

Desire for Sexual Variety in the Greek Cultural Context

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Abstract

Human beings exhibit considerable variation in their approach towards the number of sexual partners they wish to have. One consistent predictor of this variation has been sex—men desire more sexual partners than women. The current study aims to examine whether this effect is present in the Greek cultural context. In particular, a sample of 1414 Greek and Greek-Cypriot participants were asked about their desired number of sexual partners at different stages in their lives. It was found that men preferred significantly more partners than women. It was further found that men were divided in their preferences, with about half preferring several, and about half preferring a few lifetime sexual partners. On the other hand, about three-thirds of women preferred a few lifetime sexual partners with about one-third preferring several lifetime partners.

Keywords: desire for sexual variety, mating, mating strategies, short-term mating

Introduction

Humans are not a monogamous species, with men and women seeking sexual access to more than one partner during their lifetime.² It appears, however, that people exhibit considerable variation in this dimension—some desire few sexual partners while others a great many.³ One consistent predictor of this variation is sex, with men exhibiting a higher desire for sexual variety than women.⁴ The current study aims to investigate whether such a sex difference is present in the Greek and Greek-Cypriot cultural contexts.

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² D.M. Buss, D.M. and D.P. Schmitt, 'Mate Preferences and their Behavioral Manifestations' (2018) *Annual Review of Psychology*.

³ D.M. Buss, *The Evolution of Desire: Strategies of Human Mating* (4th edn, New York, NY: Basic Books, 2017).

⁴ D.M. Buss and D.P. Schmitt, 'Sexual strategies theory: An evolutionary perspective on human mating' (1993) 100 *Psychological Review* 204–232. See also D.M. Buss et al. (no 2).

Strategies of Human Mating

The present research was performed under the umbrella of an evolutionary theoretical framework. In particular, human behaviour is generated by behavioural mechanisms, which have evolved to enable people and their genetic relatives to survive and reproduce.⁵ In addition, a key premise of this framework is that evolution takes place slowly, so the adaptations that people make today have been optimised to work effectively in an ancestral context.⁶ Human mating could be understood within this framework: Mating behaviour is regulated by specific mechanisms that have evolved in ancestral human societies in order to increase reproductive success.

These mechanisms have not been shaped by selection forces to work in the same way for all individuals, giving rise to a considerable variation in mating behaviour. This variation can be seen as strategic, in the sense that people follow different approaches or strategies in order to increase their reproductive success. There are two such strategies, namely a short-term and a long-term one. A short-term mating strategy involves engaging in many casual relationships, and investing little in any offspring that may result from them. On the other hand, a long-term mating strategy involves establishing a few intimate relationships and investing heavily in any offspring that may result from them. Each strategy has benefits but also costs, which are likely to be different for each sex. These costs and benefits will be discussed next.

Costs and Benefits for Women

In contemporary as well as in ancestral human societies, adopting a short-term mating strategy could enable a woman to assess the qualities of various men who can then be approached at a later time, when they could switch to a long-term strategy. A short-term mating strategy could further enable a woman to secure help and assistance from several different men. Apart from benefits, this strategy has also costs, the primary one being that they can get pregnant from such a relationship, thus having to raise a child on their own. Moreover, men value sexual restraint in a prospective long-term partner,⁷ which means that adopting such a strategy could compromise a

⁵ J. Tooby and L. Cosmides, 'Conceptual Foundations of Evolutionary Psychology' in D.M. Buss (ed.), *The Handbook of Evolutionary Psychology* (Hoboken, NJ: Wiley, 2005) 5.

⁶ W. Irons, 'Adaptive Relevant Environments Versus the Environment of Evolutionary Adaptedness' (1998) 6 *Evolutionary Anthropology* 194–204; J. Tooby and L. Cosmides, 'The Past Explains the Present' (1990) 11 *Ethology and Sociobiology* 375–424; J. Tooby and L. Cosmides, 'The Theoretical Foundations of Evolutionary Psychology' in D.M. Buss (ed.), *The Handbook of Evolutionary Psychology* (2nd edn, vol. 1: Foundations, Hoboken, NJ: John Wiley & Sons, 2015) 3.

⁷ D.M. Buss, T.K. Shackelford, L.A. Kirkpatrick and R.J. Larsen, 'A Half Century of Mate Preferenc-

woman's future attempt to switch to a long-term strategy. Furthermore, a short-term mating strategy is associated with increased probability of contracting a sexually transmitted disease, as it involves having sex with different partners.

