

Human mate choice as the psychologist views it: Findings, issues, problems and perspectives

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This paper briefly reviews existing findings about determinants and predictors of human mate choice and discusses two theoretical perspectives that are commonly used as frameworks to explain these findings. Conceptual and methodological shortcomings in the existing literature on mate choice as well as suggestions for future research will be pointed out.

1 Introduction

Mate choice can be seen as a special instance of interpersonal attraction: The process of forming and maintaining a close personal relationship with a “partner”, often involving sex. As such, it has gotten much attention in recent psychological research. This interest is well-deserved: It is normal that people are constantly in contact with each other. Research on the “need to belong” (see Baumeister & Leary 1995) claims that this need is extremely fundamental and important to human life. Lacking personal relationships and social isolation has been linked to a wide variety of serious health problems (Cacioppo et al., 2000) and significantly lowered levels of life satisfaction and happiness (Buss, 2000). Not only the existence of personal relationships matters, their quality also does, as Swann (2001) points out in his research on “toxic” couples. Therefore, as almost 90% of individuals in western societies get married at some point in their life, the relevance and importance of “mate-choice”-issues for the individual, as well as for society as a whole can hardly be debated. This is also reflected by the fact that contemporary textbooks of social psychology usually devote several chapters to these topics (e.g. Taylor et al. 2000) – and rightfully so.

Aside from this practical importance, there is also theoretical interest in the field of mate-choice psychology: This area has become a battleground between evolutionary psychology and more conventional theories of social psychology about how to interpret the commonly accepted findings on mate choice. We can neither review all evidence nor resolve this conflict in the given space.

As there are many arguments and as we have to be as concise as possible, we limit our review to close long-term relationships (formation, maintenance, breakup) while also excluding research on the construct of love (for a comprehensive review on love, see Sternberg & Barnes, 1988).

2 Common empirical findings

In this section, we review factors that are commonly regarded as important determinants of interpersonal attraction and the quality and stability of close interpersonal relationships. The interpretation of these factors and their specific mediating mechanisms for these relatively robust effects is not so unequivocally established, why we discuss those separately in the following sections. As pointed out above, humans are social animals and are surrounded by others most of their waking time (Larson et al. 1982). The crucial question is then: If humans have the tendency to affiliate: With whom do they do it? What predicts the level of affiliation between individuals?

The following 5 factors enjoy sound and comprehensive empirical support:

- **Physical attractiveness:** Even though not politically correct and generally perceived as “shallow”, there is a growing body of evidence that physical attractiveness plays a major role in mate choice (Walster et al. 1966; Hatfield & Sprecher 1986). In general, people with similar levels of physical attractiveness seem to date and mate each other (Berscheid et al. 1971). Being physically handicapped, obese or having a non-symmetrical face is usually highly detrimental to levels of perceived physical attractiveness (Hadjistavropoulos & Genest 1994).
- **Personality characteristics:** Perceived **warmth** and **competence**. People who are perceived as warm and/or competent are liked far more than others (Rubin 1973). Perceived warmth is highly determined by positive outlook and attitude, while competence can consist of many things, depending on the type of relationship between the individuals, often social skills or intelligence.
- **Proximity:** Physical and “functional” distance are good predictors who will match up with whom, closer living increases the probability of friendship (Festinger, Schacter & Back 1950).
- **Familiarity:** While often confounded with proximity, there is a familiarity-effect of it’s own. It seems as if increased familiarity leads to increased levels of liking (Mita et al. 1977).
- **Similarity:** Contrary to popular belief, opposites do **not** seem to attract. For almost all observed variables, especially attitudes, socio-economic background, values, race, education, etc. similarity is a major predictor of establishing close relationships (Simpson & Harris, 1994).

3 Conventional explanatory frameworks within social psychology

There have been many theories put forward to explain the effects outlined above, mostly applying known principles of social psychology to interpersonal attraction and relationships. This review will be an eclectic blend of these explanations and is by no means comprehensive or complete.

