Sofie Christensen

Seeking the other half: an analytical dive into gender differences within partner preferences

Bachelor's thesis in Psychology
Supervisor: Thomas Haarklau Kleppestø

May 2024

NTNU
Norwegian University of Science and Technology
Faculty of Social and Educational Sciences
Department of Psychology

NTNU
Norwegian University of
Science and Technology

Sofie Christensen

Seeking the other half: an analytical dive into gender differences within partner preferences

Bachelor's thesis in Psychology
Supervisor: Thomas Haarklau Kleppestø
May 2024

Norwegian University of Science and Technology
Faculty of Social and Educational Sciences
Department of Psychology

NTNU
Norwegian University of
Science and Technology

SEEKING THE OTHER HALF: AN ANALYTICAL DIVE INTO GENDER

DIFFERENCES WITHIN PARTNER PREFERENCES

Candidate: 10080

Bachelor's Thesis in Psychology – PSY2910

Trondheim, spring 2024

Supervisor: Thomas Haarklau Kleppestø

PREFACE

This study was an empirical research project planned and executed by the supervisors Thomas Haarklau Kleppestø, Mons Bendixen and Leif Edward Ottesen Kennair. The research project focuses on partner preferences in the Big Five personality traits and investigates if the ideal partner personality is a product of one's own personality. The supervisors created the questionnaire. As a part of the student group in the research project, I partook in data collection and coding of variables, as well as conducting my own analyses. Choice of methods was though supervised to ensure correct investigation of the hypotheses. The idea for this study was further suggested by the supervisors. However, the hypotheses in this study were formulated by the author based on previous studies on gender differences in partner preferences, with influence of my own ideas.

I want to thank Thomas Haarklau Kleppestø for academic advice through this writing process. I further want to give my thanks to the students in my research group for valuable discussions and social support.

ABSTRACT

Although partner preferences in personality is not an under-researched topic, there is lack of consensus in what women and men value differently in the ideal partner personality. The present study attempts to further expand our knowledge of an individual's ideal partner personality and explores the difference in preferences between men and women. A questionnaire was administered on 637 Norwegian students at Norwegian University of Science and Technology (NTNU), consisting of the IPIP NEO for measuring own personality, and an adjusted version to measure the ideal partner personality. A correlation analysis found similarity preference in all traits but neuroticism, the highest being for openness and agreeableness. A t-test found aspirational preferences within all traits but openness, where people prefer less neuroticism and more of the remaining traits in their ideal partner. A second t-test showed that women place higher value on more extraversion and less neuroticism than men, and men value more agreeableness and openness than women. It is discussed how the facets within the traits better explain partner preferences. The discussion also questions whether evolutionary psychology explains the displayed gender differences.

Key words: partner preferences, personality, gender differences

SAMMENDRAG

Selv om partnerpreferanser innen personlighet ikke er et uberørt tema i psykologisk forskning, er det manglende konsensus for hva kvinner og menn verdsetter ulikt i en partner. Denne studien forsøker å utvide kunnskap om individets partnerpreferanser i Big Five personlighetstrekkene, med fokus på forskjeller mellom kvinner og menn. 637 norske studenter ble rekruttert via forelesninger ved Norges Teknisk-Naturvitenskapelige Universitet. De besvarte et spørreskjema bestående av instrumentet IPIP NEO, som målte både egen-rapportert personlighet og idealpartners personlighet. En korrelasjonsanalyse fant likhetspreferanser i alle trekk unntatt nevrotisisme, hvor den høyeste korrelasjonen var for åpenhet og omgjengelighet. Videre viste en t-test aspirasjonspreferanser for alle personlighetstrekk unntatt åpenhet, hvor deltakere foretrekker en partner med mindre nevrotisisme, og mer av de resterende trekkene. En t-test delt i kjønn viste at kvinner legger mer vekt på mindre nevrotisisme og mer ekstroversjon i en partner enn det menn gjør, og at menn vektlegger mer omgjengelighet og åpenhet sammenlignet med kvinner. Det blir diskutert hvordan fasetter under personlighetstrekkene beskriver preferansene mer presist. Videre diskuteres hvorvidt evolusjonspsykologi kan forklare de observerte kjønnsforskjellene.

Nøkkelord: partnerpreferanser, personlighet, kjønnsforskjeller.

Which characteristics people search for in their ideal partner has been investigated within a variety of different domains. Humans possess several mate preferences, and do not select mates at random. It can even be considered an evolutionary necessety to select a good long-term partner, to ensure survival and the continuation of their lineage. Therefore, it is natural to believe mate preferences play a big role in the selection of mates. Conroy-Beam and Buss define mate preferences as "the outputs of psychological mechanisms designed to motivate people to pursue potential mates who possess particular qualities" (Conroy-Beam & Buss, 2016, p. 1). These qualities range from physical to social and behavioral attributes, including personality. Personality is defined as enduring characteristics and behavior, and includes major traits and values, among other factors (American Psychological Association, 2024). Testing mate preferences through personality is a relevant way to discover potential individual differences in partner selection, where several studies already show some tendencies (Figuerdo et al., 2006; Watson et al., 2014; Liu et al., 2018). Although the relationship between one's own personality and the ideal partner's personality is not an under-researched topic, there is a need for a large-sample study to replicate and solidify results using the Five Factor Model of personality.

In addition to investigating partner preferences in general, it is valuable to explore what gender differences may exist within partner preferences. Evolutionary psychology provides a theory that the difference in parental investment in mating might result in sex differences when it comes to mate preferences (Holub & Barbero, 2022). Some previous studies have revealed a few gender-specific tendencies. Several studies have found that women rate external resources, such as financial prospect, as more important in a partner than men, and that men rate physical attraction of higher importance than women (Eastwick & Finkel, 2008; Walter et al., 2020). The previous published studies regarding gender differences in personality preferences are not consistent. This study will therefore attempt to

further expand our knowledge of an individual's ideal partner personality and explore the difference in preferences between men and women.

