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Special Features

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The following individuals reviewed manuscripts for this volume of the *Journal of Psychological Inquiry*. We gratefully acknowledge their valuable contributions to the journal.

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Acknowledgement - Institutions and Organizations

Cover Design

The creation of the graphic for the logo came about by thinking of how ideas are formed and what the process would look like if we could see into our brains. The sphere represents the brain, and the grey matter inside consists of all the thoughts in various stages of development. And finally, the white spotlight is one idea that formed into a reality to voice.

The entire logo is an example of creation in the earliest stages.

Cathy Solarana

Graphic Designer

Acknowledgement - Psychology Students

Instruction for Contributors

The *Journal of Psychological Inquiry* encourages undergraduate students to submit manuscripts for consideration. Manuscripts may include empirical studies, literature reviews, and historical articles; manuscripts may cover any topical area in the psychological sciences. Write the manuscript for a reading audience versus a listening or viewing audience.

1. Manuscripts must have an undergraduate as the primary author. Manuscripts by graduates will be accepted if the work was completed as an undergraduate. Graduate students or faculty may be co-authors if their role was one of teacher or mentor versus full fledged collaborator.

2. Manuscripts must (a) have come from students at institutions sponsoring the Great Plains Students' Psychology Convention and the *Journal of Psychological Inquiry* or (b) have been accepted for or presented at the meeting of the Great Plains Students' Psychology Convention, the Association for Psychological and Educational Research in Kansas, the Nebraska Psychological Society, or the Arkansas Symposium for Psychology Students. The preceding conditions do not apply to manuscripts for the Special Features section.

3. Send original manuscripts only. Do not send manuscripts that have been accepted for publication or that have been published elsewhere.

4. All manuscripts should be formatted in accordance with the APA manual (latest edition).

5. Empirical studies should not exceed 15 double-spaced pages; literature reviews or historical papers should not exceed 20 double-spaced pages. The number of pages excludes the title page, abstract, references, figures, and tables. We expect a high level of sophistication for literature reviews and historical papers.

6. The *Journal* requires four (4) manuscripts in near letter quality condition using 12 point font. Faded or poor quality printing may be grounds for returning materials without review.

7. Insert a self-addressed, stamped postcard. On the reverse side of the card, write the name of the primary author and the title of the manuscript.

8. Include a sponsoring statement from a faculty supervisor. (Supervisor: Read and critique papers on content, method, APA style, grammar, and overall presentation.) The sponsoring letter should indicate that the supervisor has read and critiqued the manuscript. In addition, assert that the research adhered to the APA ethical standards. Finally, confirm that the planning, execution, and writing of the manuscript represents primarily the work of the undergraduate author(s).

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11. Ordinarily, the review process will be completed in 60 days.

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Relating Hope, Sex-Role, and Interpersonal Flexibility

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Allison, Kollenbroich-Shea, and Davis (1996) found that androgynous and masculine people had higher levels of Snyder's (1991) concept of hope. The present study sought to replicate those findings and investigate the relationship between hope and interpersonal flexibility. A total of 317 undergraduates completed the Hope Scale, Bem Sex-Role Inventory, Battery of Interpersonal Capabilities, and a demographic information sheet. Results replicated previous findings that more androgynous and masculine individuals were generally more hopeful, however there was no evidence for a relation between behavioral flexibility and hope. Suggestions for future research include examining the relation between hope and its external manifestations and between hope and interpersonal flexibility in the context of goal attainment.

Researchers have tried to explain the relationship between hope and goal-seeking behavior for many years. Much of the ensuing debate has centered on the definitions of hope. The public often defines hope as the perception that something desired will happen, and professionals often portray hope as an overall perception that people's goals will be met. The history of hope's definition can be traced to Stotland (1969), who defined it as an expectation greater than zero of attaining a goal, and Averill, Catlin, and Chon (1990), who defined hope as an emotion governed by cognitive rules. In 1988, Snyder et al. conceptualized hope as a reciprocal relationship between a person's (a) cognitive energy to move toward one's goal (willpower) and (b) perceived ability to generate routes to those goals (waypower). In other words, hope is a combination of a sense of successful determination and the perceived availability of avenues for reaching desired goals, a general cognitive outlook that is applicable across many settings and to many goals (Snyder et al., 1991).

Hope is often confused with optimism and self-efficacy. The concepts of optimism and self-efficacy share several characteristics with hope but are separated from it by one important concept--waypower. Optimism is a generalized expectation that good things will happen in the future, and self-efficacy is a person's confidence about the success of a particular behavior for reaching a desired goal. Although both of these concepts stress the importance of outcome beliefs, neither concept addresses the beliefs surrounding the available strategies for accomplishing the goal (Snyder et al., 1991). Waypower is the construct that distinguishes hope from optimism and self-efficacy.

Individuals with high hope scores, as conceptualized by Snyder et al. (1991), generally achieve their desired goals with more success and attain goals that were more complex. For example, high hope individuals, given a choice among tests with various degrees of difficulty, pick the more difficult choices. Additionally, high hope individuals are more likely to experience greater life happiness, experience less distress, and possess better coping skills than low hope individuals. In other words, high hope is associated with superior performance. However, the relationships between hope and sex-role and hope and interpersonal flexibility remains less clear.

Although no differences in amount of hopefulness were found between men and women, Snyder (1995) did not examine the contribution of sex-roles. Sex-roles are the masculine and feminine traits individuals use to guide their behaviors. Individuals who have traditional masculine or feminine sex-role traits tend to behave in a manner that is congruent with their respective sex. Individuals who combine masculine and feminine traits are considered androgynous and tend to be more adaptive and flexible (Bem, 1974; Hayes & Davis, 1993). Allison, Kollenbroich-Shea, and Davis (1996) investigated the relationship between hope and sex-roles and found higher levels of hope among highly masculine and androgynous individuals than among feminine and non-androgynous individuals. These differences for androgyny appear within the level of masculinity individuals endorsed. In fact, women endorsing a high level of femininity only scored high in hope if they also scored high in masculinity.

Interpersonal behavior is the behavior exhibited by individuals when they are relating to other humans. To be flexible, an individual's interpersonal behavioral reper-

toire must have a variety of responses and the individual must be able to choose the most appropriate response for a particular situation (Hayes & Davis, 1993). Individuals who are interpersonally flexible are able to adapt their behavior to meet the goal of the moment (Miller, Davis, & Hayes, 1993). Although studies have not directly examined the relationship between hope and interpersonal flexibility, the waypower component of hope highlights the importance of interpersonal flexibility. Waypower is the ability to generate successful plans, and interpersonal flexibility should enhance this characteristic by making more options available. Thus, one would anticipate the existence of a positive correlation between measures of interpersonal flexibility and waypower.

The purpose of the present study was to examine the relationship between (a) sex-roles and hope (thus replicating the findings of Allison, Kollenbroich-Shea, and Davis, 1996) and (b) between hope and interpersonal flexibility. We hypothesized that more androgynous individuals would reveal higher levels of hope and that individuals with more interpersonally flexibility would also report higher amounts of hope.

Method

Participants

Participants were 343 undergraduate students from two medium size Midwestern universities. Of the 343 participants, 317 students (138 men and 179 women) fully completed the instruments. Students were enrolled in introductory psychology classes and received a research participation point for completing the survey.

Instruments

Instruments included the Hope Scale (Snyder et al., 1991), Bem Sex Role Inventory (BSRI; Bem, 1974), Battery of Interpersonal Capabilities (BIC; Paulhus & Martin, 1987), and a demographic information sheet. The Hope Scale consists of four items that measured willpower, four items that measured waypower, and four filler items. Each item was rated on a Likert scale ranging from 1 (*definitely false*) to 4 (*definitely true*). An example of a statement assessing willpower is, "I energetically pursue my goals," and an example of an item assessing waypower is, "I can think of many ways to get the things in life that are most important to me." For the total Hope scale, Cronbach alphas ranged from .74 to .84, with item-remainder coefficients of .23 to .63 (Snyder et al., 1991). The scale has a 6-week test-retest reliability

coefficient of .79, and a factor analysis revealed the waypower questions load on one factor and the willpower questions load on another factor (Snyder, 1989). Evidence supporting the Hope Scale's concurrent validity consisted of a negative correlation (-.51) between the Hopelessness Scale of Beck et al. and a positive correlation (.58) with the Optimism Scale of Scheier and Carver (Snyder, 1989).