First of all, while social psychology tends to explain the effects of proximity and familiarity mostly by social exchange theory (with easily available people providing cheaper contact) and the mere exposure effect (Zajonc, 1968) respectively, I want to emphasize that both factors are probably not properly characterized by these explanations. There is a growing body of evidence suggesting that both factors don't shift the levels of liking per se, but rather facilitate and amplify whatever characteristics might be there in the first place regardless if positive or negative, rendering these attributes more salient. Most of the time, these impressions will be positive of course, as people are capable of managing self-presentation. Most people tend to present themselves nicely – at least at first - which meshes nicely with the notion that people perceive positive traits in others before they perceive negative ones: As Brehm (1990) points out, negative traits play a larger role later in a relationship, but are often neglected in the beginning when partners are idealized. If there are in fact initial antagonisms and negative feelings, contact and familiarity generally tend to intensify, rather than alleviate conflicts and negative attitudes. In this perspective, proximity and familiarity just gives existing attributes a chance to be perceived, with little or no effect if they are well known – if the stimulus is repeated over and over (Bornstein, Kale & Cornell, 1990) – and even adverse effects on liking, if the perceived attributes are negative.

While proximity and familiarity therefore both work like a gain rather than a filter, the effect of similarity seems to be genuine and unidirectional: Similarity in important aspects always leads to liking, while opposite attitudes and traits decrease liking. As robust and consistent this effect is, there is no single theoretical explanation in social psychology – which is probably appropriate, regarding the nature of the effect: It occurs in so many settings and aspects that there are probably multiple factors and complex interactions between them that give rise to similarity-effects.

On the one hand, it is relatively easy to coordinate activities and resolve conflicts with people who share the same basic attitudes and goals, so similarity might be reinforcing per se. On the other hand, cognitive dissonance theory predicts that people with rather dissimilar attitudes change these views so that they become more congruent over time if they are in a relationship, for example to make the coordination of outcomes easier. There is evidence for both possibilities (Aron, 1988). Moreover, it is quite possible that both the effects of similarity and proximity result as a consequence of organized settings: As Kalmijn & Flap (2001) point out, over 50% of married couples shared one of five institutionalized settings like work or college before marriage. Admission to these contexts is by no means random, but highly selective. Therefore, similar people will end up together in these contexts, while also preparing the ground for proximity effects.

Finally, in a real-life competitive dating market, partners with a similar, matching “mate-value” naturally tend to end up with each other, as can be easily shown by simulations (Feingold, 1988).

The effects of physical attractiveness on liking can largely be explained by implicit personality theories and the so-called “halo”-effect: Not only are attractive people liked more, they are also perceived to have a number of – empirically largely uncorrelated – other desirable and positive qualities (Jackson, Hunter & Hodge, 1995; Feingold, 1992) like friendliness or intelligence.

In the analysis of close relationships, social psychology goes far beyond these established factors of - often shortlived - interpersonal attraction. Unfortunately, we don't have the space to elaborate on these concepts. It has to be sufficient to point out, that the formation and maintenance of a close relationship is an extremely complex social phenomena. Concepts like self-disclosure can help to understand the formation of intimacy and the development of a relationship, social exchange theory suggests that we evaluate our relations in terms of rewards and costs and that we strive to maintain equity within them. Many other factors like the distribution of power in the relationship, happiness and commitment of the individual partners, frustration-tolerance, ability to resolve conflicts, stress-coping mechanism and many more variables are important in predicting the time-course of a relationship. This goes far beyond simple factors and needs careful study.

4 Evolutionary psychology

Evolutionary psychology is a field of psychology that has gained considerable theoretical interest in recent years. Principally, contemporary evolutionary psychology as a metatheoretic position was developed by Leda Cosmides and John Tooby and outlined in their seminal work “The adapted mind” (Barkow, Cosmides & Tooby 1992). From their perspective, evolutionary psychology applies to a wide variety of human behaviors, including parenting, crime and – of course – mate choice. In fact, mate choice is one of those fields that is considered a “theoretical success” by evolutionary psychologists. Evolutionary psychology claims to be able to make sense of the complex mate-choice decisions that humans make, explaining the common findings within a coherent framework as well as introducing new data, emphasizing a certain specific perspective on these issues. While many evolutionary psychologists just tried to capitalize on the public interest in this topic by writing ridiculous popular psychological books, especially Buss (see for example Buss 1994 or Buss 2000), evidence from mate choice is still an essential cornerstone for further theoretical claims of evolutionary psychology.

