

# Effect Of Optimism On Psychological Wellbeing Across Genders

## Abstract:

Studies have been carried out to determine the relationship of optimism on a person's psychological wellbeing. There is evidence through research, that high optimism lead a better quality of life compared to people with pessimistic outlook on life. This study aims to further investigate how optimism impacts the mental wellness of a person. Optimism of a person is likely to impact their mental and physical well being through leading a healthier lifestyle as well as coping strategies focused on support and emphasis on positive aspects of stressful situations.

We would further like to investigate how the impact of optimism impacts mental - wellbeing of a person across sex. Mishra [2013] investigated gender and age-related differences in optimism and good life using Diener, Emman and Larson's Satisfaction with life scale (SWLS) and the Revised Life Orientation Test (LOT-R). It found that women showed significantly higher levels of optimism compared to males. Inversely, males tended to score higher on the SWLS than female participants, but these finding were not found to be significant. However, Jacobsen et.al [2014] have come to the opposite conclusion that men are generally more optimistic than women, especially when it comes to matters of economic decisions.

**Aim:** Through this study, we intend to investigate the effect of optimism on psychological wellbeing across genders.

**Rationale:** Multiple studies have indicated that people with a more positive outlook and views on life tend to have better quality of life than pessimistic folks. Mental wellbeing of a person is very important and the factors affecting it are a matter of keen research curiosity. Also, various research papers opine that optimism levels of people vary across gender. Mishra[2013] came to the conclusion that women exhibited higher levels of optimism compared to men.

## Design

We have 2 independent variables and 1 dependent variable. The independent variables are Sex and Optimism. Both are dichotomous variables. Sex can take two levels, male and female, while optimism can either be high or low optimism. The dependent variable measures the psychological wellbeing of a person, using the Flourishing Scale which was designed by Ed Diener and Robert Biswas-Diener.

Our dependent variable is measured on a continuous scale while our independent variables are nominal variables with 2 levels as mentioned above.

Participants:

Data was collected from 60 individuals, 30 males and 30 females. They were approached to take part in the study by an advertisement placed on the researcher's Facebook page and asked to respond to the advertiser if they were willing to consent via email only, to ensure confidentiality. Age of the participants was expected to be between 18 and 60 years of age. Underage folks were not allowed to participate in the data collection for ethical reasons. As we're investigating the effect of optimism on psychological wellbeing across genders, we need to have an equal number of male and female participants in our sample. Participants were mailed copies of the LOT-R scale and the Flourishing Scale and were asked to return completed forms within seven days. They were also informed that research report could be made available to them if required, and their information would be kept confidentially on file three months, after which it'll be destroyed, and the documents recycled.

The materials used consisted of a series of self reported questionnaires, first one being Life Orientation Test-Revised (LOT-R), which was devised by Scheier and Bridges (1994). The questionnaire used in the survey was the current and revised version of the Life Orientation Test (LOT) designed by Scheier and Carver (1992). It has 10 questions to measure optimism and pessimism levels in a person. There are 4 questions in the survey to act as filler questions. The participants scores were turned into 3 categories: high optimism, moderate optimism and low optimism.

Second questionnaire used was the Flourishing Scale, which was devised by Diener et al (2009). It consists of 8 items to measure the respondents perceived success in their relationships, optimism, feelings of competence and purpose in life. The single wellbeing outcome score from the survey can range from 8 to 56 with a higher score indicating a higher level of wellbeing.

As our dependent variable is interval data, the data is independent and normality of data was assumed and has homogeneity of variance, Factorial ANOVA was used to perform the analysis, as we have 2 independent variables each involving two factors. Prior to running ANOVA, assumptions of homogeneity of variances must be tested to check its validity. One also needs to look out for any outliers in the dataset before proceeding.

