BEHAVIOURAL SCIENCE

Topic:
Gender differences in financial decisions

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I- Introduction

The present study's goal is to compare the effect of gender on financial behaviours. More precisely, this study focuses on whether success has a different effect on financial behaviours of men and women. This, both everyday life financial decisions and investment/work decisions being analysed.

1- Background and literature review

There is a gender stereotype concerning financial behaviours, notably regarding risk aversion, where women are considered as more risk averse than men. It reflects by the fact that there are far less women in high position in the finance industry. In fact, even though there is a 50:50 men/women ratio for employees in this industry, only 16% of females reach the senior executive position[1]. Thus, women face a "glass ceiling" as managers look for risk loving executives to increase the average returns (Johnson, Powell 1994).

But this stereotype was confirmed as it has been shown that gender has an effect on people's risk behaviour in financial decisions, and researches agree that women are more risk averse than men (Byrnes, Miller and Schaffer, 1999). This phenomenon is observable in financial markets where women tend to have safer portfolios (Powell and Ansic, 1997), making them more risk averse than men (Niessen and Ruenzi, 2007).

Furthermore, women are more risk averse towards gamble, especially when dealing with unfamiliar situations regardless of the level of risk of the gamble (Powell, Ansic, 1997/1998).

On the other hand, women are far more likely than men to buy without need (make impulsive buying decisions). Proving that women used shopping as a celebration far more than men (Sadique, Saadat, Muhammad, Waqas, Muhammad and Ghafoor, 2015). Furthermore, women tend to be less confident about their success (assimilating it to luck) than men, who assimilate it to skills.

However, only one of the studies I have looked at have found a correlation between the types of investments (gamble and insurance/financial) and risk taking (Powell, Ansic, 1997/1998). But none of the studies cover how a successful context can impact men and women's financial and personal spending behaviour differently.

Therefore, this study will address this gap by showing how a context of success can influence men an women's both personal and financial spending behaviours.

2- Research question

How does success affect men and women's both financial and personal spending behaviours differently?

[1] South China morning post (https://www.scmp.com/business/companies/article/2074379/financial-firms-lead-gender-diversity-men-still-dominate-top-jobs)

3- Hypotheses

This study will test two hypotheses: (H1) success leads to more impulsive personal spending decisions for women than men. (H2) Success affects less the level of risk taking in financial for women than men.

II- Method

1- Design selection

a. Type of design

To evaluate the effects of success on financial decisions, and because it analyses the behaviour of so few participants the study employed an experimental method based on a between-participants design for the analysis of gender effects, and a within-subjects design for the analysis of success levels effects.

b. Independent variables and operational definitions

In this experiment the Independent variables (IVs) are Gender (male or female) and the level of success (high, routine, low).

For success, the associated operational definition is the level of success (high, routine, failure) in the context of work. In order to measure it, participants were put into 3 different scenarios of work experience in a college society. In scenario 1 they did their job very well, in scenario 2 they did what they were expected to do and in scenario three they failed to do their task.

For Gender, the operational definition was if participants were male or female. To measure it, numbers were assigned to the answers (1 for female and 2 for male)

c. Dependent variables and operational definitions

In this experiment, the dependant variable (DV) is financial decision-making behaviour for personal matter and for work matters. The associated operational definition was to complete a questionnaire of six questions. The first three questions were assessing personal spending behaviours and the last three questions were assessing traditional financial behaviour (were inspired by the risk tolerance tests used by pension funds to build different investing profiles for customers).

d. Potential extraneous variables

Other variables can affect the DVs and bias the results of the experiment. First, given the very small size of the sample, participants' variability could affect the measure of the DVs. Also, there was a time pressure (30 seconds per question on average) to answer the questionnaire, and studies have shown that women tend to be more risk averse when they have to make decisions on the spot (Xie, Page and Hardy, 2017). Furthermore, there could be an order effect as the questionnaires showed the scenarios from most successful to least successful scenario, so the feeling of failure could have been enhanced by comparing the evolution of the levels of the success from scenario to scenario. Therefore, there could be too much noise in the DVs, preventing from statistical inference and cause random errors.

Finally, age could be another confounding variable. Participant's age ranged from 18 to 20 years old, which only describes a small part of the population that could be analysed for this study. Age could also impact how much risk individuals are willing to take and change gender differences for this willingness or not to take risks.

