to assess positive and negative affect (Watson, Clark, & Tellegen, 1988). The PANAS is a composite measure that uses a five point Likert type scale with the anchors 1 ("Very little or nothing") and 5 ("Very much"). It was translated into Icelandic by Árni Halldórsson (2007). The PANAS consists of 20 items, 10 items measuring positive affect and 10 items measuring negative effect (see appendix A, page 21). An example of positive items was feeling powerful, enthusiastic, proud, inspired and decisive. An example of negative items was feeling guilty, scared, nervous, hostile and unfriendly. The PANAS scores ranged from 1 to 50. A high score indicates a high level of affect for both positive and negative affect. The coefficient alpha for positive affect was $\alpha = 0.873$ and for negative affect, $\alpha = 0.797$.

The Balloon Analogue Risk Task (BART) was used to measure risky decision making (Lejuez et al. in 2002). It has been shown to have strong correlations with self-report scales measuring constructs related to risky decision making such as impulsivity and risk aversion (Lejuez et al., 2002). The BART was chosen due to its simplistic format and its simulation of a relevant type of decision making. The software used to run the BART task was Inquisit by Millisecond which specializes in online psychological testing. In the beginning participants received instructions on how to perform the task. The instructions were presented to them on a computer monitor. The instructions were translated into Icelandic and then translated back into English to ensure that nothing got lost in translation. Following the instructions the participants engaged in the BART task. The primary objective was to collect as much money as possible by blowing up a balloon by clicking on a button on the screen. For each pump the participant collected five cents. Participants did not receive the money they earned because this was a student project with no funding. The chances of a balloon blowing up during the

first pump were 1:128 but with each pump that was pumped into the balloon the odds of the balloon exploding increased. For example, with the next pump the odds increased to 1:127, with the third pump to 1:126 and so on. If the balloon had not exploded by the 127th pump it would explode the next time. At any given time the participant could choose to cash in the money he or she had earned but then the number of balloons available to raise money decreased. The participants had 30 balloons to use at will. If the balloon exploded and the participant had not collected the money the participant would gain no money from that particular balloon. Four measures were used from the BART task to estimate risky decision making: 1) Total pump count which could range from 30 to 3840, 2) Total number of exploded balloons which ranged from 0 to 30, 3) Total number of balloons that did not explode which ranged from 0 to 30 and 4) Adjusted total pump count, it was the average number of pumps and therefore the total value of those pumps without the balloons that exploded, which could range from 30 to 3840. The amount of money earned was thus a function of the pump count. A higher score on total pump count, total number of explosions and the adjusted total pump count indicated a higher level of risky decision making. A higher score on the total number of non-exploded balloons showed a propensity to take less risk.

The demographic variables collected were age, gender and level of education. Participants were not formally asked about their level of education but all participants were psychology students at Reykjavík University so they all had similar level of education completed.

Procedure

The study was approved by an Ethics Committee within the Psychology department at Reykjavík University and the Data Protection Authority was informed about the study. The study took place at Reykjavík University in February 2015. At first the students were greeted, invited to the testing room and asked to take a seat. They were then offered an envelope which contained an information sheet, informed consent, and the PANAS scale. After

receiving the envelope the students were asked to read and sign the consent form. The consent form described the study and it was made clear to the participants that they could stop at any time without questions being asked. For anonymity each participant received a randomized number, but the consent form did not have the identifying number and was kept in a separate file from the research data. After signing the consent form participants were asked to complete the PANAS inside the envelope to the best of their ability. The participants indicated on the PANAS how they were feeling in the previous week to get a general view of their affect. They were also told not to hesitate to ask if there were any questions. After completing the PANAS the participants took the BART task on a Dell Inspiron computer, model N5110 with a 15.5 inch screen in front of them. All directions and measures were the same for both conditions except participants were informed with standardized oral instructions that they were raising money either for themselves or for some unspecified family member. Nineteen participants were randomly assigned to the "other" condition, making decision for a nonspecific family member and 18 assigned to the "self" condition, making decisions for themselves. They were also informed that the objective of the task was to collect as much money as possible. After completion of the BART the participants were thanked for their participation. After final analysis of the data the participants were debriefed with a summary report of the findings (see appendix B, page 23)

