

Whether Improved Socioeconomic Development Sees a Shift Towards Monogamous Mating Strategies

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Abstract: From the early prehistoric civilizations to the modern world, marriage practices have undergone tremendous changes. Changing environments and social perceptions have contributed greatly to how people choose to marry. This paper will investigate whether changes in socioeconomic factors such as the need to survive and religion has influenced the spread and demise of monogamous and polygynous marriages from the hunter-gatherer era to the modern day. Also investigated will be the increasing prevalence of socially imposed monogamy displacing ecologically imposed monogamy. Through research, it has been concluded that socioeconomic factors are not necessarily linked to changes to marriage practices, but that monogamous marriages did benefit the socioeconomic development of a country or society, and that the rise in monogamy is what brought improved socioeconomic development of a society, not the other way round.

Keywords: socioeconomic development, monogamy, polygyny, marriage

1. Introduction

The modern monogamous culture we see today, which is largely socially imposed, has only been around for the last 1,000 years or so [1]. Wittenberger & Tilson defines monogamy as “a prolonged association with essentially exclusive mating relationship between one male and one female” [2].

Monogamous mating strategies are not a prevalent occurrence in the natural world. Among mammals, only 3% are monogamous. A possible explanation would be due to large sex differences among mammals of the same species in mandatory parental investments, which is seen in how significant paternal investment is found in less than 10% of mammals [3].

The opposite is true for humans. Data from Pew Research Center has found that Monogamous marriages are now the norm and are practiced in roughly 98% of the households in the global population [4]. Although monogamous marriages are what most countries practice, there are still some that practice polygamy. Polygamy, defined by Merriam-Webster as “marriage in which a spouse of either sex may have more than one mate at the same time” [5], remains popular in the sub-Saharan African region, with roughly 11% of the population in the region living in a polygamous household, most notably in Burkina Faso, (36%), Mali (34%), and Gambia (30%) [6]. Incidentally, the three aforementioned countries are also some of the poorest and least developed countries and regions in 2021 [7]. Social science experts have also made mention that a country’s socioeconomic status might influence the country’s form of marriage [8]. Prior research has also indicated that monogamous marriages is beneficial to social and economic development of a country [9, 10]. Through reviewing

the evolution of monogamous marriage practices, this paper aims to explore whether socioeconomic development is the cause for more prevalent monogamous mating strategies.

2. Monogamy in the Hunter-gatherer Era

It is known that both genes and the environment affect evolutionary changes in the offspring [11]. Recent studies so far on genes affecting mating practices have only focused on “monogamous genes” in vertebrate species excluding humans [12]. Therefore, it is most likely that the environment is the factor in pushing for monogamous mating strategies among humans.

Polygynous relationships were nevertheless observed to be extremely common in the pre-agrarian era. Menelaos Apostolou studied a sample of 190 hunter-gatherer societies and their marriage patterns, concluding that while 163 societies practiced polygamy, which accounts for 85.8% of the sample (considering missing values), a paltry 17 societies or 14.2% of the sample practiced monogamy. An analysis made by Francois Nielson shows a similar trend. Out of 172 samples of hunter-gatherer societies, 18, or 10.5% of the sample were monogamous [13]. In theory, the data presented would contradict the idea that monogamous relationships were prevalent in the hunter-gatherer era. It should also be noted that in this particular era, there is no developed concept of society, and no regulation of the institution of marriage [8]. However, it is also believed that polygynous marriages during this period are the privilege of few men, with most marriages remaining monogamous [14]. This is consistent with the notion that scarce resources and populations played a role in facilitating monogamous marriages [15].

Monogamy may have developed in early human societies due to it being ecologically or socially imposed. It could have been ecologically imposed (imposed by the environment) due to scarcity in both available resources and population numbers [15]. Therefore, as resources are in short supply and can only sustain one pair in a relationship and that relationship’s offspring, it is in the best interests of both males and females to mate monogamously [15]. Therefore, socioeconomic factors cannot be considered as a factor that promoted monogamy, at least in the hunter-gatherer era.

3. Monogamy in the Ancient Era

The “ancient era”, for the purposes of this paper refers to both horticultural (simple and advanced) as well as agrarian societies (simple and advanced). The former appeared around 8000BCE, and the latter in 3000BCE [13]. However, the paper will largely focus on the latter.

A shift from hunter-gatherer societies to horticultural societies, and then to agrarian societies, saw an increase in monogamy. Francois Nielson’s analysis of 6 different societies, including hunter-gatherers, simple and advanced horticultural societies, agrarian societies, fishing, and herding societies for a total of 857 samples [13]. We can observe a weak trend away from polygyny, at least in agrarian societies. Nielson’s sample shows that about 41.5% of agrarian societies practice monogamy, the highest of all six societies. By contrast, simple horticultural societies only had 24.8% of the sample practicing monogamy, while advanced horticultural societies-societies, which cover the bronze age, had a meager 6.5% practicing monogamy, which is even lower than hunter-gatherer societies [13].