2- Sample

The sample was composed of 10 first year undergraduate students in BSc Management Science at University college of London (United Kingdom). The age ranged from 18 to 20 years old and there were 5 males and 5 females. The age mean was of 18.70 years old (SD=0.675).

Because All of the students attended the same university and course, there is a lack of diversity in the sample. Moreover, this lack of diversity is also reflected in the ethnicity of the students as 6 of them were from Western Europe and 4 from Sub-Saharan Africa.

Furthermore, it can be said with certainty that all the participants had basic knowledge about finance as they had lectures on basic principles of financial economics.

3- Materials and procedure

Experimental manipulation: The level of success

The IV was evaluated though an experimental manipulation on participants. Each questionnaire had 3 scenarios:

- The first scenario was depicting a high level of success at a work and academic level, in the context of being the treasurer of a society. In order to give a sense of success to the participants, key words like "fantastic", "good reputation" and "prestige", which are part of the lexical field of success, were used. Also, these words were associated to financial results, enhancing the feeling of success following a financial decision.
- The second scenario was depicting an average level of success, meeting the criterion of the participants' routine. In order to give a sense of average success to the participants, key words like "satisfying", "trust" and "nothing bad", which are part of the lexical field of average success, were used. Also, these words were associated to financial results, enhancing the feeling of average success in financial decisions.
- The third scenario was depicting a low level of success, meeting the criterion of the participants' sense of failure. In order to give a sense of low level of success to the participants, key words like "messed up", "loose value" and "put pressure", which are part of the lexical field of low success/failure, were used. Also, these words were associated to financial results, enhancing the feeling of failure in financial decisions.

Previous analysis of the scenarios: rating of the level of the success

Before doing my experiment, I asked 10 people (5males and 5females) from my seminar group to rate the level of success they felt after being put in each of the scenarios. They had to answer the question "Do you consider this situation as a success?". The possible answers fitted a 3-Points-Likert-scale (agree = 1/do not have an opinion = 2 /Disagree = 3). The goal of the pilot test was to check if the scenarios of the questionnaire were effectively displaying the level of success needed in order to do my analysis.

Descriptive statistics	Scenario 1	Scenario 2	Scenario 3
Min	1	1	2
Max	2	2	3
Median	1	2	3
Mean	1.30	1.70	2.70
Standard Deviation	0.48	0.5	0.5

Summary of the Pilot data

According to the table above, Participants' answers reflected the desired level of impression of success by reading the scenarios. In fact, the respective medians of each scenarios *(Median=1, Median=2, Median=3*) all reflect the "perfect" level of felt success. The respective means of each scenarios however show a slight deviation of the felt success levels *(Mean= 1.30, Mean=1.70, Mean=2.70).* The level of felt success is slightly lower than the optimal level expected for scenario 1 and slightly higher for the two other scenarios. But this inconsistency can be explained by the small size of the sample (N=10), which makes the deviations between the answers more significant.

Setting of the study

Participants were recruited using the school of management SONA System. The research invited them to participate in a research project examining the gender differences in financial decisions. As for ethical considerations, the participants were given an ethics form including an information sheet and a consent form to participating to the study before performing the questionnaire. In the Information sheet, they were told that they would be asked to answer a list of questions about financial choices (an example of a question was given) and give their gender (single blind procedure). To avoid any social desirability bias, the answers were made anonymous and we told participants that they would not be used for other purpose than the study.

The experiment was set in laboratory conditions in Canary Warf, which enabled to have better control over the IVs. However, as the participants were told that they were participating in an experiment about gender differences, participants could have modified their behaviour.

Finally, IVs were modified in an artificial setting, which could have altered the decision making of the participants.

Ride-along pre-scenarios

Before answering to the questions relating to the scenarios, participants were told that all of the scenarios were anchored in the same context. The context chosen was aimed to be as familiar to the participants as possible in order not to modify the behaviour they would have in

real life situation. Participants were told that they were the treasurer of the UCL entrepreneurship society and the tasks they had in such position were clarified[2] (setting relating to the analysis of the financial behaviour strictly regarding work). The participants were also told that their phone was starting to get old, in order to put them in a situation as close as possible to real life context regarding personal spending behaviours.

