

# **Morality and Attractiveness**

**Influence of morality and physical attractiveness on evaluations of potential  
short- and long-term relationships**

*An Experimental Philosophy Study*

**By Merethe Blandhol and Greg Charitonos**

# Introduction:

The aim of our experiment was to investigate the effect of physical attractiveness and moral attributions on desirability with regards to sexual and non-sexual relationships. Not only did we want to investigate whether negative or positive moral statements would influence how attractive a person is perceived, but also in what way it would influence the type of relationship that the participants wanted to have with an individual. In this way we hoped to better understand how decisions of short-term vs. long-term relationships are connected to physical attractiveness and morality. The experiment used three categories of relationships:

1. "Befriend", referring to a non-sexual, platonic and non-intimate relationship.
2. "Hookup", referring to a casual, sexual and short-term relationship.
3. "Date", referring to an intimate, long lasting and sexual relationship.

## Hypotheses:

1. *Physical attractiveness would correlate positively with short-term (Hookup) interactions regardless of morality.*
2. *Physically attractive individuals who are more moral are more likely to be rated highly on long-term relationships (Date).*
3. *Physically unattractive individuals are likely to be rated higher on long-term relationships (Date) when moral vs. immoral.*
4. *Male participants are more likely to pursue short-term relationships (hookups).*
5. *Morality would be less of a determining factor for male participants when seeking intimate relationships.*
6. *Morality would be the strongest determining factor when choosing to Befriend, with physical attractiveness having little to no effect.*
7. *Attractiveness would be the strongest determining factor when choosing to Hookup.*
8. *Attractiveness and morality would both be strong determining factors when choosing to Date.*

Our hypotheses were built on the assumption that in short-term sexual relationships, physical attractiveness is more important than personal characteristics such as morality. This is because hookups generally do not involve future interactions with the person, so personality would matter less. Instead, it would be more important to have initial physical attraction as this is considered a large determining factor in sexual interactions. Theories in evolutionary psychology have also shown that men are more likely to want to engage in short-term relationships such as hookups, as biologically they want to maximize the amount of people they procreate with (Gonzalez-Alvarez J., 2017). Women on the other hand have the chance of producing offspring with the partner they mate with, a taxing, resource heavy activity that affects women (as the child-bearers) more than men. Therefore it is expected that women choose partners with strong indicators for reliability and trustworthiness, and are more likely to pursue longer lasting relationships with their partner, and are generally less likely to engage in casual sex.

In terms of how morality would impact these factors, we based our hypotheses on how beauty and morality have been linked in philosophy and aesthetics. The “halo-effect” is well known in psychology, showing how more attractive individuals are assumed to be more moral, kind, and intelligent. However, whether this effect would work the other way is yet to be established. One of the effects we wished to research was whether morality could positively influence perceptions of physical attractiveness in less physically attractive individuals. Our hypothesis was that unattractive individuals who were moral would be rated higher on long-term relationships than unattractive individuals who were immoral. This is because morality is hypothesised to have more impact on long-term vs. short-term relationships. To see if positive moral actions could also influence physical attractiveness we want to compare the short-term (hookup) scores for unattractive people. Those who are more moral are hypothesized to be more attractive and therefore have higher hookup ratings. Contrasting, there may be a “bad boy” effect present, whereby individuals with immoral statements could be viewed as more exciting and thus more attractive (Monteiro et al, 2017), and moral individuals are less exciting (Egan et al, 2015). This effect is suggested to be most present under the “Hookup” category.

# Method :

## Participants

Participants were primarily University College students between the ages of 17 and 23 with a total of N = 34 participants. However, in the analysis only data from 27 participants was used: 11 female and 16 male participants. This was because some participants did not want to engage in any short- or long-term relationships and would therefore skew the data. In hindsight we could have controlled for this variable by way of asking whether a participant was open to casual sexual relationships (aka hooking up) or not. The first group of participants were recruited through a psychology class on “Decision Making”, where the experiment was presented as something relevant to the class. Remaining participants were individually approached at the University College and a message asking for participants was put in a social media groupchat.

The purpose of the experiment was briefly explained to the participants as investigating morality and attractiveness. However, the exact hypotheses of the experiment was not mentioned as we did not want the participants to be influenced.

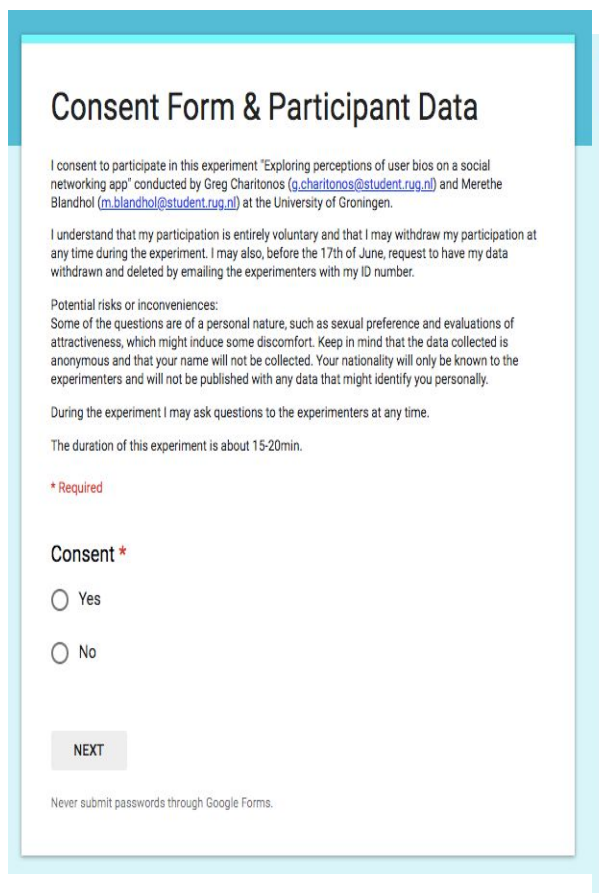
Each participant was exposed to a series of “profiles” consisting of a profile picture and a brief text (with the prompt that the text was written by the individual in the photo). Each participant reviewed twenty such profiles, which were split into four conditions making for five profiles in each condition and creating a within-subject design. Participants were each assigned to all conditions, but could select themselves if they preferred male or female profiles.

