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Benefits of Commitment and Marriage



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powerful route for transmission of disease, which has selected against promiscuity and favored having one or a few sexual partners; (4) pair-bonding enables a reciprocal care relationship, which promotes good health and longevity.

Synonyms

Conjugality; Fidelity; Loyalty; Mating; Pair-bonding

Definition

Commitment and marriage are human behaviors that occur in the context of family formation, sexual fidelity and cohabitation.

Introduction

There are a number of benefits of pair-bonding and sexual commitment, which may have favored the evolution of monogamous and polygynous marriage systems: (1) marriage enables mate guarding, which, for men, helps to ensure paternity of the children that they commit to rearing and for women secures the resources, protection, and labor of a man; (2) pair-bonding enables reciprocal division of labor in the rearing of children, thereby optimizing the investment of parental care by each sex; (3) sexual intercourse is a

Why Marriage?

There is much flexibility in the human mating system, with examples of monogamous, polygynous, polyandrous, heterosexual, and homosexual relationships in different cultures throughout history. However, in most cultures, we find some formal rules around the union of men and women, which we may describe as marriage. In many societies, particularly in Africa, the Middle-East, and Muslim parts of Asia, polygynous marriage is allowed, whereas in much of the rest of the world, polygyny is discouraged or illegal and marriage is a monogamous commitment. In recent years, it has been allowed for individuals of the same sex to become married in some countries, but historically, marriage has meant a commitment between a man and a woman, in which obligations of sexual, emotional, and financial loyalty are entered into.

It is often said that marriage is an institution, in reference to its central role in the structure and organization of societies. It is typical for children to be raised in a household which is headed by a married couple and often for those children to leave the household when they themselves enter

into a marriage. It is also seen that factors linked to social status, such as wealth and employment, affect the desirability of individuals in the marriage market (Goldman 1993; South 1991). However, biological factors, such as health, age, and height, may be much more important to the choice of a marriage partner (Kiernan 1988; Lipowicz 2014). It is likely that much of the decision-making about a potential marriage partner occurs at a subconscious level, for example, individuals may evaluate the level of genetic similarity or dissimilarity in a potential partner through their body odor (Kromer et al. 2016; Roberts et al. 2008).

Taking an evolutionary perspective, we may assume that the organizational structure of society is to a large extent evolved, which is not to say that the institution of marriage has been hard coded into our genetic makeup via natural selection. It is to say that the social structures that currently exist have succeeded through the trials of many generations, with cultural institutions contributing to that evolution, but not necessarily dictating it. The evolutionary hypotheses that have been put forward in relation to marriage are here dealt with in turn:

Marriage Is a Form of Mate Guarding

In polygynous and monogamous marriage, other males are excluded from sexual encounters with the wife, thereby ensuring the paternity of the children that the husband commits to rearing. It is possible to view marriage as an institutionalized form of mate guarding, which has evolved because the most dominant males are the most successful when it comes to getting married, and it is in their interests to defend in law what might be viewed as the ultimate form of paternalism. But while there is evidence that healthier and more successful males are more likely to marry (e.g., Lipowicz 2014; Goldman 1993), it may be too simplistic to argue that males are the only ones who are mate guarding within marriages. It has also been argued that women practice mate guarding to secure the resources of their husband,

as these are often vital for the rearing of children (Buss 2002).

In comparative studies, we find that monogamous species consistently show less dimorphism than polygynous ones, including in primates (e.g., Clutton-Brock 1985), most likely because males are not engaged in violent combat for access to mates in monogamously pairing species, as compared to polygynous ones. It has been argued, based on the fossil record, that sexual dimorphism declined over the course of human evolution, suggesting that a transition from polygyny to monogamy may have begun prior to the evolution of *Homo sapiens* (Lovejoy 1981). A difficulty with this argument is that polygyny does occur in many human societies, although it may not necessarily be the dominant form of marriage, with many monogamous marriages also occurring within such societies (White et al. 1988).

An issue to consider with mate guarding is that it can imply that one partner is exerting control over the behavior of the other to enforce their loyalty. In these circumstances, it may be in the interests of the guarded partner to circumvent the enforcement and seek extramarital partners. The question of how human behavior is evolved to deal with these issues is an active area of research in evolutionary psychology (e.g., Buss and Shackelford 1997; Shackelford et al. 2006).

Marriage Facilitates Reciprocal Division of Labor in the Raising of Children

The raising of children requires investment of time, energy, and resources – the same time, energy, and resources that are required for one's own survival and well-being. In economic theory, it has been argued that there is a quality-quantity trade-off in the raising of children, whereby parents face a choice of having more children or investing more in fewer children (Becker 1960; Becker and Lewis 1973). The principle that humans must raise socially competitive offspring means that parents must balance family size against offspring success (Lawson and Mace 2011). If we also take into account sexual selection – whereby individuals of the highest

perceived quality are those who gain the greatest reproductive success – we see the importance of investing in the development of children. For parents, the question is how to provision children with an optimal level of investment while still producing enough children that the risks of not leaving any genetic heirs are too high.