Statistical analysis

After data collection the data was imported into the Statistical Package for the Social Sciences (SPSS) and prepared for analysis. For the PANAS scale the positive and negative items were extrapolated and added to each subscale respectively. Then each subscale was dichotomized into high and low using median splits. Risky decision making measures were continuous. Descriptive statistics were calculated along with coefficient α for the PANAS subscales. The Inqusit software rendered the output from the BART task ready for analysis. An independent samples t-test was used to examine differences between groups both when

examining self-other decision making and high versus low affect, and a 2 (affect: positive vs. negative) x 2(decision making: self vs. other) ANOVA was used to examine interaction between decision making and affect.

Results

The scores on the positive subscale of the PANAS ranged from 17 to 40 with a mean of 30.285 (*SD* = 6.697) and a median of 31. The negative subscale ranged from 10 to 34 and had a mean of 18 (*SD* = 4.957) and a median of 18. Descriptive statistics from the BART task are shown in table 1. The pump count variables show how many pumps have been pumped during the BART task. Table 1 also shows the total number of exploded balloons and the total number of balloons that did not explode.

Table 1

Actual and observed range, mean and standard deviation for risky decision making measures

Variable	Actual Range	Observed Range	Mean	Std. Deviation
Total pump count (#)	30-3,840	290-1,613	832.30	324.139
Adjusted total pump count (#)	30-3,840	240-1,002	626.62	183.023
Exploded balloons (#)	30	2-18	8.30	3.821
Non-exploded balloons (#)	30	12-28	21.70	3.821

Independent samples t-test was used to inspect if risky decision making differed between those making decisions on behalf of others and those making decisions for themselves. For total pump count there was not a significant difference between groups, $t(35) = -.370$, $p = .714$, CI [-258.83, -179.34]. Same results were found for exploded balloons, $t(34) = -.455$, $p = .652$, CI [-3.17, 2.01], non-exploded balloons $t(34) = -.455$, $p = .652$, CI [-2.01, 3.17] and adjusted total pump count $t(35) = -.093$, $p = .927$, CI [-129.30, -118.01]. In Table 2 mean and standard deviations are shown by group.

Table 2

Means and standard deviations by group

	Self	Other
Total pump count	812 (303.37)	852 (349.61)
Exploded balloons	8 (4.00)	9 (3.73)
Non-exploded balloons	22 (4.00)	21 (3.73)
Adjusted total pump count	624 (177.76)	629 (192.70)

To examine if higher level of positive and negative affect resulted in higher and lower risk taking respectively independent samples t-tests were performed. For positive affect there was a significant difference between low and high affect for total pump count, $t(33) = -2.420$, $p = .021$, CI [-468.38, -40.55] and adjusted total pump count, $t(33) = -2.519$, $p = .017$, CI [-269.16, -28.16]. There was not a significant difference between high and low level of positive affect for exploded balloons, $t(32) = -1.122$, $p = .270$, CI [-4.07, 1.18] and non-exploded balloons, $t(32) = 1.122$, $p = .270$, CI [-1.18, 4.07]. As shown in Table 3 higher positive affect resulted in higher risky decision making as assessed with total pump count and adjusted total pump count.