The four conditions that the profiles fell into were:

Physically Attractive–Moral (hot_good)	Physically Attractive–Immoral (hot_bad)
Physically Unattractive–Moral (not_good)	Physically Unattractive–Immoral (not_bad)

## Materials

A consent form and initial survey was created, which first informed participants of the procedure and potential risks before asking a series of questions. Each participant was assigned an ID number and asked to enter their age, nationality, and their sex. We decided to ask for participant's biological sex and not gender on the basis that any differences between male and female participants would be hypothesized to be biological.



**Consent Form & Participant Data**

I consent to participate in this experiment "Exploring perceptions of user bios on a social networking app" conducted by Greg Charitonos ([g.charitonos@student.rug.nl](mailto:g.charitonos@student.rug.nl)) and Merethe Blandhol ([m.blandhol@student.rug.nl](mailto:m.blandhol@student.rug.nl)) at the University of Groningen.

I understand that my participation is entirely voluntary and that I may withdraw my participation at any time during the experiment. I may also, before the 17th of June, request to have my data withdrawn and deleted by emailing the experimenters with my ID number.

Potential risks or inconveniences:  
Some of the questions are of a personal nature, such as sexual preference and evaluations of attractiveness, which might induce some discomfort. Keep in mind that the data collected is anonymous and that your name will not be collected. Your nationality will only be known to the experimenters and will not be published with any data that might identify you personally.

During the experiment I may ask questions to the experimenters at any time.

The duration of this experiment is about 15-20min.

**\* Required**

**Consent \***

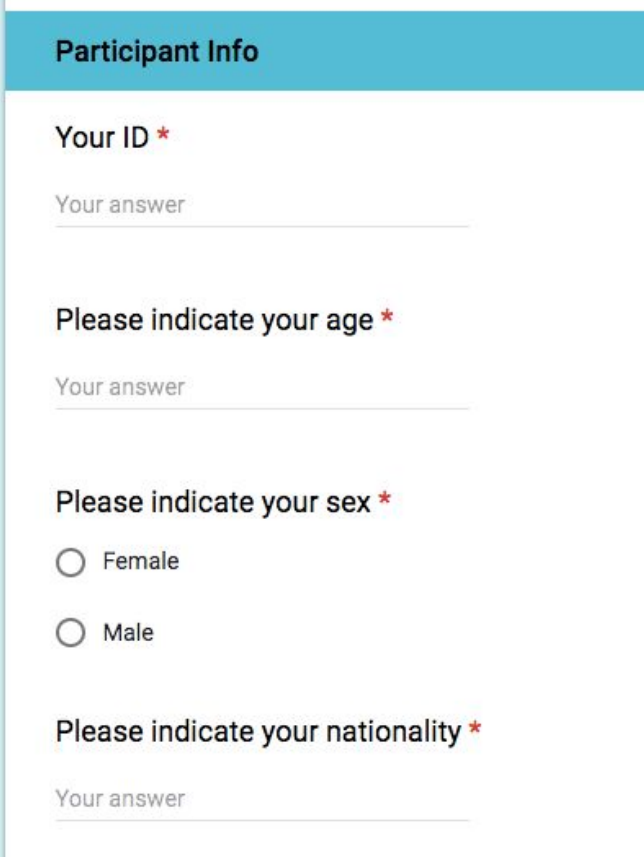
☐ Yes

☐ No

**NEXT**

Never submit passwords through Google Forms.

Figure 1. Consent form page



**Participant Info**

**Your ID \***

Your answer

**Please indicate your age \***

Your answer

**Please indicate your sex \***

☐ Female

☐ Male

**Please indicate your nationality \***

Your answer

Figure 2. Participant info part one

Participants were then asked to rate their own morality and physical attractiveness on a 10-point likert scale ranging from very immoral to very moral or very unattractive to very attractive. We

wanted to see if people's preferences were at all influenced by their perceptions of their own behaviour and looks. This was based on the idea that people tend to prefer partners that are similar to themselves. However, it should be noted that the added factor of potential reciprocity or rejection, which is encountered in real life, might not have influenced people's preferences in a hypothetical scenario. For example, a person that someone might think is "out of their league" might still be rated highly in the experiment, because there is no risk of rejection.

The image shows a screenshot of a survey interface. It contains two Likert scales. The first scale is titled "On average, how moral would you say you are? \*" and has a horizontal row of 10 radio buttons labeled 1 through 10. Below the row, "Very immoral" is on the left and "Very moral" is on the right. The second scale is titled "How physically attractive would you say you are? \*" and also has a horizontal row of 10 radio buttons labeled 1 through 10. Below the row, "Very unattractive" is on the left and "Very attractive" is on the right. The interface is framed by light blue vertical bars on the left and right sides.

Figure

### 3. Participant info part two

The experimental app itself consisted of a series of 20 pictures, taken from the Oslo Face Database (Chelnokova et al., 2014), that had already been rated on physical attractiveness. For our experiment we decided to choose the top ten and bottom ten images based on attractiveness ratings. This was to ensure that photos were either very attractive or very unattractive. Underneath every picture there was a short moral statement in the form of a first-person narrative regarding things that the person had allegedly done. These moral vignettes were taken from ["Behavioral Norms for Condensed Moral Vignettes"](#) (Clifford et al, 2015) and rated on multiple criteria such as "emotional intensity" and "illegality". Our experiment made use of the criteria "moral appropriateness" as a measure of how moral or immoral an act was perceived. The experiment used a Latin Square design and two categories for each of attractiveness and morality, to create the aforementioned four distinct categories of profiles to be shown to each participant. The twenty profiles were generated pseudo-randomly in order to produce five profiles in each category, and these were then shuffled into a random order which

was maintained for every participant. Participants were not given any indication on the category that any given profile fell in to, or that such categories existed.