A long-term mating strategy has the benefit of securing a partner who is going to provide them with children. Having two parents instead of one to contribute resources would make a considerable difference to the child's survival chances, especially in an ancestral pre-industrial context, and thus, it would be considered a major benefit for women and their offspring. This strategy also has the benefit of the reduced risk of contracting a sexually transmitted disease. However, it comes at a cost with a woman having to forgo the possible benefits of having different partners including receiving resources from several different men.

Costs and Benefits for Men

Men are not constrained by pregnancy, which translates into a capacity to impregnate many different women in a relatively short time period. Thus, their reproductive success is positively and strongly related to the number of different women they can gain sexual access to.⁸ Accordingly, the major benefit of a short-term mating strategy is that it enables men to gain sexual access to several different women. It also has the benefit of enabling men to assess different mates who they can approach at a later time, if they are to switch to a long-term strategy. Nevertheless, this strategy comes at a cost, as the children born from such relationships would not receive adequate parental support. Moreover, men risk contracting sexually transmitted diseases, while they may acquire a reputation that they are only looking for casual sex, which may compromise their chances of attracting a long-term partner in the future.

A long-term mating strategy is beneficial for men because it enables them to create the context in which their children would be raised, thus receiving support from two parents. It is also beneficial because it is associated with a reduced risk of contracting sexually transmitted diseases. Still, it has the disadvantage of confining men to only one partner, which means men who adopt it, forgo the substantial reproductive benefits of having sex with different women.

es: The Cultural Evolution of Values' (2001) 63 *Journal of Marriage and Families* 492–503; id. 'Sex Differences in Human Mate Preferences: Evolutionary Hypotheses Tested in 37 Cultures' (1989) 12 *Behavioral & Brain Sciences* 1–49. See also D.M. Buss (no 3).

⁸ D.M. Buss et al. (no 2); D.M. Buss and D.P. Schmitt (no 4).

Sex Differences and Prevalence of Different Strategies

The analysis above indicates that the different strategies could potentially accrue fitness benefits to both men and women. On this basis, it could be predicted that both sexes would adopt long- as well as short-term mating strategies. The above analysis further suggests that the benefits and costs of each strategy are not symmetrical between the two sexes. The most apparent difference is over the adoption of a short-term mating strategy, which is potentially more beneficial for men than for women. In particular, the adoption of a short-term mating strategy would enable men to gain sexual access to different partners, which in an ancestral context where non-effective methods of contraception and abortion were present, would translate to several offspring. On the other hand, such a strategy would not bring similar benefits to women who are constrained by pregnancy. On this basis, it can be predicted that men would be more likely than women to adopt a short-term mating strategy.

For women, it appears that a long-term strategy is the most beneficial, and thus it could be further predicted that it would be the most common strategy in women. Nevertheless, the adoption of this strategy by most women, constrains the adoption of a short-term mating strategy by most men. One reason is, if most women adopt a long-term strategy there would not be available many women for men to engage in casual relationships. In addition, women, in order to engage in a long-term relationship, would demand that their partner also adopts a long-term mating strategy— in other words, they would demand commitment. Accordingly, men who adopt a short-term mating strategy would face additional difficulties in gaining access to women. In turn, this argument predicts that a long-term mating strategy would also be the most prevalent in men.

Desire for Sexual Variety

The adoption of different mating strategies is reflected in the desire for sexual variety— how many different partners one would like to have sex with in a given time period.⁹ In particular, people who adopt a long-term mating strategy would desire a lower number of sexual partners than people who adopt a short-term mating strategy. There have been several research efforts that have attempted to examine sex differences in the desire for sexual variety across different periods.

The first study was conducted by Buss and Schmidt,¹⁰ who asked American men

⁹ D.M. Buss and D.P. Schmitt (no 4).

¹⁰ Ibid.

and women to indicate how many different sexual partners they would likely have sex with in different time periods (e.g., in the next six months, in the next three years, etc.). They found that men preferred significantly more partners than women, a finding that has been replicated in different samples and cultural settings.¹¹

Unfortunately, these studies did not investigate how many of the participants adopted a short-term mating strategy (i.e., they desired a large number of lifetime sexual partners) and how many followed a long-term mating strategy (i.e., they desired a small number of lifetime sexual partners). Thus, the current study aims to replicate the findings that men desire more sexual variety than women in the Greek cultural context, but also to measure the prevalence of each strategy. More specifically, it aims to test the predictions that: (a) men would desire more sexual variety than women; (b) both men and women would adopt long-term and short-term strategies; and (c) the long-term mating strategy would be the most prevalent in both sexes.