Level of risk aversion and impulsive buying

The participants' level of risk aversion and impulsive buying were measured in two separate parts in each of the three scenarios. First, three questions assessed the instant reaction to success/routine/failure regarding personal financial behaviour. Participants were presented an item of their daily life and were asked to rate their willingness to pay for the item. This was made using a 3-points Likert-scale inspiration (will surely buy the item = 1, don't have an opinion = 2, will surely not buy the item = 3).

After the three questions, participants had to answer questions about investments they had to do, in each question, different levels of risks were presented.

III- Results

1- Statistical Analysis

Throughout the statistical analysis, we refer to each question with: Question + (I/II/III = corresponding scenario) + A/B (A= questions about impulsive buying and B = questions about financial behaviour) + 1/2/3 = number of the question.

(H1) success leads to more impulsive personal spending decisions for women than men

In order to test H1, I conducted 3 t-tests using SPSS, with the data collected from the questionnaires (which has been restructured to fit the analysis). Each of the three t-tests tested the effect of one level of success on the impulsive buying behaviour of both male and female participants.

Independent samples t-test for the High level of success on Impulsive buying behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
QuestionIA1	Female	5	1.2000	.44721	.20000
	Male	5	1.8000	.44721	.20000
QuestionIA2	Female	5	1.4000	.54772	.24495
	Male	5	2.0000	.70711	.31623
QuestionIA3	Female	5	1.2000	.44721	.20000
	Male	5	1.8000	.44721	.20000

The t-test revealed that men have a lesser tendency to be affected by success in their personal financial choices *(Mean range: 2-1.8)* than women *(Mean range: 1.2-1.4)*. However, both groups have very high SDs (green), which diminishes the significance of this analysis.

[2] Refer to appendix questionnaire part

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
QuestionIA1	Equal variances assumed	.000	1.000	-2.121	8	.067	-.60000	.28284	-1.25224	.05224
	Equal variances not assumed			-2.121	8.000	.067	-.60000	.28284	-1.25224	.05224
QuestionIA2	Equal variances assumed	.103	.757	-1.500	8	.172	-.60000	.40000	-1.52240	.32240
	Equal variances not assumed			-1.500	7.529	.174	-.60000	.40000	-1.53253	.33253
QuestionIA3	Equal variances assumed	.000	1.000	-2.121	8	.067	-.60000	.28284	-1.25224	.05224
	Equal variances not assumed			-2.121	8.000	.067	-.60000	.28284	-1.25224	.05224

The t-test provided high p values (in red) for every question as displayed in the table above. Therefore, as the p values are significantly higher than 0,05 (for a 95% confidence level), we fail to reject the null hypothesis of the test being a high level of success leads to more impulsive spending for women.

Moreover, as the t-values (blue) are negative, so the mean of impulsive buying for group 1 (females) is significantly higher than the means of impulsive buying of goup 2 (males)[3]. Therefore, we can conclude that **in a high level of success situation, women buy more impulsively than men.**

Therefore, the t-test analysis supports partly (H1) in the sense that women buy more impulsively than men, but this result needs to be nuanced by the two other t-tests for scenario 2 and 3 that can be found in appendix. In fact, their reliability is not optimal because of fluctuating t-values and high standard deviations, due to the small size of the sample. Therefore, as the two other t-test were unreliable, it questions this tests' reliability.

(H2) Success affects less the level of risk taking in financial for women than men.

In order to test H2, I conducted 3 t-tests (in the appendix) using SPSS, with the data collected from the questionnaires. Each of the three t-tests tested the effect of one level of success on the financial risk behaviour of both male and female participants. I also conducted a summary t-test with the mean answer of the questions of each scenario in order to make it easier to compare the variation of risk-taking behavior in financial decisions of men and women.

Independent sample t-test for mean of scenarios and Financial risk behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Scenario1B	Female	5	1.9600	.40988	.18330
	Male	5	1.3000	.21213	.09487
Scenario2B	Female	5	2.3600	.13416	.06000
	Male	5	1.3000	.21213	.09487
Scenario3B	Female	5	2.4200	.16432	.07348
	Male	5	1.7000	.30000	.13416

The t-test revealed that men take more risks overall *(Mean range: 1.3-1.7)* than women *(Mean range: 1.96-2.42)*. However, it also shows that success doesn't have a lesser impact on women's risk-taking behaviour than on men. In fact, it has a bigger impact on women as women's risk-taking propensity increases by 0.4 points between scenario 1 (success) and 2 (routine) whereas men's stays unchanged *(Mean= 1.300)*. However, there is a high SD *(SD=0.4)* on female risk-taking during scenario 1 which can confuse the result.