Evolutionary psychologists share a number of main assumptions that are applied to the field of mate-choice: In their view, the human brain consists of a number of quite distinct mechanisms that were evolved to solve important and specific adaptive problems. Their metaphor for the mind is not the computer (like it was for cognitive psychologists), but the swiss army knife. While it admittedly took a long time to evolve these cognitive devices, they all serve a common purpose: Increasing the reproductive success - as measured by number of own surviving offspring and those of relatives - under the conditions of the “environment of evolutionary adaptedness” – the Pleistocene. Individuals who possessed traits that solved these problems efficiently reproduced more successfully than those who didn't, spreading these very traits in the population. The main point for evolutionary psychologists dealing with mate choice is their claim that men and women faced quite different adaptive problems in this environment, that they evolved different and distinct brain mechanisms to overcome these problems and that these adaptive mechanisms are still active today,

unconsciously guiding the mate-choice of men and women in current environments and under current conditions.

More specifically, they claim that the evolutionary problem women had to overcome was that their parental investment in a child is huge and irrevocable: Being in a precarious situation for at least 9 months, with considerable health-risks for the mother. Moreover, she will have to provide intensive care for the child far longer than that, and being dependent on outside-resources and support while doing so. Finally, due to these constraints, women can only have relatively few children in their lifetime – up to around 20, translating into few opportunities to pass on their genetic makeup. A successful mating strategy would therefore be to look for quality, seeking a partner who is willing and able to provide the necessary resources for her and her offspring and who defends her from all kinds of malice during her vulnerable condition. As none of these qualities is salient, women have to look for qualities that are more easily observable, but correlated with these qualities to infer these valuable traits. Therefore, it is adaptive for women to be very selective in their mate-choice and to wait a considerable time until a reliable assessment of the traits of the partner can be made, before committing to a relationship.

On the contrary, the minimal parental investment of men for reproduction can be very low: Literally minutes or even seconds of sexual intercourse can be sufficient. Thus, the reproductive capacity of a male during his lifetime is virtually infinite - if he is able to obtain enough women who are willing to reproduce with him. If this is the case, a male reproductive strategy should optimally be aimed at quantity: Reproducing with as many (different) women as possible, while keeping the individual contributions to each relationship low. But the male faces other evolutionary problems that are not encountered by women: He must be sure that his partners are fertile and that they won't commit cuckoldry. Women can always be sure that the child is theirs, men lack this certainty and have to guard against investing resources in the offspring of a rival. Therefore, men have to look for cues that signify fertility in their partners and invent adaptive mechanism that prevent adultery. Altogether this leads to a model, where males compete with each other for mates, while females –

as the more parentally investing sex – decide this competition by mate-selection. This is – in a nutshell – the common belief system of evolutionary psychologists when it comes to mate-choice. How did they make sense of the known data in this light and what specific data do they provide to support their claims?

In the case of physical attractiveness, they emphasize that standards of attractiveness are not arbitrary but interculturally similar (Buss, 1994). Moreover, they break physical attractiveness down along sex-differences. While important for both sexes, men report a higher relevance of physical attractiveness for mate-choice. Also, men strongly prefer women exhibiting variables that indicate fertility like youth or a waist-to-hip ratio of .70 – factors that are in fact correlated with female fertility – while women prefer men that are tall and strong (Barkow, Codrington & Tooby, 1992). In contrast to men, women should prefer men who can support them with their resources.

An intercultural analysis of large numbers of “lonely-hearts”-advertisements showed exactly that (Bereczkei et al., 1999): Not only did women advertise far more attributes of their physical attractiveness and were overtly seeking financial security in their ads, they also demanded higher levels of resources in potential mates if their own physical attractiveness was higher.