Factorial ANOVA enables us to see the main-effect p-values for both the factors; the main effect that sex has on optimism and psychological wellbeing and the main effect that optimism has on psychological well being. It can also help one understand any interaction effects between sex and optimism of a person; interaction effects that sex and optimism have on a person's psychological well being

For our analysis, we selected 40 participants from the 60 people in the survey. Of the 40, 20 participants were male and the rest were female. Of the 20 people selected from each sex, 10 were high optimism people and the other 10 were low optimism people. We had earlier used algorithms to convert the LOT-R scores of a person, which is an interval variable to a categorical variable with 3 categories, namely low optimism, medium optimism and high optimism. Folks with medium optimism were not selected for the final dataset. We tested 3 hypotheses in our analysis:

1. There will be a significant effect of sex on wellbeing, with female participants scoring higher than male participants.
2. There will be a significant effect of optimism on wellbeing, with high-optimism participants scoring higher in wellbeing than low-optimism participants.
3. There will be a significant interaction between sex and optimism on wellbeing, with high-optimism females scoring higher on wellbeing than high-optimism males.

Hypothesis 1 & 3 were tested using ANOVA while Hypothesis 2 was tested using the non-parametric form of ANOVA, Mann-Whitney's U test as Levene's test indicated that the assumption of homogeneity of variances was invalid for that particular categorization of data.

#### Results:

1. ANOVA on wellbeing (Flourishing score) was conducted. Results didn't indicate statistically significant difference between men and women (Significance level = 0.08 >  $\alpha = 0.05$ ). Women (M=42.45, SD= 3.12) scored marginally better than men (M=40.5, SD=3.72) on wellbeing, indicated by flourishing score. Our hypothesis fails. Sex isn't an indicator of wellbeing of a person
2. Using Mann-Whitney's U test, we reject the null hypothesis that flourishing scores for high optimism and low optimism folks was equal. Our hypothesis is true in this case
3. ANOVA was conducted to test the interaction between sex and optimism on wellbeing on an individual. Only optimism (Significance = 0.001 <  $\alpha = 0.05$ ) was a statistically significant indicator of a person's wellbeing. Sex (Significance = 0.051 >  $\alpha = 0.05$ ) wasn't a statistically significant indicator neither was Optimism\*Sex (Significance =0.959 >  $\alpha = 0.05$ ). Our hypothesis that high optimism females score higher on wellbeing than high optimism males turned to be false.

#### Discussion

High optimism folks exhibited higher scores on the Flourishing Scale compared to low optimism folks while gender wasn't a significant indicator of a person's wellbeing.

References:

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- Parveen, F., Maqbool, S., & Khan, S. M. (2016). Optimism as a predictor of psychological wellbeing among adolescents. *The International Journal of Indian Psychology*, 3(4), 2349-3429. Retrieved from <http://www.ijip.in/Archive/v3i4/18.01.154.20160304.pdf>

Appendices:

## Appendix I

### Participant Information

#### Does optimism have an effect on psychological wellbeing across sex?

We would like to invite you to be part of this research study about Individual Differences, exploring whether optimism influences psychological wellbeing across sex, and if well-being scores confirm that one sex is more optimistic than others? Your participation is appreciated although entirely voluntary! You will be asked to complete two short questionnaires that will not take longer than 5 – 10 minutes.

#### **Are there any criteria I need to meet in order to take part?**

You need to be between 18 and 60 years old and fluent in the English language to take part in this research. Unfortunately, those that are visually impaired beyond corrective measures of spectacles are also unable to take part as the questionnaires and supporting information cannot be modified.

#### **What will I need to do, if I agree to take part?**

You will be asked to complete two very short questionnaires that will be emailed to you, rating each item on the questionnaire. Please be reassured that there are no "correct" or "incorrect" answers; please answer according to your own feelings. You will not be judged on the findings and your results will be anonymous.

The first questionnaire uses scales from "A- I agree a lot", to "E- I disagree a lot". The second questionnaire works on scales from "7- Strongly agree" to "1- Strongly disagree."

#### **How much of my time will participation involve?**

It should not take more than 5-10 minutes.

#### **Will my participation in the project remain confidential?**

Please be assured that your participation will remain anonymous and confidential, using your unique 5-digit participant code in this research study. The code should be made up of your initials and the last three digits of your phone number, e.g. 'JB123'. You will also have the right to withdraw from the research study after participation if you wish. The results will be used for the analysis of study and will be only be seen by the researchers and research supervisor of the University of . Any data will be destroyed after three months. Also,

participants' signed consent forms and their unique codes will not be stored together, to ensure that their identity remains confidential.

**Do I receive any incentives or rewards if I take part in the study?**No, you will not receive any incentive or reward, but you may request a copy of the finished study for your own information if you are interested!

