

# Are Latent Sexual Themes (Instincts) Working Against the CoB's AACSB Re-Accreditation Efforts?

Management Professor Stephen Bushardt says "Yes"

In the CoB's Peer Review Team's AACSB Accreditation Report (available at [www.usmnews.net](http://www.usmnews.net)), the Peer Review Team made the point that the CoB needs to provide support for a mentor-protégé program in order to promote a higher level of scholarly output. In the article below (available at [www.timbersnursery.com](http://www.timbersnursery.com)) the CoB's own Stephen Bushardt (professor of management) explains that, although it can be done, CoB faculty will have some difficulty overcoming the "sexual themes" that are inherent to mentor-protégé relationships, especially those involving opposite sexes, and that often cause conflict in these relationships.

## The Mentor/Protege Relationship: A Biological Perspective

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### ABSTRACT

*The mentor/protege relationship can be conceptualized within the context of biological dimorphism with sex roles reflecting different reproductive strategies that evolved by natural selection. Mentor/protege roles mimic the male/female mating roles in humans, often causing conflicts that are seldom understood within the limited context of mentoring. This article examines similarities in reproductive strategies and mentoring in terms of demographics, selection criteria, and acquisition strategies. Underlying sexual themes are identified and their impact on the mentor/protege relationship discussed, along with implications and directions for future research.*

Mentorship is often promoted as a valuable tool for developing upwardly mobile, talented individuals. The word "mentor" originated in Greek legend, where Mentor was the wise and trusted counselor to whom Odysseus entrusted the education of his son, Telemachus. History is replete with examples of great mentor/protege relationships from Thomas Jefferson, who was the mentor for presidents James Madison and James Monroe, to Hubert Humphrey, who was the mentor for Walter Mondale. Ancient Indian history from 300 B.C. tells of Kautilya Chanaka who guided young Chandrugupta, an exiled nobleman, to become one of the most romantic figures in Indian history. While Chandrugupta may be regarded today as a lesser warrior than Alexander the Great, he is perceived as having been a greater ruler; Kautilya is an example of an effective mentor (Durant, 1935; Smith, 1923). Cultural myths tell of Merlyn, the magician, who mentored young King Arthur, heralding the significance of this relationship and its impact on civilization.

In general, the literature is increasingly focusing on the problems and limitations associated with mentor/protege relationships (Auster, 1984; Bensahel, 1977; Crandall, 1981; Darling, 1985; Johnson, 1980; Myers & Humphreys, 1985; Phillips-Jones, 1982). Other writers have focused primarily on problems associated with the male-mentor/female-protege relationship (Berry, 1983; Bolton, 1980; Bowen, 1985; Clawson & Kram, 1984; Fitt & Newton, 1981; Harris, 1980; LaFrance, 1981; Noe, 1988; Ragins, 1989). The William Agee/Mary Cunningham relationship, that recently played in the public media, under-scores many of the problems of the male-mentor/female-protege relationship (Apple, 1985; Cunningham, 1984; Odiorne, 1985). Auster (1984) lamented the absence of a body of systematic data and a sociological conceptualization of the mentor/protege relationship. Hunt and Michael (1983) and Ragins (1989) expressed particular concern regarding theory development and limited understanding of the dynamics of women in mentoring.

The central theme of this article is that mentors, regardless of their gender, utilize predominantly masculine sex-role behavior, and proteges, regardless of their gender, utilize predominantly feminine sex-role behavior. From the context of the reproductive strategy, sex-role behaviors have evolved to maintain the survival of the species (reproductive variance, anticuckolding strategies, polygamous threshold, and power/dependency). These same sex-role behaviors underscore the basic and often latent sexual themes that permeate the mentor/protege relationship and may be a primary cause of many problems. Sociobiology could play an important role in the development of a theoretical framework for understanding mentor/protege relationships and the impact of gender.

### **Biological Dimorphism and the Mentoring Process**

The similarity of the mentoring process to the mating process gives rise to a number of sexual themes that infiltrate the mentor/protege relationship. In the evolution of man, the reproductive strategies of males and females are complimentary, yet different, and are referred to as sexual dimorphism. Sexual dimorphism is "Any consistent difference between males and females beyond the basic functional portions of the sex organ" (Wilson, 1975). The resulting behavioral patterns are sex-role behavior. These different reproductive strategies represent behavioral patterns that attempt to maximize the genetic fitness of individuals within each gender, where fitness is defined as ensuring survival of one's genes within the species. It is not enough to reproduce; one must ensure that his/her genes are passed on to future generations, according to genetic fitness models (Daly & Wilson, 1978; Darwin, 1871; Irons, 1979; Thornhill & Thornhill, 1983). Sociobiology explains social behavior on a biological basis with roots in the evolution theory of Charles Darwin (Kitcher, 1985; Konner, 1982; Lumsden & Wilson, 1983; Wilson, 1975). The similarities between male/female reproductive strategies and the mentoring process are most salient in terms of selection criteria, acquisition strategies, and demographics.

#### **Selection Criteria**

In the mentor/protege relationship, the mentor assumes a masculine sex role and the protege assumes a feminine sex role, thus imitating male/female reproductive roles (Osborne, 1981; Bushardt & Allen, 1988, 1986). Studies using Bem's Sex Role Inventory indicate that successful individuals in managerial and leadership positions tend to utilize masculine sex-role behavior and/or androgynous behavior, which combines masculine

and feminine sex-role behavior (Bem, 1974a, 1974b, 1975; Bottoms, 1982; Bushardt, Fowler & Caveny, 1987). While studies identify androgynous and masculine sex-role behaviors with leadership and managerial success, no studies identify feminine sex-role behavior with success. Higher level managerial positions (from which mentors are selected) are often seen as masculine. On the other hand, lower level positions, (from which proteges are selected) are often viewed as feminine or undifferentiated (Guerin, Paksoy & Chandek, 1981; Myrick, Bushardt & Cadenhead, 1988; Schein, 1973; Sleeth & Humphreys, 1980). These studies suggest institutionalized power relationships tend to reflect sex-role behavior. While institutionalized power relationships and mentor/protege relationships both involve sex-role behavior, the latter is characterized by high levels of intimacy.

**Females and proteges.** Females, in maximizing their position in the genetic pool, are likely to select mates with respect to the resources they command (Chagnon, 1979; Daly & Wilson, 1978; Irons, 1979b). A desirable mate is a male of wealthy, powerful lineage, with a guaranteed income. These resources translate into power, status, and influence. Because the offspring of primates, and particularly humans, are underdeveloped at birth and have a long period before self-sufficiency, the female is likely to value supporting behavior in a mate in an effort to maximize her fitness (Betzig, 1986; Daly & Wilson, 1978; Glantz & Pearce, 1989).