It has been argued that humans would never have evolved without the combined effort of males and females to raise children, given the very long phase of infancy and the demand that this places on parents (Hrdy 2011). This is also the argument put forward by Fortunato and Archetti (2010) based on inclusive fitness theory—that monogamous marriage is an evolutionarily stable strategy for the allocation of resources to the next generation, promoting the survival of offspring by not fragmenting inherited resources. The importance of female choice and faithfulness in the development of monogamous pair-bonding systems (as compared to promiscuous mating systems) is emphasized by Gavrillets (2012), because providing for a female and her offspring becomes a viable strategy for low-ranked males to increase their reproductive success.

Marriage Reduces Transmission of Diseases Through Sexual Intercourse

The close proximity and exchange of bodily fluids involved in sexual intercourse is a powerful means by which human diseases are transmitted. There are numerous examples of bacterial (e.g., gonorrhea and syphilis) and viral sexually transmitted diseases (STDs) (e.g., genital herpes, hepatitis, and HIV). The impact of STDs ranges from irritation to premature death, with many causing chronic debilitation, infertility, and even damage to unborn children. It is for this reason that natural selection may favor monogamous over promiscuous behavior, simply because those with a tendency for promiscuity suffer higher mortality and morbidity through disease (Bauch and McElreath 2016).

In smaller groups, with a small degree of mixing with other groups, disease transmission would have been less of a problem, as may

promiscuity, but as the human ancestor transitioned to a bipedal ape, able to cover long distances and make contact with far flung groups, the potential for the transmission of disease would have increased, and we can hypothesize that less promiscuous behavior would have been favored by selection. In the modern world, STDs are abundant, and there is little doubt that promiscuity, including unprotected extramarital sex, increases the human disease burden (e.g., Reniers and Watkins 2010).

Marriage Is a Reciprocal Care Relationship

A number of studies have identified that married persons tend to live longer than singles (e.g., Hu and Goldman 1990; Lillard and Waite 1995), though the exact reasons for this are not clear. There are broadly two theories to explain the phenomenon. The first is that marriage itself has a protective effect on survival, through the support network and socioeconomic advantages that it brings. The second theory is that there is selection into marriage of individuals who are likely, even prior to marriage, to live longer, because of a high-quality genetic or physical profile, which also makes them attractive to the opposite sex.

It has proved very difficult to disentangle the protective effect of marriage from selection into marriage, because individuals move in and out of the married category, while the impact of becoming widowed or divorced may be more harmful to health and longevity than remaining as a lifetime single (Ben-Shlomo et al. 1993; Tucker et al. 1996). It appears, however, that marriage is more beneficial for men, in terms of its effect on longevity, particularly when men are married to younger women (Drefahl 2010; Foster et al. 1984; Gellatly and Störmer 2017).

Indications are that women exhibit a stronger preference for an older man in their first marriage than men do for a younger woman (Bozon 1991), which possibly relates to the desire for a “provider.” However, it may be the case that women are choosing men who, having lived longer, have demonstrated their survival and their ability to acquire skills or wealth. It might similarly be in

men's interest to select among older women, who have had longer to demonstrate their survival abilities, except that there is a shorter reproductive window for women, which causes men to select more heavily on traits associated with fertility.

Conclusion

The importance of family formation and raising of children is no doubt fundamental to the existence of marriage, but we must also consider that reduction of disease transmission, mate guarding, and reciprocal care are important contributory factors to the existence and benefit of marriage.

