Relational Contexts and Sunk Cost

Honors Thesis

Stephanie Grimes
Spring 2016

ABSTRACT

The present study examines the connection between relational contexts and the likelihood of engaging in sunk cost. Two hundred thirty-one undergraduate students participated in an online survey asking them to make a sunk cost decision under one of three relationship conditions: self, close other, and unknown other. The results showed that participants were more likely to engage in sunk costs when making decisions for themselves and close others than they were when making decisions for unknown others.

BACKGROUND AND CONCEPTUAL FRAMEWORK

Almost everyone has been to a movie they didn't enjoy. You buy your ticket, sit through the previews, and twenty minutes in, you realize that this is a movie you're not going to enjoy. You want to leave, but you think about all the time and money you spent getting to the theater – getting ready, driving to the theater, paying for popcorn – so you stay. This is a simplistic, everyday example of honoring sunk costs.

A *sunk cost* is an expenditure, be it money, time or effort, which has already been spent and is unable to be recovered. Previous sunk costs play a role in future decision making and often lead to a continuation of investment in a failing course of action, this is known as the *sunk cost effect* (Sofis, Jarmolowicz, Hudnall, and Reed, 2015). People engage in sunk costs on a daily basis, whether it's on a small scale like sitting through an unenjoyable movie or on a larger scale like when a business continues to invest money in a failing project; it is an irrational choice and, even though these past expenses have no effect on future success, people continue to do it.

Research has found that people often under-predict their likelihood of honoring sunk costs and that such behavior can be used to predict future escalation (Ku, 2008). When asking participants to predict the amount of time they would spend completing an anagram activity that

would cost participants money after the sixth minute of working, results showed that participants consistently took longer than predicted and lost money, demonstrating people engage in sunk costs whether they intend to or not. Furthermore, Ku (2008) found that those who escalated their commitment and engaged in sunk costs exhibited less regret than their counterparts who did not escalate their commitment; this suggests, that a lack of regret in an initial sunk cost decision can lead to a continuation of honoring sunk costs.

Honoring sunk costs also tend to arise out of the need for self-justification. *Self-justification* is derived from the theory of cognitive dissonance and proposes that, in order to create cognitive consistency, people seek to rationalize past decisions (Steinkühler, Mahlendorf, and Brettel, 2014). This need to need to rationalize causes decision makers to reaffirm their previous decisions and continue to commitment to those decisions, thus honoring sunk cost (Steinkühler et al., 2014).

An initial sunk cost investment can create a cycle of the continuous honoring of sunk costs. Zeelenberg and van Dijk (1997), found that previous sunk cost investments can lead to increased risk aversion in decision makers causing them to make future decisions they perceive as safe. Many agree that root of honoring sunk costs lies in the belief that staying the present course of action and avoiding deviations from the course is the safest choice (Arkes and Blumer, 1985); pairing this idea with the findings that sunk costs leads to risk aversion suggests that risk aversion would lead to a continued engagement in sunk costs, creating a cycle of honoring sunk costs.

But what if you had also invited your friend to that terrible movie and encouraged them to spend their money too? Would you be even more inclined to sit through the movie, or are there strength in numbers and you would both agree to leave? What if you invited someone you

hardly knew? Prior studies have shown that, when making decisions for others, decision-makers choose to honor sunk costs differently (Gunia, Sivanathan, and Galinsky, 2009; Fleming and Slank, 2015).

When making decisions for others, perspective-taking plays an important role in the choice to honor sunk costs. Gunia et al. (2009) paired participants with similar characteristics together to test if people tend to take the perspective of people with whom they feel psychologically connected, and if that connection also leads to an increased likelihood of honoring sunk costs. Their experiments showed that participants did, in fact, engage in taking on the perspective of their partner and continued to honor sunk costs on their behalf. The researchers propose that this was done in an effort of self-justification since the pairs identified closely with one another, so much so that they viewed their separate decisions as a singular decision (Gunia et al., 2009).

The tendency to honor sunk costs can also be linked to the decision maker's level of risk aversion. Fleming and Slank (2015) explored the connection between the level of risk aversion and decision making for the self and others; the "others" were split into two categories: concrete other, participants were given specific information regarding these individuals; and abstract other, participants were given no specific information regarding these individuals. Their study found that people make more risk-seeking decisions for others than for themselves, demonstrating higher levels risk aversion under the self condition; and, the decisions were even riskier for abstract others when compared to concrete others (Fleming and Slank, 2015). Based on the aforementioned research concerning the connection between the likelihood of honoring sunk costs and risk aversion, it can be inferred that people are more likely to honor sunk costs for

themselves due to higher risk aversion when making decisions for the self and are less likely to honor sunk costs for others due to low risk aversion when making decisions for others.