The BSRI consists of 60 items assessing masculinity (n = 20), femininity (n = 20), and androgyny (n = 20). A 7-point Likert scale ranged from 1 (*never or almost never true*) to 7 (*always or almost always true*). The masculinity score equals the mean self-rating for endorsed masculinity items, and the femininity score equals the mean self-rating for endorsed femininity items. The androgyny score is the t ratio for the difference between the masculinity and the femininity scores (Bem, 1974). An example of a word assessing masculinity is "dominant" and an example of a word assessing femininity is "compassionate." Bem (1974) computed the internal consistency for the scale separately for the masculinity score (.86), the femininity score (.80), and the androgyny difference (.85). The scale has a 4-week test-retest reliability coefficient of .90 for masculinity, .90 for femininity, and .93 for androgyny (Bem, 1974).

The BIC consists of 80 items, 5 questions for each of the 16 different personality traits, that are ranked on a 7-point Likert scale ranging from 1 (*not at all*) to 7 (*very*). An example of a question asked for the gregarious trait is, "How likely is it that you would act gregariously if the situation required it?". Few studies have evaluated the psychometric qualities of the BIC. Paulhus and Martin (1987) calculated the structural relations among the 16 interpersonal traits by combining adjacent pairs of traits. The results demonstrated that all four capability question modes collapse into the first quadrant with two major factors, nurturance and hostility. Additionally, a factor analysis of the BIC, a trait variance index, and the Self-Monitoring scale indicated that each scale loads on a separate factor, providing some evidence for concurrent and discriminant validity.

Procedure

Students were informed about their rights as human participants. They completed an informed consent document, a booklet containing the Hope Scale, BSRI, BIC, and a demographic information sheet. Immediately after completing the materials, participants were debriefed and given a research participation point slip.

Results

Because preliminary analyses yielded no significant differences between the two college groups, the two subsamples were pooled for subsequent analyses. Correlation coefficients between the scores on the Hope Scale and the BSRI indicated that androgynous individuals were more likely to be hopeful than nonandrogynous individuals, $r (329) = .31$, $p < .0001$. Additionally, androgyny was correlated with both willpower, $r (329) = .29$, $p < .0001$, and waypower, $r (329) = .22$, $p < .0001$. High scores on the BSRI masculinity dimension appear responsible for this correlation because higher masculinity scores were related to higher levels of hope, $r (341) = .43$, $p < .0001$. Although the correlation between femininity and hope was marginally significant, $r (341) = .10$, $p < .06$, the correlation between femininity and willpower was significant, $r (341) = .18$, $p < .001$. Although each of these correlations is significantly significant, each is weak.

On the basis of these results, analyses of variance, 2 (high masculinity, low masculinity) x 2 (high femininity, low femininity) x 2 (men, women), was performed on the 3 scores from the Hope Scale (overall hope, willpower, waypower). There were significant differences on each of the three hope scores for masculinity. High masculine individuals were more hopeful ($M = 3.35$) than low masculine individuals ($M = 3.11$), $F (1, 316) = 39.52$, $p < .0001$; high masculine individuals had more willpower ($M = 3.38$) than low masculine individuals ($M = 3.10$), $F (1, 316) = 35.52$, $p < .0001$; and high masculine individuals had more waypower ($M = 3.31$) than low masculine individuals ($M = 3.12$), $F (1, 316) = 18.56$, $p < .0001$. The scores of men and women did not differ on any of the hope scores. Nor did we find significant differences in hope scores for femininity.

Correlation coefficients between scores on the BIC and the Hope Scale were also computed. Interpersonal flexibility did not correlate significantly with overall hope, $r (341) = .03$, $p = .52$, willpower, $r (341) = .02$, $p = .76$, or waypower, $r (341) = .04$, $p = .46$.

Discussion

The results of the analyses supported one of the hypotheses. The results of this study confirmed the findings by Allison, Kollenbroich-Shea, and Davis (1996) that androgynous and masculine individuals have higher levels of hope. More specifically, the higher the amount of masculinity a person endorses, the higher the overall level of hope, willpower, and waypower. These results also suggest that hope and masculinity are grounded on some of the same principles and are consistent with data

reported by other investigators. Paulhus and Martin (1988) found only the masculinity component accounted for self-esteem. Self-esteem, then, may be accounting for the relationship between masculinity and the two components of hope. Individuals possessing high levels of self-esteem are more likely to envision themselves reaching their goals and therefore may be more likely to energetically pursue them. Additionally, Carter (1985) found masculine and androgynous people were cognitively flexible. In other words, these individuals were able to think of unique solutions to problems. This problem-solving ability may explain the relationship between masculinity and (a) androgyny and (b) waypower. Finally, feminine traits include characteristics such as being yielding (Bem, 1974) that are not conducive to establishing and pursuing individual goals. If these feminine traits are combined with traditional roles of housecleaning and child care, which involve never ending work, individuals high in femininity may have difficulty envisioning themselves reaching a goal. Future research should examine the relationships between (a) self-esteem, creativity, and involvement in traditionally sex-typed behaviors and (b) hope, willpower, and waypower.

The present study failed to find evidence supporting a relationship between hope and interpersonal flexibility. This failure to find a relationship may reflect different dimensions that the two concepts measure. Interpersonal flexibility is an external behavior and is concerned with how an individual interacts with other people. The nature of this flexibility may differ depending on the type and relevance of the interaction. Hope, on the other hand, is a cognitive construct and focuses on perceptions of goal attainment and is applicable across many settings. Individuals high in hope may only be flexible in achieving goals. Because there is little evidence for BIC's validity, the scale may not be measuring interpersonal flexibility. Future investigators should develop and use different instruments to measure interpersonal flexibility. Finally, researchers should examine the relationship between hope and its external manifestations and between hope and interpersonal flexibility in the context of goal attainment.

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Restaurant Server Posture Related to Add-On Sales

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Research has reported that the size of a restaurant bill affected tip size and that nonverbal communication, involving body posture and eye contact, helped to establish rapport and personal credibility. Using a naturalistic setting, this study examined the relationship between restaurant server posture (standing or squatting) and the amount of sales. This study used servers in a moderately priced, national franchise restaurant. Results showed that servers who squatted next to the table had higher sales and spent more time interacting with the customers. These results suggest how servers might increase the size of the bill and thus increase tip income.

Servers depend on tips for a major source of income (Lynn & Mynier, 1993). Research has shown that customers tip more depending on the size of their bill (Lynn & Grassman, 1990; Harris, 1995). This finding implied that servers could boost the amount of their income by selling higher priced beverages and appetizers that would increase the bill. Bodvarsson and Gibson (1994) also reported that gratuities depended on bill size and that bill size and the amount of service were related. Larger orders of beverages and food required greater amounts of service. Thus, implementing unobtrusive ways to increase the size of the bill should benefit servers by increasing the size of their tips.

This study examined strategies to increase the size of customers' bills for the purpose of boosting tips. Specifically, the effects of server posture on the number of specialty drinks and appetizers the customer bought were observed during the initial visit to the table. Servers usually stand next to the table when interacting with customers. Some servers, however, squat at the table. Research has shown that servers who squat at a table earn more in tips than those who stand (Lynn & Mynier, 1993). This posture brings the server's face closer to and in alignment with the customer's face. Leathers (1992) found a strong connection between body proximity and personal liking. Some investigators (e.g., Hargie, 1986a, cited by Knapp & Hall, 1992) consider body proximity, smiles, and eye contact as non-verbal reinforcers. By squatting next to customers, the server was virtually sitting next to them, establishing good rapport, and assuming a position of postural congruence. Research on body communication has found that postural congruence is linked to good rapport, and good rapport promotes more communication, giving the receiver the feeling of being liked (Argyle, 1975).

In addition to body posture, eye contact is essential for servers to sell successfully (Brown & Still, 1994). Research has shown that nonverbal cues, such as body orientation and eye contact increase personal credibility, a key to selling any product successfully (Leathers, 1992). Although previous research has shown that bill size affects tip size, no research to date has specifically reported about factors that might affect the size of the bill.

The purpose of this study was to determine whether a server's posture would affect the amount of add-on sales (drinks and appetizers) and thus increase bill size and the amount of the tip. Using naturalistic observation, the server's initial visit to a table was observed for posture, duration of time spent at the table during the initial visit, and the amount of items sold to the customers by the server. The hypothesis was that the servers who squatted would have higher sales and remain at the table for a longer period of time during the initial visit than servers who stood.

Method

Participants

Fifty-four patrons, seated at 21 tables in a moderately-priced, national franchise restaurant in the Midwest were participants in the study. Servers were informed about the study because the observer was also employed as a server at this restaurant and knew the servers personally. Servers were told that the study involved observing squatting and standing behaviors, but the hypothesis was not revealed to them prior to the observations. Four servers consented to participate. Two typically squatted at tables, and two typically did not. The servers who squatted waited on 11 tables, and the servers who stood waited on 10 tables.

Material and Procedure

A watch with a second hand was used to time the initial visit to the table. Alcoholic and non-alcoholic specialty drinks, as well as appetizers were an important part of the menu and advertised throughout the restaurant. Data were collected during high-volume evening hours.