**How do I withdraw from the study?**

You can withdraw from the study at any time and up to three weeks after your participation; you do not need to give a reason or explanation for doing so. You will need to contact the researchers by email, giving your unique 5-digit participant code. The code should be made up of your initials and the last three digits of your phone number.

**Thank you very much for taking part in this research study!**

**For further information about this study or in the event of wishing to withdraw from the study, please contact one of the researchers below:**

If you have any queries about the ethical procedures of this study or wish to discuss this in further detail, please contact our supervisor:

## Appendix II

### Participant Consent Form

Does optimism have an effect on psychological wellbeing across sex?

Researcher -

Researcher -

Researcher -

Researcher -

Research Supervisor -

Thank you for your interest and time in volunteering to take part in this study, which is being undertaken as part of a 2<sup>nd</sup> year undergraduate degree programme with the University of , England. Please note that the University of Psychology Research Ethics Committee has ethically approved this study. This research will require you to take part in two short self-assessed questionnaires.

Please can you read and sign this consent form prior to answering any questions on the questionnaires that you have received. The findings of this study will be analysed and placed in a written report, and possibly published. We guarantee that all identifying details will remain anonymous, and will only be seen by the researchers and research supervisor of the University.

In signing this consent form, you acknowledge that your decision to participate is completely voluntary, and you may withdraw from this research at any point up to three weeks after participation, you do not need to give a reason or explanation for doing so.

You will also be required to create a unique participant code. This code should be made up of a five-digit identifier code, comprising two initials and the last three digits of their phone number., e.g. GC185, this code must be easy for you to remember, so that in the event of you wanting to withdraw from this study, your completed questionnaire is easily recalled. If you have any questions with regards to this study, please contact any of the named researchers or research supervisor as noted above, prior to taking part.

Participants' signed consent forms and their unique codes will not be stored together, to ensure that their identity remains confidential.

Please read the statements listed below and place an 'x' in the corresponding box to confirm agreement.

- I understand that I have agreed to voluntarily participate in two electronic questionnaires.
- I understand that if; at any time up to three weeks after participation, I do not wish to take part in this study, I can notify any researcher listed above and withdraw immediately.

- I confirm that I have read and understand the information pertaining to the details of this study named above, and that I have had the opportunity to consider the information and ask any questions, and those questions have been answered satisfactorily.
- I understand that the results from the questionnaires will be analysed and written up in a report and may be published.
- I understand that confidentiality and anonymity will be maintained, and it will not be possible to identify me.

I have read and understand the above statements and agree to take part in this study.

Participant Signature

Participant Unique ID

Please return this digitally signed consent form, to the researcher that originally contacted you for participation, before or along with your completed questionnaires.

## Appendix III

### Participant Debrief Information

Dear Participant,

Thank you very much for your participation in this study. We were investigating whether males or females are more optimistic in general, and whether this correlates to general wellbeing in life. Your participation will help us greatly in understanding more about this area of research.

Please be reminded that the information you have provided is strictly confidential and your identity will be protected. The 5-digit code you provided to your researcher (your initials and the last three digits of your phone number) will be the only means of identification. If you wish to withdraw from this study, you may do so at any point up to three weeks after participation, by emailing your researcher and reminding them of your unique 5-digit code.

Should you wish to receive a copy of the finished study, please contact your researcher at the below email address.

Although we anticipate no psychological distress as a result of this study, should any discomfort occur, please do not hesitate to contact your researcher who will provide appropriate mental health or medical resources in your area.

Many thanks,

If you have any queries about the ethical procedures of this study or wish to discuss this in further detail, please contact our supervisor:

## Appendix IV

### LIFE ORIENTATION TEST – REVISED (LOT-R)

All questions contained in this questionnaire are strictly confidential.

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

<b>Your Unique ID Code</b> (2 initials 3 numbers)
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<b>Sex:</b>
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<b>Age:</b>
-------------

<b>Using the scale below answer the following questions</b>
---

A = I agree a lot  
 B = I agree a little  
 C = I neither agree nor disagree  
 D = I disagree a little  
 E = I disagree a lot

Questions	Answer
1. In uncertain times, I usually expect the best.	Select an Option
2. It's easy for me to relax.	Select an Option
3. If something can go wrong for me, it will.	Select an Option
4. I'm always optimistic about my future.	Select an Option
5. I enjoy my friends a lot.	Select an Option
6. It's important for me to keep busy.	Select an Option
7. I hardly ever expect things to go my way.	Select an Option
8. I don't get upset too easily.	Select an Option
9. I rarely count on good things happening to me.	Select an Option
10. Overall, I expect more good things to happen to me than bad.	Select an Option

Please save the completed questionnaire and return it via email, thank you.

