

Sex Roles Do Not Lead to Gender Differences in Personality

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Abstract

Psychologists often argue that gender stereotypes direct different types of caretaker behaviors toward male and female children and that this differential treatment, in turn, leads to gender differences in personality. Widely cited in support of this thesis is the Fels longitudinal study finding that dependency is stable from childhood to adulthood for females only, and aggressiveness, for males only (Kagan and Moss, 1962). The present paper explains why this finding demonstrates that sex role expectations do not lead to stable gender differences in personality--a conclusion precisely opposite of the standard interpretation of these findings. The paper points to additional fallacies in the argument that cultural expectations lead to gender differences and suggests ways in which the political agendas and wishful thinking have distorted the literature on biological and social determinants of gender differences in personality.

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This paper challenges one of the most deeply rooted assumptions in developmental psychology--that gender-related personality traits are shaped by the different expectations parents hold for their sons and daughters. The terse, immoderate, uncompromising, categorical title of this paper was generated by space requirements at the time the abstract was submitted for review by the HBES program committee. A title that more precisely states the thesis of this paper is: "The Stability of Gender-Appropriate Personality Traits Found in the Fels Longitudinal Study Contradict the Widely-Cited Conclusion that Social Expectations Shape Gender-Related Traits." And yet the proposition within the blunt title may actually be true. This paper argues that both logical considerations and empirical evidence suggest that gender-related personality traits are determined primarily by physiological factors rather than social expectations.

The argument against the notion that societal expectations shape personality is fourfold; the four points will be ordered from the most empirically-grounded to the most speculative. First, if caretaker expectations in fact directed feminine boys to become more masculine and masculine girls to become more feminine, then assessed masculinity/femininity should be unstable over time, but the Fels data show stability for gender-related traits. Second, personality refers to both inner experiences as well as manifest behavior, and if one's gender-related experiences violate social norms, these experiences might find indirect rather than direct expression in behavior. The Fels data indicate that such indirect expression does occur. Third, correlations between parental expectations and children's behavior do not indicate the direction of causality. However, if one assumes that expectations lead to behavior, the origin of expectations becomes mysterious. If one assumes that behavior leads to expectations, the origin of behavior can be explained in terms of physiology. Finally, psychologists' (incorrect) beliefs about the impact of social expectations on personality can

be explained in terms of wishful thinking and political agendas.

What Personality Stability Tells Us About Social Influences

Personality stability is normally assessed by rank-order continuity for a group of persons over time (Block, 1971). For example, to say that aggressiveness is a stable personality trait for boys is to say that boys observed to be the most aggressive at time one were also the most aggressive at time two. Likewise, boys with intermediate and low levels of aggression maintained their rank order of aggressiveness across the observation time periods. Trait stability is normally expressed in terms of a Pearson correlation coefficient between personality scores gathered at two points in time.

If personality stability is to be observed, one must observe personality differences between persons at both points in time. Differences between persons is expressed, of course, as the variance in scores. This necessity of variance to demonstrate stability derives from a basic psychometric canon: restriction of range (i.e., limited variance) in a set of scores automatically attenuates the correlation between those scores with other measurements. Attenuation from restriction of range explains, for example, why SAT scores from the general population predict college grade point average well, but a restricted range of SAT scores (e.g., scores from higher-ability students actually admitted to college) are less predictive of college GPA. To use an example from personality, a childhood measure of aggressiveness will predict adult aggressiveness only if sufficient variance in adult scores are maintained, else attenuation will occur. If one does find stability in aggressiveness from childhood to adulthood, this implies that appreciable variance was found at both time one and time two.

What does the stability of personality (and concomitant maintenance of variance) indicate about the shaping influences of the social environment? Simply put, personality stability (expressed as correlation of trait measurements over time) indicates that social expectations have failed to shape personality toward

one end of the trait continuum. If nonaggressive boys became more aggressive over time because society expects boys to be aggressive, aggressiveness scores would become restricted to the high end of that trait dimension, attenuating the correlation between childhood and adult aggressiveness. This point is illustrated graphically in Figure 1.