An "all-occurrences" sampling method was used. A server, who had previously agreed to be observed, was selected each day of observation, and the observer sat near that server's work area. The observer ordered a drink and did homework to remain inconspicuous to customers; she also made notes discreetly. In addition, that data were collected during high volume hours allowed the observer to be less noticeable to servers. Servers were also coded to preserve anonymity and were not told when they were being observed to avoid demand characteristics.

During the server's initial visit to the table, the observer recorded the server's choice of squatting or standing and the length of time the server was at the table. Squatting behavior was defined as bending at the knees until the server's face was on the same level or below the seated customers' faces. Standing was defined as being in an erect position and looking down at the customer. Timing started when the server picked up the ticket left at the table by the host and ended when the server walked away from the table. The observer recorded all drinks and appetizers served at the table, as well as the prices of the items. This procedure was repeated for each table in the server's work areas. During a total of 10 hours of observation, each server was observed for 2.5 hrs.

Results

The affects of server posture on the amount of add-on sales were assessed with t-tests. Although differences in the total cost of drinks and appetizers per table as a function of server posture were not significant, $t(21) = 1.2$, $p > .05$, there were two outliers, with an extreme value in each condition. When these two extremely high scores were omitted and the data analyzed again, there was a significant difference between the amount of sales as a function of server position, $t(19) = 2.5$, $p < .05$. The customers of servers who squatted spent more in dollars on add-on items ($M = 5.60$, $SD = 2.53$) than those of customers who stood ($M = 2.80$, $SD = 2.51$).

In addition, there was a significant difference in the amount of time servers spent at the table on the initial visit, $t(19) = 2.71$, $p < .05$. The servers who squatted spent more time in seconds at the table ($M = 64$, $SD = 28$) than the servers who stood ($M = 34$, $SD = 19$).

The correlation between the amount of time spent at the table and add-on sales was calculated for each server posture. There was no significant relationship between time spent at the table and add-on sales for those who squatted at the table, $r(9) = -0.06$, $p > .05$). There was, however, a significant relationship for time spent at the table and add-on sales for those who stood, $r(8) = 0.65$, $p < .05$).

Discussion

The results supported the hypothesis that a server's choice of squatting or standing is related to the amount of add-on sales. These findings were consistent with a similar study conducted on server posture and tips (Lynn & Mynier, 1993), which concluded that squatting at the table did have an effect on the amount of tips the server received. The results were also consistent with previous studies about body communication and nonverbal cues as selling techniques (Argyle, 1975; Brown & Still, 1994; Leathers, 1992).

One reason for the present findings may be, as Argyle (1975) has pointed out, that assuming a position of postural congruence promoted more talking. This interpretation could also explain why servers in this study who squatted spent more time at the table than those who stood. Another interpretation is that spending more time with customers, and not squatting, leads to greater sales. However, there was no correlation between time spent at the table and add-on sales for the servers who squatted. On the other hand, the amount of time spent at the table may be a relevant variable for servers who stand. Collectively, the data suggest that those who stand may need to engage in more verbal behaviors, whereas those who squat may be successful with nonverbal contact.

A limitation in the present study was the confounding between posture and a selection factor among servers. Servers in the squat and stand conditions were determined by their usual way of serving. Although servers appeared to be similar on variables such as attractiveness and neatness, those who squatted appeared to be more outgoing and talkative than those servers who stood. This difference may account for the higher add-on sales. Using the same servers, randomly assigned to a posture

condition, would eliminate the confounding problem.

Another limitation in the study was the servers' knowledge about the study and the observer's presence. Although the servers did not know who was being observed at any particular time, the observer's presence was enough to inform them that they could be under scrutiny. Observing naive servers would eliminate such a limitation.

The findings from this study might motivate servers to look more closely at the nonverbal behaviors they use when serving tables and at the options they have to increase sales and personal income. Larger orders result from using various unobtrusive, easily implemented nonverbal methods. Such methods may prove to be effortless and effective for increasing servers' income.

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Feminine and Masculine Presentation Styles and Ratings of Competence and Likability

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This study investigated how aspeaker's gender and presentation style, as well as a participant's gender influenced participants' views about speakers. Participants were 63 men and 107 women from general psychology classes at a four-year, Midwestern college. The experimenter prepared and used four videotapes depicting either a woman or a man discussing a lecture and presented in either a masculine or feminine manner. Participants rated the female speaker as more qualified and intelligent and the topic and lecture as more interesting when she used a feminine versus masculine presentation style. Implications are applied to male-female interpersonal relations and to limitations facing women in business settings. Future research should examine the role of visual and auditory cues in influencing participants' judgments.

Many studies indicate that gender and/or gender roles affect communication between men and women, as well as their perceptions of one another. Everyday speech provides many examples: women tend to use more qualifiers and disclaimers, ask tag questions, and support other speakers by helping nurture and draw out conversations. In contrast, men tend to interrupt and speak more than women (Johnson, 1994). Women also tend to perceive a greater degree of affiliation and involvement with others than do men (Beer & Darkenwald, 1989). Women are generally more concerned with building a sense of community and strengthening social bonds, whereas men tend toward hierarchical and favor ritual opposition. Furthermore, women tend to bond with others by talking about troubles; men tend to bond by debating, exchanging insults, and other types of verbal sparring (Tannen, 1991).

There are also several differences in the way men and women communicate nonverbally. Women tend to smile more and maintain eye contact longer than men. Men tend to have a larger personal space; women tend to be more accepting if someone invades their personal space. Body postures are also different. Men often use sprawling body postures that take up large amounts of space. Women, in contrast, sit in a rigid form that takes up considerably less space, covering their pubic area with crossed legs and folded hands (Frieze, Parsons, Johnson, Ruble, & Zellman, 1978).

Men and women also differ in the quantity of self-disclosure. Self-disclosure is the extent to which individuals reveal information about themselves to others (Derlega & Chaiken, 1976). In general, men tend to disclose significantly less than women. This behavior may be because most men concentrate on completing tasks and feel that control over their emotions is an important factor in effectively completing their goals. In contrast, women tend to focus on social connections and emotional closeness as important, and increased self-disclosure might be an attempt to facilitate that goal (Derlega, Metts, Petronio, & Magulis, 1993).

An emerging consensus among psychologists is that these communication differences between men and women are not the result of hormones or instinct but rather a product of social training. Society largely dictates what is proper for men and women and does not readily support those who cross the lines. Schaef (1992) discussed her concept about the dominating White male system and said that "... the beliefs and perceptions of other systems—especially the Female system—are seen as sick, bad, crazy, stupid, ugly, and incompetent" (p.14). Bem (1993) concurred in her discussion on gender polarization with the following comments:

> Gender polarization operates in two related ways. First, it defines mutually exclusive scripts for being male and female. Second, it defines any person or behavior that deviates from these scripts as problematic—as unnatural or immoral from a religious perspective or as biologically anomalous or psychologically pathological from a scientific perspective (pp. 80-81).

Much experimental evidence supports these statements. Women smile more often than men. Research suggests that a woman's smile is an attempt to please others and gain approval; women who fail to smile are seen as deviant (Frieze et al ., 1978).

Self-disclosure is another example. In a study by Derlega and Chaiken (1976), participants read that an individual sat down in an airplane seat next to a person and asked, "Are you nervous about flying?" The second person answered "yes" and proceeded to reveal a painful experience (disclosure) or not (nondisclosure). In one case, the second person was named "Bill Bryant" and in another "Joan Porter". The results found that "Bill" was rated as being more adjusted when he did not disclose and "Joan" was rated as being more well adjusted when she did disclose.

In spite of such differences, one's biological sex seems to have less to do with self-disclosure than gender roles. Shaffer, Pegalis, and Cornell (1991) found that gender alone was not an accurate predictor of how much and in what circumstances a person would disclose. Feminine persons were more likely to disclose in situations that were clearly social and expressive in nature, but persons who consistently disclosed more were neither women nor feminine persons; the highest levels of disclosure were found in androgynous individuals.

Another example in which gender roles appear more important than biological sex was found in a study analyzing men and women role-playing manager positions. Johnson (1994) found that the formal, masculine-style authority of the manager position affected verbal interaction (and submissive reactions of persons role-playing employees) more than anything else. This finding was consistent regardless of the gender composition of men and women in the group of manager and subordinates.

Previous research suggests that reactions to the communication of men and women is not only influenced by the gender of the speaker but also the manner in which he or she conveys information. The purpose of this study was to investigate how the speaker's gender, the speaker's presentation style, and the participant's gender influenced participant's opinions about speakers.

On the basis of findings in previous studies, one would suspect that presentation style as well as the gender of the speaker might influence participants' reactions. I hypothesized that men would react more positively to a masculine presentation style having a male speaker and a feminine presentation style having a female speaker. I further hypothesized that female participants would respond more positively to female speakers than would male participants, regardless of the presentation style. Finally, I hypothesized that female participants would respond more favorably to the feminine style of presentation.

