An Evolutionary Psychological Perspective on Gender Similarities and Differences

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Hyde (September 2005) reviewed the results of 46 meta-analyses of studies investigating gender differences. The results supported the gender similarities hypothesis that men and women are similar along most psychological traits. We agree with the gender similarities hypothesis but argue here that Hyde's review has limitations that caused it to understate the true extent of gender differences. We also outline the benefits of adopting an evolutionary psychological perspective on gender differences.

Limitations of Hyde's Review

Hyde (2005) found that effect sizes of gender differences for 78% of the domains included in the reviewed meta-analyses were "small or close to zero" (p. 586). Hyde's review has several limitations, however, that may have caused it to underestimate the extent of gender differences.

Sexual selection produces the most and the largest evolved gender differences within species and acts on domains related to mating and intrasexual competition, such as strategies for attracting and retaining mates, preferred qualities desired in mates, and tactics for outcompeting rivals for mates (Buss, 2004). Because the reviewed meta-analyses did not include a representative sample of studies in these domains, Hyde's review may have underestimated the percentages of larger gender differences.

The methodology of many of the studies included in the reviewed meta-analyses may have attenuated the display of evolved gender differences, for participants were removed from contexts in which the display of evolved gender differences is likely to be greatest. For instance, Lighdale and Prentice (1994) investigated gender differences in aggression in video-game play, but participants were removed from the context of competing for mates and defeating rivals in actual combat. Similarly, as aggression evolved partly to facilitate men's status acquisition (Buss, 2004), the display of an evolved gender difference would have been dampened in the experiment's deindividuated condition, in which participants were anonymous.

A more accurate estimate of the extent of gender differences than that provided by Hyde's (2005) review would be secured by considering sources such as comparative studies, census data, personal advertisements, and anthropological studies. These have evidenced large gender differences (Buss, 2004) but were not considered in the meta-analyses.

Predicting the Effect of Context

Referring to Lighdale and Prentice (1994), Hyde (2005) stated, "The significant gender difference in aggression disappeared when gender norms were removed" (p. 589). She later concluded, "The magnitude and even the direction of gender differences depends on the context" (p. 589). It cannot be assumed, however, that a gender difference is a social construct. An evolutionary perspective suggests that if there are reasons to believe that the selection pressures along a trait differed for men and women, it is reasonable to assume that a gender difference along the trait is evolved.

By considering the adaptive costs and benefits associated with displaying a trait in different contexts, an evolutionary perspective allows the prediction of how an evolved gender difference along the trait will vary. This perspective argues that social mores can influence the observed magnitude of evolved gender differences by influencing the size of the adaptive benefits and costs associated with displaying traits. Thus, the exhibition of an evolved gender difference along a trait is likely to be dampened by contextual features that increase the adaptive costs of displaying the trait and that increase the benefits of pursuing adaptive goals through alternative traits. For instance, among professors in academia, gender differences in physical violence are expected to be minimal.

Developmental Trends

Hyde (2005) stated, "The fluctuating magnitude of gender differences at different ages argues against ... notions that gender differences are large and stable" (p. 588). Gender differences along traits related to mating, however, are both large and stable from puberty to around age 30, when sexual selection pressures are most intense.

The Costs of Gender Differences

Hyde (2005) stated, "There are serious costs of overinflated claims of gender differences" (p. 589). We agree, but we add that there are serious costs associated with gender differences. Unlike social constructivism, which views gender differences solely as products of social norms, an evolutionary perspective facilitates limiting the costs of gender differences by considering whether a gender difference is evolved and by evaluating the adaptive costs and benefits of displaying traits. For instance, the costs of men's greater tendency for physical aggression are evidenced in statistics relating to phenomena such as murders and spousal and gang violence (Buss, 2004; Wilson & Daly, 1985). An evolutionary perspective suggests that because the intensity of selection pressures for aggression differed for men and women, the gender difference along aggression is likely to be evolved (Daly & Wilson, 1988). Further, it suggests that male violence may be reduced (a) if men are caused to perceive that they are more likely to suffer costs if they are violent and if these costs are made greater, such as through improved policing and harsher penalties; (b) if social norms are moved away from portraying violent
men as attractive and toward portraying them as obnoxious; and (c) if means to achieve status and resources other than through violence, such as through academic qualifications, are made more appealing and available to men. An evolutionary perspective also suggests that these tactics will be most effective if they are targeted at adolescent males.