[3] t value = mean of group 2 – mean of group 1.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Scenario1B	Equal variances assumed	1.545	.249	3.198	8	.013	.66000	.20640	.18405	1.13595
	Equal variances not assumed			3.198	5.999	.019	.66000	.20640	.15495	1.16505
Scenario2B	Equal variances assumed	.086	.777	9.443	8	.000	1.06000	.11225	.80115	1.31885
	Equal variances not assumed			9.443	6.759	.000	1.06000	.11225	.79264	1.32736
Scenario3B	Equal variances assumed	2.415	.159	4.707	8	.002	.72000	.15297	.36725	1.07275
	Equal variances not assumed			4.707	6.202	.003	.72000	.15297	.34863	1.09137

Furthermore, the t-values (blue) are positive but are significantly higher for scenario 2, therefore, women take way less risk on average than men when facing an average level of success. However, the lowest t-values are the ones of scenario 1, meaning that the difference between men and women's risk-taking behaviour is the smallest when facing a high level of success. This means that women's willingness to take risks increases more than men's when they face a successful event. Thus, **this is not significant to H2 and we reject the hypothesis.**

2- Interpretation

From the statistical analysis conducted, some significant results were found for H1 proving that a high level of success has a higher impact on women's propensity to buy impulsively than on men's. The analysis led for scenario 1 was conclusive besides high standard deviations that make the result less relevant. Moreover, the results were less significant for scenario 2 and Three as it was impossible to determine whether women had a higher or same propensity to consume impulsively in this context.

As for H2, the results did not confirm it. We found that women were more affected by success in their change of risk-taking behaviour. However, the t-test for scenario 3 was not significant and the t-test for scenario 1 had a SD that was too high to make comparisons.

3- Quality of the study

Reliability

The reliability of the questionnaire is low as the scenarios and questions left a lot for personal interpretation. As the measurement of the IV was based on interpretation, it makes the statistical analysis less reliable. Furthermore, the measurement of the DVs was based on only three questions which didn't give a thorough view on the participants' behaviours.

Validity

The internal validity is questionable. Statistically, the results of the t-tests had high standard deviations which didn't enable a precise analysis. Also, the effects found were deduced from the t-test (mostly for H2) by comparison and the information wasn't directly given by the test and a t-test was made using means.
For the external validity, the effects demonstrated in the female group for H2 cannot be generalised from such a small sample and high standard deviation.

The population validity is questionable as the sample was small for this research.

4- Conclusion

The present study aims at comparing the effect of a success on impulsive buying and financial risk behaviour. However, results were either non-significant or statistically arguable. However, the present finding still contributes to existing research by demonstrating, despite arguably significant results, that women have a more impulsive spending behaviour than men following a successful event. Also, it leads other studies to confirm or reject that success may have a higher impact on women regarding risk taking in financial behaviour. Furthermore, other studies could compare how the impulsive spending behaviour of women evolves as the level of success increases compared to men.

Words:2958

IV- Appendix

1) References

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2) Further details on the statistical analysis

Test for (H1)

Independent samples t-test for routine on Impulsive buying behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
QuestionIIA1	Female	5	1.8000	.44721	.20000
	Male	5	2.0000	.00000	.00000
QuestionIIA2	Female	5	2.0000	.70711	.31623
	Male	5	2.2000	.83666	.37417
QuestionIIA3	Female	5	1.8000	.44721	.20000
	Male	5	1.8000	.44721	.20000

The t-test revealed that men have a slightly lesser tendency to consume impulsively *(Mean range: 2.2-1.8)* than women *(Mean range: 2-1.8)*. However, both groups see big fluctuations of their SDs *(Range of SDs : 0-0.83)*, from questions to questions which diminishes the significance of this analysis.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
QuestionIIA1	Equal variances assumed	7.111	.029	-1.000	8	.347	-.20000	.20000	-.66120	.26120
	Equal variances not assumed			-1.000	4.000	.374	-.20000	.20000	-.75529	.35529
QuestionIIA2	Equal variances assumed	.590	.464	-.408	8	.694	-.20000	.48990	-1.32971	.92971
	Equal variances not assumed			-.408	7.784	.694	-.20000	.48990	-1.33519	.93519
QuestionIIA3	Equal variances assumed	.000	1.000	.000	8	1.000	.00000	.28284	-.65224	.65224
	Equal variances not assumed			.000	8.000	1.000	.00000	.28284	-.65224	.65224

The t-test was inconsistent as it provided p values that fluctuated from consistent to inconsistent *(0.029 < 0,05 vs 1>0,05)* depending on the questions (for IC = 95%).

