COMMENTARY

Friendship, Mating, and Reputation in U.S. College Sororities: Exploring Female Intrasexual Competition and Cooperation

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Reynolds' (2021) target article reviews multidisciplinary research on human female sociality and its fitness correlates, showing that a major strategy in female intrasexual competition is gossip, where women, for example, comment negatively on the sexual reputations of rivals. Reynolds also shows that women in today's small-scale societies who have female cooperative partners get more help, resources, information, and emotional support, which are associated with higher child survivorship. Ancestral women and girls may have faced a social paradox: they competed for high-quality, investing men, but they also needed to form cooperative relationships with one another. Reynolds further shows that woman's biggest rivals might simultaneously be her closest allies; that women value equality, kindness, and commitment in friends; and that they are averse to competition within their friendships as well as in their broader communities (e.g., workplaces).

Reynolds' (2021) proposed reconciliation of competition (negative gossip about a target) and cooperation (expressing care and concern for the target) involves "guis[ing] one's competition with prosociality." A woman might disseminate negative information about a competitor, but also convey that she cares about the well-being of the competitor. In doing so, she harms the competitor's reputation and improves her own reputation in at least three ways. First, she declares that she is a kind and caring person who hopes for an improved state for the competitor. Second, she is giving the community information that it wants about the competitor: "gossip, whether it has a positive or negative impact on the reputation of the subject, can involve important information that fellow group members would want to know. Individuals benefit from knowing accurate information about other members of their community. Therefore, although many

societies have norms against gossip, especially negative gossip, gossip should be discouraged less than physical aggression" (Hess & Hagen, 2019, p. 929). In other words, she demonstrates that she is valuable because information is a desired resource. Third, she may look comparatively better than the competitor if she does not possess the competitor's gossiped-about flaw, or did not engage in the bad behavior of the competitor (Krems & Hess, 2021).

Reynolds (2021) takes the first mechanism a step further, suggesting that women may genuinely care about their flawed competitors, or may not be aware that they are harming their competitors in disseminating negative information about them: "[a] denial or lack of awareness of nefarious motivations may be a particularly viable strategy for women, compared to men. People more readily associate women with victimhood than perpetration, whereas they show the reverse tendency for men." Self-deception may allow women to harm their competitors while avoiding the costs of the community viewing them as competitive and socially aggressive. Reynolds reviews evidence showing that women are more relationally aggressive than men, but that they do not self-report as being such. "Such a pattern suggests that women may be unaware of their involvement in gossip and relational aggression because they earnestly believe they are speaking out of concern for their targets."

Reynolds (2021) lays out roughly eleven hypotheses and suggested avenues for research. Several hypotheses can be explored at the level of within-friendship dynamics, and some may be better explored at the level of the community (e.g., that sex ratios should predict female competitive strategies) or culture (e.g., that cultures with more male vs. female control of resources should have higher levels of female intrasexual competition). Male-male fights are conspicuous by design, men and boys aiming to publicly determine who is dominant. In contrast, female-female competitive maneuverings are less conspicuous and often actively hidden (Campbell, 1999; Hess, 2017). And, as Reynolds argues, the plausible self-deception operating in study participants can make self-report data even harder to obtain, so more objective measures are needed. Female intrasexual competition

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is difficult to observe and measure. Where, then, are we to test these hypotheses?

Ideally, research on female intrasexual competition and cooperation in evolutionary perspective should be conducted among adults in small-scale societies that have as many features in common as possible with the social and ecological environments of our female ancestors. These environments would include communities where everyone knows everyone, and where members interact frequently in multiple domains of life, such as mating, acquiring and allocating valuable resources (food, territory, status items, etc.), managing within-group competition for resources, caring for those in need (e.g., children, elderly, or sick individuals), competing with other communities, and adhering to group morals (morals which, according to Curry et al., 2019, function to increase group cooperation). Unfortunately, accessing these study populations can be difficult due to location, local politics, and other factors (e.g., Hess, 2019). Smaller communities also mean smaller sample sizes, reducing statistical power in quantitative studies. In addition, if gossip is the main weapon in female competition, researchers will need to be fluent in the local language. Further, non-WEIRD (Western, Educated, Industrialized, Rich, and Democratic; Henrich et al., 2010) community participants may not be accustomed to common social science methods like surveys, which require using numbers to describe emotions. For example, in a study on aggression with Aka hunter-gatherer participants from the Central African Republic, pile sort methods using photographs were required, which, although they took longer to complete than a typical survey like method, were necessary in order to ensure the ecological validity of the measure (Hess et al., 2010).