Bushardt, Moore and Debnath (1982) identified the following criteria to be used by a protege in selecting a mentor: They can help you, you can help them, they can be trusted, and they have a successful track record. They suggest selecting a mentor who commands significant resources which can be used by the mentor to forward the protege's career. The mentor should have power, influence, and status (Auster, 1984; Collins, 1982; Ragins, 1989; Robinson, 1981; Schein, 1978).

In selecting a mentor with a proven track record, the possibility exists of being one of several proteges. This must be balanced against selecting an unproven mentor. This balancing act resembles the dilemma of females in a polygamous society who attempt to choose between a single mate of limited resources or to share resources with another competitive female in a polygamous relationship (Thornhill & Thornhill, 1983). The mating female and the protege both attempt to maximize their success. Verner and Wilson (1966) referred to this phenomenon as the polygamy threshold.

**Males and mentors.** In listing criteria for mate selection, males often list such behaviors as loyalty, dependability, helpfulness, and supportiveness. In selecting a mate, the prime criteria used by males is receptiveness, followed by being a good breeder, being a hard worker, and having fidelity (Daly & Wilson, 1978). In listing criteria that are important in selecting a protege, a group of mentors would be likely to list many of the same descriptors used by males in mate selection, just as a group of proteges would list criteria used by females in mate selection (Ropp, 1985).

Males of most species tend to be more indiscriminate in their mating behavior than are females (Thornhill, 1980). Males are more concerned with maximizing mating as a means of maximizing fitness. The male, although somewhat indiscriminate, seeks a mate who is supportive, helpful, and nurturing to the young. The penalty for bad mating is relatively low for the male because the initial investment is relatively small. The female, on the other hand, is likely to incur a far more severe penalty from a bad mating due to her investment and her limited reproductive opportunity (Alexander & Borgia, 1979; Thornhill & Thornhill, 1983).

In the mentor/protege relationship, mentors are likely to be more indiscriminate in selecting proteges because mentors can have several proteges concurrently and risk little for a poor choice. Successful proteges, however, rarely have more than one mentor at any given time (Hennig, 1970). A poor selection by the protege can sideline his or her career for many years (Collins, 1982, Reich, 1986).

Males are likely to stress fidelity on the part of their mate to a greater extent than females. This results from uncertainty associated with male paternity and the fear of being cuckolded (Thornhill, 1980). The uncertainty of paternity, when coupled with extensive parental investment by males in humans relative to other species, raises fidelity on the part of the female to a central criterion for establishing and maintaining a relationship (Alexander & Noonan, 1979; Benschhoof & Thornhill, 1979; Low, 1979). This same pattern appears in the mentor/protege relationship, in which the mentor supports and nurtures the protege and in return demands loyalty. Reproductive competition among males combined with the uncertainty associated with paternity have led to the development of elaborate behavioral patterns or anticuckolding strategies intended to exclude other males. While researchers have not directly addressed the mentor behavior used to insulate proteges from potential rival mentors, it appears likely that mentors would attempt to thwart others from exerting strong influence over their proteges.

### **Acquisition Strategies**

The mating process involves a mating dance rooted in biological and cultural origins that still thrives today only slightly battered by the feminism of the 1970s. The process assigns to the male the dominant role of initiating while the female displays receptiveness or a lack thereof. While the male is the initiator, the female is neither passive nor powerless in the grand pageantry of the mating dance (Van den Berghe, 1979).

In the mentoring process, potential proteges are in a similar position to the mating female, and they must project to potential mentors their receptiveness to mentoring. The prospective mentor has the dominant role of initiating the relationship, which characterizes mentor/protege relationships (Bearden, 1984; Cook, 1979; Missirian, 1980; Osborne, 1981; Thompson, 1976).

Females and proteges. While the male employs highly visible mating behavior, the female tends to orchestrate the mating dance by subtle projections of receptiveness (Low, 1979). Successful females tend to utilize a proactive strategy. This strategy often includes many nonverbal mating cues, such as eye contact, body movement, high visibility, active listening, appearing interested, and becoming indispensable to prospective male mates (Betzig, 1986; Glantz & Pearce, 1989).

Strategies designed by Bushardt et al. (1982) for cultivating a mentor are similar to those in mating behavior, namely: Maintain high visibility, display competency, become indispensable, appear interested and upwardly mobile. These proactive strategies, like the female mating cues, are subtle, yet they project receptiveness to a potential mentor (Gray, 1984; Jenkins, 1985; Kelly, 1984; Odiorne, 1985).

Males and mentors. Males are almost universally the more competitive sex, and they are usually the initiators of mating interaction. Furthermore, males as a group tend to be less discriminating in mating interactions and have a higher variance in reproductive success relative to females. This results in a select few males accounting for a disproportionate number of offspring.

The mentor, like the male in the mating dance, formally initiates the mentor/protege relationship. Bearden (1984) reported 96% of the mentor/protege relationships in her study were initiated by the mentor. The discrimination in selection of proteges relative to mentors and the variance in participation rates for the role of mentor and protege have not been adequately addressed in the literature (Hennig, 1970).

**Nonverbal cues.** Cohen (1982) identified nonverbal sexual cues used by males and females. Eye contact, smiling, posturing, and touching were used by females to communicate receptiveness. She suggested that in a work relationship these same cues are used to communicate status and power between males and females, lower status males and higher status males, and proteges and mentors regardless of gender. Henley and Thorne (1977) reported that many verbal and nonverbal interaction patterns, including self-disclosure, word and sentence structure, frequency of talking, and body language, are related to gender and status, with those interactions common to females being associated with lower status. Cues that signal lower status are more common in females and are used by lower status males in groups (Cohen, 1982; Henley & Thorne, 1977).

### Demographics

Given the different criteria and strategies used in mate selection, certain demographic differences between males and females should be evident. The marry-up, marry-down hypothesis suggests that males tend to marry down and females tend to marry up in terms of socioeconomic background (income, status, education, and family background). Demographic data lend strong support to this hypothesis (Dickeman, 1979a, 1979b, 1981; Glantz & Pearce, 1989).

A nearly universal characteristic of human marriages is that the male is older than the female (Daly & Wilson, 1978; Dickeman, 1979a, 1979b). From a physiological perspective this appears somewhat inverted until the reproductive strategy is introduced.