PERSONALITY

The term personality refers to the complex construct of the individual's pattern in thoughts, emotions, and behaviors. As defined by the American Psychological Association personality is: "… the enduring configuration of characteristics and behavior that compromises an individual's unique adjustment to life, including major traits, interests, drives, values, self-concept, abilities and emotional patterns" (American Psychological Association, 2024). This definition of the phenomenon gives reason to believe that many psychological mechanisms are either included or influenced by the individual's personality.

In this study, personality is assessed using the IPIP-NEO, which is based on the original measure of the Five Factor Model (FFM) called NEO PI-R (Maple-Keller et al., 2019). FFM is also known as The Big Five, and it is one of the most frequently used frameworks in personality research. The model includes five personality traits: neuroticism (emotionality), extraversion, openness to experience, agreeableness, and conscientiousness. Each trait further includes six facets. For instance, neuroticism include facets such as anxiety and depression. IPIP-NEO was created by using the International Personality Item Pool (IPIP) to create a 60-item representation of the NEO PI-R (Maples-keller et al., 2019). Measurements of FFM often includes either 300 or 120 items, to ensure high validity and reliability in the inventory. However, using a measure with many items raises challenges for researchers, for example participant fatigue and financial limitations (Maples-Keller et al., 2019, p. 5). A 60-item measurement was more beneficial, and IPIP-NEO was created.

PARTNER PREFERENCES

Research in partner preferences often aims to uncover whether we tend to have absolute preferences, also referred to as consensual preferences, or relative preferences. Consensual preferences describe a tendency to prefer some traits over others, that seems to be similar across all individuals. Relative preferences describe a partner preference where one's ideal romantic partner personality is in relation to one's own personality (Figuerdo et al., 2006). Relative mate preferences can further be divided into the terms *similarity preference* (wanting a partner similar to oneself) and *aspirational assortative preference* (wanting a partner "better than" oneself) (Watson et al., 2014). There are several definitions for the different partner preferences, and some terms could describe the same result. For example, a preference for an ideal partner that is less neurotic than oneself is an aspirational assortative preference. However, if every individual exhibits this preference, it is also considered a consensual preference.

There is some evidence that supports the idea of both similarity and aspirational assortative preference, meaning individuals tend to both prefer a similar partner, while also wanting a partner scoring somewhat lower or higher on several personality traits. Liu et al. investigated the ideal partner personality using the HEXACO personality traits (Honest-humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness). All traits but honest-humility are similar to the Big Five traits, and will therefore suggest similar results for the Big Five (Ashton & Lee, 2009). The study found that singles had a similarity preference within openness, and aspirational preferences within the remaining traits (Liu et al., 2018). They argue that the nature of the traits is what creates the differences in preference. A similarity preference will in that case occur when traits are linked to attitudes and values, and aspirational preferences will occur when traits are desirable (Liu et al., 2018). The meta-analysis results showed an overall aspirational preference in emotionality, extraversion,

agreeableness, and honest humility. They found no significant tendency in aspirations for conscientiousness or openness (Liu et al., 2018).

Watson et al. (2014) found evidence supporting consensual partner preferences in the Big Five personality traits. Corresponding to Liu et al., their study found a preference for a partner that was "better". In this case a partner that is more agreeable, conscientious, and emotionally stable, as well as intelligent and physically attractive (Watson et al., 2014). The strongest effect found in aspirational assortative preference was for neuroticism, where a significantly lower score was preferred in the ideal partner regardless of gender. They also found a similarity preference within openness and other attitudinal variables (Watson et al., 2014). An older, similar study also found evidence supporting both similarity preference and aspirational assortative preferences. Figuerdo et al. (2006) conducted two studies on independent samples investigating individual partner preference in Big Five personality traits. They found a tendency to prefer a partner that was somewhat similar, but also one that scores higher in conscientiousness, extraversion, and agreeableness (Figuerdo et al., 2006).

To conclude the previous literature, the tendencies in partner preferences for personality is dualistic: people prefer both a partner that is somewhat similar, especially in openness, and a partner with a lower score in neuroticism and higher in the remaining personality traits. Though, the studies discussed found different effects for the traits. The preferences with the most consensus are lower neuroticism, higher agreeableness, and similarity in openness. Evidence for aspirational assortative preferences in extraversion and conscientiousness is found in some, but not all, previous studies and could therefore need replication. It could also indicate that these preferences need to be controlled by gender.

Gender differences

As previously mentioned, evolutionary theories suggest that there are evolutionary mechanisms underlying mate selection that should result in different strategies for males and

females, based on what would be considered reproductive success. Buss and Schmitt (1993) provide a Sexual Strategy Theory that describes an evolutionary perspective on mating. According to the article, reproductive success is historically different for women and men. Where men's reproductive success is defined by how many fertile women they can reproduce with, women's success has been measured by how many resources they can secure for themselves and their children (Buss & Schmitt, 1993). This relationship can further be explained by Trivers' Parental Investment Theory, which proposes that the sex that invests more in offspring should be choosier when selecting a mate (Buss & Schmitt, 1993). In the case of humans, this would be females since they invest more in children, historically and biologically.

Some research on gender differences in mate preferences could indicate that women indeed are choosier in mate selection. A study by Furnham investigated partner preferences in several traits, including the Big Five personality traits. The only trait with significant gender difference in their analysis was conscientiousness, where women preferred a more conscientious partner than men (Furnham, 2009). In the studies conducted by Liu et al. (2018) women's partner preferences showed stronger effect sizes in every trait but openness. Watson et al. also found that women place a higher value on desirable traits than men, meaning higher agreeableness and conscientiousness, and lower neuroticism (Watson et al., 2014). A study investigating partner preferences in both heterosexual and non-heterosexual women and men found corresponding results, where heterosexual women showed more desire and a higher preference in lower neuroticism, and higher conscientiousness and agreeableness (Varella et al., 2016). Their results furthermore indicate stronger preferences for agreeableness in non-heterosexual women, compared to both heterosexual and non-heterosexual men (Varella et al., 2016). Women could therefore be considered choosier than men regardless of sexual orientation.