Table 3

Means and standard deviations for risk taking measures for positive or negative affect

	Positive affect $\bar{x}$ (*SD*)		Negative affect $\bar{x}$ (SD)	
	Low	High	Low	High
Total pump count	711 (278.61)	965 (341.87)*	871 (354.52)	774 (276.46)
Exploded balloons	8 (3.25)	9 (4.06)	8 (4.02)	8 (3.64)
Non-exploded balloons	22 (3.52)	21 (4.06)	22 (4.02)	22 (3.64)
Adjusted total pump count	555 (185.68)	704 (163.19)*	651 (192.31)	585 (172.05)

Note. $p < 0.05$*

The same analysis was conducted for negative affect. As shown in Table 3, no significant effects were observed between negative affect and risky decision making; total pump count $t(31) = .911$, $p = .370$, CI [-120.40, 314.41], exploded balloons $t(27) = .097$, $p =$

.924, CI [-2.56, 2.82], non-exploded balloons $t(27) = -.097$, $p = .924$, CI [-2.82, 2.56] and adjusted total pump count $t(28) = 1.064$, $p = .297$, CI [-61.46, 194.12].

A 2 (affect: positive vs. negative) x 2 (decision making: self vs. others) ANOVA was conducted to examine if the effects of negative and positive affect on risky decision making differed between those making decisions for themselves versus those making decisions for others. For the total pump count the main effects for group $F(1, 27) = 1.105$, $p = .303$, $\eta^2 = .039$ was not significant but main effects for positive affect was significant $F(1, 27) = 4.627$, $p = .041$, $\eta^2 = .146$. The interaction between group and positive affect was not significant $F(1, 27) = .102$, $p = .752$, $\eta^2 = .004$.

As shown in Figure 1, participants with higher levels of positive affect took more risk regardless of whether a decision was made for oneself or on the behalf of someone else.

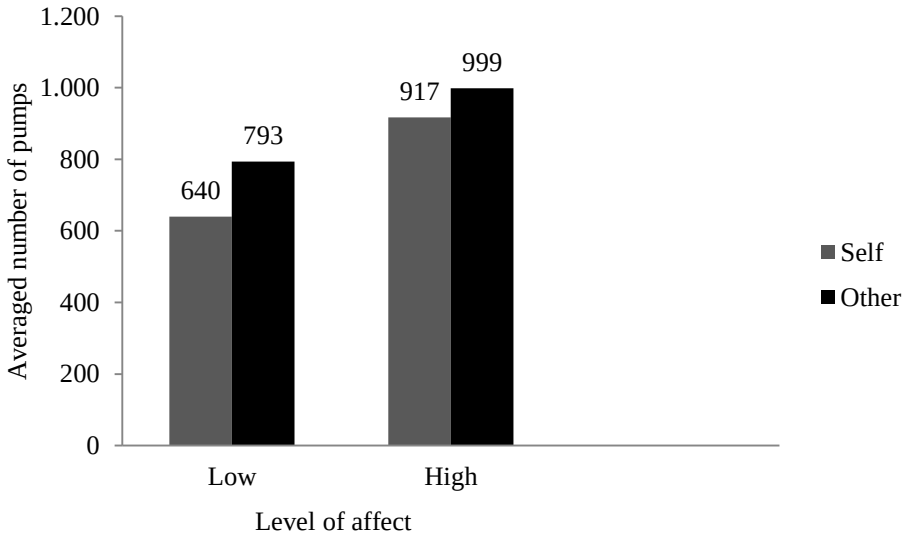

Figure 1. Average number of pumps for each experimental condition and separated into high and low level of positive affect.

For exploded balloons the main effects for group $F(1, 27) = 1.305$, $p = .263$, $\eta^2 = .046$ and positive affect $F(1, 27) = .422$, $p = .521$, $\eta^2 = .015$ were not significant and the interaction between group and positive affect was not significant $F(1, 27) = .563$, $p = .459$, $\eta^2 = .020$. Similarly, for non-exploded balloons the main effect for group, $F(1, 27) = 1.305$, $p = .263$, η^2