Females select older males because their resources are in place. Selecting a young male with potential, but as yet unacquired resources, would be a high-risk strategy. This marriage system in stratified societies is described as hypergenous and is characterized by intense competition for high status males (Dickeman, 1979a, 1979b).

The marry-up, marry-down hypothesis and supporting demographic data are found in our earliest knowledge of civilization and across all known cultures. An examination of the demographic variables associated with the mentor/protege relationship reveals strong parallels with the marry-up, marry-down hypothesis. Mentor/protege relationships almost universally have older mentors and younger proteges with an average age difference of 8 to 15 years (Fowler, 1984; Kram, 1983, 1980; Levinson, Darrow, Klein, M. Levinson, & McKee, 1977, 1978). Mentors tend to be older and have higher incomes as well as higher organizational status than their proteges (Levinson et al., 1977, 1978; Osborne, 1981). The similarity in demographic data of mating relationships and mentoring relationships results primarily from the similarity of selection criteria used in both relationships. While the knowledge and skills that are finely honed for the mating dance can be transferred to the mentoring process, it is the similarity of these two processes that creates the sexual themes within the mentor/protege relationship.

**Intensity, duration, and developmental stages.** Shapiro, Haseltine and Rowe (1978) suggested the presence of a general patron system based on a continuum of

involvement and power ranging from peers, to sponsors, to guides and finally to mentors. On this continuum, mentoring is regarded as the most complex relationship and has more strings attached. The intensity of the mentoring relationship is a hallmark that separates it from other informal work relationships (Anderson & Devanna, 1981; Levinson et al., 1977, 1978; Missirian, 1980; Woodlands Group, 1980).

Formal mentoring programs have become popular in many organizations and generally consist of junior members of the organization being paired with senior members of the organization. Organizations with formal mentoring programs attempt to facilitate the development of mentoring relationships between organizational members (Farrel, 1985; Hennecke, 1983; Phillips-Jones, 1983). The extent to which a mentor/protégé relationship occurs is dependent on the level of intimacy that develops within the relationship. Many of the arranged relationships are more likely to utilize sponsors or guides rather than mentors because the intimacy and level of involvement never develop to the level characteristic of a mentor relationship. Clearly, however, some of these arranged relationships do develop into mentor relationships and have the characteristics of those mentor relationships that were not arranged by the organization (Hennecke, 1983).

Helen Fisher (1990), in her studies of divorce, found strong evidence to suggest that four years is the biological time period for marriage. Her analysis of modern society divorce rates suggest that incidents of divorce tend to rise as couples approach four years of marriage and begin to decline rapidly after this period. The biological rationale suggests four years is the necessary period of time to raise a child to the point where the mother is no longer dependent on the male for support. Mentor/protégé relationships tend to last an average of two to three years and eight to ten years at most (Levinson, et al., 1978).

Kram (1983, 1980) identified the following four phases in a mentor relationship: Initiation, cultivation, separation, and redefinition. These or similar phases were reported in other studies (Hobbs, 1982; Larson, 1983; Missirian, 1980; Parr, 1980; Thomas, 1985). Hobbs (1982) used a similar four-phase paradigm, referring to the first phase as connecting, courting, and testing, and the second stage as the honeymoon and promise of a legacy phase. The language and the stages in the mentoring literature bear strong similarity to the biological literature on mating and function as a conduit metaphor. The conduit metaphor generates and promotes a superficial understanding, thereby discouraging a deeper examination of the underlying assumptions (Axley, 1984; Reddy, 1979).

**Power and dependency.** Belcher (1974) viewed institutionalized power relations within an exchange model as suggesting that each party to a transaction perceives they provide contributions which are less than the perceived benefits. In short term relationships, these contributions and benefits are highly specific; in long-term relationships, they tend to be less specific. Employees submit to organizational authority relationships in return for rewards and benefits provided by the organization. From a sociobiological perspective, individuals are attempting to maximize their fitness by participating in institutionalized relationships. The resources individuals acquire in institutionalized relationships are likely to exceed the resources they could acquire by independence for most individuals. As illustrated earlier, lower status males within a hierarchy often display feminine sex-role behavior, and these nonverbal cues of power and status are often identical to sex-role behavior (Daly & Wilson, 1978; Glantz & Pearce, 1989).

A mating relationship involves power and dependency which manifests itself in reciprocity. Gender differences are part of the basis for reciprocity, where each party

exchanges value with the belief they will receive fair value from the relationship (Glantz & Pearce, 1989). Submissive behavior by females may be exchanged for resources that the male brings to the relationship, but Daly and Wilson (1978) take strong issue with the idea that either sex wields more power than the other.

Auster (1984) viewed the mentor/protégé relationship from the conceptualization of a power-dependent, dyadic role set, where each person receives rewards from the exchange. Furthermore, he suggests "... a power imbalance in the direction of the mentor due to his or her greater supply of valued resources." This suggests the protégé's bargaining strength within an established relationship is weak and is fundamentally riskier for the protégé. It would appear that protégés tend to proffer submissive behavior in expectations of receiving rewards.

### Gender and Sex Roles in the Mentoring Process

A gender-based typology of mentor/protégé relationships indicates four combinations (Hunt and Michael, 1983). The typology is illustrated in Figure 1.

FIGURE 1

#### Gender of Protege

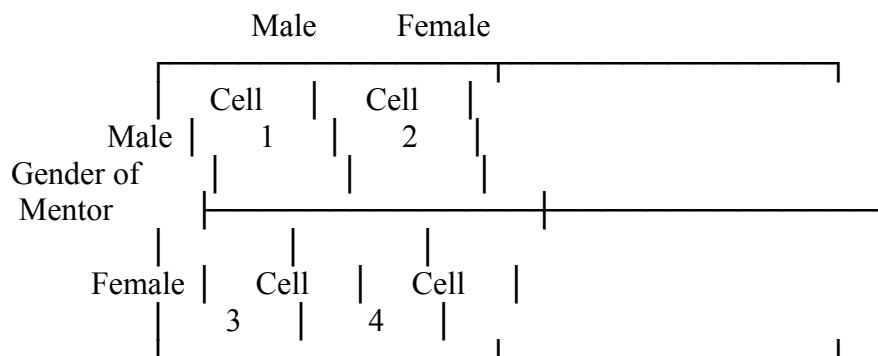


Figure 1: A gender-based typology of mentor/protégé relationships (Hunt & Michael, 1983).