The existing literature has found some consensus in what the ideal partner personality is, though certain personality traits lack corresponding results across studies. Different results for the traits could be explained by the diversity of the previous studies, with variances in sample size, methods, and cultures. Watson et al. (2014) demonstrate some limitations to their results, their sample of singles including mainly American undergrad psychology students. Furthermore, their results include a significant amount of people in relationships, which may respond differently than singles, for example by their answers being influenced by the personality of their current partner. Figuerdo et al. (2006) conducted two studies, both being conducted on American samples with less than 200 participants, with a vast majority of female respondents (73-87 %). Their study also included a large amount of people in relationships compared to singles. Liu et al. (2018) conducted 5 studies with different countries and decent sized samples, which makes their results more robust than the other studies mentioned.

With the knowledge of these variations in previous results, this study aims to expand our knowledge in partner preferences, especially looking into gender differences. The literature points to the coexistence of aspirational and similarity preferences, and further suggest women value desirable traits higher than men (conscientiousness, agreeableness, and neuroticism). Therefore, our hypothesis is that people prefer some degree of similarity within all traits, as well as aspirations for several traits. Openness is hypothesized to display the largest similarity preference, and the remaining traits to be aspirational. Further we hypothesize that women are more selective in their preferences than men, meaning the difference between self and ideal partner personality is significantly larger for women.

METHOD

Participants

In total 637 responded and gave consent to participate in the study. The sample consist of Norwegian students attending the Norwegian University of Science and Technology (NTNU), and out of 636 respondents (missing one), 69 % of them were female and 30 % were male. 8 respondents did not identify as either male or female and were therefore not included when analyzing gender differences. In several analysis, some cases are also excluded due to respondents not answering enough items for each trait. *N* therefore varies for each trait. The age in the final sample ranged from 19 to 58 (*M* = 22.06, *SD* = 3.92), though most respondents were under 27 (95%).

Procedure

The study sample is a convenience sample. Respondents were recruited during lectures at NTNU, where the research group selected lectures held at several campuses from the room schedule. Firstly, the lecturers were contacted by the project leader with a standardized email asking for permission to visit their lectures in the break. When granted, students from the research group visited the lecture, informing about the study and inviting students to participate by answering our questionnaire. They were assured that the survey was anonymous and voluntary to answer, and that our study has approval from the internal ethical committee. The response rate is unknown, as we do not know the total number of students attending the selected lectures. The questionnaire they received consists of a measure of self-reported personality and ideal partner personality, in addition to Social Dominance Orientation (SDO) of both ideal partner and self. This study will not analyze SDO.

Measures

The self-report personality traits were measured by the Norwegian translated version of the IPIP-NEO-60 (Maples-Keller et al., 2019). Each personality trait is measured with 12

items, two items for each facet. The ideal partner traits were measured using the same questionnaire with an alteration of the questions, creating questions referring to "my ideal partner". An example of a self-report item is "I worry about things". The same item used to measure the ideal partner personality is altered into "my ideal partner worries about things". The questionnaire included some reversed items for all personality traits to disrupt inattentive responding, reducing response bias. The IPIP-NEO items were also presented in a random order for each participant to further strengthen the accuracy of the responses. For both the self- and the ideal partner personality measurement, the participants responded to the items on a Likert-scale. The scale ranges from 1 to 5, where 1 means strongly disagree and 5 means strongly agree. To be included in the analysis, participants had to answer at least 9 items for each personality variable. Participants who skipped too many items were considered invalid and removed to maintain the accuracy of out measurement.

The reliability of each personality trait in our sample was at an acceptable level. Cronbach's alpha for the self-reported traits were as following: neuroticism $\alpha = .80$, extraversion $\alpha = .83$, openness $\alpha = .66$, agreeableness $\alpha = .74$, and conscientiousness $\alpha = .76$. Cronbach's alpha for the ideal partner traits were similarly at an acceptable level of reliability: neuroticism $\alpha = .76$, extraversion $\alpha = .75$, openness $\alpha = .68$, agreeableness $\alpha = .78$, and conscientiousness $\alpha = .76$. After investigating each item's influence on Cronbach's alpha, no items were found to disturb the reliability of the variable severely.

Analyses

To explore partner preferences in general, a Pearson's correlation analysis was executed to investigate similarity preference. Aspirational assortative partner preferences were then assessed through conducting a paired sample t-test, revealing significant mean differences that may exist between one's own personality and the ideal partner personality. A t-test was also conducted to investigate the hypothesis that women have stronger aspirational

preferences in some traits compared to men, by splitting the data by gender before running the analysis with all the personality variables.

RESULTS

Table 1

Descriptive statistics, correlation analysis results, and differences between self- and partner personality

Trait	N	Self-report			Ideal partner				Aspirational assortative preference			
		M	*SD*	α	*M*	*SD*	α	*r*	M_d	CI	*t*	*d*
N	628	2.84	0.58	.80	2.09	0.41	.76	.16*	-.75	[-.80, -.70]	-28.60*	-1.14
E	627	3.40	0.59	.83	3.63	0.41	.75	.51*	.23	[.19, .27]	11.14*	.45
O	626	3.36	0.48	.66	3.45	0.41	.68	.56*	.10	[.06, .13]	5.65*	.23
A	627	3.94	0.45	.74	4.17	0.39	.78	.60*	.23	[.20, 26]	14.95*	.60
C	627	3.69	0.47	.76	4.09	0.36	.76	.35*	.40	[.36, .44]	20.98*	.84

Note. * $p < .001$, N = neuroticism, E = extraversion, O = openness, A = agreeableness, C = conscientiousness, M_d (mean difference), CI (95% confidence interval for M_d), d = Cohen's d point estimate.