= .046 and positive affect were not significant $F(1, 27) = .422$, $p = .521$, $\eta^2 = .015$ and the interaction between group and positive affect was not significant $F(1, 27) = .563$, $p = .459$, $\eta^2 = .020$. Findings for the adjusted total pump count showed that the main effects for group $F(1, 27) = .546$, $p = .466$, $\eta^2 = .020$ was not significant while the main effect for positive affect was significant $F(1, 27) = 5.238$, $p = .030$, $\eta^2 = .162$. Again, the interaction between group and positive affect $F(1, 27) = 1.003$, $p = .325$, $\eta^2 = .036$ was not significant. As is shown in Figure 2, participants that had high positive affect were associated to take more risk for others than they did for themselves. In summary, there were significant main effects for positive affect for total pump count and adjusted total pump count while other risky decision making measures were not significant for positive affect.

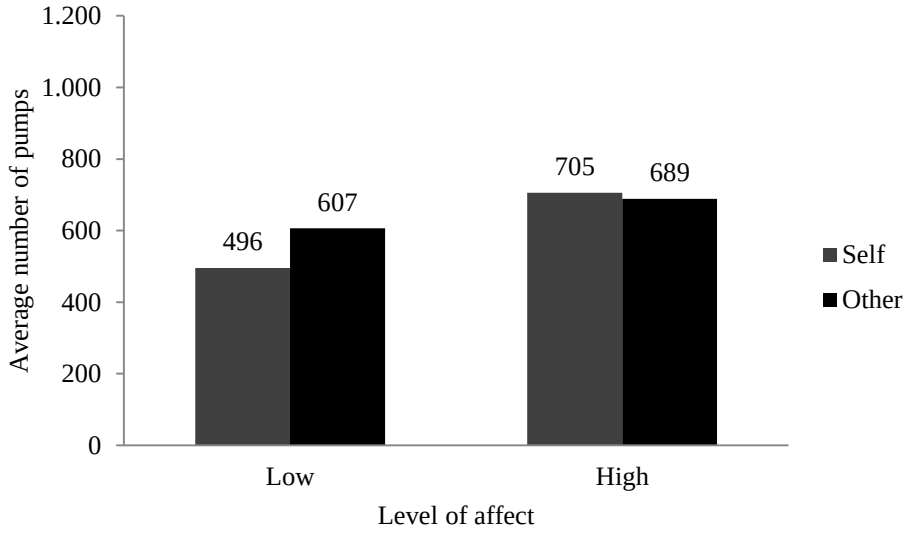

Figure 2. Average number of pumps for each experimental condition and separated into high and low level of positive affect.

Identical analyses were conducted to examine if negative affect differed between those making decisions for themselves versus those making decisions for others. Results for main effects by group can be seen above. As shown below the results indicated that negative affect had no effects on any of the risky decision making measures and it did not differentially affect decision making for oneself versus others. For the total pump count the main effects for

negative affect was $F(1, 27) = 1.175$, $p = .200$, $\eta^2 = .060$ and the interaction was $F(1, 27) = .005$, $p = .946$, $\eta^2 = .000$ and therefore not significant. For exploded balloons the main effect for negative affect was not significant with $F(1, 27) = .475$, $p = .497$, $\eta^2 = .017$ as was the interaction $F(1, 27) = .385$, $p = .540$, $\eta^2 = .014$. For non-exploded balloons the main effects of negative affect was $F(1, 27) = .475$, $p = .497$, $\eta^2 = .017$ and therefore not significant as was the interaction between group and negative affect for non-exploded balloons $F(1, 27) = .385$, $p = .540$, $\eta^2 = .014$. Similar to other risky decision making measures the adjusted total pump count had no significant main effects for negative affect $F(1, 27) = 1.740$, $p = .198$, $\eta^2 = .061$ and the interaction between group and negative affect was not significant $F(1, 27) = .025$, $p = .876$, $\eta^2 = .001$.

Discussion

The main purpose of this study was to explore and examine the differences in self-other decision making and if affect had an effect on self-other decision making. The results showed that there was no difference in risky decision making between those making decisions for others versus making a decision on their own behalf. Positive affect was associated with higher risky decision making while negative affect was not associated with more risk. Affect did not differentially affect risky decision making for oneself versus others.