In a mentor/protégé relationship, both parties are enacting a form of the mating dance with the mentor in the male sex role and the protégé in the female sex role. These roles are played in the mentor/protégé relationship regardless of the gender of the mentor or protégé. The underlying sexual theme involves the enactment of the mating dance. When gender of participants is juxtaposed with sex-role mating behavior, the problems of cross-gender mentoring are more readily understood. The interpersonal dynamics of a mentoring relationship are based on sex roles, but gender impacts the ability to conform to these sex roles. The reaction of others is also affected by the interaction of gender and sex roles (Kram, 1985).

### Cross-Gender Mentoring

**Cross-gender mentoring refers to a mentor/protégé relationship involving a male and female. In cross-gender mentoring, the latent and/or manifest sexual themes are likely to be very different depending on the alignment of gender and sex-role behavior.**

**Male-mentor/female-protégé. In cross-gender mentoring involving male mentors and female protégés, the sexual theme is most likely to emerge because mating sex roles and gender are aligned. The mating theme in mentoring has been popularized in such films as Educating Rita, A Star is Born, and My Fair Lady (Gilbert, 1983; Luft & Cukor, 1954; Warner & Cukor, 1964). Literature repeatedly portrays this mentoring relationship with an overt sexual theme (Osborne, 1981). The problems of sexual entanglement, spousal jealousy, and peer gossip have been addressed by others (Auster, 1984; Berry, 1983; Bushardt & Allen, 1988; Clawson & Kram, 1984; Epstein, 1970; Harris, 1980; Noe, 1988; Ragins, 1989; Thompson, 1976; Westoff, 1986).**

**Because of ambiguity between mentoring and mating strategies, and the matching of sex roles and gender, these problems particularly plague the heterosexual male-mentor/ female-protégé relationship. The similarity and ambiguity between mentoring and mating strategies in terms of selection criteria, acquisition strategies, and demographic variables foster misinterpretation by participants, spouses, and co-workers (Bushardt & Allen, 1988). The two processes, which are intertwined like a double-helix, are susceptible to evolving as a single strand in the male-mentor/female-protégé relationship (Clawson & Kram, 1984). Often the two are combined into a single relationship, as when husbands mentor wives (Atteberry, 1986, 1984; Diamond, 1978-1979; Taylor, 1985).**

**Clawson and Kram (1984) examined cross-gender mentoring outcomes and intimacy. While viewing intimacy as an integral part of effective mentoring, the authors suggest that intimacy can be productive or counter-productive depending on the extent to which romantic involvement occurs in the relationship or is perceived to occur by others. The authors suggest, "finding an appropriate balance of intimacy and distance which will allow a productive relationship to develop" (Clawson & Kram, 1984). Various authors have suggested suppressing or avoiding those cues which are signals to sexual involvement, such as using first names, discussing personal and private matters, meeting alone too frequently, closing the office door, and meeting after regular hours (Clawson & Kram, 1984). However, suppressing or avoiding the cues associated with sexual involvement are likely to inhibit the development of a mentoring relationship regardless of the gender of the participants because the intensity of involvement is what distinguishes mentoring relationships from other patron systems (Anderson & Devanna, 1981; Levinson et al., 1977, 1978; Missirian, 1980; Woodlands Group, 1986).**

**Female-mentor/male-protégé. While little information exists on female-mentor/male-protégé relationships, writers have generalized results from studies involving male mentors and female protégés (Auster, 1984; Clawson & Kram, 1984; Westoff, 1986). While a sexual mating theme underlies the relationship, the sexual theme is far more likely to remain latent, because the sex roles of participants are at odds with their gender. Furthermore, the latent sexual theme has strong overtones of the Oedipus complex, which is a major taboo in all societies. The relationship is less likely to illicit jealousy from co-workers and spouses because a sexual relationship would be at odds with demographic mating patterns and biological reproductive strategies. For these reasons, it appears wholly unwarranted to extrapolate results from studies on male-mentor/female protégé relationships to female mentors and male protégés. The two cases of cross-gender mentoring are fundamentally different. In one case, the sex roles for mating and mentoring match the physical gender, while sex roles and gender are mismatched in the other.**



## **Matched-Gender Mentoring**

**Matched-gender relationships contain an underlying homosexual theme, with the mentor enacting the male mating dance and the protege enacting the female mating dance. Societal and cultural taboos are quite strong in regard to homosexuality, hence the sexual theme is latent and manifested expressions are repressed by both parties as well as by peers and spouses. In mentoring relationships involving noncertified heterosexuals, the homosexual theme is more likely to be raised by observers and participants. Noncertified heterosexuals are defined as individuals currently nonbonded and lacking a history of heterosexual bonding. In this instance, the latent sexual theme tends to be less threatening and lacks the overt jealousy which often infiltrates the male-mentor/female-protégé relationship. Based on inferential data, Auster (1984) suggested that matched-gender mentoring is less likely to experience gender-related difficulties.**

### **Alternate Explanations of the Mentoring Process**

**Various explanations in the literature explore the underlying dynamics of the mentor/protégé relationship. The relationship has been explained in the context of life stages and of a parent/child relationship by Levinson et al.**

#### **Parent/Child Relationship**

**Writers have suggested a strong similarity of mentoring to parent/child relationships with the emphasis that mentors fill a father role in the protégé's development (Glover, 1986; Hobbs, 1982; Kahn, 1981; Kates, 1985; Watkins, 1980). Studies examining parent/child role identification have characterized the proteges in son or daughter roles based on gender. Father/son and father/daughter relationships provide different functions within each gender's development, suggesting that male protégés and female protégés should have varied expectations and experience. Studies show that females tend to stress the importance of role models and mentor relationships from a protégé's perspective more than men (Epstein, 1970; Gilbert, 1985; Oller, 1979; Walker, 1985). Schrader (1980) reported no difference by gender in expressed need for a mentor. Atcherson and Jenny (1983) and Barnier (1981) reported that many females do not perceive mentoring as being generally available to them. Other studies suggest highly similar experiences by protégés regardless of gender (Bearden, 1984; Gordon, 1983). The general similarity of protégés' experiences suggests gender is not central to the mentoring process for those involved but may inhibit the development of a mentoring relationship.**

**Attempts to explain mentoring in the context of a parent/child relationship utilize parental sex roles as defined by gender to explain the underlying interpersonal dynamics and leave many questions unanswered. Levinson et al. (1977, 1978) separate parental identification from the mentoring process. They suggest that the mentor is not a parent, nor is the relationship paternalistic. The relationship is more appropriately viewed in the context of a mating relationship with mentors functioning in the role of the male protégés in the role of the female.**

#### **Levinson's Life Stages**

Using the views of Freud, Jung and Erikson as a foundation for explanation, Levinson et al. (1977, 1978) examined male adult development during transitional periods. Mentors support and facilitate the realization of the protégé's dream, playing an active role in young men's lives during their 20s and 30s, but rarely beyond 40.