Method

Participants

The study was designed and conducted online at the University of Nicosia in the Republic of Cyprus. The link of the study was forwarded as a Facebook ad to participants residing in Cyprus and Greece. Participants received no financial help or compensation. The target group was aimed at men and women who were 18 years old or older. Overall, 1414 Greek-speaking individuals (615 women, 799 men) took part. The mean age of women was 26.1 ($SD = 8.6$), and the mean age of men was 33.5 ($SD = 11.1$).

Materials

The survey questionnaire was written in Greek and consisted of two sections. In the first section, the desire for sexual variety was measured using the Number of Partners instrument,¹² which contained 11 open-ended scales for evaluating the number of sexual partners desired at different time intervals, ranging from *1 month* to *your re-*

¹¹ R.A. Lippa, 'Sex Differences in Sex Drive, Sociosexuality, and Height Across 53 Nations: Testing Evolutionary and Social Structural Theories' (2009) 38 *Archives of Sexual Behavior* 631–651; D.P. Schmitt, L. Alcalay, J. Allik, L. Ault, I. Austers, K.L. Bennett, et al. 'Universal Sex Differences in the Desire for Sexual Variety: Tests from 52 Nations, 6 Continents, and 13 Islands' (2003) 85 *Journal of Personality and Social Psychology* 85–104; D.P. Schmitt 'Sociosexuality from Argentina to Zimbabwe: A 48-Nation Study of Sex, Culture, and Strategies of Human Mating' (2005) 28 *Behavioral and Brain Sciences* 247– 275.

¹² D.M. Buss and D.P. Schmitt (no 4).

maintaining lifetime. In order to ensure consistency, the instrument was translated into Greek and translated back into English. In the second section, demographic information was collected, including age, sex, and sexual orientation. In order to measure sexual orientation, participants were asked about their attractions and the following options were provided: *Only to members of the opposite sex*, *Predominantly to members of the opposite sex but occasionally to members of the same sex*, *To both sexes equally*, *Predominantly to members of the same sex but occasionally to members of the opposite sex*, and *Only to members of the same sex*.

Results

In order to calculate participants' desires for sexual variety, means and standard deviations were estimated for each time period, separately for men and women. The results are presented in Table 1 where we can see that in all cases men desired substantially more partners than women. For instance, for the next year, men indicated that they would like to have sexual contact with about 18 partners while women with about three. The standard deviations were considerable, suggesting that there was a large variation in desires for both men and women. That is, for each time period, men and women were likely to desire substantially more or substantially fewer partners than the respective means indicated.

Participants were classified into two categories on the basis of their responses to the question about the lifetime partners they desired. More specifically, for both men and women, a large chunk of the scores was centred on '1' following a bell-curved distribution, with a right tail to reach the score of '10'. On this basis, participants who indicated that they would desire up to 10 lifetime partners were placed in the *Low desire for sexual variety* category, and those who indicated above 10 were placed in the *High desire for sexual variety* category. The results of this analysis are presented in Figure 1 where we can see that about 49% of men were in the low desire category and about 51% were in the high desire category. On the other hand, about 71% of women were in the low desire category and about 29% in the high desire category.

Furthermore, in order to investigate significant effects, a multivariate analysis of covariance (MANCOVA) was performed where participants' responses for each time period were entered as the dependent variables and participants' sex and sexual orientation were entered as independent variables. Moreover, participants' age was entered as a covariate. The results indicated a significant main effect towards sex [$F(11, 1348) = 4.13, p < 0.001, \eta^2 = 0.033$], but there were no significant effects towards sexual orientation and age. It has to be noted that for sexual orien-

tation the effect approached the significance level ($p = .064$). The effects of sex on each time period are presented in Table 1. We can see that the sex differences in the means were significant in all of the time periods. As indicated by the effect size, the largest difference was for the next month, followed by the next six months.