Method

Participants

The participants were 170 volunteers (63 men, 107 women) from general psychology classes at a four-year, Midwestern college with approximately 6,000 students. The participants' race was primarily Caucasian, and their ages ranged from 18-23 years old. Most participants received extra credit for participating in the study.

Materials

The experimenter prepared and used four videotapes. Each videotape showed either a woman or a man sitting at a student desk discussing a lecture about the psychology of Hamlet, which s/he was going to present at an upcoming conference. The material was presented in either a masculine or feminine manner. In the masculine version, the person used an assertive tone and sat comfortably with her/his legs apart. In the feminine version, s/he used more qualifiers and tag questions and sat up straight with legs together and hands folded on the desk.

The study employed a 20-item questionnaire designed to gauge participants' reactions toward the speaker and, to a lesser extent, the topic. Examples of statements were: "This is an interesting topic," "The speaker is an intelligent person," and "I would feel comfortable working with this person." Participants marked a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Design and Procedure

The design was a 2 x 2 x 2 between-subjects factorial design with gender of the speaker (women or men), speaker's presentation style on the videotape (masculine or feminine) and gender of the participant (women or men) as the independent variables. Each of the 8 conditions contained between 12 and 39 participants.

Participants were told that their participation was completely optional, their responses would be confidential and anonymous, and they could withdraw from the study for any reason, at any time, and without penalty. Students were shown one of the four videotapes. After viewing the videotape, all participants completed a short questionnaire asking for their reactions to the speaker and the topic. Upon completing the questionnaire, participants were informed about the study's format. Finally, they were informed that results of the study would be available in the psychology office.

Results

Each question was analyzed separately with an analysis of variance (ANOVA) for the variables of speaker's gender, speaker's presentation style on the videotape, and participant's gender. For the statement, "Other people will respond positively to the speaker," the ANOVA results revealed that participants rated the feminine presentation style ($M = 3.16$) significantly higher than the masculine presentation style ($M = 2.78$), $F (1, 160) = 7.95$, $p < .006$. Moreover, for the statement, "The speaker is likable," participants rated the feminine presentation style ($M = 3.42$) higher than the masculine presentation style ($M = 2.96$), $F (1, 162) = 15.15$, $p < .001$. Finally, for the statement, "Other people will respond positively to the speaker," participants rated the female speaker ($M = 3.22$) higher than the male speaker ($M = 2.85$), $F (1, 160) = 5.24$, $p < .024$.

The results in Table 1 summarize three significant interactions between the speaker's gender and the speaker's presentation style. Subsequent one-way ANOVAs revealed that participants gave significantly higher ratings to females speakers using a feminine versus a masculine presentation style. The three items were: "The speaker is qualified to discuss the topic," $F (1, 52) = 6.27$, $p < .016$, "The speaker is an intelligent person," $F (1, 52) = 6.78$, $p < .013$, and "The speaker makes the lecture seem interesting," $F (1, 52) = 5.74$, $p < .03$.

Table 1
Speaker Gender and Video Style Interactions and Simple Effects

	Presentation Style		
Speaker	Masculine	Feminine	Interaction F^a
The speaker is qualified to discuss the topic.			
Female speaker	3.36	3.88	$F = 5.11$
Male speaker	3.65	3.66	
The speaker is an intelligent person.			
Female speaker	3.32	3.88	$F = 7.90$
Male speaker	3.68	3.59	
The speaker makes the lecture seem interesting.			
Female speaker	2.71	3.46	$F = 4.37$
Male speaker	2.70	2.71	

[a] Degrees of freedom were 1, 160 or 1, 162

Table 2 summarizes the results of significant interactions involving the speaker's gender and the participant's gender. Subsequent one-way ANOVAs revealed that for the statement, "The speaker makes the lecture seem interesting," women's ratings of female speakers were significantly higher than for male speakers, $F (1, 106) = 8.69$, $p < .005$. Similarly, men's ratings of male speakers were significantly higher than their ratings of female speakers, $F (1, 115) = 8.02$, $p < .006$. For the statement, "The speaker is likable," women gave significantly higher ratings to the female versus the male speaker, $F (1, 106) = 12.57$, $p < .002$ and women's ratings of male speakers was significantly lower than that of the men's $F (1, 115) = 10.63$, $p < .002$.

Table 2
Speaker Gender and Participant Gender Interactions and Simple Effects

	Participants		
Speaker	Men	Women	Interactions F
The speaker makes the lecture seem interesting.			
Female speaker	2.88	3.24	$F (1, 162) = 7.02$
Male speaker	3.13	2.50	
The speaker is likable			
Female speaker	3.40	3.52	$F (1, 162) = 5.17$
Male speaker	3.39	2.91	

Finally, ANOVA results indicated a significant interaction between presentation style and participant's gender for the statement, "I would feel comfortable working with this person." Table 3 summarizes the findings. One-way ANOVAs revealed that women rated the feminine presentation style higher than the masculine presentation style, $F (1, 105) = 9.52$, $p < .004$.

Discussion

For the female speaker, presentation style produced several differences in ratings; participants preferred a feminine versus a masculine style. In contrast, there were no style differences for the male speaker. Although not hypothesized, this result was consistent with previous research that showed a demand for female conformity. For example, Frieze et al. (1978) found that women who did not smile often were labeled as deviant. This finding is also validated by Schaef's (1992) concept called the White male system. Such a phenomenon can be exceed-

Table 3
Participant Gender and Video Style Interactions and Simple Effects

	Participants		
Style	Men	Women	Interactions *F*
I would feel comfortable working with this person.			
Feminine style	3.13	3.19	$F(1,160) = 3.83$
Masculine style	3.13	2.70	

ingly detrimental to women. Although men might have relative freedom to behave in ways most comfortable to them, women must exhibit more traditional role behavior in order to receive a favorable evaluation.

Consistent with the hypothesis, women responded least favorably to the masculine presentation style and to the male speaker. This finding conforms with research about different perceptions of what is important in conversation. For example, Derlega et al. (1993) found that women believed social connections and social ties were more important than did men. Perhaps a feeling of closeness is less easily facilitated by a masculine presentation style and male speaker.

In general, there was not a difference between styles for the male participants. Perhaps this finding resulted because women attended to style whereas men focused on facts presented and tasks to be completed. This interpretation is supported by Bell (1992), who found that women concentrated more on the social atmosphere of the classroom, such as getting to know the other students and feeling comfortable with the teacher, whereas men tended to concentrate on more concrete details such as the syllabus or the lecture presented.

The relevance of this study could be critical to interpersonal relations between men and women. Knowing how friends or significant others perceive different messages and what is salient to men and women is important to understanding. For example, a woman might complain to her male spouse about a problem she is having at work. Many times a woman talks about this type of problem because she wants someone to listen to and support her; she is searching for a social bond or a communal experience according to Tannen (1991). Her spouse might be confused because men often focus on specific tasks (Derlega & Chaiken, 1976), and he might attempt to solve her problem when she was merely looking for emotional support. An increased awareness of the ways in which men and women are socialized to communicate differently might avert confusion and conflict.

This study may also give insight into factors that contribute to the "glass ceiling" phenomenon, which describes how women often find it difficult to advance to management positions. In the present study, the female speaker was responded to more positively when she communicated in a feminine style than when she communicated in a masculine style. This tendency could highly limit women who want to enter management positions where the conventional management style is masculine.

One way to improve this study would be to re-word the questionnaire to make some items less ambiguous. For example, one of the statements was "This topic should be investigated further". Participants might think that the topic was not adequately covered and should, therefore, be investigated further or that the topic was very interesting and would, therefore, be worthy of further investigation.

Future research should also try to find which parts of communication tend to most affect the speaker's perception. For example, in some instances, only the voices of the speaker could be played, and in other instances, the sound could be cut from the video so that only body language could be observed. After viewing or listening to one of the videotapes, participants could rate the speaker.

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Weight Reduction Using Behavior Modification: Modifying Sedentary Activity

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A nine-week behavior modification program was designed and implemented for a 10-year-old boy. Target behaviors were exercise and TV watching. The research design consisted of a change in criteria for the two target behaviors during each week of the study. The design used three separate reinforcers and fading procedures for the first two reinforcers. Programming for generalization was done by creating a relationship between exercise and increased chances of success at a desired vigorous activity. Results indicated the program was effective in changing target behaviors but had no effect on weight reduction. These changes and failure to affect weight reduction, as well as possible future research, are also discussed.