Moreover, the t-values fluctuate a lot (Range: -1.000-0.000) but never go from positive to negative, which means that **women have a bigger or same tendency to impulsively consume than men on a routine context.**

Independent samples t-test for failure on Impulsive buying behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
QuestionIIIA1	Female	5	1.8000	.44721	.20000
	Male	5	2.0000	.00000	.00000
QuestionIIIA2	Female	5	2.2000	.83666	.37417
	Male	5	2.4000	.54772	.24495
QuestionIIIA3	Female	5	2.0000	.70711	.31623
	Male	5	2.0000	.00000	.00000

The t-test revealed that men have a slightly lesser tendency to consume impulsively *(Mean range: 2.4-2)* than women *(Mean range: 2.2-1.8)* during a failure. However, both groups see big fluctuations of their SDs *(Range of SDs: 0-0.83)*, from questions to questions which diminishes the significance of this analysis.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
QuestionIIIA1	Equal variances assumed	7.111	.029	-1.000	8	.347	-.20000	.20000	-.66120	.26120
	Equal variances not assumed			-1.000	4.000	.374	-.20000	.20000	-.75529	.35529
QuestionIIIA2	Equal variances assumed	.640	.447	-.447	8	.667	-.20000	.44721	-1.23128	.83128
	Equal variances not assumed			-.447	6.897	.668	-.20000	.44721	-1.26072	.86072
QuestionIIIA3	Equal variances assumed	2.667	.141	.000	8	1.000	.00000	.31623	-.72922	.72922
	Equal variances not assumed			.000	4.000	1.000	.00000	.31623	-.87799	.87799

The t-test was inconsistent as it provided p values that fluctuated from consistent to inconsistent *(0.029 < 0.05 vs 0.447>0.05)* depending on the questions (for IC = 95%).

Moreover, the t-values fluctuate a lot (Range: -1.000-0.000) but never go from positive to negative, which means that **women have a bigger or same tendency to impulsively consume on a failure context**

For H2

a) Independent sample t-test for high level of success and Financial risk behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
QuestionIB1	Female	5	2.0000	.70711	.31623
	Male	5	1.0000	.00000	.00000
QuestionIB2	Female	5	2.4000	.54772	.24495
	Male	5	1.4000	.54772	.24495
QuestionIB3	Female	5	2.4000	.89443	.40000
	Male	5	1.6000	.54772	.24495

The t-test revealed that success lead to men taking more risks *(Mean range: 1.000-1.600)* than women *(Mean range: 2.000-2.400)*. However, both groups have very high SDs, which diminishes the significance of this analysis.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
QuestionIB1	Equal variances assumed	2.667	.141	3.162	8	.013	1.00000	.31623	.27078	1.72922
	Equal variances not assumed			3.162	4.000	.034	1.00000	.31623	.12201	1.87799
QuestionIB2	Equal variances assumed	.000	1.000	2.887	8	.020	1.00000	.34641	.20118	1.79882
	Equal variances not assumed			2.887	8.000	.020	1.00000	.34641	.20118	1.79882
QuestionIB3	Equal variances assumed	1.756	.222	1.706	8	.126	.80000	.46904	-.28161	1.88161
	Equal variances not assumed			1.706	6.630	.134	.80000	.46904	-.32177	1.92177

The t-test provided high p values (in red) for every question as displayed in the table above. Therefore, as the p values are significantly higher than 0,05 (for a 95% confidence level), we fail to reject the null hypothesis of the test being a high level of success leads to riskier behaviour for men.