Levinson et al. (1977, 1978) identify the mid-life crisis as occurring in one's 40s. Erikson identifies this stage as involving one's relationship to future generations and particularly the next generation. Mid-life crisis is followed by mid-life transition, the stage where accepting responsibility as a mentor is more likely to occur. At this stage, men tend to integrate more feminine aspects of the self.

The description by Levinson et al. (1977, 1978) of life stages for males is supported by other studies (Gooden, 1980; Hobbs, 1982; McCallus, 1980; Mega, 1980). Studies examining male and female subjects, or females only, suggest Levinson's work is not gender bound (Bova & Phillips, 1981; Goldstine, 1985; Lea, 1981). Burke (1984) and Quinn (1980) supported Levinson's work in general, but did not find the mentoring relationships ending in disharmony. Explanations of why life stages exist reflect the views of Freud, Jung and Erikson and have received little empirical testing.

The work of Levinson et al. (1977, 1978) does not incorporate sociobiology per se as an explanation of life stages and mentoring, but their work appears readily explainable within this context. They suggest, "there are . . . parallels between a man's relationship with a mentor and with a special woman" (1978). During mid-life transition, marital problems often erupt and extramarital relationships develop. Mid-life transition is followed by middle adulthood where mentoring relationships usually develop. Mentoring relationships appear to meet many of the basic needs of intimacy that extramarital affairs provide, and they may function as a substitute for mating behavior, which carries strong societal moral judgment. Adult development appears to support the mentoring process as being interwoven with biological reproductive strategies. Adult development within the context of sociobiology and mentoring needs further examination.

### **Implications and Directions for Research**

Future research in mentoring utilizing a sociobiological conceptualization should further examine latent and manifest sexual themes in the mentor/protégé relationship. In addition, researchers should examine sex-role behavior associated with reproductive variance, anticuckolding strategies, polygamous threshold, and power/dependency exchanges relative to the mentor/protégé relationship.

**Sexual themes.** The presence of sex-role behavior in the mentor/protégé relationship leads to latent and manifest sexual themes. The parallels between mentoring and reproductive strategies identified within sociobiology occur because the sexual themes are present within the relationship. Additional study is needed to examine the extent to which the homosexual theme is raised among matched gender mentor/protégé relationships involving nonbonded participants. Research is also needed to examine matched gender mentor/protégé relationships and the conditions where the sexual theme becomes manifest. In addition, further research is needed into formal mentoring programs. Specifically, to what extent do planners consider gender and other demographic variables when establishing a relationship?

**Sex-role behavior.** Sex-role behavior and gender for an individual can be independent constructs and have been treated as such here. In essence, one can display either or both masculine or feminine sex-role behavior, regardless of gender.

**However, within a societal or cultural context, gender and sex-role behavior cannot be independent constructs, because sex-role behavior is defined as those behaviors commonly associated with a specific gender. If a sample was drawn at random from a population, one would expect the males on average to display more masculine and less feminine sex-role behavior. The reverse would tend to be true for females. The failure to differentiate sex-role behavior and gender for individuals is sex-role stereotyping.**

If mentors enact masculine sex-role behaviors and protégés enact feminine sex-role behaviors as suggested here, it would appear that for any random sample of the population, males would tend to be more comfortable in the mentoring role than females, and that females would perceive a more natural fit as protégés. Additional research is needed regarding sex-role behavior, gender, and mentoring roles.

As individuals age they tend to become more androgynous. Males tend to adopt more feminine behavior and females tend to adopt more masculine behavior. Future research should examine the change in sex-role behavior by mentors and protégés as the relationship advances through the stages commonly identified in the literature. Specifically, as the protégé develops, does he or she demonstrate more masculine behavior? If so, is this a source of conflict that leads to the often-unhappy break in the relationship as reported by Levinson et al. (1978) and others?

Reproductive variance. Males vary in their reproductive success more than females (Cox & LeBoeuf, 1977; Chagnon, Flinn & Melancon, 1979; Daly & Wilson, 1978; Vogel, 1987). For any given society, however, the average number of offspring produced by males and females is equal. Within the mentoring relationship, it would appear that the role of protégé is more widely available for individuals than the role of mentor. More study is needed to identify the qualities and characteristics associated with being a successful mentor. Additional study is needed to ascertain the participation rates for mentors and protégés. The socio-biological conceptualization suggests that relatively few individuals will be successful mentors and that those who are successful will tend to have had several protégés. On the other hand, individuals who have been protégés are likely to report having had only a few mentors in their lives.

Anticuckolding strategies. The considerable risk assumed by males in investing time and resources in nurturing offspring which may have been sired by others has led them to develop elaborate strategies to avoid being cuckolded, while cuckolding others at the same time. The most notable sexual double standard, emphasis on female virginity, has been evident in both civilized and primitive societies as well as throughout history (Barash, 1979; Daly & Wilson, 1978; Kurland, 1979).

Within the mentoring relationship, mentors risk having other potential mentors exert strong influence over their protégés. Additional research is needed to ascertain the extent to which mentors attempt to restrict protégés' interactions and the methods used. How critical is fidelity on the part of protégés within a mentoring relationship? The mentor literature does not address co-opting of protégés by rival mentors. A sociobiological conceptualization with latent and manifest sexual themes suggests these behaviors are likely to be undercurrents within a mentor/protégé relationship.

Polygamous threshold. Mating females in a polygamous society must weigh the advantages of a single mate of limited resources against sharing resources in a polygamous relationship. Future research should examine the decision-making process used by proteges who are involved with mentors who have multiple protégés concurrently. The sociobiological conceptualization suggests it is unusual for a protégé to have more than one mentor at a time

unless the mentors are unaware of each other. Research into these decision-making trade offs and the frequency of this phenomena is needed.

**Power/dependency exchange.** Mating females often exchange submissive behavior in return for resources the male brings to the relationship. Further research is needed regarding the nature of power/dependency within the mentor/protege relationship, with particular emphasis on the exchange of submissive behaviors by proteges for the resources of the mentor and the underlying dynamics that result.