Between the photo and the moral statement textbox there was a button labelled “rate” which, when pressed, opened a section where participants were asked to drag a point on a scale to indicate how likely they felt they would “Befriend”, “Hookup” with or “Date” the person. The scale ranged from “not at all” to “very much” and had 5 possible indications.



Figure 4a. Experiment screen 1

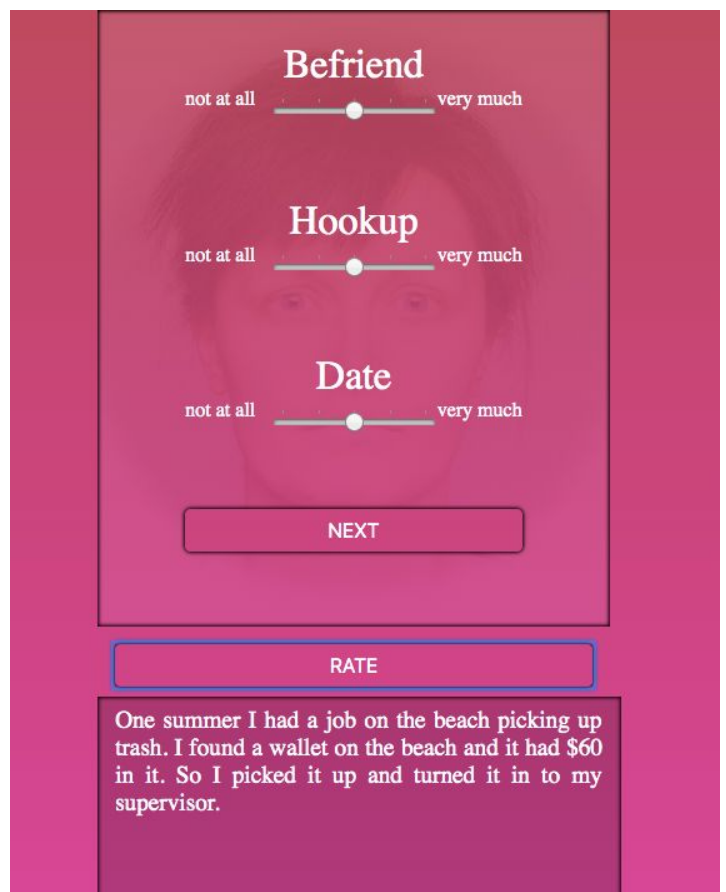


Figure 4b. Experiment screen 2

## Procedure

Each participant was first asked to fill out the consent and participant information form. They were assigned or asked to generate an ID and asked to remember their number. After the consent form was completed the participants were directed to the experiment page, where they had to fill in their ID and their preference for either male or female faces. Then they were

instructed to look at each face and read the descriptions below before pressing the “rate” button and adjusting the sliders according to their preferences.

Once the participant finished with all the photos a small window with “raise your hand for assistance” appeared on the screen. The experimenter then uploaded the data manually and the experiment was finished. On average the experiment lasted between 10 and 15 minutes.

The design on the experiment app used visual cues based off of popular mobile dating applications in order to achieve a sense of familiarity with participants.

## Results:

For our analysis we performed a series of multivariate tests and ANOVAs by splitting up morality and attractiveness into two categories each. Morality was labelled Good\_Bad (which represented our moral and immoral vignettes respectively), and attractiveness Hot\_Not (representing our attractive and unattractive profile photos respectively). We then looked at the interactions between these and the variable sex, which was the sex of the participants. In our within-subjects contrasts