Discussion

Consistent with the original hypothesis in the Greek cultural context, men desired a significantly larger number of sexual partners than women. Assuming that the number of desirable mates constitutes a proxy of the type of mating strategy one adopts, this finding could be interpreted to indicate that men were more likely to adopt a short-term mating strategy than women. In particular, about three in four women were found to adopt a long-term mating strategy— i.e., to desire a small number of lifetime partners, but men were divided, with half adopting a short-term and half adopting a long-term mating strategy.

One limitation of the current study is that it did not take into consideration that people may also adopt a combination of short- and long-term mating strategies known as a mixed-strategy.¹³ People engage in long-term intimate relationships and invest heavily in children that come from these relationships, but exploit any opportunities for casual sex. As discussed in the introduction, adopting a long-term mating strategy is associated with important reproductive benefits, but also costs that are equal to the benefits they could derive had they adopted a short-term mating strategy. A mixed strategy could enable people to reduce such costs by periodically engaging in casual sex.

For women, apart from gifts and male allies discussed previously, a mixed strategy has additional benefits including getting good genes, switching between mates, and securing future mates. Starting from the former, men are not willing to settle with long-term partners who have a mate value lower than their own, but they are much more willing to do so for casual mates.¹⁴ Women may exploit this difference by engaging in a long-term relationship with a man of a similar mate value to their own, but engage in casual relationships with men of better mate value— e.g. who have genes that make them very attractive, and have children with these men and present them to their legitimate partners as their own.¹⁵

¹³ D.M. Buss et al. (no 2); D.M. Buss and D.P. Schmitt (no 4).

¹⁴ D.M. Buss (no 3).

¹⁵ D.M. Buss et al. (no 2).

In this rather sinister way, women could benefit by getting parental investment from their long-term partners and good genes from their casual partners.

Moreover, mating involves a lot of deception,¹⁶ which means that women may find themselves with long-term partners who are not as good as they thought they would be. Alternatively, it could be the case that a misfortune such as illness has decreased the mating quality of their partners. Thus, it would be profitable for women to switch mates, but terminating their current relationship and starting to look for another one could be risky because they may not be able to find a better deal. A mixed strategy could hedge this risk by enabling women to retain their current partner and at the same time sample other men as prospective partners.¹⁷ She can then switch, if she finds something better or stay with her current partner if she does not. Women can be quite satisfied with their partners and they may not think of switching. However, their partner may die or leave them, the former being quite likely in an ancestral pre-industrial context. Thus, it would pay for women to have intimate relationships with different men, which they could use in the future if for any reason their current partner moves out of the picture.

The mixed strategy enables men to retain the benefits of the long-term strategy without losing all the benefits of the short-term strategy. In particular, by adopting this mating strategy men are likely to have a long-term partner and the environment to raise children who receive support from two parents, while at the same time exploiting opportunities for casual sex, which potentially could enable them to gain substantial reproductive benefits. Similarly, for women such a strategy would enable men to assess prospective mates if they are to engage in future mate switching.

A mixed strategy is not without costs, the primary one being that people who adopt it may be caught and thus face the termination of their long-term relationship. This strategy could also increase the risk of contracting a sexually transmitted disease that, apart from being harmful to one's health, could increase the chances of detection of an extra-pair relationship. Yet, due to its benefits such a strategy is likely to be quite common in the population.

In terms of sexual desire, a mixed strategy would materialise in people preferring just a few long-term mates, but many casual ones. Our research methodology did not

¹⁶ D.M. Buss (no 3).

¹⁷ D.M. Buss, C. Goetz, J.D. Duntley, K. Asao and D. Conroy-Beam, 'The Mate Switching Hypothesis' (2017) 104 *Personality and Individual Differences* 143–149.

allow us to distinguish for this strategy. Accordingly, participants who indicated that they would prefer many sexual partners may as a matter of fact adopt a short-term or mixed strategy. In this respect, the findings could be reinterpreted to indicate that about one in four women and about one in two men adopt a short-term or mixed strategy. Future research should attempt to distinguish between the two.

The mixed mating strategy being common in the population could be interpreted to indicate that cheating would also be common. That is to say, people who are in long-term intimate relationships would be motivated to seek casual partners. Our data suggest that men would be more prone than women to engage in extra-pair relationships. In the Greek-Cypriot cultural context, infidelity constitutes a primary motivation for people to divorce their partners,¹⁸ which can lead us to the prediction that many divorces would be a result of the husbands' infidelity. Future research needs to examine the implications of the findings of this study towards the different aspects of the Greek-Cypriot culture.