The initial hypothesis was to examine the difference between those making decisions for themselves versus those making decisions for others. No significant difference was found. This is inconsistent with the literature which has found more risk to be taken if a decision is made for someone else (Hsee & Weber, 1997; Polman, 2012b; Pronin, Olivola, & Kennedy, 2007). A possible reason for these discrepant findings may be that the sample in the present study was small and, thus, there was not enough statistical power to detect a difference between the groups. Another possible factor might be the individual who the participants were making the decision on behalf of. The instructions specified that the participants were taking the test for a non-specific family member. The results might have differed if a specific

family member had been specified or if a friend and acquaintance had been used. Other studies have used physicians, parents, medical directors (Zikmund-Fisher et al., 2006) and students (Lu, Xie, & Xu, 2013) and they have found differences between self-other decision making. The reason for using non-specific wording was to eliminate bias and perceptions of the individual the participants were making decisions on behalf of.

The hypothesis that positive affect would be associated with higher risk taking was confirmed. For two of the four risky decision making measures positive affect was positively associated with risk taking and for the other two risk measures the means were in the expected direction. This finding is consistent with MacLeod & Campbell (1992). The exploratory hypothesis that negative affect would be associated with less risk taking was not supported. This hypothesis was exploratory and the statistical power to detect a significant association between negative affect and risky decision making was lacking. Lastly it was proposed that affect would affect risky decisions differently between those making decisions for others or on their own behalf. Non-significant findings have to be taken with reservations as the number of participants was small and restricted to undergraduate psychology students.

The study had a few limitations. As mentioned above, the sample size was relatively small and a future step would be to replicate the study with a bigger sample size as assumptions of inferential statistical methods might not be reliable with a small sample. For this reason the results of this study, although promising, have to be taken with reservations. Another possible concern might be the size of the screen and risk perception. The BART task shows a balloon on the screen which grows with each pump and having more room for the balloon to grow might impact participants and their risk related behavior. A bigger screen allows the balloon to become bigger changing the participants' sense of scale which might cause them to perceive more risk on a bigger screen. This study was, however, conducted using a similar screen as other studies (Lejuez et al., 2002). The participants in the study did

not receive the amount of money they earned in the BART task due to this study being without funding and the participants already receiving course credit for their participation. This might have had an impact on the results as it could have made the risk perception relatively small. Other studies have offered money (Lejuez et al., 2002; Bechara et al., 1997) and the results from the BART task in this study are nonetheless consistent with Lejuez et al. (2002). All instructions were hypothetical so it was clear that there would be no real money offered. All currency in the BART was in US dollars instead of the Icelandic currency. The perception of monetary value might, therefore, be slightly different if the currency had been Icelandic. Finding a realistic equivalence without pilot testing was not practical for the magnitude of this study and therefore it was decided to keep the currency in dollars. The literature has shown affect to be a strong conditioner of preference in decision making with or without the affect being consciously apparent (Slovic, Finucane, Peters, & MacGregor, 2007). Self-reports were used to assess affect in this study. A more reliable way to measure affect might be to induce different types of affect such as joy, rage and anxiety which would allow for a more specific measurement of self-other decision making.

The BART task was well received with the students. Other risky decision making measures that have been used are the Iowa Gambling Task and the Wisconsin Card Sorting Task. They have been criticized for lacking convergent validity with measures of various aspects of risky decision making and risky behavior (Lejuez et al., 2002) and were therefore not chosen as a measure. The BART has shown strong correlations with measures of risky decision making and behavior (Lejuez et al., 2002). The software used for the BART task offers a possibility of increasing the number of balloons and changing various elements of the task with relative ease so many possibilities are available to experiment with. Because of the number of pumps possible for each balloon there is a large amount of data available for the measures using pump count.