**Appendix V****FLOURISHING SCALE**

All answers contained in this questionnaire are strictly confidential.

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

**Your Unique ID Code**(2 initials 3 numbers)

**Sex:**

**Age:**

**Using the scale below answer the following questions**

Below are 8 statements with which you may agree or disagree. Using the 1–7 scale below, indicate your agreement with each item by indicating that response for each statement.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

<b>Questions</b>	<b>Answer</b>
1. My social relationships are supportive and rewarding	Select an Option
2. I am engaged and interested in my daily activities	Select an Option
3. I actively contribute to the happiness and well-being of others	Select an Option
4. I am competent and capable in the activities that are important to me	Select an Option
5. I am a good person and live a good life	Select an Option
6. I am optimistic about my future	Select an Option
7. People respect me	Select an Option

Please save the completed questionnaire and return it via email, thank you.

## **Appendix VI**

### **Advertisement Requesting Volunteer Participants from Facebook**

Dear All,

I am in my 2<sup>nd</sup> year of a Psychology degree, with the University of , and require participants to take part in a study I am working on with 3 fellow Psychology students. The research study seeks to answer the following question “Does optimism have an effect on psychological wellbeing across sex?”

If you would like to volunteer to be part of this study, which consists of completing 2 very short questionnaires that will be emailed to you, please email me at: or telephone for more information. Please do not reply to this Facebook advertisement to ensure anonymity is preserved.

If you are interested in taking part, please note that participants must be 18 years of age or older and fluent speakers of English.

Unfortunately, those that are visually impaired beyond corrective measures of spectacles are also unable to take part as the questionnaires and supporting information cannot be modified due to researcher ability.

Please be assured that your participation will remain anonymous and confidential, and you will also have the right to withdraw from the research study after participation if you so wish.

Many thanks

### **Advertisement Requesting Volunteer Participants via Email**

Dear All,

I am in my 2<sup>nd</sup> year of a Psychology degree, with the University of , and require participants to take part in a study I am working on with 3 fellow Psychology students. The research study seeks to answer the following question “Does optimism have an effect on psychological wellbeing across sex?”

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If you are interested in taking part, please note that participants must be 18 years of age or older and fluent speakers of English.

Unfortunately, those that are visually impaired beyond corrective measures of spectacles are also unable to take part as the questionnaires and supporting information cannot be modified due to researcher ability.

Please be assured that your participation will remain anonymous and confidential, and you will also have the right to withdraw from the research study after participation if you so wish.

Many thanks

## Appendix VII

### Risk Assessment Form

**This form should be submitted with your completed ethical application. You may find it useful to discuss any potential risks of your study (or task), as listed below, with your supervisor after inspection of the attached risk definitions (pg. 2).**

You are only allowed to start data collection after your Proposal/Ethics/Risk Assessment application has been approved.

#### RISK ASSESSMENT FORM

*This form must be completed before **any work involving risk to health, safety or welfare** is carried out.*

<b>Name</b>  1.  2.  3.  4.	
<b>Designation</b>  2nd year undergraduate degree programme with the University of , England.	