In order to further analyze the link between relationships and sunk costs, the current study used an experiment to determine the likelihood of honoring sunk costs under three relationship conditions: self, close other, and unknown other.

Based on the prior research concerning risk aversion when making decisions for self and others, I predict that the more social distance there is between the decision maker and the subject, the less likely it is for the decision maker to honor sunk costs. Also, taking perspective-taking into account, the result for honoring sunk costs should be similar in the self and close other conditions. In total, I predict that when the decision is being for the self, the likelihood for honoring sunk costs will be high and the highest of the three conditions; when the decision is being made for a close other, the likelihood of honoring sunk costs will also be high; and when the decision is being made is for the unknown other, the likelihood of honoring sunk costs will be low.

Hypothesis: When making decisions for the self, individuals are more likely to honor sunk cost, compared to making decisions for close others or unknown others.

METHODOLOGY

Study 1 examined how different relational contexts (self, close other, unknown other) influenced the likelihood of honoring sunk costs. Two hundred thirty-one undergraduate students from a large university in Southwest took part in an online experiment in exchange for course credit (145 females and 86 males; 186 Caucasians, 17 Asians, 11 African Americans, 7 Hispanics, 6 Native Americans, and 4 other races/ethnicities; mean age = 21.88, SD = 4.21, range = 18 to 54).

Participants were randomly assigned to a hypothetical scenario in which they were asked to make a purchasing decision for either themselves, a close other, or an unknown other. Participants in *the self-condition* read,

> *You recently accepted a job that requires you to move to a new city for a two-year period. You were hoping to get an apartment close to work, but the closest apartment that met all of your needs was a 10-mile commute to your work place. You paid a $3,000 non-refundable deposit for this apartment (it is $1,000 a month in rent and $100 a month in transportation costs). A few weeks after paying the deposit, you see an advertisement for a comparable apartment with a monthly rent of $700 that is right near your workplace (it's slightly smaller, but still meets all your needs).*

Those in *the close-other condition* were asked to imagine and type one of their close friends' name. Then, they read,

> *(Close friend's name) has accepted a job that requires them to move to your city for a two-year period and, since you know the area well, they have given you control in finding them an apartment. (Close friend's name) was hoping to get an apartment close to work, but the closest apartment that met all of their needs was a 10-mile commute to their work place. You paid a $3,000 non-refundable deposit on their behalf for this apartment (it is $1,000 a month in rent and $100 a month in transportation costs). A few weeks after paying the deposit, you see an advertisement for a comparable apartment with a monthly rent of $700 that is right near their workplace (it's slightly smaller, but still meets all of their needs).*

Finally, participants in *the unknown other condition* read,

You are a recruiter for a company and one of the services you offer is finding apartments for new hires while they work at the main office for a two-year period. You are given control in securing an apartment for a new hire, Pat. Pat was hoping to get an apartment close to work, but the closest apartment that met all of their needs was a 10-mile commute to their work place. You paid a $3000 non-refundable deposit on their behalf for this apartment (it is $1000 a month in rent and $100 a month in transportation costs). A few weeks after paying the deposit, you see an advertisement for a comparable apartment with a monthly rent of $700 that is right near their workplace (it's slightly smaller, but still meets all of their needs).

After reading their randomly assigned scenario, participants were asked to indicate to what extent they would prefer to forego the $3,000 deposit and opt for the nearby apartment on a 9-point Likert type scale (*1* = Definite take nearby apartment, *9* = Definitely stick to original apartment).

RESULTS

A one-way analysis of variance (ANOVA) was conducted to compare the mean differences in honoring sunk cost across the three conditions (self, close other, unknown other). The result revealed that there was a marginally significant effect of conditions on honoring sunk cost, F (2, 228) = 2.36, p = .097; See Figure 1). Then I conducted pairwise comparisons across the conditions. The results showed that participants in the self condition were more likely to honor sunk cost (M = 5.17, SD = 2.84) than those in the unknown other condition (M = 4.32, SD = 2.11), t(228) = 2.17, p = .03. However, there was no statistically different mean differences between self and close other condition (M = 4.78, SD = 2.25), t(228) = .95, p = .35. In addition,

no difference between close other and unknown other condition were found, $t(228) = 1.17$, $p = .24$.

DISCUSSION

This study examined the connection between relational contexts and sunk costs; analyzing how the relationship between the decision maker and the subject influence the level of honoring sunk cost.

The results support my hypothesis that when making decisions for themselves, people are more likely to honor sunk costs than those who make decisions for others. The results further supported previous research that those who make decisions for close others are likely to honor sunk costs as they would their own, shown by no statistical mean difference between the self and close other conditions.