Insert Figure 1 about here

Now, Kagan and Moss (1962) report that sex-appropriate personality traits (aggressiveness and sexuality in males, passivity and dependence in females) show stability from childhood (ages 6-10) to adulthood (ages 19-29). They also report stability for overall sex-typed activities for both males and females across the same time period (replicated by Block, 1971). They interpret this stability incorrectly, however, as evidence for the influence of social norms on personality:

"Passive and dependent behavior are subjected to consistent cultural disapproval for men but not for women. . . . It is not surprising, therefore, that childhood passivity and dependency were related to adult passive and dependent behavior for women, but not for men" (p. 268) and "the individual's desire to mold his overt behavior in concordance with the culture's definition of sex-appropriate responses is a major determinant of the patterns of continuity and discontinuity in his development" (p. 269). This speculative conclusion, precisely opposite what the data suggest, is presented uncritically in every developmental textbook I have read (e.g., Fitzgerald, 1986; Sigelman & Shaffer, 1991).

The stability of aggressiveness and sexuality (for boys) and passivity and dependency (for girls) found by Kagan and Moss contradicts the hypothesis that these socially accepted behaviors are shaped by the social environment. Stability indicates that sexually active boys become sexually active men, but also that sexually inactive boys remain so as adults, despite society's expectations that

males generally have a high sex drive. Likewise, stability indicates that passive girls become passive women but also that assertive girls become assertive women, despite norms against assertiveness in women.

What about the instability of socially disapproved passivity and dependency in boys and aggressiveness and sexual activity in girls? Does instability in these characteristics indicate that disapproval from parents, peers, teachers, coaches, etc. creates assertive, autonomous men from passive, dependent boys and unaggressive, demure women from aggressive, sexually active girls? Only an examination of the mean levels of these traits can answer that question definitively. Kagan and Moss do not report means and variances for their measures, however, perhaps because methodological differences between childhood and adult assessment make mean comparisons problematic.

It is possible that the instability of sex-inappropriate characteristics is caused by societal suppression. It is also possible that low correlations for some variables represents a chance finding in Kagan and Moss's very small samples ($N_s = 36$ males and 35 females). Block (1971), working with sample sizes over 100, found the item "Behaves in dependent fashion" to correlate $r = .50$ (corrected for unreliability) for boys, and the item "Expresses hostile feelings directly" to correlate $r = .32$ for girls across the time from junior to senior high school. (Measurements of these traits were not made in adulthood). For girls, "Tends to construe or define many different contexts in sexual terms; eroticizes situations" correlated $r = .27$ from senior high to adulthood, and "Becomes emotionally involved with members of the opposite sex" correlated $r = .60$ across the same time period. These statistically significant coefficients of stability suggest that Kagan and Moss generalized too quickly from their small sample about the instability of gender-inappropriate traits.

Limited Relevance of Behavioral Inconsistency for Attributing Social Influences

There is another reason why behavioral instability does not necessarily

imply that personality is molded by society: Personality is not equivalent to behavioral consistency. This point is not well understood outside the discipline of personality psychology. Probably due to the dominance of behaviorism in this century, many psychologists outside the discipline mistakenly assume that personality is defined as "cross-situational consistencies in behavior" (e.g., Kenrick & Funder, 1988, p. 23). Such a conception is misleading for two reasons.

First, the concept of a personality trait refers to a consistent pattern of reactions to a particular type of situation, not identical behaviors across different situations (Johnson & Hogan, in press). To attribute the trait "sexually active" to an individual is to describe that person as more likely than others to engage in sexual activities when give the opportunity--not to claim that he copulates with everyone he meets.

Defining personality in terms of behavioral consistency is misleading for a second reason. Most personality psychologists, following Allport (1937) recognize two distinct aspects of personality: outer, behavioral appearances and inner, cognitive and emotional experiences (Johnson & Hogan, in press). Naturally, observers must infer inner aspects of personality based on outer appearances, but this does not guarantee a one-to-one correspondence between the inner and outer aspects (Johnson, 1990). It is possible for an individual to possess a stable, inner disposition (e.g., homosexual feelings) that are rarely and inconsistently expressed in behavior due to conflicts with other dispositions or fear of reprisals.