In the early 2000s, I conducted anthropological fieldwork on female friendship and conflict among young adult women in a university Greek community in Southern California (Hess, 2006). A sorority, also known as a "women's fraternity," is a Greek letter named organization of female students that is formally recognized by a college or university community. Sororities are well-defined, bounded, formalized groups of female friends in which every member knows every other member, and where they interact on a daily basis domestically, socially, academically, recreationally, and economically. This is in contrast to alternative adult populations like church groups, workplace communities, or social clubs, where membership may be loosely defined and where members typically interact in limited ways (e.g., coworkers may interact at work for many hours of the week, but most do not regularly interact recreationally away from work). Numerous close friendships exist within sororities, and these close friends occupy the same social environments. Joining and leaving a sorority involves record keeping by Greeks and the university, making members identifiable, and giving clear boundaries to groups at the levels of Greek vs. non-Greek and sorority X vs. sorority Y. Knowing about the social life of one informant means knowing about the social lives of others in her sorority. Importantly, high levels of competition and cooperation among sorority women occur between sororities, between factions or cliques within sororities, and between individuals within sororities.

Three differences are worth noting between sorority women and women in the broader university community, who often make up undergraduate research participant pools. First, unless it is a very small school, most university students will not know most other students, making it difficult or impossible to collect some of the kinds of data relevant to testing hypotheses about social competition and cooperation, e.g., network data. Second, in studying competitive and cooperative relationships in the broader university population, a woman might be unwilling to give a researcher the contact information of her close friends or competitors because then the peer would know that the informant had said something about her. In a sorority, however, a researcher can invite each member to participate because she is a member of a particular sorority, not because the researcher has special information about her obtained from peers. Collecting sensitive information about competition and cooperation may thus be more feasible in a sorority population. Third, a woman may only be a member of one sorority during her life (a rule enforced by the National Panhellenic Conference during the years that I conducted my research). Leaving one's sorority (or being expelled from it) will result in irreversible changes to one's social world—the sorority cannot be replaced, membership as a student in the Greek Community cannot be replaced, and the Greek lifestyle cannot be replaced (Hess, 2006). This contrasts with the campus-wide subject pool, where "breaking up" with one's best friend or being ostracized by a group of friends does not preclude finding new friends on campus or participating in the same kinds of social activities.

The social lives of women joining Greek communities share some key features with the social lives of similarly aged women in the ancestral environment. As Reynolds (2021) discusses, ancestral women probably typically left their natal groups at maturity more than men (genetic data are cited; see also Marlowe, 2004 for ethnographic data comparing foragers to non-foragers). Imagine what life was like for a newly exogamously married woman in the ancestral environment. She is likely to have recently reached sexual maturity and is in her late teens. She will be moving away, perhaps permanently, from her family and the friends/peers with whom she grew up. She will enter a new group where she will be welcomed by some but not others. She may have to learn new cultural practices and adopt new beliefs. She will have to form new relationships based on reciprocity or mutualism because kinship ties may be few or absent. One relationship will be with her new husband, and she may know him if he performed bride-service prior to their marriage. However, her husband is not the only person she will be socializing with day in and day out (perhaps he is often away hunting for long periods). Due to sexual divisions of labor (e.g., in childcare vs. hunting), the people she will spend many of her waking hours alongside will be her children and other women in the group—women to whom, unlike

those in her natal group, she is unlikely to be bonded by kinship. Despite inherent competition with these women, she will still have to form alliances with some of them, even if only as a means of protection from other alliances of women. She will be envied and even despised by some women for her youth/fertility, and for the novelty, she presents to the group's men. She will encounter women who are older and more knowledgeable about the group, and who are dominant to her. She will have to prove herself as a hard worker and, ultimately, as a good mother. She may benefit her new group (and especially her new husband's lineage) by having children, helping raise children (Meehan et al., 2014), bringing important skills or specialized knowledge to the group, solidifying political or economic alliances with her family, or enhancing her group's ability to host feasts that impress allies (e.g., Chagnon, 1968).