Moreover, as the t values (blue) are positive, so the mean from group 1 (female) is significantly lower than the mean from group 2 (male) -I.E: women take less risks on average than men in the questions-. Therefore, we can conclude that **on high level of men have a higher risk taking behaviour than women.**

b) Independent sample t-test for routine and Financial risk behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
QuestionIIB1	Female	5	2.0000	.70711	.31623
	Male	5	1.0000	.00000	.00000
QuestionIIB2	Female	5	2.6000	.54772	.24495
	Male	5	1.4000	.54772	.24495
QuestionIIB3	Female	5	2.6000	.54772	.24495
	Male	5	1.6000	.54772	.24495

The t-test revealed that women have greatly lesser tendency to take risks *(Mean range: 2.6-2)* than men *(Mean range: 1-1.4)*.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
QuestionIIB1	Equal variances assumed	2.667	.141	3.162	8	.013	1.00000	.31623	.27078	1.72922
	Equal variances not assumed			3.162	4.000	.034	1.00000	.31623	.12201	1.87799
QuestionIIB2	Equal variances assumed	.000	1.000	3.464	8	.009	1.20000	.34641	.40118	1.99882
	Equal variances not assumed			3.464	8.000	.009	1.20000	.34641	.40118	1.99882
QuestionIIB3	Equal variances assumed	.000	1.000	2.887	8	.020	1.00000	.34641	.20118	1.79882
	Equal variances not assumed			2.887	8.000	.020	1.00000	.34641	.20118	1.79882

The t-test was consistent as it provided very high p-values circled in red (for IC = 95%).

Moreover, the t-values don't fluctuate a lot (Range: 3.162-2.887) but are high overall which means that **women have a way lesser tendency to take risks when they face an average level of success than men.**

c) Independent sample t-test for failure and Financial risk behaviour

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
QuestionIIIB1	Female	5	2.2000	.44721	.20000
	Male	5	1.2000	.44721	.20000
QuestionIIIB2	Female	5	2.6000	.54772	.24495
	Male	5	2.0000	.00000	.00000
QuestionIIIB3	Female	5	2.6000	.54772	.24495
	Male	5	2.0000	.70711	.31623

The t-test revealed that women have a lesser tendency to take risks *(Mean range: 2.6-2.2)* than men *(Mean range: 1.2-2)* when facing failure. But Men's SD are higher than women's which leaves uncertainty about the results.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
QuestionIIIB1	Equal variances assumed	.000	1.000	3.536	8	.008	1.00000	.28284	.34776	1.65224
	Equal variances not assumed			3.536	8.000	.008	1.00000	.28284	.34776	1.65224
QuestionIIIB2	Equal variances assumed	96.000	.000	2.449	8	.040	.60000	.24495	.03515	1.16485
	Equal variances not assumed			2.449	4.000	.070	.60000	.24495	-.08009	1.28009
QuestionIIIB3	Equal variances assumed	.103	.757	1.500	8	.172	.60000	.40000	-.32240	1.52240
	Equal variances not assumed			1.500	7.529	.174	.60000	.40000	-.33253	1.53253

The t-test was consistent as it provided very high p-values circled in red (for IC = 95%) for questions 1 and 3 but has a null p value for question 2 which leads us to not take it into account in the statistical analysis.

3) Information and consent form

Information Sheet for Participants in Research Studies

You will be given a copy of this information sheet.

Title of Project: Gender differences in financial decisions

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 6346/036

Name: Daphne Sobolev and Philippine Bonnaud

Work Address: School of Management, UCL, Gower St, London, WC1E 6BT

Contact Details: Email: d.sobolev@ucl.ac.uk, phone number: 020 7679 3209 (33209)

Email: zceibon@ucl.ac.uk, phone number: +33 6 89 09 02 04

I would like to invite you to participate in this research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or you would like more information.