Table 2

Differences in partner preferences between women and men.

Trait	N	Women				N	Men			
		t	M_d	CI	*d*		*t*	M_d	CI	*d*
N	434	-32.50*	.92	[-.97, -.86]	-1.56	186	-7.89*	.37	[-.46, -.28]	-.58
E	434	10.27*	.26	[.21, .30]	.49	185	4.73*	.18	[.11, .26]	.35
O	433	3.61*	.07	[.03, .11]	.17	185	5.10*	.16	[.10, .22]	.38
A	433	11.52*	.21	[.17, .24]	.55	186	9.89*	.28	[.22, .36]	.72
C	434	17.70*	.40	[.36, .48]	.85	185	11.22*	.41	[.33, .48]	.83

Note. * $p < .001$, N = neuroticism, E = extraversion, O = openness, A = agreeableness, C = conscientiousness, M_d (mean difference), CI (95% confidence interval for M_d), *d* = cohen's d point estimate.

General partner preferences

A correlation analysis was executed to find similarity preferences in our sample, where stronger correlations indicate a relative partner preference for similarity. The results show lowest correlations for neuroticism, ($r = .16$) followed by conscientiousness ($r = .35$). The remaining traits show moderate correlations: extraversion ($r = .51$), openness ($r = .56$) and agreeableness ($r = .60$), as shown in table 1. No trait shows a substantially high similarity preference, though the highest similarity preference was found for openness and agreeableness, which is consistent with previous studies (Liu et al., 2018; Watson et al., 2014).

Table 1 further shows aspirational assortative preferences in the general sample, which include t-test results for all traits. Bigger mean differences will indicate a tendency to prefer an ideal partner with higher or lower scores on the personality traits, compared to themselves. Overall, participants had aspirational preferences for all traits, lowest being for openness ($d = .23$) and extraversion ($d = .45$). The strongest difference was found to be between the ideal

partner's- and self-reported neuroticism. Participants wanted an ideal partner scoring significantly lower in neuroticism (d = -1.14). On the remaining traits, participants wanted significant higher scores in their ideal partner: agreeableness (d = .60) and conscientiousness (d = .84).

Gender differences

Table 2 provides an overview of gender differences. The results indicate aspirational assortative preferences in all traits for both genders, and moreover indicate some gender differences. As hypothesized, women have stronger partner preferences in neuroticism and extraversion, where they prefer a partner with significantly lower score in neuroticism compared to themselves (d = -1.56), and a significantly higher score in extraversion (d = .49). These aspirational preferences also exist for male participants, though not to the same degree. We further found unexpected gender differences in openness and agreeableness, where the male participants prefer a partner with higher scores than themselves, more so than the female participants. Contrary to the hypothesis, we found no gender differences in conscientiousness.

DISCUSSION

This study provides an overview of different partner preferences based on the Big Five personality traits. The goal was to investigate the relationship between one's own personality and the ideal partner personality, while focusing on what gender differences may exist. We based the hypothesis on previous literature, in addition to theories from evolutionary psychology. The first hypothesis was supported, where people tended to exhibit the strongest similarity preferences in openness, and aspirational assortative preferences for the remaining traits. Self-reported openness correlated with ideal partner openness, meaning the participants prefer a partner with the same degree of openness. The correlation analysis furthermore showed moderate correlation for the remaining traits except for neuroticism, meaning people

want a somewhat similar partner based on these traits. Neuroticism is the only trait with a low correlation, which indicate that people are more likely to have aspirational preferences for this trait. The analysis on aspirational assortative preferences showed significant mean differences between own and ideal partner personality in all traits but openness. These results specifically showed that people prefer their ideal partner to be significantly less neurotic, indicating that the trait is undesirable in a partner. Meanwhile the remaining traits (extraversion, agreeableness, conscientiousness) have demonstrated to be desirable in the ideal partner, where our sample prefers a partner scoring higher on all these traits. The mean differences between self and partner indicates stronger aspirations in some traits than others, strongest effects demonstrated within neuroticism and conscientiousness. Agreeableness and extraversion show lower but significant effects, meaning people display aspirational preferences for these traits at a lower scale. It is important to note that agreeableness exhibited an equally strong correlation as openness, but the trait can be considered an aspiration preference because of the mean difference. Openness displayed a small mean difference, but the effect was considered too low to conclude any aspirations for the trait within the general sample.

Similarity preferences in openness is strongly supported by both earlier research and theories. Several studies argue that the link between the personality trait and attitudinal attributes, such as political views and values, is what creates a preference for similarity (Liu et al., 2018; Watson et al., 2014). There is research supporting this link, where a meta-analysis conducted by Ng et al. found a strong negative association between openness and prejudice, meaning a higher score in openness shows less prejudice and more tolerance (Ng et al., 2021). The preference for similarity in openness could then translate to a preference for similarity in attitudes and values. People generally want a partner with the same values and political attitudes, possibly to avoid conflicts in the relationship, since alignment in this area could

reduce disagreements. Watson et al. (2014) further suggests the same link for agreeableness as for openness, which also displayed one of the strongest similarity preferences in our study. It is interesting to note that agreeableness also displayed an aspirational preference, where people exhibited preference for a partner with a higher score than themselves. Both similar and more agreeable partners are desirable, indicating the attitudes linked to the trait could also be stronger in the ideal partner.