### Summary

This article suggests a sociobiological perspective be utilized as a basis for understanding the mentor/protege relationship as the presence of sex-role behavior leads to latent and manifest sexual themes that shape the interaction. Current research which ignores our cultural and biological heritage can advance a limited understanding of the dynamic and complex process involved in the relationship. This is particularly true in the case of a male-mentor and female-protege relationship, which is enmeshed in the web of primitive society with congruent sex roles and gender. An evolutionary perspective facilitates a greater understanding of the interplay of sex-role behavior, the underlying sexual themes, and gender on the mentoring process. While many questions are unanswered, new directions for study which tender considerable promise are offered from a sociobiological perspective.

## REFERENCES

- Alexander, R. D. & Borgia, G. (1979). On the origin and basis of the male-female phenomenon. In M. S. Blum & N. A. Blum (Eds.), Sexual selection and reproductive competition in insects. New York: Academic Press.
- Alexander, R. D. & Noonan, K. M. (1979). Concealment of ovulation, parental care, and human social evolution. Evolutionary biology and human behavior: An anthropological perspective. Mass: Duxbury Press.
- Anderson, C. & Devanna, M. A. (1981). Mentors: Can they help women get ahead? Columbia University Career Development Bulletin, 2(2), 5-8.
- Apple, C. G. (1985, April). Mentors and rumor management: The case of Bendix. Paper presented at the Annual Meeting of the Central States Speech Association, Indianapolis, IN.
- Atcherson, E. & Jenny, J. (1983, November). What about mentors and women in academe? Paper presented at the Ninth Annual Midyear Conference of the American Educational Research Association, Research on Women and Education Special Interest Group, Tempe, AZ.
- Atteberry, R. D. (1984). The phenomenon of spousal mentoring among female upper-level university administrators: Components, progression, duration and impact. Unpublished doctoral dissertation, Pepperdine University.
- Atteberry, R. D. (1986). Mentors for females university administrators: Spouse identified. In W. A. Gray & M. W. Gray (Eds.), Mentoring: Aid to excellence in career development business and the professions, 11, 66-73. Proceedings of the First International Conference on Mentoring, Vancouver, Canada.
- Auster, D. (1984). Mentors and proteges: Power-dependent dyads. Sociological Inquiry, 54(2), 142-153.
- Axley, S. R. (1984). Managerial and organizational communication in terms of conduit metaphor. Academy of Management Review, 9(3), 428-437.
- Barash, D. (1979). The whispering within. London: Penguin.
- Barnier, L. A. (1981). A study of the mentoring relationship: An analysis of its relationship to career and adult development in higher education and business. Unpublished doctoral dissertation, Idaho State University.
- Bearden, K. W. (1984). Women proteges' perceptions of the mentoring process. Unpublished doctoral dissertation, University of Louisville.
- Belcher, D. W. (1974). Compensation administration. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bem, S. L. (1974b). On the utility of alternative procedures for assessing psychological androgyny. Journal of Consulting and Clinical Psychology, 45(2), 196-205.
- Bem, S. L. (1974a). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42(2), 155-62.
- Bem, S. L. (1975). Sex role adaptability: One consequence of psychological androgyny. Journal of Personality and Social Psychology, 31(4), 634-43.
- Bensahel, J. G. (1977). Let your protege make his own way. International Management, 32(5), 44-46.
- Benshoof, L. & Thornhill, R. (1979). The evolution of monogamy and concealed ovulation in humans. Journal of Social Biology Structure, 2, 95-106.

- Berry, P. (1983). Mentors for women managers: Fast-track to corporate success. Supervisory Management, 28(8), 36-40.
- Betzig, L. L. (1986). Despotism and differential reproduction: A Darwinian view of history. New York: Aldine Publishing Company.
- Bolton, E. B. (1980). A conceptual analysis of the mentor relationship in the career development of women. Adult Education, 30(4), 195-207.
- Bottoms, L. W. (1982). The interrelationship among sex-roleorientation, self-actualization and significant issues of high-achieving, executive women. Unpublished doctoral dissertation, Georgia State University.
- Bova, B. M. & Phillips, R. C. (1981). The mentor relationship: A study of mentors and proteges in business and academia. (Source ERIC 208 233).
- Bowen, D. D. (1985). Were men meant to mentor women? Training and Development Journal, 39(2), 31-36.
- Burke, R. J. (1984). Mentors in organizations. Group and Organization Studies, 9(3), 353-372.
- Bushardt, S. C. & Allen, B. (1986, May). Male-mentor and female-protege: Problems and opportunities. Paper presented at the Women and Work Symposium, sponsored by the University of Texas, Arlington, TX.
- Bushardt, S. C. & Allen, B. (1988). Role ambiguity in the male mentor/female protege relationship. Equal Opportunities International, 7(2), 5-8.
- Bushardt, S. C., Fowler, A. & Caveny, R. (1987). Sex-role behavior and leadership: An empirical investigation. Leadership and Organizational Journal, 8(4), 13-16.
- Bushardt, S. C., Moore, R. W. & Debnath, S. C. (1982). Picking the right person for your mentor. Advanced Management Journal, 47(3), 46-51.
- Chagnon, N. A. (1979). Is reproductive success equal in egalitarian societies? In N. A. Chagnon & W. G. Irons (Eds.), Evolutionary biology and human social behavior: An anthropological perspective. North Scituate: Duxbury Press.
- Chagnon, N. A., Flinn, A. V., & Melancon, T. F. (1979). Sex- ratio variation among the Yanomamu Indians. In A. Chagnon and W. Irons, (Eds.) Evolutionary biology and human social behavior.
- Clawson, J. G. & Kram, K. E. (1984). Managing cross-gender mentoring. Business Horizons, 27(3), 22-32.
- Cohen, L. R. (1982). Minimizing communication breakdowns between male and female managers: Sex role cues create tension at the office. Personnel Administrator, 27(10), 57-58, 60, 89.
- Collins, R. L. (1982, March). Colonialism on campus: A critique of mentoring to achieve equity in higher education. Paper presented at the Annual Meeting of the American Educational Research Association, New York. (March 19-26). (Available from Foundations of Education Department, M2 #2, University of Cincinnati, Cincinnati, OH).
- Cook, M. F. (1979). Is the mentor relationship primarily a male experience? Personnel Administrator, 24(11), 82-86.
- Cox, C. R. & LeBoeuf, B. J. (1977). Female incitation of male competition: A mechanism in sexual selection. The American Naturalists, 3(978), 317-335.
- Crandall, H. B. (1981). Are mentors necessary for successful careers. Direct Marketing, 44(6), 124-130.