There are many more factors that were checked for sex-differences by evolutionary psychologists and in fact, they found them in many aspects. For example, women prefer men with high social status and power (presumably as indicators of resources), and with humor and a “warm” personality (presumably as indicators of a willingness to share these resources). Even male jealousy is seen as an adaptation to prevent the cheating of the wife (Buss, 2000). Some of the cited evidence is rather bizarre, for example the reported male tendency to monopolize sexual access to females by introducing harems, chastity belts and even marriage. In summary, an evolutionary perspective on mate choice comes down to the claim that sex-differences in evolutionary problems of reproductive success translate into sex-differences in the evolved adaptations, which give rise to sex-differences in many current mate-choice strategies and preferences that are overtly observable and presumably allow to infer the validity of this chain of reasoning.

5 Critical discussion and conclusions

Our critique with regard to social psychological explanations of mate-choice is quite straightforward: The main deficiency in social psychological research on the topic is that the data is obviously just seen as illustrations of larger theories like social exchange theory or cognitive dissonance theory, rather than being used to construct a comprehensive theory of mate choice that makes specific and accurate predictions. Another shortcoming is the fact, that many factors were linked to liking (for example similarity \rightarrow liking), but there are not many studies that investigate if this change in attitudes actually translates into changes in mate-choice behavior.

In contrast, evolutionary psychology suffers from many more problems. As could be seen, sex differences in mate-choice preferences are very important for the claims of evolutionary psychology. Curiously, there is another perspective that can potentially make sense of these data, namely the sociocultural perspective. Proponents of this perspective basically claim that these sex-differences are not due to biologically based mechanisms that were shaped in the distant past, but due to culturally defined and currently maintained social roles for men and women. In this framework, it makes sense for women to seek men with resources, because their traditional role suggests this behavior. Unfortunately, we can't resolve the conflict between these two directly rivaling theoretical accounts. As social roles gradually change, time will tell if these sex-differences change accordingly or disappear completely. If not, this would increase our faith in explanations by evolutionary psychologists. Clearly, this question has to be deferred to the future. But there are current issues: Contemporary evolutionary psychology often just comes down to good story-telling and making sense of patterns of data post-hoc. As we have no real idea, what was important in the pleistocene and why, these are largely just-so stories. The predictions that arise from this research are often generally even more unspecific. A large variety of patterns is consistent with the general hypothesis. It also seems that they find what they are looking for and that they commit logical errors, while testing their hypotheses. Given x, they look for y and find y. It is not clear to me, if they ever look for falsificators, data that must not occur in their framework. It's always easy to

make sense of any findings post-hoc. In a Popperian sense, the approach has no empirical value, if it doesn't provide the possibility of falsification by considering alternative explanations, especially if the original hypothesis depends on an inference back in time, as is the case here.

There are more methodological issues: In this research (Buss 1994), people were often asked how they would feel about a partner with specific attributes. This is not very valid, as people are not good at predicting their feelings under these circumstances (Loewenstein et al. 1999).

The resolution to these methodological problems is very clear: These questions can only be properly addressed by prospective longitudinal studies that elicit a wide variety of specific mate-choice predictors and try to predict actual mate-choice **behavior** – the formation, maintenance and termination of those relationships. This would also allow to assess the relative importance and the interplay of the respective factors - via accounted variance, leading to a parametric model.

Curiously, this hasn't been done yet in any consistent or systematic manner.

With this critique in mind, we can conclude that both perspectives can't yet fully account for human mate-choice behavior. Moreover, this very fact helps us to appreciate the magnitude and complexity of the problem at hand. Much of the rich phenomenology that is attached to the topic is far from being understood: For example, none of the frameworks can account for the significant effect of sibling-position on mate choice (Toman, 1964). In a similar fashion, the role of childhood attachment styles on adult mate-choice behavior is still unresolved and poorly understood.

Nevertheless, we need scientific answers for mate-choice decisions. Individuals themselves are basically unable to predict the duration and future quality of their relationships, as shown by MacDonald & Ross (1999). Persons were far too optimistic in their predictions of the future of their relationship and were only slightly better than chance in doing so. Obviously, this deficiency creates a market for all kinds of scam-artists, flooding the book-market with preposterous manuals on how to find Mr. or Ms. "right", with no scientific justification whatsoever. Given the importance of this subject for personal well-being and happiness, this is untenable. We – as social scientists - can't possibly leave the field to those quacks, no matter how complex the real story might be.

6 References

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