## Dating Category

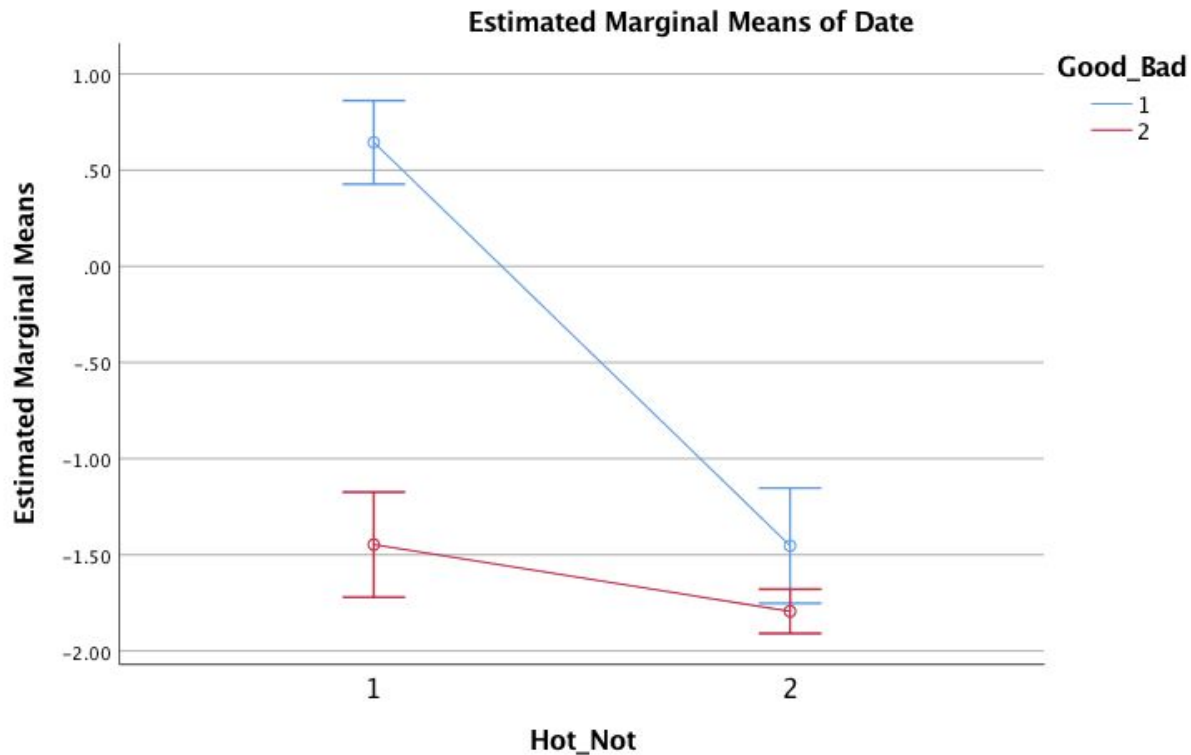
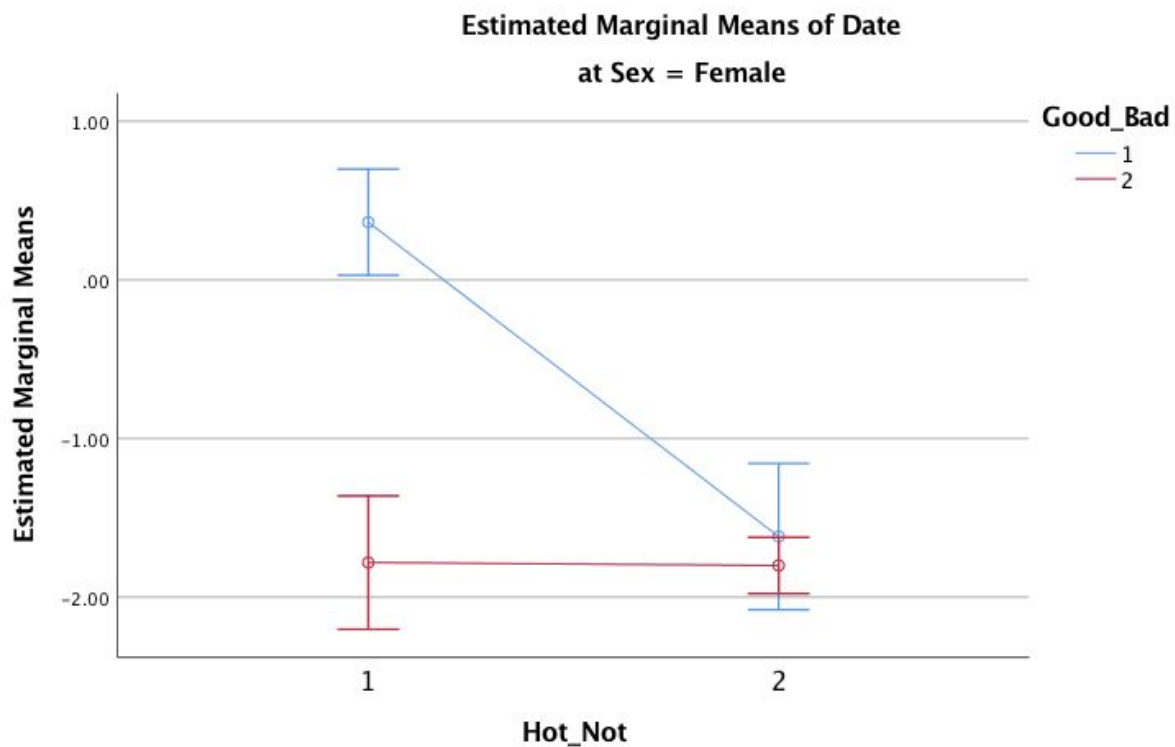


Figure 5a

The graph above (Figure 5a) we see the mean differences of likelihood of dating for the four different combinations of attractiveness and morality for all participants. The number 1 on the x-axis indicates attractive faces and 2 indicates unattractive faces. The blue line indicates moral profiles and the red indicates immoral ones. From the graph we can see that there is a big difference in the attractive condition between moral and immoral profiles. People are more likely to date attractive people who are moral than those who are immoral. For unattractive people, there is a slight increased likelihood of dating if the profile is moral. The interactions of Hot\_Not\*Good\_Bad were shown to have a significance level of  $p = 0.000$  across all relationship types, meaning there was a significant effect of attractiveness and morality in each category. The correlation table below suggests that both morality and physical attractiveness are indicators of whether or not a profile was considered in the dating category:

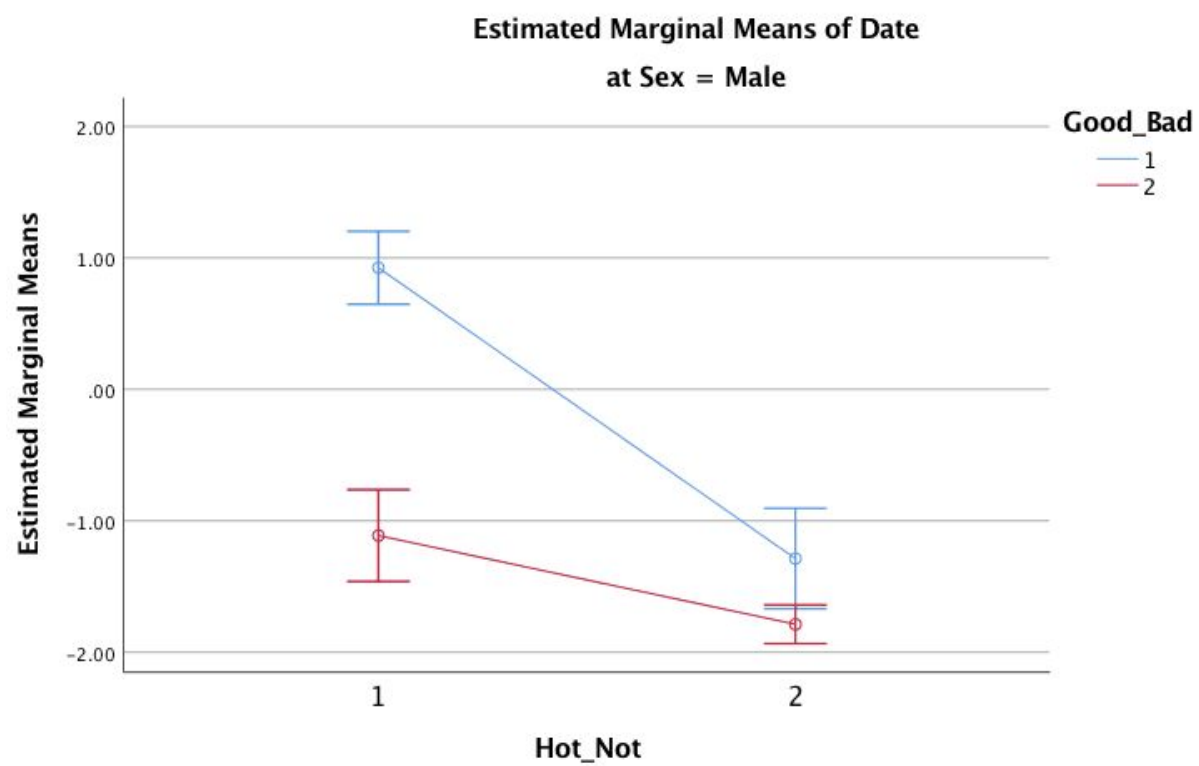
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Correlation with category "Date"	
Moral Rating	0.6045307022
Physical Attractiveness	0.6938238054



*Figure 5b*

For female participants the means in the immoral condition did not differ as much between the attractive and unattractive categories as shown in (Figure 5b). Though there was some interpersonal differences, as indicated by the error bars, there is still evidence for the fact that women are less influenced by attractiveness and care more about morality when dating than men. This difference is also clear in (Figure 5c) which shows the same data for male participants. Here the mean for attractive immoral profiles is higher compared to female participants. This creates a bigger difference between the two attractiveness conditions, indicating that men are more influenced by appearance when picking long-term partners. It should be noted however that there is a significant difference between the moral and immoral attractive faces, meaning that both men and women are impacted greatly by morality when choosing who to date.



*Figure 5c*

## Hookup Category

For hookup data, results showed that attractiveness was a strong determining factor for both sexes. The correlation table below, over both sexes, reflects this data.

Correlation with category "Hookup"	
Moral Rating	0.3537433416
Physical Attractiveness	0.8375790644

For females, moral and attractive men received the highest score, but attractive immoral men also scored higher than either of the unattractive conditions. From the graph there seems to be little difference between the morality conditions when the person was unattractive, indicating that morality was less important. However, morality still does have some influence, as indicated by the difference between moral and immoral attractive people.

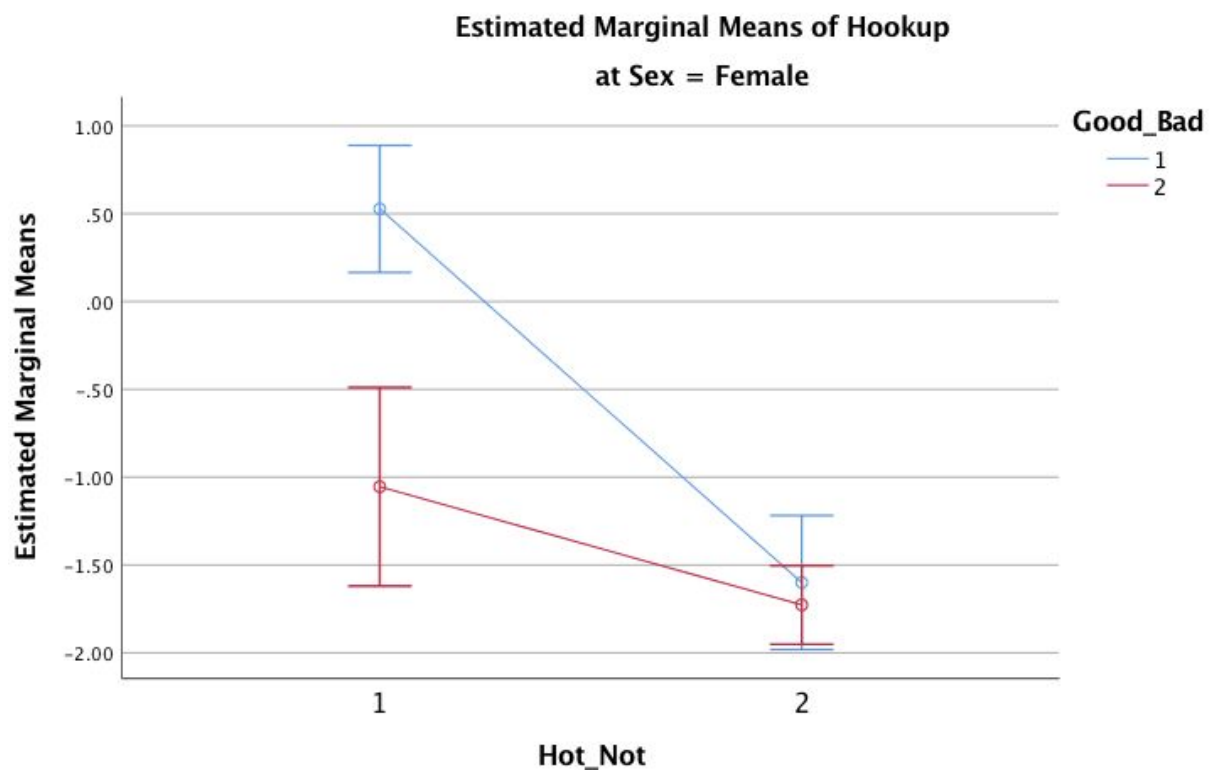
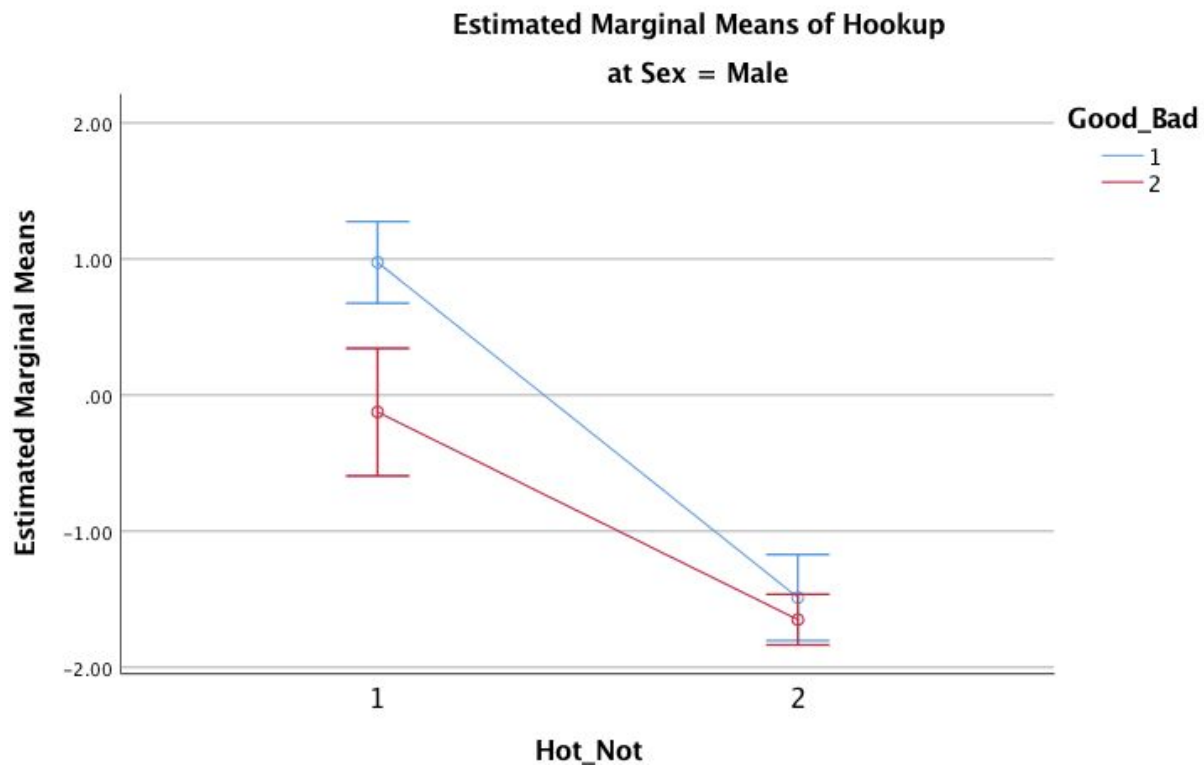