Details of Study

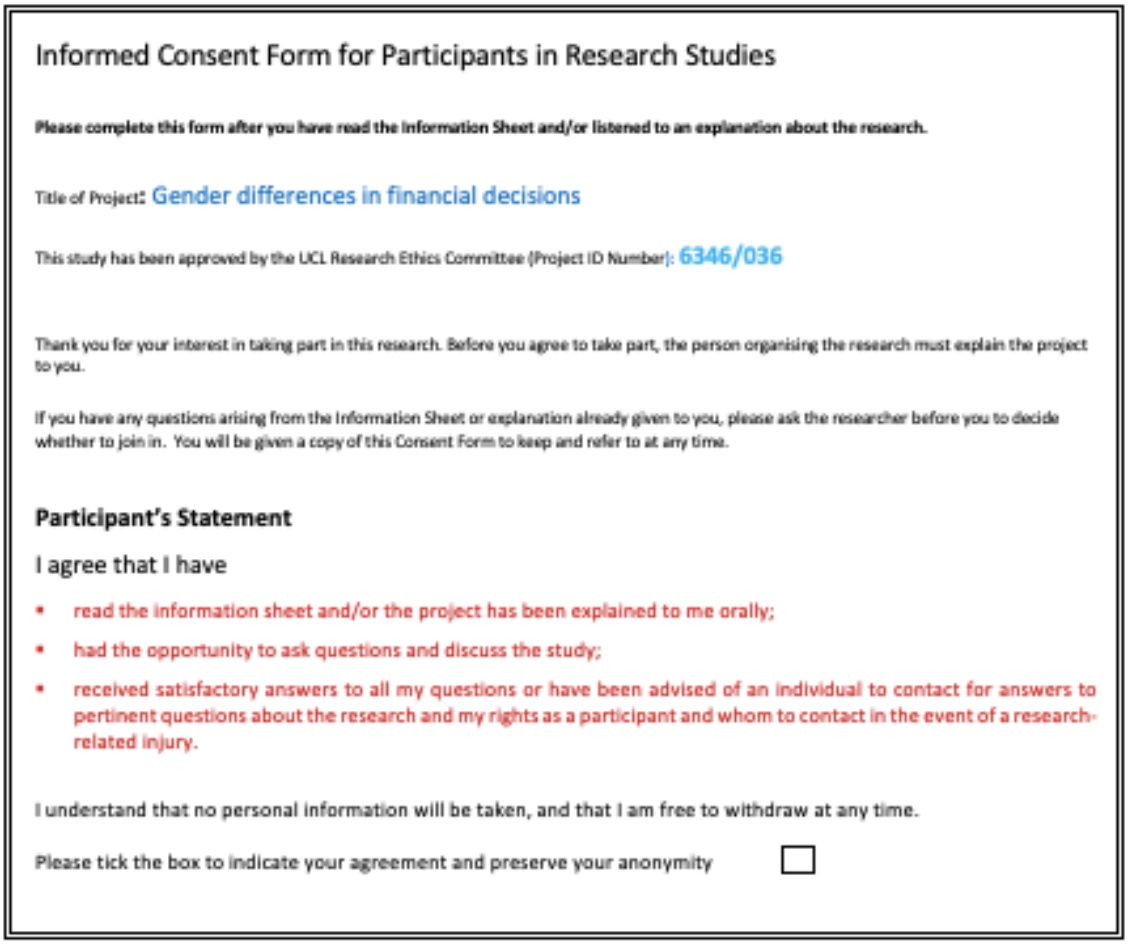
Why do this study?
This study will give insight about the different financial behaviours of men and women.

What does the survey involve? – In this experiment, you will be asked to answer a list of questions. In addition, you will be asked to provide your gender.
For example, you may be asked how comfortable you feel about an certain investment ?

The experiment will take up to 10 minutes.

No personal information will be taken. You will be free to withdraw at any time.

It is up to you to decide whether or not to take part. If you choose not to participate it will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to take part you will be given this information sheet to keep and be asked to tick a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.
All data will be collected and stored in accordance with the Data Protection Act 1998



Informed Consent Form for Participants in Research Studies

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Project: Gender differences in financial decisions

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 6346/036

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement

I agree that I have

- read the information sheet and/or the project has been explained to me orally;
- had the opportunity to ask questions and discuss the study;
- received satisfactory answers to all my questions or have been advised of an individual to contact for answers to pertinent questions about the research and my rights as a participant and whom to contact in the event of a research-related injury.

I understand that no personal information will be taken, and that I am free to withdraw at any time.

Please tick the box to indicate your agreement and preserve your anonymity ☐

4) Questionnaire

I- General question

Gender (1-female / 2-Male) _____
Age _____
Nationality_____

I- Scenarios

In all three scenarios, you are the treasurer of the entrepreneurship (UCLe) society of UCL. This position involves managing UCLe's fund by finding interesting investments. Before investing, you have to make a review of all of the information necessary about the investment, so you don't lack any knowledge.

As a treasurer, you need to find a lot of sponsorships in order to collect money for the fund. Therefore, you use your phone a lot but yours is starting to have bugs (E.g: shuts down at 30% battery).

Scenario 1

You have a meeting with UCLe's president. He says that the latest investment you have decided to do gave fantastic results, the shares are now starting to gain significant amount of value. This spreads around and gives you a good reputation and prestige to your society.

