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Title

Access to Alloparents

Definition

An alloparent is any individual who is not the biological parent, who helps to raise the child by providing direct or indirect investments. Alloparents may include kin members such as grandparents, siblings, aunts and uncles, as well as non-kin such as friends, neighbours, and professional caregivers.

Introduction

Several prominent scientists studying human behavior from an evolutionary perspective have proposed that humans are cooperative breeders. Cooperative breeding is loosely defined as a breeding system where mothers require help from other individuals for successful childrearing (Hrdy, 2005).

This proposal stems from the observation that human neonates are incredibly helpless compared to other primates, only able to carry out basic functions. Human prematurity at birth is couple with a slow development and maturation period throughout childhood and adolescence). Consequently, children require high levels of care over a prolonged period of time to successfully reach adulthood. Such intensive caregiving is a near-impossible task for mothers to complete on their own – especially given the fact that, at least in natural fertility populations, mothers tend to have multiple dependent offspring.

It has been argued that these factors have led to the coevolution of facultative parental investment (i.e., fathering) as well as "alloparenting" (i.e., non-parental childrearing support) (Hrdy, 2005). Indeed, alloparenting is arguably a cross-cultural universal, though who helps and how they help varies within and between populations.

Alloparenting can be conceptualized in different ways depending on the type of investments and its effects on parenting. Further, the general relationships between alloparental investments and parental investments may vary from population to population. Evolutionary theory predicts that the relationship between alloparental and parental investments will influence pair-bond stability.

Cross-cultural examples of alloparenting

Starting with forager populations, hunter-gatherers generally have a wide network of allomothers who provide care and share food with infants and children. For example, in both the Hadza of Tanzania and the !Kung of Botswana, weaned toddlers who are too heavy to be carried are left in camp while their parents go on foraging and hunting trips. These toddlers stay in camp with other children, teenagers and a few adults who provide informal care (Hewlett & Lamb, 2005). In the Efe of the Democratic Republic of Congo, infants were found to have an

average of 15 caregivers at four months old (Hewlett & Lamb, 2005), and in the Aka of the Central African Republic, infants were found to have an average of 21 caregivers (Meehan, 2009). While mothers are generally the main caregivers across all these populations, childrearing amongst foragers is largely a collective venture whereby children have access to numerous alloparents.

With agriculture, the childrearing system tends to focus more strongly on maternal care. Nonetheless, the necessity of "help for mothers" is often acknowledged as women face tradeoffs between agricultural labor and childcare. For example, in some sub-Saharan agriculturalists such as the Giryama of Kenya and Fulani of Bukina Faso, women who are responsible for food cultivation and childrearing collaborate with each other to share food processing tasks and child care. In the Gussi of Western Kenya, the job of assisting mothers with childcare is often given to older daughters (LeVine et al., 1994).

In developed populations with stronger nuclear family norms, childcare is primarily viewed as the responsibility of the mother. Nonetheless, kin and non-kin allomothers universally contribute to childrearing. Grandmothers have been found to be particularly important alloparents who provides childcare and influences parenting behavior. When alloparenting by kin is less common, state provision of formal childcare takes prominence, such as the 'collectivist' approaches to childcare seen in Nordic countries (Emmott, 2015).

Categories of Alloparental Investment

Alloparents who provide help with childrearing, in essence, are providing investments into child quality (i.e., improving their fitness and future reproductive success). In support, the presence of alloparental kin across 37 high-fertility, high-mortality populations have been

associated with greater child survival (Sear & Coall, 2011), though who matters for children seems to vary between populations.

Alloparental investments can be categorized and differentiated as 1) direct vs indirect investments, 2) caregiving vs provisioning, and 3) substitutive vs additive investments.

First, direct alloparental investments are *any investments made by the alloparent straight to the child*, for example by providing direct childcare, playing or teaching. Indirect alloparental investments are *investments made by the alloparent to the child via a mediator*, for example when an allomother provides monetary support to the mother who uses that money to feed the child. These alloparental investments may also be described as caregiving and provisioning. By default, caregiving is a direct investment made straight to the child. Provisioning, on the other hand, involves a transfer of resources either directly to the child or indirectly via a mediator. Finally, allomaternal investments may either be substitutive or additive, depending on the impact it has on parental investments. As the terms suggest, substitutive investments *replace parental investments*, allowing parents to direct their freed-up energy, time and resources into other domains of behaviour. In contrast, additive investments are additional investments children receive *without impacting parental investment levels*.

Studies suggest that alloparental investments through direct care and provisioning often substitute maternal investments in high-fertility populations, encouraging mothers to divert their time to and effort into other activities. In the Karo Batak farmers of Indonesia, help from matrilineal alloparents was associated with greater childcare and lower levels of farm work by the mother, while help from patrilineal alloparents was associated with lower levels of childcare and greater levels of farm work by the mother (Kushnik, 2012). Similarly, in the Aka foragers, direct caregiving by allomothers was associated with lower levels of maternal care and higher levels of foraging (Meehan, 2009).

Across developed populations, direct grandparental caregiving has been associated with reduced maternal childcare and greater labour force participation, suggesting a substitutive relationship between direct alloparental care and maternal investments. However, this is not a universal relationship found across countries (Assave, Arpino & Goisis, 2012). Further, indirect alloparental investments through financial help have been found not to correlate with maternal investment activities (Emmott, 2015), suggesting provisioning for children in developed populations may be an additive rather than a substitutive investment.

Alloparents and pair-bond stability

Assuming that pair-bonds function as a reproductive contract, evolutionary theory predicts that pair-bond stability is influenced by the trade-off in the "loss" of other mating partners (i.e., future reproduction/mating effort), against inclusive fitness benefits of a cooperative pair-bond (i.e., current reproduction/parenting effort). Given the facultative nature of paternal investments, a key determinant of this trade-off is the impact of fathers on child quality. If successful childrearing is dependent on paternal investments, this should serve as an incentive to maintain cooperative pair-bonds. In contrast, if mothers can successfully rear children without help from fathers, the costs of maintaining a relationship may outweigh the benefits. Indeed, studies have suggested that divorce across developed populations is more likely when women are financially independent.

Alloparent availability may impact pair-bond stability by influencing the necessity of paternal investments for successful childrearing. If alloparental investments can effectively substitute paternal investments, the costs of pair-bond dissolution on child fitness are reduced. This may lower the incentive for mothers and fathers to maintain their pair-bonds, as well as increase the incentive for parents to seek alternative mates. While research in this area is

sparse, studies have found evidence of increased alloparental investments followed by father absence (Bentley & Mace, 2009). An examination of the Standard Cross-Cultural Sample has found that populations with higher rates of allomaternal childcare are associated with higher rates of divorce (Quinlan & Quinlan, 2007).

Conclusion

Alloparenting is a fundamental aspect of the human childrearing system, with examples of alloparenting seen across societies. Childrearing support from a range of helpers can directly and indirectly influence child quality, which in turn may influence parental behavior. It is important to remember that the trade-offs mentioned above exist amongst a myriad of other costs and benefits surrounding parental/alloparental investments and pair-bonding. One must also not forget the importance of cultural norms and rules which may encourage or restrict behavior. Nonetheless, if alloparental investments are effectively able to substitute paternal investments, evolutionary theory predicts that it would facilitate pair-bond dissolution.

Cross-References

Parental Investment Theory; Life-History Theory; Kin Selection; Men's Long-Term Strategies; Women's Long-Term Strategies

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