For obese children, defined as 20% or more over ideal weight for body height, the amount of time spent with electronic games, videos, and television presents formidable barriers to improving health. Obese children are at greater risk for hypertension, psychosocial dysfunction, respiratory disease, and several orthopedic conditions (Gortmaker, Dietz, Sobol, & Wehler, 1987). One result of childhood obesity is an increase in the risk of adult obesity (Epstein, McCurley, Wing, & Valoski, 1990). Similarly, mortality from coronary heart disease and stroke is greater among men who were overweight in adolescence versus those who were not (Must, Jacques, Dallal, Bajema, & Dietz, 1992).

Research indicates that television viewing is highly correlated with childhood obesity (Dietz & Gortmaker, 1985). Epstein, Smith, Vara, and Rodefer (1991) suggest that a child's choice of activity is influenced by environmental factors, such as the availability of non-sedentary activities. Further, by reducing the availability of a desired sedentary activity (e.g., TV watching) researchers have been able to alter environmental factors and manipulate obese children's choice of activities. In recent years, parents and investigators have made concerted efforts to change overweight children's behavior from sedentary (e.g., playing video games and watching television) to more mobile activities (e.g., exercise and sports) for the purpose of improving their health. These attempts to improve children's health take the form of behavior modification programs (i.e., changing activity behavior), diet programs (i.e., changing foods children eat), or a combination of the two.

Studies indicate behavior modification treatment programs, when used in conjunction with diet treatment programs, are moderately effective in weight reduction and control (Epstein et al., 1990; Haddock, Shadish, Klesges, & Stein, 1994). Research findings indicate weight reduction programs that include parental involvement are more effective than those that only target children (Epstein et al., 1990; McKenzie, Klein, Epstein, & McCurley, 1993). However, the study of parental involvement, for the most part, has been in the form of high parental participation in the child's program (Epstein et al., 1990; Haddock et al., 1994; McKenzie et al., 1993). Haddock et al.'s (1994) results indicated that the magnitude of parental involvement did not affect the outcome of the program. To control program costs, parental participation can be kept to a minimum. However, Haddock et al. (1994) defined parental involvement as attending treatment sessions, making dietary choices for the child, and learning behavioral modification techniques (i.e., administering the program or passive participation). Other researchers (e.g., Epstein et al., 1990; McKenzie et al., 1993) defined parental involvement as the amount of time the parent(s) spent actively participating in the program with the child (e.g., exercising and following dietary guidelines with the child). The difference in the results of these studies appears attributable to parenting style; active parental involvement produced greater benefits than passive parental involvement, which involved administering the program only.

Studies using active parental involvement (e.g., Epstein et al., 1990; McKenzie et al., 1993) used such parent involvement throughout the program as the child's main reinforcer. Secondary reinforcers were used for the children's progress, but the parents were never replaced (faded out) as the main reinforcer and then used as a secondary reinforcer.

Many of the behavior modification programs used

for weight reduction have focused on the child's diet without attempting to alter the child's environment before or after behavioral treatment. Regardless of the attention given to the treatment process, an otherwise sedentary environment diminished any gains made by the behavioral treatment of a child's diet, even when supported by behavioral treatment of the child's exercise habits (Epstein et al., 1991). A positive reinforcer for vigorous activity may not be strong enough to overcome environmental stimuli that produce sedentary activity.

In the same fashion as Epstein et al.'s (1990; 1991) research, the present study used behavior modification to reduce weight. In contrast to those studies, this study incorporated a fading procedure in which the parental involvement reinforcer became a secondary reinforcer rather than remaining the main reinforcer. This procedure was implemented to demonstrate that, although parental participation should begin at a high level, it may be used effectively at a much lower level once the behavioral program is in place. Using this procedure, the hypothesis was that a vigorous activity (i.e., exercise) would be chosen over a sedentary one (i.e., TV watching) when a high level of active parental participation was used as positive reinforcement. A further hypothesis was that the child would maintain vigorous activity when delayed gratification was the main reinforcer following fading procedures to reduce parental involvement to a passive level as a secondary reinforcer.

Method

Participant

The participant was a 10-year old overweight boy. His height at the time of the study was 1.45 m and his weight was 55.34 kg. Height and weight charts for the participant's age group show normal height to be 1.37 m and healthy weight to be 32.21 kg.

Materials and Procedure

A checklist for recording both sedentary and non-sedentary activity at 5-min intervals was used on a daily basis. The research design was a change in criteria procedure. That is, as a behavior changed to meet specified criteria at specified times, that behavior was rewarded by positive reinforcement. Positive reinforcement included a physical award (e.g., parental attention) or monetary value, a token award that was later redeemed for a physical award or monetary value (e.g., a point system in which points were exchanged for money), or delayed reinforcement (e.g., the promise of positive reinforce-

ment, contingent upon a behavior change that met a specific criteria). Using this design for the two target behaviors (exercise and TV watching), activity was observed and recorded on a continuous schedule (5-min intervals) each day over a 9-week period during the participant's most sedentary times.

Activities observed and recorded were: (a) watching television, (b) indoor activity (e.g., homework, reading, and playing video games), (c) outdoor activity, (e.g., playing catch, playing with other children, and Boy Scout activities), and (d) exercise, which was defined as jogging/walking, calisthenics, or bicycle riding. Behavior was recorded by the participant's mother and father. The parents were used to record data because one of them was always in close proximity during the observation periods, and they were willing to undergo training in observation and behavior modification techniques. Initially, observation times were from 4 P.M. to 8 P.M. every day of the week. Because of the nature of the participant's activities during the weekend, observation times were changed during Week 4 of the study to the hours of 10 A.M. to 2 P.M. on Saturdays and noon to 4 P.M. on Sundays.

Parental involvement in the program was initially high but faded during the program to an intermittent secondary reinforcement. Parental participation began in Week 2 with the father participating in the program for 6 days a week (86% of the time) and continued at the same level for Weeks 2 and 3. During Week 4, parental participation was faded to 4 days per week (57%), and further faded to 1 day per week (14%) by the end of Week 5. Parental participation continued at 1 day per week for Weeks 5 and 6. During Week 7, parental participation was further faded from active involvement in the program to a more passive role of administering the program (i.e., making dietary choices for the child, supervising the exercise program, and giving verbal encouragement).

During Week 1, baseline behavior was recorded without the participant's knowledge. Beginning in Week 2, the participant was informed that an exercise regimen of 15 min of walking/jogging would be instituted, and his TV time would be limited to 2 hr. The positive reinforcement during the second week was the time spent exercising with the father.

For Weeks 4 and 5, a differential reinforcement of alternative behavior (DRA) schedule was introduced as the first reinforcer (parental participation) was faded. The DRA schedule consisted of points awarded for any observed activity other than television watching. Point values were: (a) indoor activity = 1 point, (b) outdoor

activity = 3 points, and (c) exercise = 5 points. The points were worth 25 cents each and were converted to money at the end of each week.

A final, delayed reinforcer was introduced in Week 6. The participant was told that the point system would end in two weeks (at the end of Week 7) and replaced with a desired physical activity (i.e., Karate lessons) four weeks after the study was complete. The Karate lessons were contingent on the child continuing the current exercise criteria for the final two weeks of the study. The point system was faded completely by the beginning of Week 8, leaving Karate lessons as the main reinforcer and low, passive parental participation as the secondary reinforcer. Week 9 proceeded with those reinforcers in place. Table 1 itemizes change in criteria design for two behaviors.

Table 1
Criteria for Two Behaviors for Nine Weeks

Week	Activities	
1	Baseline	
2	15 min exercise	2 hr television
3	30 min exercise	1 hr 45 min television
4	30 min exercise	1 hr 30 min television
5	45 min exercise	1 hr 30 min television
6-9	1 hr exercise	1 hr television

Results

Table 2 shows the percentage of observed time each week during which the child engaged in each activity. TV watching decreased from 53% of the weekly observed time during baseline to 13.7% by Week 9. Figure 1 shows this decrease as average daily hours during observed time compared with daily criteria for TV watching.

Whereas TV watching decreased over time, exercise increased from 0% of the observed time during baseline to 25.3% of the weekly observed time for Week 9. As Figure 2 shows, even though the observed behavior fell below criteria levels during Weeks 5 and 7, the end result was above the criterion. Table 2 also shows that at the end of Week 9 overall indoor activity increased to 56.3%, whereas overall outdoor activity constituted on 4.8% of total activity.