On the other hand, a newly married woman in the ancestral environment could also be costly to her new group—perhaps she lacks childcare skills, consumes more resources than she provides to others, is unable to provide practical labor, carries novel pathogens, is unable to conceive, or cannot provide political benefits through her family (e.g., because her parents are dead or have rejected her). Her ability to provide benefits to the group will be discussed and scrutinized by community members, as will the impact that her reputation has on the group's reputation. Because of the benefits tied to marriage contracts, as well as the between-community alliances associated with female exogamous marriage, a woman defecting from a marriage contract would have experienced substantial costs. In addition to losing the benefits she would have brought to her family, her husband's family, and their broader communities, her defection would have damaged her reputation as a marriageable woman to alternative groups. In this sense, a young woman would have often found herself "stuck" in her new community.

A woman starting college encounters conditions analogous to ancestral conditions. She is recently reproductively mature, is in her late teens, and is moving away from home, likely permanently, to a place with some cultural practices and beliefs that will be novel to her. She is unlikely to have kin or non-kin allies who will look out for her best interest when she arrives at college, so she will feel motivated to establish new friendships. Joining a sorority helps here. Sororities provide a safe, structured environment and a well-defined ingroup and support network that is largely absent in the general undergraduate community. Sororities provide new members with opportunities to interact closely with older women from whom to learn new cultural norms, some of which are transmitted in formal educational practices and marked by rituals. She will engage in the majority of her activities in close proximity to her sorority sisters, including studying, traveling around campus and the local city, eating, relaxing, partying, exercising, and if she lives in the sorority house, sleeping, and grooming. She will not have a mate waiting for her in her new group—unlike the ancestral condition—so she may feel as if

finding new allies quickly will improve her physical safety (Hess, 2006; Smuts, 1992).

One of the key benefits of being in a sorority, for many, involves access to mates in a structured setting (Hess, 2006). Men's fraternities and the Greek community's frequent formal parties and activities provide venues for accessing available men. During the process of finding a sorority to join, a woman will be evaluated for the benefits she can provide to a sorority, including her ability and willingness to work for the sorority, and the way that her reputation will impact the sorority's collective reputation (e.g., her GPA will factor into the sorority's average GPA, which other institutions use in allocating benefits to the sorority).

A woman's physical attractiveness is extremely important in her evaluation as a sorority member. Reynolds (2021) reviews the evidence that female physical attractiveness is associated with being selected as a mate by men with resources. Physical attractiveness, in part, indicates fertility, and children are certainly not desired among sorority women while they are in college. However, physical attractiveness also indicates access to resources (e.g., food, medicine, and status items), freedom from disease, and a mastery of valued, attractiveness-enhancement practices (e.g., dress and beauty improvement techniques). In college Greek communities, physical attractiveness, charm, conversation ability, expertise in particular cultural domains, confidence, and a positive attitude are valued because they draw the attention of fraternity men and attention of high-status individuals. Competition over physical attractiveness is pervasive in sororities (Hess, 2006).

Joining a sorority will help a young woman better cope with some of the difficult conditions listed above (like finding new friends), but joining exposes her to other difficulties that may have ancestral analogs. A new sorority woman may find that she is welcomed by some women but not others. Some women will try to befriend her, but she may not like them. By virtue of her novelty to Greek community men, other women will envy her. She may try to learn from the behaviors of others, and, whereas some will be flattered, some will resent her for "copying" them. She will be surrounded by women who are older, dominant, and more knowledgeable. She will have to do work that benefits the sorority, or provide something that benefits the sorority (e.g., social ties to preferred fraternities or a high GPA), or else she will be viewed as lazy or selfish and will thus have less power to influence others in ways that benefit herself. Her physical attractiveness and other desirable traits will impact her sorority's ability to entice fraternities to co-host the large parties that impress the Greek community, elevating the sorority's status (Hess, 2006). Her behaviors will determine her reputation, and that reputation will impact the sorority's reputation; thus, other sorority members will scrutinize and discuss her actions and intentions for the duration of her membership; she may likewise scrutinize and discuss others. She will have loyalty to the entire sorority, but will also need to establish closer alliances with a smaller number of women in the sorority for various purposes such as

influencing sorority-wide financial decisions. Once she becomes a full, initiated member of a sorority, she may never join another sorority; she is essentially "stuck" with one sorority if she wants to maintain her Greek status.