- Cunningham, M. (1984). Powerplay: What really happened at Bendix. New York: Simon and Schuster.
- Daly, D. & Wilson, M. (1978). Sex evolution and behavior. North Scituate, Mass: Duxbury Press.
- Darling, L. W. (1985). What to do about toxic mentors. The Journal of Nursing Administrators, 15(5), 43-44.
- Darwin, C. (1871). The descent of man and selection in relation to sex. Murray, London.
- Diamond, H. (1978-1979). Husband as mentor: You can do it: An interview with Stelle Fevers. Educational Horizons, 57(2), 90-96.
- Dickeman, M. (1979a). Female infanticide, reproductive strategies and social stratification: A preliminary model. In N. A. Chagnon & W. G. Irons (Eds.), Evolutionary biology and human social behavior: An anthropological perspective. North Scituate, Mass: Duxbury Press.
- Dickeman, M. (1979b). The ecology of mating systems in hypergynous dowry societies. Biology and Social Life, 18, 163-195.
- Dickeman, M. (1981). Paternal confidence and dowry competition: A biocultural analysis of Purdah. In R. Alexander & D. Tinkle (Eds.), Natural selection and social behavior. New York: Chiron Press.
- Durant, W. (1935). The story of civilization: Our oriental heritage. New York: Simon and Schuster (Vol. 1).
- Epstein, C. F. (1970). Encountering the male establishment: Sex-status limits on women's careers in the professions. American Journal of Sociology, 75, 965-982.
- Farrel, J. W. (1985). A unique approach to management development. Traffic Management, 24(1), 44-46.
- Fisher, H. (1990). Sex, monogamy, and adultery and divorce: Where did we come from? where are we going? Lecture given as part of the University of Southern Mississippi Honor's Forum on March 20, Hattiesburg, Mississippi.
- Fitt, L. W. & Newton, D. A. (1981). When the mentor is a man and the protege is a woman. Harvard Business Review, 59(2), 50, 80, 60.
- Fowler, J. W. (1984). Becoming adult, becoming christian. San Francisco: Harper & Row.
- Gilbert, L. (Producer & Director). (1983). Educating Rita [Film]. Burbank, CA: Columbia Pictures.
- Gilbert, L. A. (1985). Dimensions of same-gender student-faculty role-model relationships. Sex Roles, 12(1-2), 111-123.
- Glantz, K. & Pearce, J. K. (1989). Exiles from Eden: Psychotherapy from an evolutionary perspective. New York: W. W. Norton & Company.
- Glover, W. C. Jr. (1986). Mentors and fathers: A study of male developmental relationships. Unpublished doctoral dissertation, The Wright Institute, (Berkeley).
- Goldstine, S. D. (1985). Mentoring adult development, and the career advancement of women leaders. Unpublished doctoral dissertation, Columbia University Teachers College.
- Gooden, W. E. (1980). The adult development of black men. Unpublished doctoral dissertation, Yale University.
- Gordon, C. I. (1983, September). Toward a conceptual framework of the mentor-mentee relationship. Unpublished doctoral dissertation, Boston University School of Education.



- Gray, M. M. (1984). Looking ahead: Prospective-taking by mentors. Paper presented at the XXIII International Congress of Psychology, Mexico.
- Guerin, V. S., Paksoy, C. H., & Chandek, M. (1981). Relationship of androgyny to success and satisfaction of managers. Proceedings of the Southern Management Association, pp. 162-164.
- Harris, T. G. (1980). Godfathers and gossips. Industry Week, 207(2), 32-37.
- Henley, W. & Thorne, B. (1977). Woman speak and men speak: Sex differences and sexism in communication, verbal and nonverbal. In Alice G. Sargent (Ed.), Beyond Sex Roles. New York: West Publishing Company.
- Hennecke, M. H. (1983). Mentors and proteges: How to build relationships that work. Training, 20(7), 36-41.
- Hennig, M. (1970). Career development for women executives. Unpublished doctoral dissertation, Harvard University.
- Hobbs, S. J. (1982). Male mentor relationships: A study of psychological development in early adulthood. Unpublished doctoral dissertation, California School of Professional Psychology, Berkley.
- Hunt, D. M. & Michael, C. (1983). Mentorship: A career training and development tool. Academy of Management Review, 8(3), 475-485.
- Irons, W. (1979a). Natural selection, adaptation, and human social behavior. In N. A. Chagnon and W. G. Irons (Eds.), Evolutionary biology and human social behavior: An anthropological perspective. North Scituate, Mass: Duxbury Press.
- Irons, W. (1979b). Cultural and biological success. In N. A. Chagnon and W. G. Irons (Eds.), Evolutionary biology and human social behavior: An anthropological perspective. North Scituate, Mass: Duxbury Press.
- Jenkins, S. Y. (1985). Gender differences in graduate student relationships with their major faculty advisors. Unpublished doctoral dissertation, University of Oregon.
- Johnson, M. C. (1980). Mentors--The key to development and growth. Training and Development Journal, 34(7), 55, 7.
- Kahn, D. G. (1981). Fathers as mentors to daughters. Working paper, Radcliffe Institute.
- Kates, J. (1985). In search of professionalism. City Woman, 8(1), 34-42.
- Kelly, K. (1984). Initiating a relationship with a mentor in student affairs. NASPA Journal, 21(3), 49-54.
- Kitcher, P. (1985). Vaulting ambition: Sociobiology and the quest for human nature. Cambridge, Mass: The MIT Press.
- Konner, M. (1982). The Tangled Wing. New York, NY: Holt, Rinehart and Winston.
- Kram, K. E. (1980). Mentoring at work: Developmental relationships in managerial careers. Unpublished doctoral dissertation, Yale University.
- Kram, K. E. (1983). Phases of the mentor relationship. Academy of Management Journal, 26(4), 608-25.
- Kram, K. E. (1985). Mentoring at work. Organizational Behavior and Psychology Series. Glenview, IL: Scott, Foresman and Company.