References

- Bauch, C. T., & McElreath, R. (2016). Disease dynamics and costly punishment can foster socially imposed monogamy. *Nature Communications*, 7, 11219. <https://doi.org/10.1038/ncomms11219>.
- Becker, G. S. (1960). An economic analysis of fertility. In J. F. Dusenberry & B. Okun (Eds.), *Demographic and economic change in developed countries* (pp. 209–240). New York: Columbia University Press.
- Becker, G. S., & Lewis, H. G. (1973). On the interaction between the quantity and quality of children. *Journal of Political Economy*, 81(2), S279–S288. <https://doi.org/10.2307/1840425>.
- Ben-Shlomo, Y., Smith, G. D., Shipley, M., & Marmot, M. G. (1993). Magnitude and causes of mortality differences between married and unmarried men. *Journal of Epidemiology & Community Health*, 47(3), 200–205. <https://doi.org/10.1136/jech.47.3.200>.
- Bozon, M. (1991). Women and the age gap between spouses: An accepted domination? *Population: An English Selection*, 3, 113–148.
- Buss, D. M. (2002). Human mate guarding. *Neuro Endocrinology Letters*, 23(Suppl 4), 23–29.
- Buss, D. M., & Shackelford, T. K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology*, 72(2), 346–361. <https://doi.org/10.1037/0022-3514.72.2.346>.
- Clutton-Brock, T. H. (1985). Size, sexual dimorphism, and polygyny in primates. In W. L. Jungers (Ed.), *Size and scaling in primate biology* (pp. 51–60). Boston: Springer US. https://doi.org/10.1007/978-1-4899-3647-9_4.
- Drefahl, S. (2010). How does the age gap between partners affect their survival? *Demography*, 47(2), 313–326.
- Fortunato, L., & Archetti, M. (2010). Evolution of monogamous marriage by maximization of inclusive fitness. *Journal of Evolutionary Biology*, 23(1), 149–156. <https://doi.org/10.1111/j.1420-9101.2009.01884.x>.
- Foster, D., Klinger-Vartabedian, L., & Wispe, L. (1984). Male longevity and age differences between spouses. *Journal of Gerontology*, 39(1), 117–120. <https://doi.org/10.1093/geronj/39.1.117>.
- Gavrilets, S. (2012). Human origins and the transition from promiscuity to pair-bonding. *Proceedings of the National Academy of Sciences of the United States of America*, 109(25), 9923–9928. <https://doi.org/10.1073/pnas.1200717109>.
- Gellatly, C., & Störmer, C. (2017). How does marriage affect length of life? Analysis of a French historical dataset from an evolutionary perspective. *Evolution and Human Behavior*, 38(4), 536–545. <https://doi.org/10.1016/j.evolhumbehav.2017.02.002>.
- Goldman, N. (1993). Marriage selection and mortality patterns: Inferences and fallacies. *Demography*, 30(2), 189–208. <https://doi.org/10.2307/2061837>.
- Hrdy, S. B. (2011). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge, Massachusetts: Belknap Press.
- Hu, Y., & Goldman, N. (1990). Mortality differentials by marital status: An international comparison. *Demography*, 27(2), 233–250. <https://doi.org/10.2307/2061451>.
- Kiernan, K. E. (1988). Who remains celibate? *Journal of Biosocial Science*, 20(3), 253–264. <https://doi.org/10.1017/S0021932000006593>.
- Kromer, J., Hummel, T., Pietrowski, D., Giani, A. S., Sauter, J., Ehninger, G., . . . , & Croy, I. (2016). Influence of HLA on human partnership and sexual satisfaction. *Scientific Reports*, 6, 32550. <https://doi.org/10.1038/srep32550>.
- Lawson, D. W., & Mace, R. (2011). Parental investment and the optimization of human family size. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 366(1563), 333–343. <https://doi.org/10.1098/rstb.2010.0297>.
- Lillard, L. A., & Waite, L. J. (1995). Til death do us part: Marital disruption and mortality. *American Journal of Sociology*, 100, 1131–1156.
- Lipowicz, A. (2014). Some evidence for health-related marriage selection. *American Journal of Human Biology*, 26(6), 747–752. <https://doi.org/10.1002/ajhb.22588>.
- Lovejoy, C. O. (1981). The origin of man. *Science*, 211(4480), 341–350. <https://doi.org/10.1126/science.211.4480.341>.
- Reniers, G., & Watkins, S. (2010). Polygyny and the spread of HIV in sub-Saharan Africa: A case of benign concurrency. *AIDS*, 24(2), 299–307. <https://doi.org/10.1097/QAD.0b013e328333af03>.
- Roberts, S. C., Gosling, L. M., Carter, V., & Petrie, M. (2008). MHC-correlated odour preferences in humans and the use of oral contraceptives. *Proceedings of the Royal Society B: Biological Sciences*, 275(1652), 2715–2722. <https://doi.org/10.1098/rspb.2008.0825>.
- Shackelford, T. K., Goetz, A. T., Guta, F. E., & Schmitt, D. P. (2006). Mate guarding and frequent in-pair

- copulation in humans. *Human Nature*, 17(3), 239–252. <https://doi.org/10.1007/s12110-006-1007-x>.
- South, S. J. (1991). Sociodemographic differentials in mate selection preferences. *Journal of Marriage and the Family*, 53(4), 928. <https://doi.org/10.2307/352998>.
- Tucker, J. S., Friedman, H. S., Wingard, D. L., & Schwartz, J. E. (1996). Marital history at midlife as a predictor of longevity: Alternative explanations to the protective effect of marriage. *Health Psychology*, 15(2), 94–101. <https://doi.org/10.1037/0278-6133.15.2.94>.
- White, D. R., Betzig, L., Mulder, M. B., Chick, G., Hartung, J., Irons, W., . . . , & Spencer, P. (1988). Rethinking polygyny: Co-wives, codes, and cultural systems [and comments and reply]. *Current Anthropology*, 29(4), 529–572. <https://doi.org/10.1086/203674>.