1- On your way back from your meeting, your phone starts bugging again :

a. Rate the chance that you buy the phone (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

b. You are offered a more expensive package with the phone and Airpods (you don't have any). This package gives you the Airpods at a lesser price than the normal price. Rate the chance that you buy the package (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

c. Regardless of whether you decided to buy the phone/package or not, you see an item of clothing that you really like in a shop. Rate the chance that you buy the item (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

2- You have to continue your job as a treasurer, and you are faced with the following situations. Circle what option you would choose.

a. Most investment portfolios have a spread of investments – some of the investments may have high-expected returns but with high-risk, some may have medium expected returns and medium-risk, and some may be low-risk/low-return. (For example, shares and property would be high-risk/high-return whereas cash and bank deposits would be low-risk/low-return). Which spread of investments do you find most appealing? What portfolio would you choose?

		Spread of Investments in portfolio		
		High-risk/ return	Medium-risk/ return	Low-risk/ return
☐	Portfolio 1	0%	0%	100%
☐	Portfolio 2	0%	30%	70%
☐	Portfolio 3	10%	40%	50%
☐	Portfolio 4	30%	40%	30%
☐	Portfolio 5	50%	40%	10%
☐	Portfolio 6	70%	30%	0%
☐	Portfolio 7	100%	0%	0%

b. You see a possible investment you could make which offers high returns, but a similar chance of losing money. How much are you willing to invest in it ?

• All of it
• More than half
• A quarter
• Half
• Less than half
• less than a quarter
• None

c. How would you feel about picking an investment with high chances of returns but risks of losses?

• Panicked and very uncomfortable
• Quite uneasy
• A little concerned
• Accepting of the possible highs and lows
• Excited by the potential for gain

Scenario 2

You are a satisfying treasurer, you have lost no money so far on the fund. The president and your sponsors have nothing bad to say about you, and keep on trusting you with your responsibilities.

1- On your way back from your meeting, your phone starts bugging again :

a. Rate the chance that you buy the phone (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

b. You are offered a more expensive package with the phone and Airpods (you don't have any). This package gives you the Airpods at a lesser price than the normal price. Rate the chance that you buy the package (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

c. Regardless of whether you decided to buy the phone/package or not, you see an item of clothing that you really like in a shop. Rate the chance that you buy the item (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

2- You have to continue your job as a treasurer and you are faced with the following situations. Circle what option you would choose.

a. Most investment portfolios have a spread of investments – some of the investments may have high-expected returns but with high-risk, some may have medium expected returns and medium-risk, and some may be low-risk/low-return. (For example, shares and property would be high-risk/high-return whereas cash and bank deposits would be low-risk/low-return). Which spread of investments do you find most appealing? What portfolio would you choose?

		Spread of Investments in portfolio		
		High-risk/ return	**Medium-risk/ return**	**Low-risk/ return**
☐	Portfolio 1	0%	0%	100%
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☐	Portfolio 4	30%	40%	30%
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☐	Portfolio 7	100%	0%	0%

b. You see a possible investment you could make which offers high returns, but a similar chance of losing money. How much are you willing to invest in it ?

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c. How would you feel about picking an investment with high chances of returns but risks of losses?

• Panicked and very uncomfortable
• Quite uneasy
• A little concerned
• Accepting of the possible highs and lows
• Excited by the potential for gain

Scenario 3

You messed up with your last Investment decision, the shares you have bought are starting to lose value and it could have been predicted. Therefore, the president of the society is stressed as the student union and sponsors start to put pressure on him. The president also puts pressure on you to make the situation better.

1- On your way back from your meeting, your phone starts bugging again :

a. Rate the chance that you buy the phone (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

b. You are offered a more expensive package with the phone and Airpods (you don't have any). This package gives you the Airpods at a lesser price than the normal price. Rate the chance that you buy the package (circle the answer)

Will surely not buy it					Unsure					Will surely buy it
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

c. Regardless of whether you decided to buy the phone/package or not, you see an item of clothing that you really like in a shop. Rate the chance that you buy the item (circle the answer)

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• Less than half
• less than a quarter
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c. How would you feel about picking an investment with high chances of returns but risks of losses?

• Panicked and very uncomfortable
• Quite uneasy
• A little concerned
• Accepting of the possible highs and lows
• Excited by the potential for gain

The End.
Thank you for your participation!