<p><b>Task</b></p> <p>Participants will be asked to complete to short questionnaires. The first is the Life Orientation Test-Revised (LOT-R), devised by Scheier and Bridges (1994), which is categorical and comprises a total of 10 questions. Three questions measure optimism, three measure pessimism, and four questions serve as fillers.</p> <p>The second questionnaire is the Flourishing Scale, devised by Diener et al. (2009). The Flourishing Scale consists of 8 items measuring the respondents perceived success in their relationships, feelings of competence, optimism, and purpose in their life. It should take no more than 5 – 10 minutes to be completed online.</p>					
<p><b>Start Date - February 2018</b></p>		<p><b>End Date - March 2018</b></p>			
<p><b>Location of task</b></p> <p>It will be up to the participants, as it is an online questionnaire to be answered. If participants are unable to complete the questionnaire online, a convenient, private location will be arranged for them to complete a physical copy.</p>					
<p><b>Hazards and Risks:</b> Definitions: A hazard is something with the potential to do harm (to people or property). Risk is the likelihood of the potential for harm being realised. Look only for hazards that you could reasonably expect to result in significant harm to participants or yourself (i.e. Tolerable, Moderate, Substantial, and Intolerable Risk).</p>					
<p><b>Consider the research task and identify if any of the hazards listed below are significant. Please highlight those that are relevant</b></p>					
1	Psychological effects (researcher)	4	Display screen equipment	7	Human error
2	Psychological effects (participant)	5	Internet Mediated Research	8	Peripatetic/lone working

3	Tools/Experimental equipment	6	Confined space	9	Other(s)
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**WHO MIGHT BE HARMED?**

Some participants in this research study might feel distressed during the research time answering certain questions found in the questionnaires, as well as fatigue after responding to a couple of questions. However, due to the short duration of the questionnaire, we do not anticipate this occurring.

**LIST HERE ANYONE OR ANY GROUP OF PEOPLE WHO MAY BE AT RISK – State “N/A” if appropriate**

(If the assessment is for a student project, you may need to write the name of the responsible adult accompanying the student)

N/A

**WHAT MEASURES ARE NECESSARY TO CONTROL (REDUCE) THE RISKS?**

For all but trivial risks, the following principles (in order) will help to ensure that the risks are adequately controlled.

- 1 Remove the risk completely i.e., don't do the task, do something less risky.
- 2 Employ a less risky method of obtaining the same results.
- 3 Make sure you are adequately informed of the risks and trained to cope with them.
- 4 Organise work to reduce hazard exposure.

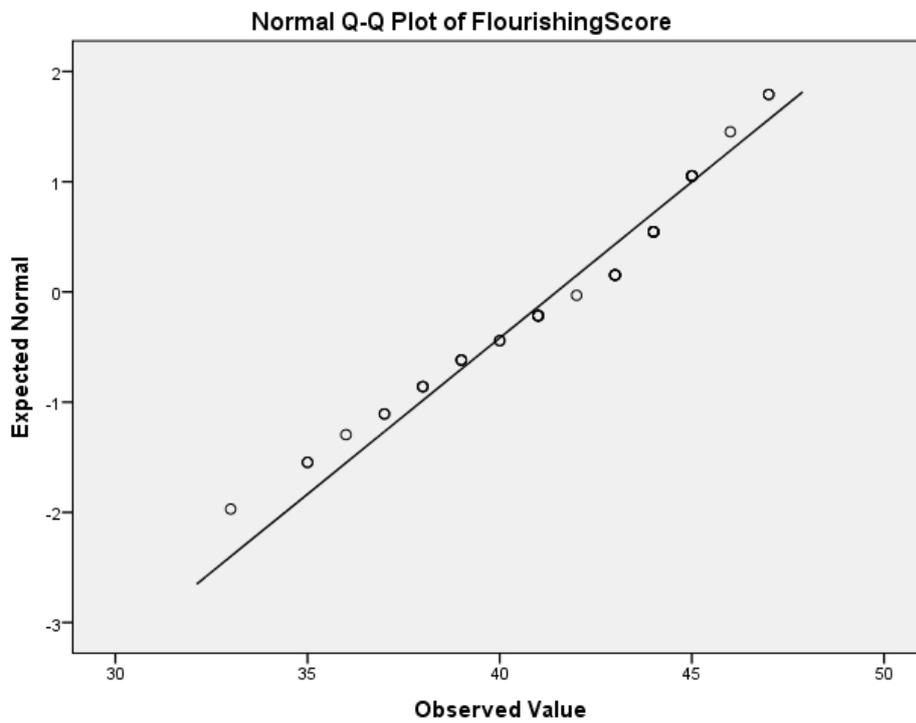
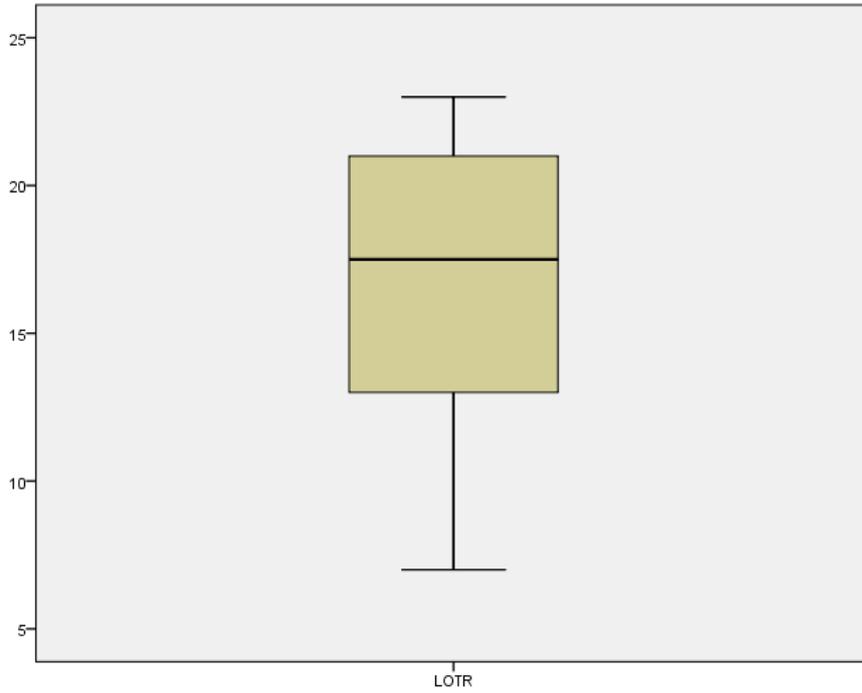
Hazards/Risks (What could go wrong and <b>initial</b> level of risk identified)	List here the control measures to be used to reduce the risks to a <b>trivial</b> or <b>tolerable</b> level. (How are you going to stop it going wrong?)	Level of risk <b>after</b> control measure  <b>i.e. Trivial Risk, Tolerable Risk</b>  Refer to below definitions
Some participants could feel distressed or fatigued, which could drive them to	Regarding avoiding fatigue and distress during the questionnaires answering time, researchers will use two short questionnaires that could be done in 5 – 10 minutes. Also, a consent form and	Trivial Risk.