When inner dispositions are suppressed rather than expressed directly in behavior, one might expect discontent, anxiety, and perhaps a tendency to engage in substitute activities (sublimation in Freudian terms or displacement in the language of ethologists). Interestingly, Kagan and Moss (1962) themselves report this phenomenon. "Passivity among boys predicted noncompetitiveness, sexual anxiety, and social apprehension in adult men, but not direct dependent overtures

to parents or love objects. A tendency toward rage reactions in young girls predicted intellectual competitiveness, masculine interests, and dependency conflicts in women, but not direct expression of aggression. . . . When [childhood behavior] conflicts with sex-role standards, the relevant motive is more likely to find expression in theoretically consistent substitute behaviors that are socially more acceptable than the original response" (pp. 268-269).

In short, social expectations may inhibit individuals from expressing their inner impulses directly in behavior. But this does not indicate that social expectations shape the impulses themselves (i.e., inner personality).

Correlations Between Parental Behavior and Personality Imply Nothing about Causality

For some reason, the standard textbook warning against interpreting causality from correlational data is ignored by psychologists attempting to demonstrate that differential caretaking of boys and girls leads to personality differences. Psychologists have done such clever things as dressing infant boys in girls' clothes and vice-versa, and observing how strangers tailor their behavior to the perceived sex of the baby (Jampel, 1974). Psychologists have rigorously corroborated what all parents already know--that we are more likely to play rough truck games with children we assume are boys and coo gently to children we assume are girls (Frish, 1977; Smith & Lloyd, 1978). Observing the correlation between parental behavior and children's play, psychologists conclude that the differential treatment of boys and girls determines both play preferences and larger sex role of children.

Of course, as with any correlation, the direction of causality could be precisely opposite from the psychologists' conclusions. Perhaps parents make different play overtures to boys and girls because the children are already predisposed toward different types of play and the parents expect these predispositions. Consider the following analogy: Certain human groups believe

the sun will die unless they bring it back with midwinter rituals. They expect their rituals to be efficacious, and, indeed, the sun returns every solstice. Do their expectations and rituals cause the sun to return, or does the sun's behavior create their expectations of what will happen at midwinter?

The notion that differential treatment of boys and girls shapes personality rather than vice-versa suffers from two major conceptual shortcomings. First, it fails completely to explain the substantial individual differences in masculinity and femininity found within genders. Sex role stereotypes, however inaccurate, are extremely pervasive and universal: women are expected to be expressive and nurturing and men, instrumental and agentic (Sigelman & Shaffer, 1991). Now, if these stereotypic expectations had any causal force, then all men should be very masculine and women, feminine. This is obviously not true, bringing into question the causal efficacy of sex-role expectations.

The second conceptual problem in assuming that expectations shape gender-related personality traits is that it fails to explain where such expectations come from, if not from actual, preexisting sex differences. The account typically given is that children acquire sex role expectations from their parents. This begs the question. Suggesting that children acquire sex-role expectations from their parents, who acquired their expectations from their parents, etc. creates an infinite regress and shrouds the origins of sex role differences in mystery.

An alternative, biosocial approach (Money & Ehrhardt, 1972) explains both intragender differences in masculinity/femininity and the origins of sex-role expectations without an infinite regress. The biosocial model suggests that hormones determine brain organization before children are born. Later behavior is a function of brain organization. Normally, boys are exposed prenatally to large amounts of androgens, whereas girls are not. This leads to the typically observed sex differences in children. Occasionally, however, boys' brains are

not exposed to androgens or girls' brains are exposed to abnormally high amounts of androgens. When these developmental anomalies occur, the sexes exhibit behaviors that are more typical of the opposite sex (Ehrhardt & Baker, 1974; Money & Ehrhardt, 1972). Thus, the biosocial approach locates the origin of sex differences unambiguously in brain ontogeny and can account for individual differences within sexes via developmental anomalies.