As shown, the findings of this study reveal both aspirational and similarity preferences, which also consider the possibility of consensual partner preferences as an underlying mechanism. A consensual partner preference is a shared agreement on the desirability of certain traits, that goes beyond individual preferences for similarity or aspirations (Figuerdo et al., 2006). This type of preference suggests that there is a collective consensus for the ideal partner personality. It is proposed that this consensus is cultivated by several evolutionary, social, and cultural influences that jointly shape the preference among individuals. This consensus could be within the sample in its entirety, or a consensus within the male- or female sample alone. Our analysis could indicate that people agree on what personality is desirable – people prefer higher and lower scores on several traits. Though the analysis directly describes relative aspirational preferences, the tendencies could nevertheless indicate that the ideal partner is similar across individuals – less neurotic, and more agreeable, extraverted, and conscientious partner.

The second hypothesis was that women would exhibit stronger preferences for the desirable traits than men, meaning the results would show larger mean differences between self-reported personality and ideal partner personality in our female sample. Previous studies indicate that this gender difference could appear within all traits deemed desirable, but there is only consensus for gender differences in neuroticism, agreeableness, and conscientiousness. Our analysis rejected the hypothesis. Women did exhibit stronger aspirational preferences in

some personality traits, where the difference between self and partner were larger in the female sample in both neuroticism and extraversion. Women valued less neuroticism ($d = -1.56$) and more extraversion ($d = .49$) in a partner much stronger than men did ($d = -.58$, $d = .35$, respectively). Note that men also exhibit a preference for significantly less neuroticism in a partner, but women exhibited a larger effect size. Contrary to expectations, this study found that men exhibited stronger preferences in some of the Big Five traits, which there is no robust evidence for in previous studies. The difference between self and ideal partner score in agreeableness ($d = .72$) and openness ($d = .38$) were larger for men compared to women ($d = .55$, $d = .17$, respectively). Women in our sample exhibited a very low mean difference between self and partner openness, while men might tend to prefer a partner with a slightly higher score than themselves. This connects to the small effect found for aspirational preferences in openness, where it might be caused by the male participants preferring partner with a higher score in openness. Agreeableness is a desirable trait for both groups, but men showed the strongest difference. Both genders preferred a substantially higher score in conscientiousness in their ideal partner ($d = .82$ and $d = .85$). The overall assumption that women exhibit stronger preferences for all the desirable traits compared to men appears to be false in the initial analyses.

No gender difference was found in conscientiousness, which is contrary to both our hypothesis and the previous literature. This occurrence can be explained by the limitations of previous studies or of the current study. As explained in the theoretical background, there are quite a few variations in the existing literatures methods and samples. Especially when analyzing gender differences, the sample can be crucial for influencing the results. If the male sample is too small in comparison to the female sample, it is possible that significant partner preferences only appear in the female sample. As previously mentioned, Figuerdo et al. (2006) is an example of a study where the number of male participants may influence their

results. Generally, small samples reduce reliability and consequently provide less robust results (Andrade, 2020). The current study consists of a large female and male sample compared to several other studies, though there is still a large difference in number of participants (men $N = 186$, women $N = 434$). Our sample also differs from the literature by consisting of Norwegian university students. The results could be influenced by cultural differences, in this case meaning Norwegian men and women equally prefer better partners but that they place higher value on different traits than the participants in earlier studies. The sample is also quite young ($M = 22.06$), which makes our participants mainly members of a different generation and subculture. A suggestion could then be that it is more traditional for women only to value more conscientiousness in their partner, meaning the tendency is likely to be influenced by cultural factors that progress over time.

Another factor creating dissimilar results could be the study's use of the IPIP NEO to measure personality, where the literature mainly consists of studies based on other measures, e.g., NEO Five Factor Inventory (Figuerdo et al., 2006) or the Big Five Inventory (Watson et al., 2014). Considering the sample size, it is more likely the limitation is caused by the instruments rather than the sample being non-representative. The reliability analysis conducted on the ideal partner conscientiousness must be further investigated to know whether the unexpected results could be caused by our instrument. The analysis showed that specifically one item reduced the Cronbach's alpha of conscientiousness slightly, which was an item for achievement striving. Initially, we accepted this finding due to the minor change in alpha-level, but our results might indicate a limitation. The issue might stem from either the Norwegian translation of the IPIP NEO, or the IPIP NEO itself. The research conducted on the IPIP NEO found stronger alpha levels for the traits than the current study (Maples-Keller et al., 2019). That points to a possible issue with the translation rather than the original instrument. There is no way of knowing where the issue stems from based on our own results.

Further research on a Norwegian sample must be conducted to see whether there is no gender difference in conscientiousness, or if the translated IPIP NEO is unreliable.

The results on conscientiousness further prompt a look into the facets, where a facet-level-analysis might better describe the partner preferences, and possibly describe our differing results. Results from this analysis shows that there were some facets women preferred a higher score than men, and opposite. These results can be viewed in the Appendix. First example is that we found no statistically significant results in achievement striving. The mean differences pointed to women preferring a partner with less achievement than themselves, and that men prefer a partner with higher achievement striving. In addition to non-significant results, these specific items furthermore slightly disturb the inner validity of the trait. The reliability analysis indicated that the alpha level increased when removing the items, indicating a reliability issue. In the remaining facets, men exhibit a preference for more orderliness in a partner than women, and in self efficacy women preferred a higher score in their partner than men. Women also had the strongest preference in cautiousness compared to men. Some facets are more valued by women and some facets are more valued by men, which explains why there was no gender difference in conscientiousness alone.

The analysis on facets further displays interesting details in partner preferences in openness. Rather than wanting a partner that is similar in all facets, our participants preferred a partner scoring higher in some facets, and lower in other. For example, being adventurous is deemed quite desirable, where both men and women wanted a partner scoring higher than themselves. However, women preferred a much larger difference than men. Women further prefer a partner with less imagination, artistic interests, and emotionality, whereas men prefer a partner with a higher score in artistic interests and emotionality. Women also prefer a partner with higher intellect, and men prefer a partner with lower intellect. These differences are, however, comparably very small to the mean differences described in the other analysis.