Figure 6a

For male participants, the difference between the moral and immoral attractive profiles was smaller compared to the female participants. This indicates that men cared less about the morality of their hookup partner if they were attractive. Still, morality is still an influencing factor in the attractive condition. Yet, attractiveness or more specifically unattractiveness seems again to be a disqualifying factor and is only affected very slightly by morality.



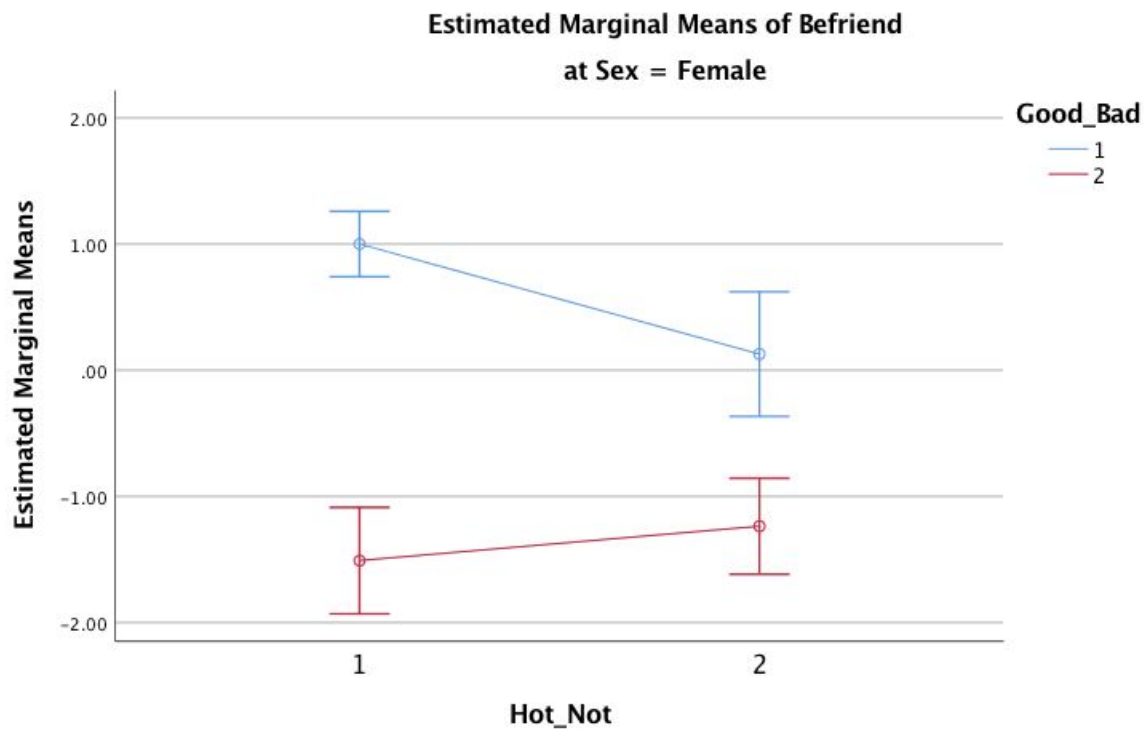
*Figure 6b*

## Befriending Category

Across both sexes, the effect of morality was indicated it as a deciding factor for pursuing a platonic friendship with an individual. The correlation table below, over both sexes, reflects this data.