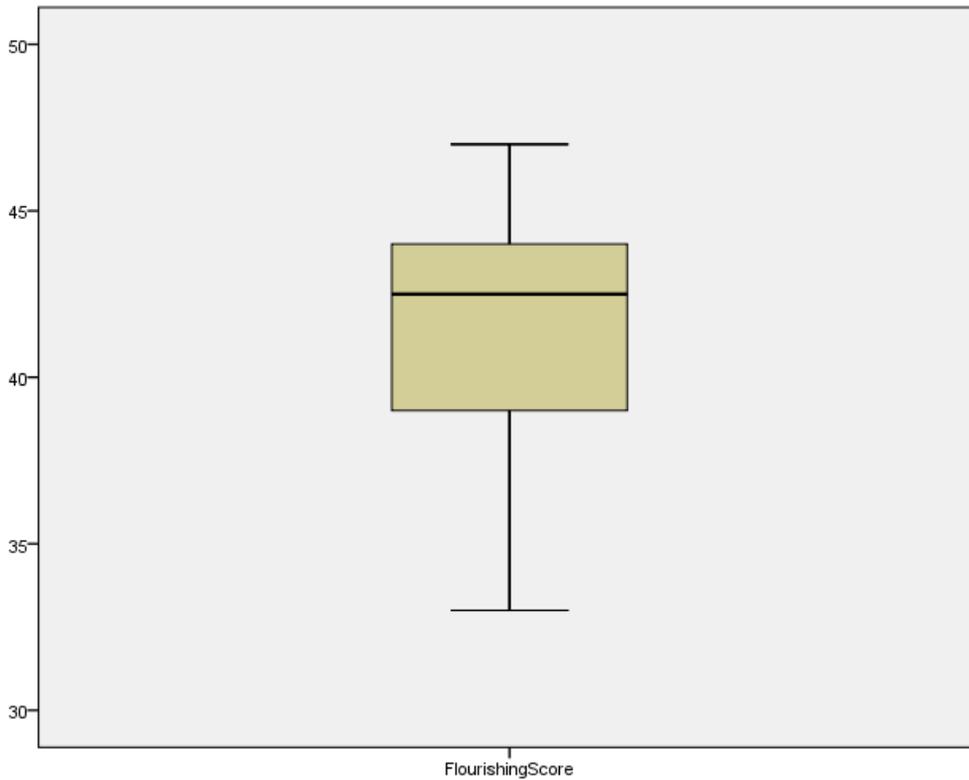
<p>skip some questions, or not really answer it in an honest way.</p>	<p>participant information sheet will be given to each individual explaining their rights to withdraw, as well as a detailed outline of the procedures.</p>	
<p>Tolerable Risk.</p>	<p>Only fluent English speakers over 18 years old will be considered for the study, thereby minimising distress. In order to ensure this, the Facebook advert and email invitation will clearly state that participants must be over 18, and the questionnaires or advertisements will contain no aversive stimuli.</p>	