Nonetheless, it remains noteworthy how the initial analysis displays low mean differences in openness, while the facets display some mean differences. Essentially, the combination of preferences for higher or lower scores on the facets becomes what appears as a similarity preference.

Earlier our results showed that extraversion seems to be more desirable trait for women than men, and when investigating the facets within extraversion, some interesting results emerge. Women prefer significantly more extraversion in their partner in all facets. Meanwhile, men show no statistically significant differences between self and ideal partner in three out of six facets. This could be caused by the sample size. To discover small, but significant differences in the male population, the sample size must be large enough for them to appear. Our male sample might be too small to discover these small mean differences. Nonetheless our sample is relatively large, meaning the difference then had to be extremely minor. Alternatively, there is no male partner preferences within extraversion. One explanation could be that this trait is valued drastically different based on other demographic variables, perhaps people possess quite individual preferences for extraversion. Thus, our results only conclude that women prefer a partner with a higher score in extraversion, while men do not.

Looking further into the results on facets within agreeableness, there were no significant differences between self and partner for women nor men in the facet altruism. The facet modesty also displays some fascinating results. Women appear to prefer a level of modesty that is similar to themselves, with a score just lower than their own. Men, however, prefer a partner with a higher score. Women exhibit somewhat stronger preferences in the facets trust, cooperation, and morality. The results on agreeableness indicated that both men and women prefer a partner with a higher score than themselves, and that men display the strongest effect. Meanwhile, the facets indicate more intricate preferences within the trait.

Partner preferences are more complicated than first assumed. Our facet-level analysis revealed that both genders value different facets within each personality trait. The analysis could demonstrate two findings. Firstly, the results could suggest that partner preferences are not simply about desiring a higher or lower score in the Big Five personality traits overall. Instead, they reflect preferences for more precise attributes within each personality trait. These tendencies could emphasize the complexity of human attraction and highlight the importance of considering the facets when understanding the ideal partner personality. Secondly, the differing results in the facets could too be a sign of the reliability issue in our measurement of the ideal partner personality. The translation and alteration of the items could cause the questions to possess a different semantic meaning, making the facets to be either more or less desirable based on the formulation.

What causes gender differences?

To summarize the gender differences our data demonstrates, both women and men exhibit an aspirational assortative preference for all desirable traits. The results further propose that women place higher value on lower neuroticism and higher extraversion, and that men place higher value than women in openness and agreeableness. As mentioned, existing literature shows similar tendencies within female samples, more so for neuroticism than extraversion. The most intriguing gender difference that emerged in our study, was that men placed higher value on traits that the existing literature have not shown any tendencies for yet. It differs from the traditional assumptions about mate selection, where it is assumed that women evaluate characteristics like personality more rigorously. The tendency men show in our study challenges the previous assumptions and prompts an evaluation of our understanding of gender dynamics in mate preferences.

The hypothesis that women would value desirable traits more strongly than men was based on Trivers' Parental Investment theory (Buss & Schmitt, 1993). Evolutionary

psychology hypothesizes that many human behaviors, including partner preferences, are the product of the adaptation shaped by natural selection. Mating and reproduction opportunity is theorized to play a strong role in the selection of mates, and shapes mate preferences in humans. Women and men prefer different traits in their partners based on the Sexual Strategy Theory, where the theory is that reproductive success is considerably different for the sexes and therefore results in different strategies (Buss & Schmitt, 1993). Parental Investment Theory further explains that the different level of investment in future children, makes the sexes search for different traits in a partner. Women being the sex investing the most, should then display a choosier strategy in partner choice (Buss & Schmitt, 1993). Some tendencies in research lend support to these theories. For instance, research indicates that men have more permissive sexual attitudes than women, such as being more likely to engage in casual sex (Peterson & Hyde, 2010; Kennair et al., 2009). This study showed that women are choosier in two personality traits and several facets to each trait. Evolutionary psychology could describe women having stronger preferences in extraversion, since extraversion can be connected to social status (Anderson et al., 2001). Furthermore, both extraversion and lower neuroticism is connected to financial prospects (Exley et al., 2021). As previously mentioned, these traits are essential for women to search in a partner from an evolutionary perspective.

The evolutionary framework faces some limitations in explaining the complexity of gender differences in partner preferences across diverse human societies. Firstly, the evolutionary theories emphasize mainly biological and reproductive imperatives, such as the preference for traits that indicate fertility. An example would be the tendency to prefer physical attractiveness and younger age (Walter et al., 2020). This focus may potentially underestimate the influence of socio-cultural factors and individual differences. Eagly and Wood states that "… the product of evolution must be distinguished from the products of cultural change" (Eagly & Wood, 1999, p. 411). They further describe how gender roles in

society influence behaviors regarded as beneficial, including selection of partners. These roles are somewhat dependent on the physical sex differences and their interaction with social conditions. An example is greater size, which would give males an advantage in jobs demanding certain types of physical strength (Eagly & Wood, 1999). In this example, the physical difference influence what roles women and men adopt in society. Though it is not only physical differences that influence the gender roles. To the extent women and men adopt roles with associated responsibilities and obligations in relationships, they should then select a mate that reflects the complimentary responsibilities (Eagly & Wood, 1999). These arguments challenge the assumptions that parental investment and reproductive success are the main mechanisms behind mate selection.

It is further noteworthy that the research designs in evolutionary psychology often makes it difficult to infer causation of the observed behaviors in current environments. The literature provides little evidence to support the idea of natural selection alone as the origin of evolved mating behavior, such as how one can prove reproduction is the unconscious motivation. These critiques suggest the need for more integrative approaches that consider these biological predispositions and the socio-cultural context, such as Eagly and Wood (1993) provides.