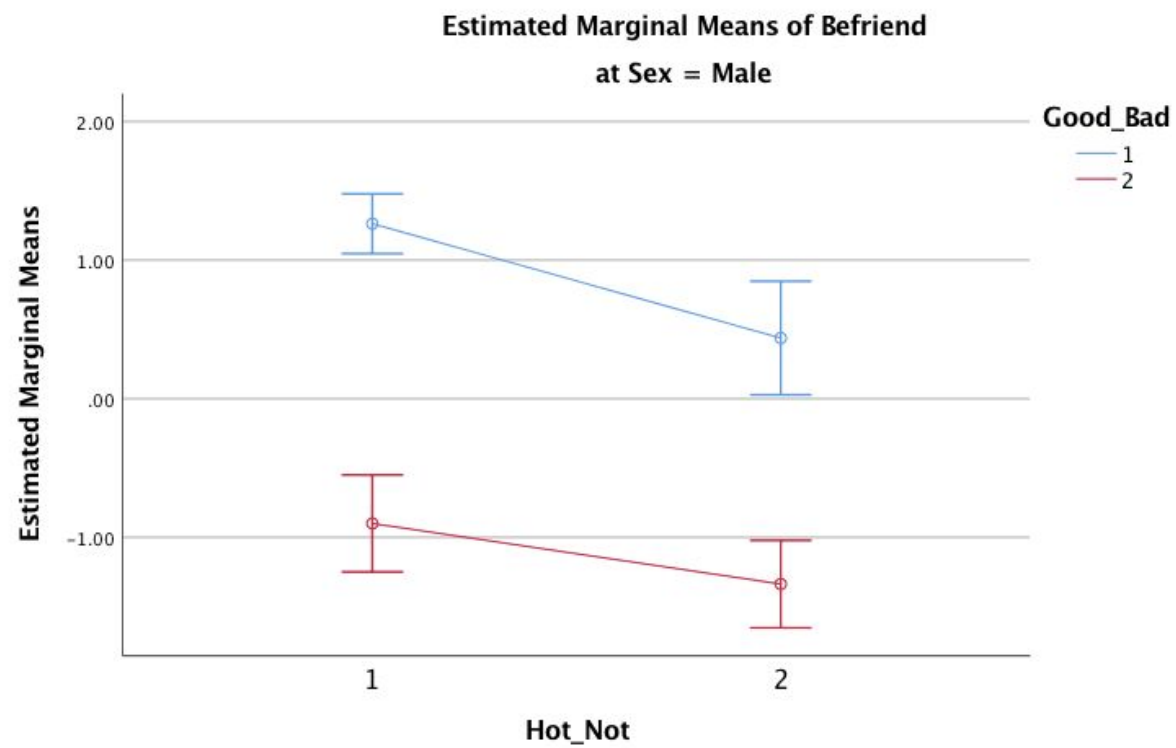
Correlation with category "Befriend"	
Moral Rating	0.9076425927
Physical Attractiveness	0.2891300394

The next graph (Figure 7a) shows the differences in likelihood of befriending across the two dimensions of attractiveness and morality for female participants. Here there is a clear difference between the immoral and moral profiles in the attractive condition, indicating that women are more likely to befriend moral attractive people over immoral attractive people. An interesting observation in this graph is the difference between the attractive and unattractive condition for the immoral profiles. Here, women are more likely to befriend unattractive immoral people, than unattractive moral people. Although this effect lies within the error bars and is therefore not significant. Regardless, the effect might be surprising, as attractiveness is hypothesized to make a person more appealing.



*Figure 7a*

This finding contrasts to the graph below (Figure 7b) that shows the likelihood of male participants to befriend different levels of attractiveness and morality. Here, we see parallel results between the two moral categories, indicating that men are more likely to befriend attractive compared to unattractive people. However, morality is still the stronger indicator in the decision to befriend someone, which can be seen by the higher scores for the moral condition. Yet, for immoral profiles an attractive appearance was more likely to result in a friendship.



*Figure 7b*



# Discussion:

Our hypotheses and findings are summarised below:

Hypothesis	Outcome												
1. Physical attractiveness would correlate positively with short-term (Hookup) interactions regardless of morality.	Significant effect. Across both sexes and averaging over the Good_Bad, Hot_Not showed a clear indication that physical attractiveness correlated strongly with short-term sexual relationships. Correlation Coefficient (CC): 0.8375790644 Significance (Hot_Not v. Hookup): 0.000												
2. Physically attractive individuals who are more moral are more likely to be rated highly on long-term relationships (Date).	Significant effect. Across both sexes Hot_Good individuals scored higher in (Date) than any of the other categories. <table><tr><th colspan="3">Average Score Across Both Sexes between -2 and 2</th></tr><tr><th></th><th>Good</th><th>Bad</th></tr><tr><td>Hot</td><td>0.495833333</td><td>-1.480059524</td></tr><tr><td>Not</td><td>-1.415178571</td><td>-1.817559524</td></tr></table> Significance (Hot_Not*Good_Bad v. Date): 0.000	Average Score Across Both Sexes between -2 and 2				Good	Bad	Hot	0.495833333	-1.480059524	Not	-1.415178571	-1.817559524
Average Score Across Both Sexes between -2 and 2													
	Good	Bad											
Hot	0.495833333	-1.480059524											
Not	-1.415178571	-1.817559524											
3. Physically unattractive individuals are likely to be rated higher on long-term relationships (dating) when moral vs. immoral.	Insignificant effect. As expressed in overlapping error bars in Fig.5a for second condition in Hot_Not (aka Not / physically unattractive).												
4. Male participants are more likely to pursue short-term relationships (hookups).	Significant. Pairwise comparison showed male participants scoring a mean difference of 0.392 higher than their female counterparts, with a significance level of 0.017												