This work is not without limitations. To begin with, as discussed above, the methodology employed in the current study prevented us from distinguishing between a short-term and a mixed mating strategy. Moreover, the research was based on self-report data, which involved the bias of people not having an accurate perception of their desires. In addition, as previously discussed, the current study did not take into consideration the possibility of participants adopting a mixed strategy. Furthermore, a non-probability sample was used; thus, the findings may not readily generalised to the population. Finally yet importantly, the current study considered sex, age, and sexual orientation, but there may be many more factors affecting the desire for sexual partners, which have not been measured here.

Overall, the current research provided evidence that in the Greek cultural context, men exhibited a stronger desire for sexual variety than women, but there were many men as well as women who desired a large number of lifetime sexual partners. However, more research is necessary in order to be able to better comprehend the desire for sexual variety and its implications.

¹⁸ M. Apostolou and M. Hadjimarkou 'Domains of Motivation in Men and Women for Initiating and Terminating Procreation in an Evolutionary Perspective' (2018) 54(5) *Marriage & Family Review* 486–506.

Annex

Time period	Men		Women		p-value	ηp^2
	Mean	SD	Mean	SD		
1 month	2.77	4.60	1.25	1.18	<.001	.025
6 month	8.50	23.43	2.12	4.57	<.001	.018
1 year	18.37	70.06	2.97	8.86	<.001	.014
2 years	32.91	132.56	4.67	20.43	<.001	.014
3 years	48.17	200.40	6.14	27.95	<.001	.014
4 years	62.98	284.94	6.97	33.92	<.001	.012
5 years	78.23	359.32	8.90	45.90	<.001	.011
10 years	159.35	960.11	13.66	111.69	.003	.007
20 years	270.30	1451.86	15.84	112.31	<.001	.010
30 years	430.84	2128.50	22.13	160.57	<.001	.016
Lifetime	768.78	3053.55	104.94	117.63	<.001	.015

Table 1. Women’s and men’s desires for sexual variety across different time periods

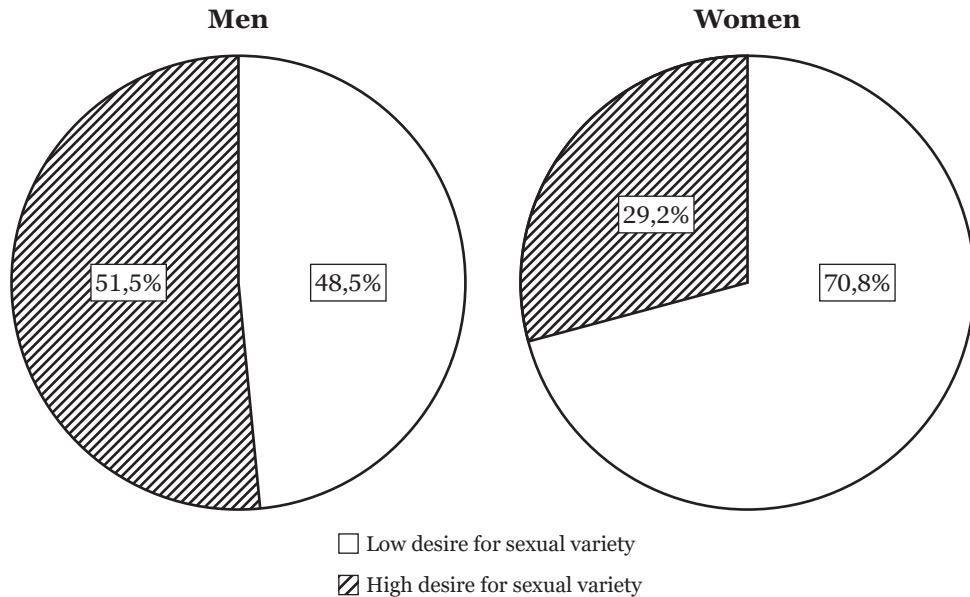


Figure 1. The classification of men and women in two broader categories, on the basis of their desires for lifelong partners. Participants would classify to the low desire category if they indicated that they would desire up to 10 lifetime partners, and in the high desire category if they indicated that they would desire more than 10 lifetime partners.

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