STRENGTHS, LIMITATIONS, AND FUTURE RESEARCH

One of the greatest strengths of our study is the sample size. With 637 participants, the sample is more likely to be representative of the population, and our analyses will be considered more reliable. Our participants were invited from a wide range of lectures from engineering to sociology, meaning our results could be generalized for the entire Norwegian student population. The questionnaire was created with both randomization of the order of items, and included some reversed items in each variable, which reduces response bias and

strengthens the accuracy of responses. Moreover, removing responses with fewer items than 9 of 12 total for each variable, further ensures accuracy of the measurement and the analyses.

Due to some inconsistent results, the personality measurement might be a limitation in our study. The reliability analysis indicates that some items disturb the reliability of the personality measure slightly. Reliability and inner validity of the instrument are both essential to know whether out instrument measure what we are trying to measure. Therefore, inconsistencies in our instrument implies the instrument fails to measure the Big Five accurately. Maples-Keller et al. (2019) past research on the IPIP NEO did not display an issue with the items, which then implies an issue emerged in the current study. It could be caused by either the Norwegian translation of the instrument, or the adjusted questions that measure the ideal partner personality instead of self-reported personality. Translating questions might add or subtract new semantic meaning in the used sentences. In addition to reliability issues, our results show a variety of preferences within the personality traits. Whether the results differ because of the instrument, the sample, or that the preferences themselves are not measurable by personality traits, is not certain. This gives some implications for future research, since a Norwegian sample measured by IPIP NEO exhibit somewhat different results compared to other samples and instruments. Future research could also replicate and strengthen the findings of this study, since there are some effects specific to our sample in addition to the exhibited gender differences.

CONCLUSION

This research has demonstrated the complexity of gender differences within partner preferences based on the Five Factor model of personality. The initial hypotheses were both confirmed and rejected, where results indicate more intricate relationships between own personality and partner personality than first assumed. Through analyzing mean differences

between women and men's own personality and their ideal partner's personality, we found

that all participants exhibit a similarity preference in all traits, highest being in openness and

lowest in neuroticism. Additionally, participants prefer a partner with higher extraversion,

agreeableness, and conscientiousness, and lower neuroticism. When looking at gender

differences, women value higher extraversion and lower neuroticism more than men, and men

value higher agreeableness and openness more than women. Additional analyses further

showed that women and men valued different facets within each trait, implying that

measuring partner preferences in personality traits might not be specific enough. These

differing effects could also be caused by the main limitation of this study, which was the

reliability of the personality measurement. Despite potential concerns about the instrument,

the strengths of the study provide a solid basis for confidence in the validity of the observed

effects.

APPENDIX

Differences in partner preferences between women and men, facet-level analysis

	Facet	Women			Men		
		t	M_d	*d*	*t*	M_d	*d*
N	Anxiety	-29.44*	1.52	-1.41	-4.78*	.39	-.35
	Anger	-17.32*	.75	-.83	-3.76*	.24	-.27
	Depression	-24.99*	1.08	-1.20	-7.85*	.60	-.57
	Self-consciousness	-16.88*	.77	-.81	-7.34*	.55	-.54
	Immoderation	-9.48*	.39	-.45	-6.66*	.41	-.49
	Vulnerability	-19.34**	.98	-.93	-0.94**	.07	-.07
E	Friendliness	15.7**	.62	.75	8.05**	.54	.59
	Gregariousness	7.14**	.29	.34	3.53**	.22	.26
	Assertiveness	6.04**	.29	.29	.87	.06	.06
	Activity level	8.69**	.43	-.42	2.44	.17	-.18
	Excitement-seeking	8.52**	.29	.41	1.81	.09	.13
	Cheerfulness	14.54**	.47	.70	7.03**	.39	.51
O	Imagination	-5.59**	.25	-.23	.27	.02	.02
	Artistic interests	-3.47**	.13	-.17	2.94*	.15	.22
	Emotionality	-6.53**	.29	-.31	4.84**	.33	.35
	Adventurousness	22.12**	.89	1.06	8.24**	.49	.60
	Intellect	5.08**	.19	.24	-2.60*	.15	-.19
	Liberalism	-.28	.01	-.01	3.11*	.15	.23
A	Trust	9.04**	.33	.43	3.80**	.19	.28
	Morality	12.55**	.34	.60	4.93**	.24	.36
	Altruism	2.51	.07	.12	2.42	.11	.18
	Cooperation	15.58**	.51	.75	9.28**	.47	.68
	Modesty	-1.28	.05	-.06	6.03**	.35	.44
	Sympathy	1.55	.04	.07	6.16**	.32	.45
C	Self-efficacy	14.23**	.51	.68	6.01**	.36	.44
	Orderliness	8.60**	.38	.41	7.94**	.55	.58
	Dutifulness	16.08**	.43	.77	10.78**	.49	.79
	Achievement-striving	-1.22	.04	-.06	1.48	.08	.11
	Self-discipline	16.13**	.68	.77	9.52**	.64	.70
	Cautiousness	10.19**	.45	.49	4.10**	.27	.30

Note. ** *p* < .001. * *p* < .01, N = neuroticism, E = extraversion, O = openness, A = agreeableness, C = conscientiousness, M_d (mean difference), *d* = Cohen's *d* point estimate.

REFERENCES

American Psychological Association (n.d). Personality. In *APA dictionary of psychology.*

   Retrieved March 11., 2024, from https://dictionary.apa.org/personality

Anderson, C., John, O. P., Keltner, D., & Kring, A. M. (2001). Who Attains Social Status?