Implications for Business

This study has many implications for decision making in many areas of life, but particularly in the loss of objectivity in business decisions.

The present study demonstrates clear importance for any business relationship between an agent and a client. In finance, it is important that there is social distance between the financial officer and the client since people are more likely to honor sunk costs for themselves and close others. This issue is exemplified by Nick Leeson who single handedly brought down Barings Bank because he continuously honored his own sunk costs without consulting an outside financial advisor. This same principle applies for negotiating agents; they should not negotiate on behalf of themselves or close friends and family. The negotiating agent may be more likely to follow a course of action for their client, be it themselves or close others, even though it is

ultimately detrimental for the negotiation. Providing separation between the agent and the client allows for more objectivity in decision making.

In many hiring decisions, managers fall prey to the "similar to me" bias in which they tend to hire people they feel are akin to themselves. When managers are surrounded by employees they feel connected and similar to, they may be more likely to engage in honoring their employees sunk costs. As demonstrated by the present study, when people feel close to each other, they are more inclined to follow through on another's failing course of action.

Since family-owned businesses generate decision making purely between close others, it is important to bring in employees from outside the family. Whether it is bringing in sales associates, upper-managers, or accountants, it is important that there be individuals in the decision making process that are not inclined to take on the perspective of others and self-justify on their behalf; this will allow for the best choices to made for the business as a whole rather than for the family.

It is important to gain social distance between the decision maker and the subject of the decision in order to bring objectivity into the decision making process.

Implications for Future Research

The simplicity of this study provides a foundation for further research. The present study examined a singular sunk cost decision; perhaps multiple sequential sunk cost decisions would give more insight into long-term escalation patterns. A future study could ask participants to make multiple sunk cost decisions in one sitting or it could require participants to make an initial decision and then return later to make a subsequent decision, allowing researchers to study how long people are willing to invest in a failing course of action.

Much of the reasoning for the hypothesis of this study is founded on the idea that risk aversion leads to continued investment in sunk cost, but there is no current study that directly links such a relationship. A simple study could be created that asks participants to answer questionnaires and scenarios that measure the level of risk aversion and the likelihood of honoring sunk cost. Then researchers can conduct tests to determine if there is a correlation between risk aversion and sunk cost.

Limitations

Although there was statistical significance to the findings, the level of honoring sunk cost was moderate under all three conditions. The hypothetical nature of this study could prove to be a limitation on the level at which participants chose to honor sunk costs; perhaps having participants actively engage in sunk costs situations (i.e. an auction scenario) would allow for better results. Also, having participants write a personal paragraph about a time they had to make a decision in the self and close other scenario could have helped solidify participants' mindsets for the sunk cost decision.

REFERENCES

Arkes, H. R., & Blumer, C. (1985). The Psychology of Sunk Cost. *Organizational Behavior & Human Decision Processes*, *35*(1), 124-140.

Fleming, A. C., & Slank, K. L. (2015). Making a choice: Self-other differences in decision making in risky situations. *North American Journal of Psychology*, *17*(3), 633-648. Retrieved from http://argo.library.okstate.edu/login?url=http://search.proquest.com.argo.library.okstate.edu/docview/1754565426?accountid=4117

Gunia, B. C., Sivanathan, N., & Galinsky, A. D. (2009). Vicarious entrapment: Your sunk costs, my escalation of commitment. *Journal Of Experimental Social Psychology*, *45*(6), 1238-1244. doi:10.1016/j.jesp.2009.07.004

Ku, G. (2008). Before escalation: Behavioral and affective forecasting in escalation of commitment. *Personality and Social Psychology Bulletin*, *34*(11), 1477-1491. doi:http://dx.doi.org.argo.library.okstate.edu/10.1177/0146167208322559

Sofis, M., Jarmolowicz, D., Hudnall, J., & Reed, D. (2015). On Sunk Costs and Escalation. *Psychological Record*, *65*(3), 487-494. doi:10.1007/s40732-015-0124-5

Steinkühler, D., Mahlendorf, M. D., & Brettel, M. (2014). HOW SELF-JUSTIFICATION INDIRECTLY DRIVES ESCALATION OF COMMITMENT - A MOTIVATIONAL PERSPECTIVE. *Schmalenbach Business Review (SBR)*, *66*(2), 191-222

Zeelenberg, M., & van Dijk, E. (1997). A reverse sunk cost effect in risky decision making: Sometimes we have too much invested to gamble. *Journal Of Economic Psychology*, *18*(6), 677-691.

APPENDIX

Figure 1.