Recently exogamously married women in the ancestral environment and college women intending to join a sorority differ in some significant ways. Whereas ancestral women left home to mate and have offspring, college women leave home with the purported primary goal of getting an education (cf. "Educated in Romance" by Holland & Eisenhart, 1990). Ancestral women were bound by a marriage contract, and sorority women are bound by friendship. An ancestral woman was likely to have a mate upon joining her new community. She was expected to reproduce soon after arriving, which would establish lifelong social ties to new kin groups. A woman arriving at college will not have a mate waiting for her. She will be discouraged from having children (though not necessarily from finding short-term and long-term mates), and she will be at college for only roughly four years of her life (though she will be an alumnus of her particular sorority for life). Ancestral women obtained resources from members of their new groups, especially their mates and in-laws. College women rely on their parents and their own part-time employment for money for resources like food, clothing, and lodging. In the ancestral environment, the number of older adults and children that a woman would encounter was large, whereas, for college women, the number of age-matched peers is large.

Nonetheless, Greek communities might be less WEIRD (Henrich et al., 2010) than they seem. Same-sex adolescent peer groups are common across cultures and are often formalized to some degree, as seen in, for example, *ghotul* adolescent dormitories among the Muria (Elwin, 1947). Separate adolescent dormitories for one sex or the other are (or were) widespread among traditional peoples of Africa, southern Asia, and the Pacific (Schlegel & Barry, 1991). US college fraternities and sororities fall on the more formal end of a spectrum of adolescent peer groups that occur in a wide range of cultures (Hess & Hagen, 2021).

Reynolds (2021) discusses the evidence that women, in contrast to men, tend to be averse to inequality, asymmetrical reciprocity, and unequal distributions of power and resources in their relationships with other women, and this has been documented in many organizations. Variation in power, status, and dominance is observable within a sorority. Age and seniority are two very clear correlates of power asymmetries. Sororities also have a large number of elected and appointed offices, such as President, Vice President of Finance and Operations, Vice President of Recruitment, Social Chair (one who organizes the sorority's social calendar), and Chaplain (one who educates new members on the sorority's traditions and runs initiation rituals). Dozens of women among a house of a hundred members can hold formal offices. Officers have varying degrees of authority, responsibility, rights, and perquisites (e.g., a desired parking space and sorority-funded retreats to national conventions). Some women want offices because they feel they have leadership skills that will benefit the house and themselves (see Garfield et al., 2019 for an exploration of the function of leadership). Some women want to pad their resumes for future job prospects by demonstrating, for example, that they have successfully managed their sorority's finances. Some women want offices that control the kinds of new members that will be recruited, which will substantially impact the sorority's attractiveness to certain fraternities or the odds that one's sorority will win Greek community tennis tournaments.

The power asymmetries that come with seniority and holding an office create within-sorority conflict. However, these hierarchies can also assuage conflict. For example, when I conducted my research, the president, a junior, had a serious conflict with some highly respected seniors who brought alcohol into the house, a major infraction. The seniors deferred to the president by agreeing to stand trial before Chapter Standards Council made up of house officers who were all juniors. They did so in order to uphold respect for the sorority's officers in the eyes of newest (freshmen) house members, whose faith in the sorority the seniors viewed as sacred and imperative to the morale, cohesion, and future of the sorority. When I asked the freshmen about the conflict, they confirmed the seniors' worries: they felt anger and confusion. No one would tell them the nature of the major infraction because, in accordance with sorority policies, non-officers and those not involved with the situation were not allowed to sit in on the trial or discuss it until the matter had been resolved. The freshmen knew that a serious secret was being kept from them, and several told me they had considered dropping out of the sorority because they felt they had been misled about the house's seemingly high sisterhood when they were recruited (Hess, 2006). Conflicts among those with varied power, if measured, can be used to test hypotheses about female intrasexual competition and cooperation.

College sororities would be an excellent population for testing many of Reynolds' (2021) hypotheses. For example, Reynolds' 9th hypothesis is that "[f]emale-biased (versus male-biased) sex ratios will predict heightened manifestations of female intrasexual competition (e.g., defamatory gossip, condemnation of female sexuality, appearance enhancement.)". This is testable in Greek communities. My informants readily shared their experiences of gossip victimization, conflict, and social support. And the female to male sex ratio in the Greek community I studied (3:2) was easily obtained from university records. The intrasexual competition among similarly aged, co-residing, unrelated women in a sorority is present and salient, as are a constant concern with gossip, establishing and maintaining a good reputation for oneself and one's sorority, and opportunities for friendship formation. If women have psychological adaptations for intrasexual competition and cooperation that are active in young adulthood, we will find evidence of them in sororities.

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