- Kurland, J. A. (1979). Paternity, mothers's brother, and human sociality. In N. A. Chagnon and W. G. Irons (Eds.), Evolutionary biology and human social behavior: An anthropological perspective. North Scituate, Mass: Duxbury Press.
- LaFrance, M. (1981, August). Women and the mentoring process: Problems, paradoxes and prospects. Paper presented at the Annual Meeting of the American Psychological Association, Los Angeles.
- Larson, L. L. (1983). Mentoring relationships in banking: Enriching lives, careers, organizations. Unpublished doctoral dissertation, The Fielding Institute.
- Lea, H. D. (1981). Relationship of Levinson's concept of dream and mentor to the psychological consistency and congruence of work histories. Unpublished doctoral dissertation, University of Maryland.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1977). Periods in the adult development of men: Ages 18 to 45. In Alice G. Sargent (Ed.), Beyond Sex Roles. New York: West Publishing Company.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). The seasons of a man's life. New York: Balentine Books.
- Low, B. S. (1979). Sexual selection and human ornamentation. In N. A. Chagnon and W. Irons (Eds.), Evolutionary biology and human behavior: An anthropological perspective. North Scituate, Mass: Duxbury Press.
- Luft, S. (Producer) and Cukor, G. (Director). (1954). A Star is Born [Film]. Burbank, CA: Warner Bros. Pictures, Inc.
- Lumsden, C. J. & Wilson, E. O. (1983). Promethean fire: Reflections on the origin of mind. Cambridge, Mass: Harvard University Press.
- McCallus, C. J. (1980). The relationship of perceived instructional mentor influence to student educational development. Unpublished doctoral dissertation, University of Tulsa.
- Mega, R. J. (1980). A study of male mid-life voluntary career change. Unpublished doctoral dissertation, University of Pittsburgh.
- Missirian, A. K. (1980). The process of mentoring in the career development of female managers. Unpublished doctoral dissertation, The University of Massachusetts.
- Myers, D. W. & Humphreys, N. J. (1985). The caveats in mentorship. Business Horizons, 28(4), 9-14.
- Myrick, M., Bushardt, S. C., & Cadenhead, G. (1988). Managerial success: Sex-role behavior and nursing leadership. Today's O.R. Nurse, 10(9), 31-34.
- Noe, R. A. (1988). Women and mentoring: A review and research agenda. Academy of Management Review, 13(1), 65-78.
- Oller, C. S. (1979, April). Differential experiences of male and female aspirants in public school administration: A closer look at perceptions within the field. Paper presented at the Annual Meeting of the American Education Research Association, San Francisco.
- Odiorne, G. S. (1985). Mentoring--An American management innovation. Personnel Administrator, 30(5), 63-70.
- Osborne, N. (1981). An analysis of female mentor relationship. Unpublished doctoral dissertation, Arizona State University.
- Parr, V. E. (1980). The impact of mentor relationships on the career progress and personal growth of women. Unpublished masters thesis, Simon Fraser University.

Phillips-Jones, L. (1982). Mentors and proteges: How to establish, strengthen and get the most from a mentor/protege relationship. New York: Arbor House.

Phillips-Jones, L. (1983). Establishing a formalized mentoring program. Training & Development Journal, 37(2), 38, 40-42.

Quinn, B. C. (1980). The influence of same-sex and cross-sex mentors on the professional development and characteristics of women in human services. Unpublished doctoral dissertation, Western Michigan University.

Ragins, B. R. (1989). Barriers to mentoring: The female manager's dilemma. Human Relations, 42(1), 1-22.

Reddy, M. (1979). The conduit metaphor--A case of frame conflict in our language about language. In A. Ortony (Ed.), Metaphor and Thought. Cambridge, England: Cambridge University Press.

Reich, M. (1985). The mentor connection. Personnel, 63(2), 50-56.

Robinson, P. H. (1981). The influence of mentors upon the career development of business education graduates. Unpublished doctoral dissertation, Ohio State University.

Ropp, V. A. (1985). A metatheoretical analysis of attributing theory and social structure: A case study of mentor-protege partnerships. Unpublished doctoral dissertation, University of Washington.

Schein, V. E. (1973). Relationship between sex-role stereotype & requisite management characteristics. Journal of Applied Psychology, 57(2), 95-100.

Schein, E. H. (1978). Career dynamics: Matching individual and organizational needs. Reading, MA: Addison Wesley.

Schrader, E. M. (1980). Personality characteristics of the woman-to-women mentor in the career arena. Unpublished doctoral dissertation, University of Colorado at Boulder.

Shapiro, E. C., Haseltine, F. P. & Rowe, M. P. (1978). Moving up: Role models, mentors and the "patron system". Sloan Management Review, 19(3), 51-58.

Sleeth, R. G. & Humphreys, L. W. (1980). Influence on managerial attitudes: Sex and androgyny. Proceedings of the Southern Management Association, 269-71.

Smith, V. A. (1923). Oxford History of India. Oxford: University Press.

Taylor, A. (1985). The characteristics of mentoring activity and the type of mentoring help received by nurse administrators in British Columbia. Unpublished masters thesis, University of British Columbia.

Thomas, T. K. (1985). Mentoring in career development of Illinois Community College presidents. Unpublished doctoral dissertation, Northern Illinois University.

Thompson, J. (1976). Patrons, rabbis, mentors--Whatever you call them, women need them too. MBA (Master in Business Administration), 10(2), 27,30.

Thornhill, R. (1980). Choosy females and competitive and charming males: Was Darwin correct? Fla. Ent., 63, 5-30.

Thornhill, R. & Thornhill, N. W. (1983). Human rape: An evolutionary analysis. Ethology and Sociobiology, 4(3), 137-173.

Van den Berghe, P. (1979). Human family systems. New York: Elsevier, North Holland.

Verner, J. & Wilson, M. F. (1966). The influence of habitats on mating systems of North American Passerine birds. Ecology, 47, 143-147.

Vogel, J. (1987). The economic implications of sociobiology and evolution from an economic viewpoint: Another look at entropy. Unpublished doctoral dissertation, Rutgers University.

Walker, W. B. (1985). Mentor/protege relationships of male and female elementary and middle school principals. Unpublished doctoral dissertation, Northern Illinois University.

Warner, J. L. (Producer), & Cukor, G. (Director). (1964). My Fair Lady [Film]. Burbank, CA: Warner Bros. Pictures, Inc.

Watkins, B. (1980, April). Training educational opportunity researchers: Some sobered thoughts on mentoring, some optimistic thoughts on community. Paper presented at the 64th Annual Meeting of the American Educational Research Association, Boston.

Westoff, L. A. (1986). Mentor or lover? Working Woman, 11(10), 16-19.

Wilson, E. O. (1975). Sociobiology: The new synthesis. Cambridge, Mass: The Belknap Press of Harvard University Press.

Woodlands Group. (1980). Management development roles: Coach, sponsor and mentor. Personnel Journal, 59(11), 918-921.