Despite the increased incidence of monogamous relationships, civilizations in the ancient era largely practiced socially imposed monogamy, as opposed to socially imposed universal monogamy. Socially imposed monogamy is defined as defined as a prohibition of marital relations with more than one person that is shaped by culture and society, though legal restrictions may also apply [16]. Therefore, most polygynous relationships occurred in the upper echelons of society, while those lower down had very limited practices of polygynous relationships. This is not to say that polygynous relationships only occurred in the elites and ruling classes of societies, since lower classes in societies

may also have engaged in polygynous marriages; being that the exploitation of wives' labor means that many wives can be used for labor purposes to produce goods [13], increasing productivity. However, this was not a mainstream practice. Prior research has indicated that social monogamy increases in-group cooperation while giving society an advantage in competition with other groups [9]. Moreover, Fortunato and Archetti suggested that monogamous marriages can be viewed as the result of strategic allocation of resources for the next generation by males and females [9].

It can be inferred that a shift from hunter-gatherer societies to horticultural (simple and advanced) to finally, agrarian societies, resulted in increased socially imposed monogamy. An analysis of the Standard Cross-Cultural Sample by Stephen Sanderson has found that in the 186 samples of the SCCS, socially imposed monogamy was most prevalent among larger states, at 46% while 39% of larger states had occasional polygyny. On the other hand, only 26% of smaller states had socially imposed monogamy, while it was 10% for chiefdoms, and 11% for bands and tribes [10]. The trend is very clear. Larger states, which are typically more advanced civilizations, prefer monogamous relationships. In addition, monogamy is influenced by religion, political activism, and social class. It is notable that even though an individuals' socioeconomic status increases their likelihood of practicing monogamy, improved socioeconomic development does not directly advance monogamy.

4. Monogamy in the Industrialized and Modern World

Prior to the 20th century, the Christian church acted as the harbinger of modern socially imposed monogamy, first imposing it in Europe under religious grounds [16]. Since then, there has been a spread of socially imposed monogamy around the world, generally taking place in the 20th century and beyond. Examples include Japan, which drafted legislation banning polygamy in 1880, with China banning the practice in 1953. India banned polygamy for Hindus in 1955, and Nepal did so in 1964. The primary exceptions to this trend are found in secular Islamic states in the Middle East and countries in sub-Saharan Africa [16].

Evolutionary theory suggests that males who control wealth or power will utilize it to enhance their reproductive success, by seeking out multiple wives [15]. Hence, the increased prevalence of socially imposed monogamy seems to be at odds with men who are either politically or financially powerful, since there are many fitness-related motivations and incentives for them to oppose such practices, though the presence of supernatural sanctions, such as legitimate and divinely recognized heirs may have resulted in monogamous relationships becoming more appealing [17].

There are other possible reasons for promoting monogamous marriages, be it environmental, or social. A study of six West African countries concludes that child mortality is lower in monogamous households compared with polygamous households. Likewise, since polygamous marriages result in greater competition for females, and with many men losing out on finding a mate, higher percentages of unmarried men will increase rates of rape, murder, kidnapping, and more [17]. Therefore, there are real, legitimate benefits for a society to implement socially imposed monogamy, as it enhances the survivability of the populace and reduces social unrest.

When comparing monogamous marriages to polygamous marriages, there are significant differences in family functioning, marital satisfaction, self-esteem, and life satisfaction between wives. Additionally, wives in monogamous marriages reported fewer mental health issues such as depression, psychological distress, hostility, and anxiety. Polygamous wives were also more likely to experience physical and sexual abuse. A monogamous marriage system provides better treatment towards women, improving their own living standards. Increased rights for women will yield benefits to society, as research on women's political rights in the United States shows that the ability for women to vote has resulted in a 24% increase in state social spending, particularly with higher local public health spending.

Additionally, a study on 156 modern nation-states, of which 84 practiced monogamy while 72 practiced polygyny saw a difference in mean population size. For monogamous societies, the population was 52.15 million, far greater than the 19.93 million for polygynous societies. Monogamous societies were more likely to abolish the death penalty, improve cooperation and reduce conflict within society, and were more likely to be liberal democracies. Monogamous societies would also perform better economically, with reduced corruption, and a mean per capita GDP in 1996 of 5 times that of polygynous societies (\$10,000 vs \$2,000). Also, monogamous societies were typically stronger militarily [10].

5. Conclusion

Marriage traditions in human society have seen drastic changes over the course of human civilization, from largely polygynous to mostly monogamous, (except for polyandry, which has always remained very rare) [14]. While monogamy can be either ecologically or socially imposed [15], socially imposed monogamy is the norm currently, and will likely continue to displace polygynous in countries around the world that still permit polygyny.

There is no evidence proving that socioeconomic development is linked to the introduction of monogamy. By contrast, a shift in the institution of marriage from medieval to modern society suggests that monogamous marriage benefited the socioeconomic development of a country or society. Alternatively, the shift in the institution of marriage supports the continuity of assets and the solidity of rights of individual families. Also, through reviewing the evolution of monogamy, it can also be suggested that there is a strong correlation between the marriage type and the level of development in society. Larger nations typically have some form of socially imposed monogamy, be it in either ancient or modern times. There are clear benefits for a society to impose monogamy, from reduced social unrest to greater population growth and even better economic performance. The paper would conclude that the level of development of society, the consolidation of women's rights, the change in social perception, and the emergence of religion contributed greatly to the spread of monogamous marriages, as opposed to strictly speaking, improvements in socioeconomic development of a society.

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