The participant's weight at the beginning of the program was 55.34 kg and his height was 1.45 m. At the end

Table 2
Percentage of Weekly Time Spent in Each Activity

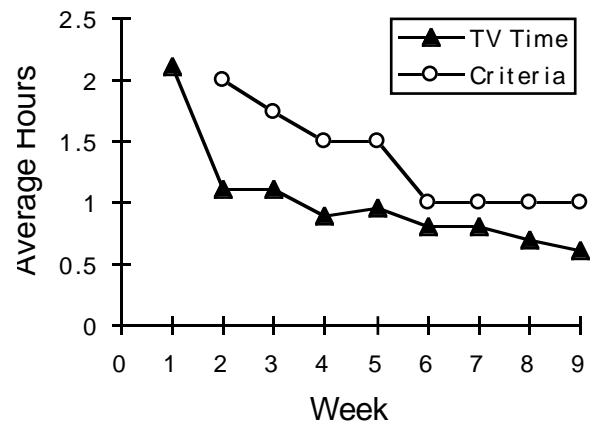| Week	TV	Exercise	Indoor Activity	Outdoor Activity
1	53	0.0	33.3	13.7
2	27.7	8.0	48.4	17.6
3	27.9	12.8	43.5	15.8
4	21.1	14.3	45.6	19.0
5	23.8	15.5	44.6	16.1
6	19.0	25.6	45.8	9.5
7	18.5	22.9	34.5	24.1
8	16.9	25.0	47.9	10.1
9	13.7	25.3	56.3	4.8

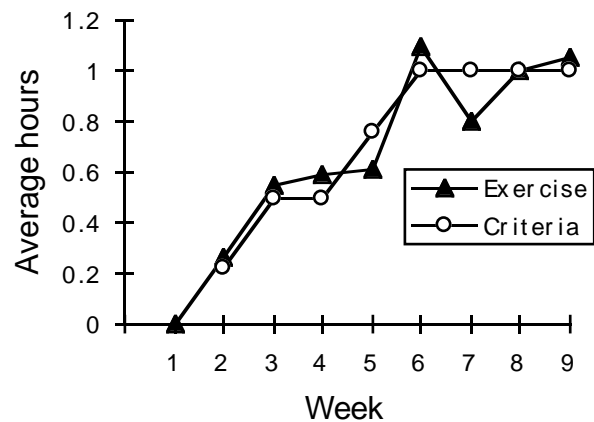*Figure 1.* Average Daily Hours Spent TV Watching Compared to Daily Criteria.

Figure 2. Average Daily Hours Spent Exercising Compared to Daily Criteria.

of 9 weeks, weight remained at 55.34 kg, but height had increased to 1.49 m. The present data indicate the behavior modification program was effective in changing the target behaviors but had no effect on weight reduction.

Discussion

The results indicate that a behavior modification program with high active parental participation can differentially modify a child's activities, lowering the percent of time watching TV and raising the percent of time spent exercising. These data further suggest that a change in the target behavior(s) can be maintained with low, passive parental participation and a reinforcer involving delayed gratification.

The present study successfully replicated Epstein et al.'s (1991) research with regard to the participant's behavior when the environmental constraints were altered. The environmental change occurred when criteria for the two target behaviors were instituted at Week 2. Following the initial criteria change at Week 2, the weekly average amount of TV watching during observed times decreased. At the same time, exercise activity increased at a steady rate. This trend continued for both behaviors throughout the study, indicating a vigorous activity would be chosen over a sedentary one when environmental contingencies were altered.

There were two exceptions to the steady decrease in TV watching. One of these occurred during Week 4, when the most sedentary times for the participant on Saturday and Sunday differed from the rest of the week. Consequently, observation hours for Saturday and Sunday were changed and resulted in an increase in TV watching between Weeks 4 and 5. The other exception occurred during Week 3 of the study because of a special program the participant asked to watch. The extra time allowed for this program resulted in a barely noticeable increase in TV watching between Weeks 2 and 3. What is particularly interesting about this incident is that the participant suggested TV watching on the next day if allowed to watch the desired program. This behavior supports conclusions about the effectiveness of the reinforcers used to attain criteria for TV watching behavior. An additional result for allowing the extra TV time was the increase in exercise time of 20 min for the following day. This change was not suggested by the parents but was the participant's decision. This observation suggests that the reduction of a highly liked sedentary activity was associated with an increase in a vigorous activity, as

Epstein et al. (1991) reported.

A critic might argue that the decrease in TV watching was because of transferring previous TV time to other indoor sedentary activities rather than because of an increase in exercise activity. Such a shift did occur. However, one of the largest increases in other indoor activities predictability occurred between baseline and Week 2. The three other instances of increase in indoor activity, however, seemed the result of an increase in the amount of school homework and inclement weather. To control for increases related to homework, future research should be conducted at different times throughout the year.

The immediate increase in exercise between Baseline and Week 2 appears to be the result of high parental participation as a reinforcer. The point system, as a reinforcer, appeared to be effective for maintaining the behavior; however, it was not effective in increasing the target behavior to meet the new criteria level as parental participation faded. The delayed reinforcer of Karate lessons, on the other hand, appeared to be as effective as the initial high parental participation at the beginning of the program.

The increase in exercise between Weeks 5 and 6 gives an indication of the strength of the reinforcer presented at the beginning of Week 6. The failure to reach criteria during Week 7 may have resulted from the transition of parental involvement from active to passive participation. That the target behavior remained at a high level with intermittent parental participation indicates parental participation is an integral part of maintaining a behavioral treatment program, although perhaps at very low levels as Haddock et al. (1994) suggested.

Programming for generalizing to other stimuli was done by establishing a relationship between exercise and increased chances of success during Karate lessons. At the end of the week immediately following the conclusion of the study, the parents reported the participant was limiting himself to 1 hr of TV for the entire day while committing to 30 min of exercise each day. The participant's self-limitation of TV watching immediately following the study seems to have been a fortuitous by-product of the stimulus generalization between exercise and success at the desired vigorous activity of Karate lessons.

Although weight reduction was not achieved, the parents were not disturbed by that outcome because of the relatively short length of the treatment program.

Additionally, that the participant grew .04 m during the study might have masked potential weight loss. When body weight to length indices (WLI), which indicate the relative obesity of a child, were compared before and after the study, there was a decrease in the WLI. The participant's WLI decreased from Baseline (160) to the end of Week 9 (158).

In conclusion, the results offer support for the role of parental involvement. The parents' active participation in the program demonstrates parental concern about changing the child's behavior. Another argument favoring parental involvement is the choice of reinforcers. Because the parents actively participated, they were more likely to choose contingencies that reinforced the desired behavior. This careful attention is also evident in programming for generalization, which aids in the maintenance of target behaviors.

This study did not intend to generalize the results from one participant. However, these findings can aid future research using larger samples for treatment. Despite limitations of single person studies, the findings can provide rich sources of ideas for more highly controlled studies using true experimental designs.

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Relationships Between Hope, Self-Esteem, and Personality Type in College Students

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Those who investigate the concept of hope have identified several attributes that overlap with definitions of Type A behavior. This study sought a link between the concepts of hope and Type A behavior by examining the role of self-esteem. One hundred thirty-three undergraduate college students (98 women, 35 men) participated in a study to determine the relationship between levels of hope, Type A/B personality, and self-esteem. The results yielded significant positive correlations between the levels of hope and self-esteem in both men and women. Self-esteem scores did not differ between Type A and B individuals. Future research should examine components of hope, waypower and willpower.

Throughout history writers have described hope in numerous ways . In ancient Greece, when Pandora first opened the box, hope was considered humankind's only shield against plagues the world sent to destroy mind, body, and soul. Sophocles, and much later, Nietzsche, both concluded that hope was illusionary and caused more pain to humankind than benefit. Contemporary theorists define hope as the process of thinking about one's goals, the motivation to move towards those goals, and finding ways to achieve those goals (Snyder, 1995).

Snyder (1995) asserted that higher levels of hope are evidenced by setting goals that are more difficult to achieve, having greater success achieving goals, and perceiving goals as challenges. He also indicated that individuals with higher levels of hope are more confident, self-assured, and determined to succeed.

These views about hope draw many parallels with the description of Type A behavior proposed by Hayes and Davis (1993). These authors indicated that Type A characteristics include orientation toward work, competitiveness, lack of patience, and the determination to achieve as much as possible in as short an amount of time as possible. Given these characterizations, one might be tempted to predict that Type A individuals would have higher hope than Type B individuals. However, Snyder (1995) suggested that such a prediction might not be accurate. He described Type A individuals as in a hurry, having rapid, often explosive speech, and too egocentric to interact well with other people. On the other hand, high hope individuals are generally not hostile, and they appear to enjoy the moment-to-moment activities related to their goal pursuit, in opposition to the Type A desire to get the results as soon as possible.

To further complicate the situation, Ivancevich and Matteson (1988) described Type B individuals as more relaxed and tending toward procrastination. These behaviors are consistent with Snyder's (1995) findings about individuals with low levels of hope. Accordingly, these individuals approach a particular goal with a negative emotional state, a sense of ambivalence, and a focus upon failure rather than success.