From a conceptual standpoint, then, it makes more sense to conclude that social expectations about gender differences derive from--rather than cause--actual physical and behavioral differences between the sexes. This conclusion is reinforced by data from sophisticated designs can get at the direction of causality when parents' and children's behavior are correlated (Halverson & Wampler, in press). These studies indicate that cases in which parental behavior had been assumed to shape child personality in fact often show the opposite direction of causality.

Cultural and Political Biases in the Interpretation of Developmental Data

The remaining question is, if both empirical data and conceptual analysis suggest that social expectations are the effect rather than cause of gender-related personality differences, why do so many psychologists continue to assert the opposite? I have an hypothesis about this which is admittedly speculative.

It is quite clear that for most of human history, child-care functions have jeopardized women's economic and political power (Saxton, 1986). Women still suffer from unequal access to higher status jobs and are paid far less than men for the same work. Despite the fact that they are a majority in the population, women hold a tiny fraction of all political offices and executive positions. This is obviously something that most women would like to change.

Understandably, women would be hostile to anything perceived to impede change toward economic and political parity with men. One such perceived impediment is the notion that biology, rather than social environment underlies sex

differences that might lead to differential power and status. Those who seek to correct gender-based inequities assume that biological sex differences cannot be changed and therefore deny that "biology is destiny." They also assume that social expectations can be changed and therefore believe that the social environment is the primary determinant of sex differences in personality. These assumptions are bolstered by the American ideology, which holds that people are born equal and that anyone can achieve the American dream in this land of opportunity (Hogan & Schroeder, 1981; Hogan & Emler, 1978).

These assumptions seem to be based on wishful thinking, specifically the wish for women to achieve economic and political parity. Yet these assumptions also appear to be wrong and therefore not useful. Biology can be altered, as shown by the research on prenatal influences of androgens. And social expectations can be quite resistant to change, as noted by sex role researchers who point to persistent and pervasive but inaccurate stereotypes. Rather than exposing their daughters to abnormal levels of artificial androgens or insisting that their daughters play with trucks and guns, parents desiring economic, vocational, and political opportunity for their daughters might instead consider legislating these opportunities.

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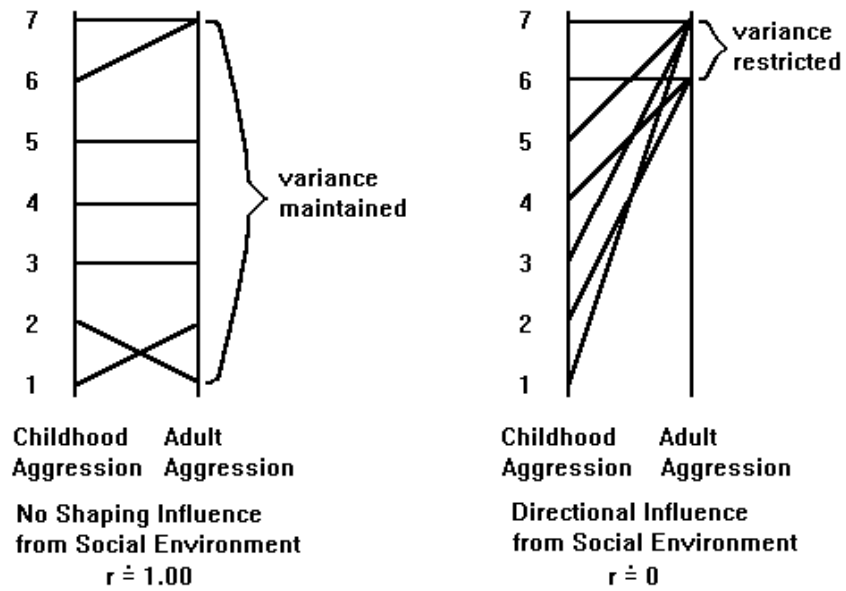


Figure 1. Illustration of how hypothetical social environmental influences would restrict variance, leading to personality instability.