   Effects of Personality and Physical Attractiveness in Social Groups. *Journal of*

   Personality and Social Psychology, *81*(1), 116–132.

   https://doi.org/10.1037/0022-3514.81.1.116

Andrade, C. (2020). Sample Size and its Importance in Research. *Indian Journal of*

   Psychological Medicine, *42*(1), 102–103.

   https://doi.org/10.4103/IJPSYM.IJPSYM_504_19

Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A Short Measure of the Major

   Dimensions of Personality. *Journal of Personality Assessment*, *91*(4), 340–345.

   https://doi.org/10.1080/00223890902935878

Buss, D. M., & Schmitt, D. P. (1993). Sexual Strategies Theory: An evolutionary perspective

   on human mating. *Psychological Review*, *100*(2), 204–232.

   https://doi.org/10.1037/0033-295X.100.2.204

Conroy-Beam, D. & Buss, D. M. (2016). Mate preferences. I T.K. Shackelford, V.A. Weekes-

   Shackelford (eds.), *Encyclopedia of Evolutionary Psychological Science*,

   DOI: 10.1007/978-3-319-16999-6_1-1

Eagly, A. H., & Wood, W. (1999). The Origins of Sex Differences in Human Behavior:

   Evolved Dispositions Versus Social Roles. *The American Psychologist*, *54*(6), 408–

423.

https://doi.org/10.1037/0003-066X.54.6.408

Eastwick, P. W., & Finkel, E. J. (2008). Sex Differences in Mate Preferences Revisited: Do

People Know What They Initially Desire in a Romantic Partner? *Journal of*

Personality and Social Psychology, *94*(2), 245–264.

https://doi.org/10.1037/0022-3514.94.2.245

Exley, J., Doyle, P., Snell, M., & Campbell, W. K. (2021). O.C.E.A.N.: How Does

Personality Predict Financial Success? *Journal of Financial Planning*, *34*(10), 68–86.

Figueredo, A. J., Sefcek, J. A., & Jones, D. N. (2006). The ideal romantic partner

personality. *Personality and Individual Differences*, *41*(3), 431–441.

https://doi.org/10.1016/j.paid.2006.02.004

Furnham, A. (2009). Sex differences in mate selection preferences. *Personality and Individual*

Differences, *47*(4), 262–267.

https://doi.org/10.1016/j.paid.2009.03.013

Holub, A. M., & Barbaro, N. (2022). Trivers' Parental Investment Theory. In *Encyclopedia of*

Sexuality and Gender. Springer International Publishing.

https://doi.org/10.1007/978-3-319-59531-3_52-1

Kennair, L. E. O., Schmitt, D., Fjeldavli, Y. L., & Harlem, S. K. (2009). Sex Differences in

Sexual Desires and Attitudes in Norwegian Samples. *Interpersona: an International*

Journal on Personal Relationships, *3*(supp1), 1–32.
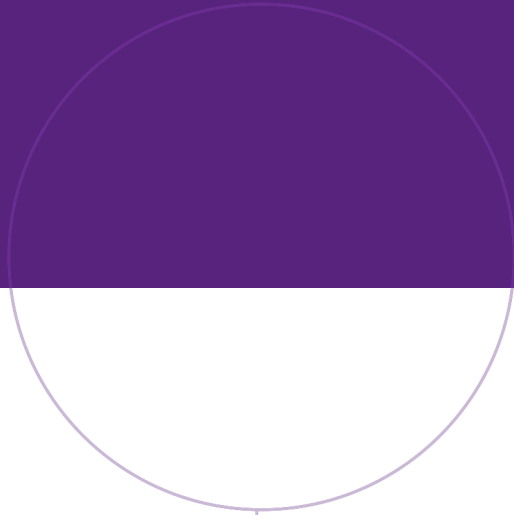
https://doi.org/10.5964/ijpr.v3isupp1.67

Liu, J., Ludeke, S., Haubrich, J., Gondan-Rochon, M., Zettler, I., & Wrzus, C. (2018). Similar to and/or Better than Oneself? Singles' Ideal Partner Personality Descriptions. *European Journal of Personality*, *32*(4), 443–458. https://doi.org/10.1002/per.2159

Maples-Keller, J. L., Williamson, R. L., Sleep, C. E., Carter, N. T., Campbell, W. K., & Miller, J. D. (2019). Using Item Response Theory to Develop a 60-Item Representation of the NEO PI-R Using the International Personality Item Pool: Development of the IPIP-NEO-60. *Journal of Personality Assessment*, *101*(1), 4–15. https://doi.org/10.1080/00223891.2017.1381968

Ng, D. X., Lin, P. K. F., Marsh, N. V., Chan, K. Q., & Ramsay, J. E. (2021). Associations Between Openness Facets, Prejudice, and Tolerance: A Scoping Review With Meta-Analysis. *Frontiers in Psychology*, *12*, 707652–707652. https://doi.org/10.3389/fpsyg.2021.707652

Petersen, J. L., & Hyde, J. S. (2010). A Meta-Analytic Review of Research on Gender Differences in Sexuality, 1993-2007. *Psychological Bulletin*, *136*(1), 21–38. https://doi.org/10.1037/a0017504

Varella Valentova, J., Štěrbová, Z., Bártová, K., & Corrêa Varella, M. A. (2016). Personality of ideal and actual romantic partners among heterosexual and non-heterosexual men and women: A cross-cultural study. *Personality and Individual Differences*, *101*, 160–166. https://doi.org/10.1016/j.paid.2016.05.048

Walter, K. V., Conroy-Beam, D., Buss, D. M., Sorokowska, A., Sorokowski, P., Aavik, T., Akello, G., Alhabahba, M. M., Alm, C., Amjad, N., Anjum, A., Atama, C. S., Atamtürk

Duyar, D., Ayebare, R., Batres, C., Bendixen, M., Bensafia, A., Bizumic, B.,

Boussena, M., … Carrier, A. (2020). Sex Differences in Mate Preferences Across 45

Countries: A Large-Scale Replication. *Psychological Science*, *31*(4), 408–423.

https://doi.org/10.1177/0956797620904154

Watson, D., Beer, A., & McDade-Montez, E. (2014). The Role of Active Assortment in

Spousal Similarity. *Journal of Personality*, *82*(2), 116–129.

https://doi.org/10.1111/jopy.12039