In attempting to establish a link between hope and Type A personality, one might consider a link between hope and self-esteem. For example, Brockner and Guare (1983) indicated that self-esteem was a particularly important variable. According to Burke (1985), self-esteem is determined by one's evaluations of self-worth, based on perceived ability to achieve desired goals and the feelings resulting from these evaluations. He stated further that individuals with low levels of self-esteem respond to aversive events with greater negativity, tend to overgeneralize from specific negative feedback to other aspects of their identities, and generally lower their self-evaluations when placed in negative moods. These characteristics coincide with Snyder's (1995) descriptions of individuals with a low level of hope.

Based on these three converging lines of research, this study examined several tentative expectations. First, hope scores should be higher for Type A individuals than Type B individuals. Likewise, self-esteem scores should be higher for Type A individuals than Type B individuals. Finally, hope and self-esteem should be positively related. The testing of men and women also allowed for assessments of sex differences on these variables.

Method

Participants

One hundred thirty-three undergraduate female ($n = 98$) and male ($n = 35$) college students enrolled at a regional Midwestern state university volunteered to serve as participants. The mean ages for men and women were 20.17 and 20.47 years years old, respectively.

Testing Instruments

Three questionnaires were combined to form a self-administering booklet and took approximately 20 min to complete. All questionnaires were positioned in the same sequence in the booklets. The Hope Scale (Snyder et al., 1991) consists of 12-items, 4 of which are not counted, answered on a 4-point Likert scale. The total score indicates the level of hope an individual possesses; higher scores indicate a greater level of hope. The modified Jenkins Activity Survey for Health Predictions (JAS; Krantz, Glass, & Snyder, 1974) was used to establish personality type (A/B). The JAS is a 21-item multiple-choice questionnaire. The Texas Social Behavior Inventory (TSBI, Form A) was used to evaluate levels of self-esteem. Developed by Helmreich and Stapp (1974), the TSBI is a 16-item scale designed to provide an objective measure of self-esteem or social competence; higher scores reflect higher levels of self-esteem.

Procedure

All testing took place in a regular college classroom. Participants could select one of three separate testing periods. All participants received extra-credit points for participating. To insure anonymity, students completed and returned informed consent documents prior to distribution of the booklets. Although no specific time limit was imposed, all participants completed the booklet within 25 min.

Results

Prior to analysis, participants were assigned to either the Type A or Type B personality category according to the normative designation reported by Krantz et al. (1974). More specifically, participants with JAS scores of nine and higher were classified as Type A, whereas those with scores of seven and lower were classified as Type B. Participants, who scored at the normative mean of eight, were excluded from further analysis. This procedure resulted in a total of 69 participants (17 men, 52 women) classified as Type A and 43 participants (16 men, 27 women) classified as Type B.

Two separate 2 x 2 factorial analyses of variance incorporating personality type (Type A vs. Type B) and sex (men vs. women) were performed, one on the hope data and one on the self-esteem data. An alpha of .05 was employed to determine statistical significance.

Analysis of the hope scores yielded a significant difference for the personality type variable, $F (1, 108) = 4.42$, $p = .035$. Inspection of the data indicated the Type A participants had higher hope scores ($M = 25.6$) than that Type B participants ($M = 24.5$). Analysis of the self-esteem scores yielded no significant difference for any variable.

Further analysis consisted of calculating separate Pearson product moment correlation coefficients between the hope and self-esteem scores for the entire sample of men and the entire sample of women. Both correlations yielded significant, positive relations between hope and self-esteem [men, $r (34) = .38$, $p < .05$; women, $r (96) = .51$, $p < .01$].

Discussion

The present data clearly demonstrated higher hope scores for Type A versus Type B, individuals. The reasons underlying this relationship may be related to two factors. First, Type A individuals tend to be more goal-oriented than Type B individuals. Consequently, they have delineated both their goals and the most efficient way to achieve them more clearly than their Type B counterparts. Second, Type A individuals have a greater orientation toward work and therefore set goals that may be more difficult to attain than those set by Type B individuals. Recall that Snyder (1995) showed higher levels of hope were connected with the setting of more difficult goals.

The present study also found a positive relationship between hope and self-esteem for both men and women. This finding is consistent with Snyder's (1995) contention that hope provides the underlying cognitive mechanism for the process of achieving goals, and that self-esteem is a natural, welcomed bonus when we succeed. A noteworthy interpretation is that higher hope individuals think positively about themselves because they know they have achieved their goals in the past and can do the same in the future.

In view of the significantly higher hope scores shown by the Type A participants and the positive relationship between hope and self-esteem, the lack of self-esteem differences between Type A and Type B individuals puzzlingly did not support the second hypothesis. Perhaps this lack of difference in self-esteem can be interpreted as indicating that Type A and B personalities are equally content with their different styles in achieving their goals.

The lack of sex differences in the analysis of the self-esteem and hope scores is also informative. College students' level of hope is not related to sex for reasons that future research must discover.

Although the lack of reliable sex differences in levels of self-esteem is consistent with data reported by Buzzanga, Miller, Perce, Sander, & Davis (1989), that lack of sex differences stands in sharp contrast to earlier reports (Davis, Bremen, Anderson, & Trammel, 1983; Davis, Martin, Wilee, & Voorhees, 1978) indicating college men have higher self-esteem scores than college women. Why do these studies differ? One explanation involves a possible decline of temporal validity. The studies supporting sex differences were conducted in the late 1970s and early 1980s. Since those studies were performed at least a decade ago, a substantial number of women have entered prominent positions in the work force, and an increasing number of women have completed undergraduate, professional, and graduate programs. Both factors may have lessened sex differences in self-esteem. Whether this result can be generalized to the entire population or other cultures must also await the results of future studies.

One avenue for continued research includes examining variables that are associated with hope (i.e., waypower and willpower). Researchers should also examine similarities and differences in hope among individuals from various socio-economic classes and cultures. Findings from such studies can contribute to understanding the conditions under which hope is a relevant variable.

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Menopause and Mental Health: A Literature Review

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This article reviews literature about the influence of menopause on Western women's mental health. There is debate among competing models about menopause. The popular and historical views toward menopause have been negative. Scientific literature has contributed to a stereotype of the physically deteriorating, mentally unstable, socially anachronistic, and irrelevant older woman. More recent scholarly writing is changing this perspective. This review found that during peri-menopausal years there may be a slight increase in psychological distress, but generally middle-aged women consider menopause a relatively benign event, and post-menopausal women experience increased levels of mental health.

The first baby-boomers have turned 50 years old. Over the next 10 to 15 years, a very large number of American women will experience menopause. Western culture places a high value on youth and physical attractiveness, and since menopause is a sign of advancing age (Ballinger, 1990; Barile, 1997), one may wonder what effect this event will have on Western women's mental health. There are many myths and stereotypes about what menopause does to a woman's physical and mental health (Berkun, 1986). A few are that women at menopause become mentally unstable, hypochondriacal, useless, and irrelevant (Patterson & Lynch, 1988). I undertook this literature review to distinguish fact from fiction and determine what, if any, effect menopause has on women's mental health.

Overview of Menopause

There has been confusion in use of the terms menopause and climacteric. They have often been used interchangeably in the literature when referring to the singular event itself or to the several years of ovarian change leading up to and following it. In 1979, Dyer clarified the terms: (a) menopause is cessation of menses and no menstrual bleeding for a period of at least one year; and (b) the climacteric is the period during which there are bodily changes as the ovaries gradually decrease in their functioning, leading up to and following the menopause (as cited in Patterson & Lynch, 1988).

Although cessation of menstrual bleeding is the most noticeable sign of change during the climacteric, the World Health Organization in 1981 recommended a standard developmental classification to clarify research: (a) premenopause—regular, orderly menstruation still occurs, (b) perimenopause—increasingly irrigular menstruation with changes in quantity and quality of flow, (c) menopause—no menstruation for at least 12 months, and (d) postmenopause—the years following the last emnses (as cited in Jackson, Taylor, & Pyngolil, 1991).

Barile (1997) synopsized four conceptual views of menopause: (a) biological, (b) psychological-psychosocial, (c) environmental-sociocultural, and (d) feminist. The biological perspective is the most negative view and considers menopause a medical disorder, an endocrine deficiency in which estrogen production fails. Thus, menopausal women need to be treated with hormonal replacement. The psychosocial model emphasizes the impact of women's multiple social roles and changes in life circumstances during the climacteric years, such as adult children leaving home or major illness or death of close relatives. This view considers most psychological difficulties at that time to be products of stressors. The sociocultural model sees women's difficulties at menopause as stemming from the cultural values of their society. This view encourages women to become proactive in changing the social environment and to learn coping skills that counteract the effect of negative cultural attitudes. The feminist view is the most positive and considers menopause a natural event signaling transition into a new stage of life with fresh challenges and opportunities; the transition is, or ought to be, under the control of women rather than the medical profession.