5. Morality would be less of a determining factor for men when seeking intimate relationships.	Insignificant effect. Significance (Hot_Not*Sex v. Date): 0.652 Significance (Hot_Not*Sex v. Hookup): 0.311
6. Morality would be the strongest determining factor when choosing to befriend.	Over both sexes correlation coefficient for good_bad vs befriend: 0.9076425927 Compared to hot_not vs befriend: 0.2891300394
7. Attractiveness would be the strongest determining factor when choosing to hookup.	Over both sexes correlation coefficient for good_bad vs befriend: 0.9076425927 Compared to hot_not vs befriend: 0.2891300394
8. Attractiveness and morality would both be strong determining factors when choosing to date.	Significant effect. Significance (Hot_Not*Good_Bad v. Date): 0.000  Over both sexes, correlation coefficient for Hot_Not: 0.6938238054 Over both sexes, correlation coefficient for Good_Bad: 0.6045307022

## Limitations

### Relationship Status and Participant Behaviour

One limitation that became apparent in the analysis of the results were that some participants were generally less inclined to have short-term relationships than others. Some participants therefore consistently scored low on “likelihood to hookup with”, regardless of the attractiveness of the stimulus. Other participants were outliers because they wanted to have short- or long-term relations with almost anyone. These outliers were later omitted from the data analysis.

Another factor that may have influenced the results is whether or not the participants were in a relationship or not. Despite given the prompt “imagine you are single and proceed as such” these participants might have been less likely to engage in romantic encounters than those who were not.

### Binary Restrictions

There were also a few complaints from participants about the binary nature of the experiment, in that you could only choose between male and female as your sex and you were presented with only faces of the opposite sex.. Future experiments could consider adding the gender and an

option for transgender or agender individuals as well as bisexual people. This might provide interesting insight into how gender and sexuality may influence the experiment.

## Anonymity

There were also some complaints from participants about the anonymity of the experiment, as some people felt that indicating their nationality would easily identify them. This is because some nationalities are underrepresented, so an individual from a certain country might be the only one from there and thus recognizable to the experimenters. Even though we warned the participants of this beforehand, we could have considered removing the nationality section all together. The purpose of collecting this data was to see if there were any cultural differences, but overall this might not have been worth potentially compromising the anonymity of the study for. It is also worthy to note that in order to detect cultural differences it might be more useful to ask for cultural background than nationality, as many participants have grown up in different countries and might not identify with their nationality on their passport.

## Faces

Another limitation of the study might be the faces that we used. Generally, we received feedback that most faces were not very attractive, even the ones that were supposed to be the most attractive in the database. We were not able to select faces in a certain age range as age was not provided for the photos. Therefore, some of the faces looked older and might therefore have been less desirable to our age group of 17-23 year olds. It would therefore have been beneficial to choose younger and more attractive faces for the study as this might have produced more accurate results.

## Moral vignettes

Some possible limitations with the moral vignettes were their very American-centered nature. When referring to money, they used dollars and not euros (which participants might have been more familiar with considering the study was performed in the Netherlands). Further, the vignettes had some errors, such as the reference to “crystal methane” instead of “crystal methamphetamine”. There was also a difference in strength for some moral statements, where many referred to people picking up and returning lost wallets, whilst others referred to consciously running over and killing a dog. In general, participants indicated that they felt the “moral” vignettes described ordinary, expected behaviour whereas the “immoral” vignettes were generally described as far more unfavourable. Some moral statements contained information that was explicit towards the attitudes towards relationships that the profile had, eg. a confession about being unfaithful to a significant other. In hindsight it would have been beneficial to not include these statements as they may have influenced the decisions of participants with greater strength. The moral statements might also have been interpreted differently based on what is considered polite or moral in different cultures. Since our participants were from different parts of the world, this might have influenced the results.

## Explanations of Experiment

In order to explain the concept to the participants we sometimes referred to the experiment as similar to the dating app “Tinder”, in order to provide a reference. In retrospect this might have initiated some assumptions in participants, which may have made some components of the experiment seem odd. For example, Tinder profiles are generated by the person themselves and usually reflects a very positive side of the person. However, in our experiment the descriptions weren’t meant to function in the same way as Tinder bios. Instead, when put into a Tinder context they may have come across as very honest but socially unusual self-descriptors. This effect was applicable to both moral and immoral vignettes as the “bio” in a Tinder profile is meant to serve as a description of the individual, whereas the moral vignettes were short descriptions of events that were meant as an indication of the nature of the individual. It is usually not normal to disclose information about illegal past behaviour when presenting yourself to potential partners. Therefore, we should have perhaps avoided the reference to existing dating-apps.

## Comparison groups

Another limitation was that the four-category latin square did not account for neutral (control) values in either hot\_not nor good\_bad. Having included this, an investigation into the effect of one of these variables on Befriend/Hookup/Date whilst controlling for the other could have been achieved.

## Future Research

To conclude, this experiment provided data that lead to an insightful analysis of the potential link between morality, physical attractiveness, and relationships. In future research, it would be interesting to eliminate some of the aforementioned limitations, as well as explore topics such as the potential effects of sexual orientation and gender. In future research, a larger sample size of individuals, with a more varied background, age, and culture could provide more meaningful data, as well as using a database of profiles that include physical cues beyond just the face, such as full body images. Researching the effect of other moral categories aside from moral appropriateness (such as illegality) could lead to further insight into the connection between morality, ethics, and relationships.

The data used has lead to some intuitive, but insightful conclusions about the way in which humans seek connections with other humans, in sexual, non-sexual, intimate and platonic relationships. Future research could build upon this, and monitor the effect and its potential change over generations.

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