In summary, the literature is very compartmentalized in its approach to decision making. Specific elements are well documented such as loss aversion (Polman, 2012b) and risk preference (Hsee & Weber, 1997). Decision making is a very complex phenomenon and compartmentalization of it has helped in assessing its working parts and structures. The next steps in decision making research lie in combining various components and parts of decision making and offer a broad and holistic view of how decisions are actually made.

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Appendix A

PANAS

Kvarðinn samanstendur af 20 orðum sem lýsa ólíkri **líðan og tilfinningum**. Vinsamlegast lestu hvert atriði og merktu svar þitt á kvarðann í viðeigandi reit. Gefðu til kynna hvernig þér líður að jafnaði eða yfirleitt. Vertu hreinskilin(n) í svörum þínum og reyndu að dvelja ekki of lengi við hvert atriði.

	Mjög lítið eða ekkert	lítið	nokkuð	mikið	mjög mikið
áhugasamur/áhugasöm	1	2	3	4	5
þjakaður/þjökuð	1	2	3	4	5
eftirvæntingarfull(ur)	1	2	3	4	5
í uppnámi	1	2	3	4	5
kraftmikil(l)	1	2	3	4	5
sakbitin(n)	1	2	3	4	5
hrædd(ur)	1	2	3	4	5
óvinveitt(ur)	1	2	3	4	5
atorkusamur/atorkusöm	1	2	3	4	5
stolt(ur)	1	2	3	4	5
pirraður/pirruð	1	2	3	4	5
vökul(l)	1	2	3	4	5
skömmustuleg(ur)	1	2	3	4	5
innblásin(n)	1	2	3	4	5
taugaóstyrk(ur)	1	2	3	4	5

ákveðin(n)	1	2	3	4	5
athugul(l)	1	2	3	4	5
óróleg(ur)	1	2	3	4	5
virk(ur)	1	2	3	4	5
óttaslegin(n)	1	2	3	4	5

Eftirfarandi var ekki gefið upp fyrir þátttakendur:

PANAS gefur tvö skor, fyrir jákvæðar tilfinningar og neikvæðar tilfinningar. Atriði sem tilheyra hverjum þætti eru lögð saman og fæst þá skor á bilinu 10 – 50. Jákvæðar tilfinningar: Áhugasamur/áhugasöm, eftirvæningarfullur, kraftmikill, atorkusamur/atorkusöm, stolt(ur), vökul(l), innblásin(n), ákveðin(n), athugul(l), virk(ur). Neikvæðar tilfinningar: Þjakaður/þjökuð, í uppnámi, sakbitin(n), hrædd(ur), óvinveitt(ur), pirraður/pirruð, skömmustuleg(ur), taugaóstyrk(ur), óróleg(ur), óttaslegin(n).

Appendix B

Summary Report

Tilgangurinn með þessari rannsókn var að kanna hvort að það væri munur á milli þess að taka ákvörðun fyrir sjálfan sig eða fyrir einhvern annan. Einnig var athugað hvort að tilfinningar hefðu mismunandi áhrif á hvort ákvarðanir væru teknar fyrir sjálfan sig eða fyrir aðra. Tveir tilraunahópar voru í rannsókninni: Að taka ákvörðun fyrir sjálfan sig eða taka ákvörðun fyrir einhvern fjölskyldumeðlim. Niðurstöður rannsóknarinnar gefa til kynna að ekki sé marktækur munur á milli þess að taka ákvörðun fyrir sjálfan sig eða fyrir aðra. Jákvæðar tilfinningar virðast valda því að meiri áhætta er tekin við ákvarðanir sama hvort ákvörðun er tekin fyrir aðra eða fyrir sjálfan sig. Neikvæðar tilfinningar höfðu ekki marktæk áhrif á ákvaðranatöku. Samverkun milli tilfinninga og ákvörðunartöku milli tilraunahópa var ekki marktæk.