<p><b>Intolerable Risk</b></p>	<p>Activity should be suspended immediately until action is taken to reduce the risk</p>
<p><b>Substantial Risk</b></p>	<p>Significantly high risk that where reasonably practical activity should be suspended until significant action has been taken to reduce the risk. Where this is not reasonably practicable, strict deadlines should be agreed for further action to reduce the risk.</p>
<p><b>Moderate Risk</b></p>	<p>Significant action should be planned in accordance with overall risk management program to reduce the risk.</p>
<p><b>Tolerable Risk</b></p>	<p>Risk level is acceptable as long as all reasonably practicable controls are in place.</p>
<p><b>Trivial Risk</b></p>	<p>Risk level is low no significant action required.</p>

### Appendix VIII

Results & Graphs for hypothesis 1:





**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LOTR	.196	40	.001	.906	40	.003
FlourishingScore	.167	40	.007	.948	40	.067

**Between-Subjects Factors**

		N
Gender	F	20
	M	20

**Descriptive Statistics**

Dependent Variable: FlourishingScore

Gender	Mean	Std. Deviation	N
F	42.4500	3.11997	20
M	40.5000	3.72050	20
Total	41.4750	3.53000	40

**Levene's Test of Equality of Error Variances<sup>a</sup>**

Dependent Variable: FlourishingScore

F	df1	df2	Sig.

.859	1	38	.360
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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender

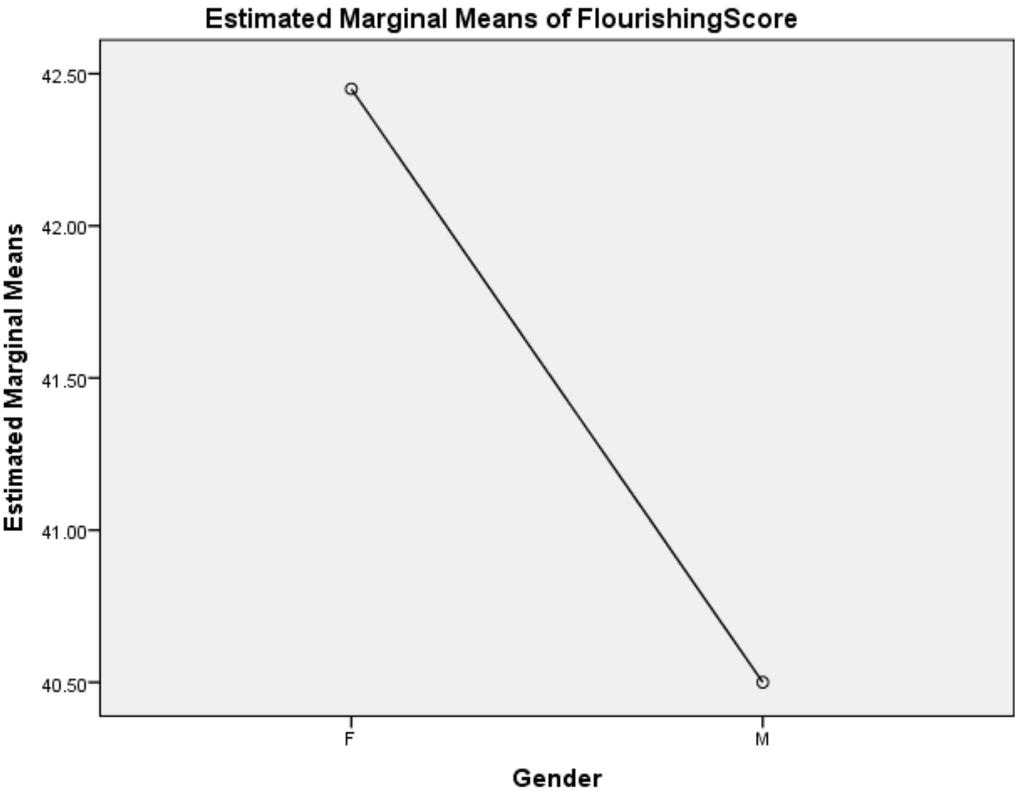
**Tests of Between-Subjects Effects**

Dependent Variable: FlourishingScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	38.025 <sup>a</sup>	1	38.025	3.226	.080	.078
Intercept	68807.025	1	68807.025	5836.962	.000	.994
Gender	38.025	1	38.025	3.226	.080	.078
Error	447.950	38	11.788			
Total	69293.000	40				
Corrected Total	485.975	39				

a. R Squared = .078 (Adjusted R Squared = .054)

**Profile Plots**



## Appendix IX: Results for Hypothesis 2

### Levene's Test of Equality of Error Variances<sup>a</sup>

Dependent Variable: FlourishingScore

F	df1	df2	Sig.
4.623	1	38	.038

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Optimism

P-value obtained is equal to  $0.038 < \alpha = 0.05$ . Therefore, we have to reject the null hypothesis

### Mann-Whitney Test

Ranks				
	OptimismLevel	N	Mean Rank	Sum of Ranks
FlourishingScore	High Optimism	20	25.83	516.50
	Low Optimism	20	15.18	303.50
	Total	40		

### Test Statistics<sup>a</sup>

	FlourishingScore
Mann-Whitney U	93.500
Wilcoxon W	303.500
Z	-2.898
Asymp. Sig. (2-tailed)	.004
Exact Sig. [2*(1-tailed Sig.)]	.003 <sup>b</sup>

a. Grouping Variable: OptimismLevel

b. Not corrected for ties.

Appendix X: Results from hypothesis 3

**Univariate Analysis of Variance**

**Between-Subjects Factors**

	Value Label	N	
OptimismLevel	1.00	High Optimism	20
	2.00	Low Optimism	20
Sex	1.00	Male	20
	2.00	Female	20

**Descriptive Statistics**

Dependent Variable: FlourishingScore

OptimismLevel	Sex	Mean	Std. Deviation	N
High Optimism	Male	42.2000	2.85968	10
	Female	44.2000	1.54919	10
	Total	43.2000	2.46235	20
Low Optimism	Male	38.8000	3.82390	10
	Female	40.7000	3.36815	10
	Total	39.7500	3.64005	20
Total	Male	40.5000	3.72050	20
	Female	42.4500	3.11997	20
	Total	41.4750	3.53000	40

**Levene's Test of Equality of Error Variances<sup>a</sup>**

Dependent Variable: FlourishingScore

F	df1	df2	Sig.
2.440	3	36	.080

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + OptimismLevel + Sex + OptimismLevel \* Sex

**ests of Between-Subjects Effects**

Dependent Variable: FlourishingScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	157.075 <sup>a</sup>	3	52.358	5.731	.003	.323
Intercept	68807.025	1	68807.025	7531.325	.000	.995
OptimismLevel	119.025	1	119.025	13.028	.001	.266
Sex	38.025	1	38.125	4.182	.051	.108
OptimismLevel * Sex	.025	1	.025	.003	.959	.000
Error	328.900	36	9.136			

Total	69293.000	40			
Corrected Total	485.975	39			

a. R Squared = .323 (Adjusted R Squared = .267)

## Estimated Marginal Means

### 1. OptimismLevel

Dependent Variable: FlourishingScore

OptimismLevel	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
High Optimism	43.200	.676	41.829	44.571
Low Optimism	39.750	.676	38.379	41.121

### 2. Sex

Dependent Variable: FlourishingScore

Sex	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male	40.500	.676	39.129	41.871
Female	42.450	.676	41.079	43.821

## Profile Plots