Conclusion

Although we generally agree with the gender similarities hypothesis, Hyde’s (2005) review has limitations. Gender differences may be more profound and have greater societal costs than Hyde suggested. The addition of an evolutionary psychological perspective to the investigation of gender differences is likely to facilitate determining the true extent of gender differences and limiting their associated costs.

REFERENCES


Hyde (September 2005) introduced her hypothesis in two sentences intended to be equivalent to one another:

The gender similarities hypothesis holds that males and females are similar on most, but not all, psychological variables. That is, men and women, as well as boys and girls, are more alike than they are different. (p. 581)

However, the two sentences are far from equivalent. It is quite conceivable that males and females are nearly the same on nearly all measured variables but nevertheless may be judged as quite different from one another if the few variables on which they differ are of great psychological or social importance. For example, Hyde (2005, p. 586) readily acknowledged “strikingly large” gender differences for attitudes about sex in casual, uncommitted relationships, but considered this an “exception.” However, coupled therapists, novelists, and the large population of men and women for whom the mating motive is of major psychic importance may judge males and females as vastly different despite similarities on dozens of cognitive skills.

What Hyde (2005) missed is that judgments of similarity and difference are psychological, not scientific. Hyde cannot simply tally all the studies in which gender differences are found or are not found to calculate a score, as if all variables are equally important. She must first determine the psychological importance of each dimension in human judgments of similarity and difference.

A second way in which Hyde (2005) ignored psychological importance was her dismissal of any gender difference that is dependent on context or is “consistent with social-role theory” (p. 589). This dismissal seems arbitrary, and Hyde did not justify it. Instead, it was achieved by verbal sophistry. Hyde first described the rival theory she criticized as “the differences hypothesis: that males and females are, psychologically, vastly different” (p. 581). Yet, by the end of the article, the differences hypothesis was subtly emended to read “psychological gender differences are large and stable” (p. 589, italics added). Hyde then used any evidence that gender differences are not stable across contexts as support for her gender similarities hypothesis. However, for advocates of the rival differences hypothesis, it is of no consequence that gender differences may depend on context or are consistent with social-role theory. The important fact is that in a wide variety of important contexts, males and females behave, think, and feel very differently, and this observation yields the psychological judgment that males and females are vastly different.

For my article “The Gender Similarities Hypothesis” (Hyde, September 2005), I located 46 meta-analyses of studies of psychological gender differences and then synthesized the results of these meta-analyses. I specified these methods clearly in the original article. It is crucial to reach conclusions about psychological gender differences and similarities on the basis of meta-analyses whenever possible, because they allow researchers to assess the replicability of the phenomenon and ways in which it varies systematically on dimensions such as age, ethnicity, or method of measurement. The results of this synthesis of meta-analyses surprised even me in the consistency in the findings of small or negligible gender differences across a wide array of psychological domains. These findings supported my proposed gender similarities hypothesis: “that males and females are similar on most, but not all, psychological variables” (p. 581).

Archer (2006, this issue) regretted that I did not include theoretical perspectives in my article, especially evolutionary psychology and social role theory. I am, of course, keenly aware of these theories and have written extensively about them elsewhere (e.g., Hyde, 2004; Oliver & Hyde, 1993). One of my fundamental beliefs about science, however, is that before we work on theorizing psychological phenomena, we must have an accurate knowledge of what the phenomena are. A major goal of my article was to help scientists “get it right” in regard to psychological gender differences—that gender similarities are far more common than gender differences, and that this fact needs to be taken into account in theorizing.

Lippa (2006, this issue) believed that I omitted from my review areas such as interests and occupational preferences that show large gender differences. My method, clearly stated in the article, involved a review of published, peer-reviewed meta-analyses. To my knowledge, no one has conducted a meta-analysis on the topics raised by Lippa. It would be a good project. In the meantime, we have no idea whether the large effect sizes that Lippa cited are replicable. As an example of how wildly gender effect sizes can fluctuate across dif-