Research on Menopause and Mental Health

Rostosky and Travis (1996) undertook a review of journal articles on menopause in both the MEDLINE and PsycLIT databases covering the years 1984 to 1994. Although MEDLINE cites over 300,000 articles per year

from over 3,200 medical, psychiatric, social science, psychological, and interdisciplinary journals, the authors found only 9,018 (about 3%) that used the words menopause or menopausal in either the title or the mesh headings for key words. The majority of these approached menopause with a focus on medical treatment focus and dealt with reproductive hormones and hormone replacement therapy. There were 500 articles about menopause with a social or psychological focus (less than 6% of all menopause articles). Most of these articles focused on menopause and depression or mood; some examined menopause and stress, or work patterns, weight gain, and sleep problems; and some investigated decision making by women or physicians regarding hormone replacement therapy. A few looked at health practices and health care utilization patterns of menopausal women.

Rostosky and Travis' (1996) search of PsycLIT for the years 1984 to 1994 was also not very fruitful. In contrast to the more than 9,000 articles found in MEDLINE from approximately 40,000 articles cited per year from over 1,300 journals in PsycLIT, there were only 227 about menopause (or less than 1%). Only about 30% of those articles focused mainly on psychosocial aspects of menopause. Some articles examined social roles, health utilization and help-seeking patterns, or specific health-related behaviors such as exercise behavior or smoking in menopausal women. The two most frequent topics, however, were psychological distress or depression and women's attitudes, beliefs, and perceptions about menopause.

Rostosky and Travis (1996) examined publication trends from 1984-1994 within four subsets of the PsycLIT journals. Of interest were their findings regarding the journals specifically focused on women: *Psychology of Women Quarterly, Sex Roles, Signs,* and *Women and Health.* These journals published only nine articles specifically on menopause during the entire 10 year period. There were five empirical studies, all of which were based on surveys. Three of these articles focused on attitudes or perceptions about menopause, and the remaining two considered depression and menopausal symptoms. There were four conceptual/theoretical papers, three of which discussed menopause and sexuality, and one of which was a literature review on exercise and menopause symptomatology. Expanding their search in these journals beyond menopause, they found only an additional 22 articles (eight in one special issue of Psychology of Women Quarterly) on either middle-age or aging, covering topics such as employment/career issues, mid-life childbearing, cross-cultural comparisons of menopause, and sex roles.

About 96% of the menopause articles published from 1984 to 1994 and cited in MEDLINE and PsycLIT were based directly or indirectly on the biomedical model of ovarian disease and estrogen deficiency and viewed menopause as a negative event. Those articles dealing primarily with mental health aspects often painted a gloomy picture of stress, decline, and depression (Rostosky & Travis, 1996).

Problems with Research

Research on menopause has suffered from several methodological problems. Among these are: (a) small, non-random, self-selected samples drawn from clinical populations, (b) lack of control populations, (c) lack of diversity of participants, (d) little attention to the experiences of lesbian women, (e) lack of measurement of hormone levels; (f) lack of baseline data, (g) poorly defined variables, (h) nonstandardized instruments for measuring symptomatology, (i) failure to conceptually distinguish the terms menopause and climacteric, (j) failure to distinguish participants receiving hormone therapy from those who were not, and (k) failure to distinguish naturally postmenopausal women from hysterectomized or bilaterally oophorectomized women (Berkun, 1986; Cole & Rothblum, 1990; Matthews et al., 1990; McKinlay, McKinlay, & Brambilla, 1987; Rostosky & Travis, 1996; Stewart, Boydell, Derzko, & Marshall, 1992).

Despite these problems, investigators have acquired important information. Of particular interest are: (a) studies of women's sexuality in mid-life, (b) investigations into physicians' and women's attitudes toward menopause and estrogen replacement therapy, and (c) the effect of menopause itself on women's mental health. The followings sections of the article address these topics.

Middle-aged Women's Sexuality

Until recent decades, few women lived long enough to experience menopause. According to figures compiled by the Department of Health, Education, and Welfare (as cited in Morokoff, 1988), the life expectancy for women in 1900 was only 48.3 years. Menopause generally occurs at about 50 years of age (Wagner, Kuhn, Petry, & Talbert, 1995). In 1985, the Department of Health and Human Services' statistics reported women's life expectancy at about 81 years (as cited in Morokoff, 1988). Thus, women can expect to live for about 30 years after menopause or for a considerable portion of a lifetime.

Sexuality is an important component of people's

self-identity and has an influence on quality of life. A common notion is that women who have gone through or have completed "the change" lose their femininity and interest in sexual activity. Until recently, the psychological literature, particularly by Freudians such as Deutsch (cited in Patterson & Lynch, 1988), promoted the view that women's femininity was determined by their capacity to reproduce.

There are physical changes that take place in women during the climacteric and after menopause that can have a bearing on sexual behavior. The ovaries secrete three types of estrogen: estrone, estradiol, and estriol. They also secrete several androgens, notably testosterone and androstenedione, both of which are also secreted by the adrenal glands (Morokoff, 1988). During the climacteric, production of estrogens—particularly estradiol—gradually declines, although for some women estradiol continues to be secreted for a few years after the last menses (Vermeulen, as cited in Morokoff, 1988). Estrone becomes the main estrogen in women's bodies after menopause and results from conversion of adrenally produced androstenedione (Morokoff, 1988).

As a result of reduced estrogen and reduced vascular supply to the pelvis, the external female genitalia change somewhat in appearance. There may be some loss of pubic hair and reduction of fatty tissue in the labia majora (Leiblum, 1990). The walls of the vagina gradually thin as the epithelium loses its folds and elasticity. This change reduces vaginal depth. In addition, there is less vaginal fluid, which can leave the woman susceptible to vaginal infections (Leiblum, 1990; Morokoff, 1988). Dyspareunia, or painful intercourse, may occur because of the thinner and drier vaginal mucosa. Such dryness can be compounded by a longer time for sexual stimulation to produce lubrication (Channon & Ballinger, 1986; Leiblum, 1990; Morokoff, 1988). These changes, particularly the anatomical changes in the vagina resulting in less lubrication and proneness to vaginal infection, may affect a woman's comfort during sexual intercourse, which in turn may cause her to avoid coitus (Leiblum, 1990; Morokoff, 1988).

Most studies report a lessening of sexual activity after menopause (Ballinger, 1990). Investigators have not determined, however, whether this decrease reflects a diminution in desire, an increase in physical discomfort, or relational factors. To date, studies have tended to focus on levels of sexual activity rather than on women's level of sexual desire during climacteric and after menopause. Whereas most evidence points to diminished activity, whether this change result from hormonally diminished

desire or other factors remains unclear. Some studies have found that in a significant number of women sexual desire actually increases after menopause (Cutler, Garcia, & McCoy, as cited in Morokoff, 1988; von Mühlen et al., 1995).

Attitudes Toward Menopause

Professional attitudes toward menopause have run the gamut from Victorian physicians considering menopausal women in a state of "sin and decay" (McCrea, as cited in Patterson & Lynch, 1988) to feminist therapists maintaining that menopause is simply a natural developmental process, a normal transition requiring a cognitive restructuring to help women view it as a challenge within their control (Barile, 1997). Economic factors may also be involved. Strong in 1979 and Reissman in 1983 pointed to the medicalization of menopause and called it medical imperialism based on profit and power motives (as cited in Gannon & Ekstrom, 1993).

In the past, literature that focused on the climacteric and menopause used language that was pejorative toward women and stressed a medical view toward menopause as pathology (Rostosky & Travis, 1996). An example is this quote in 1963 from Wilson and Wilson: "The unpalatable truth must be faced that all post-menopausal women are castrates [while] from a practical point of view a man remains a man until the end" (as cited in Berkun, 1986). Fortunately, researchers in more recent times lament such attitudes. As Patterson and Lynch (1988) chided, "With stereotypical views of menopausal women reinforced and promoted in the psychological, medical, and popular literature, it seems inevitable that many women would also accept these stereotypes themselves" (p. 186).

There is evidence, however, that women may not hold such stereotypes. Cowan, Warren, and Young (1985) did a survey of 35 family practice and gynecology physicians, 43 practicing nurses, and 35 menopausal or post-menopausal women to compare responses in these three groups regarding frequency, causality, and severity of 15 menopausal symptoms. Three categories of symptoms were psychosomatic, psychological, and somatic. Results showed that lay women who had experienced menopause tended to consider menopausal symptoms pathological and less psychogenic than did the medical professionals. The professionals' attitudes may be because medical personnel tend to see women who are experiencing emotional difficulties or menopausal discomfort, a minority of all women (Ballinger, 1990; Cowan, et al., 1985; Matthews et al., 1990; McKinlay et al., 1987; O'Connor,

Del Mar, Sheehan, Siskind, Fox-Young, & Cragg, 1995; Rostosky & Travis, 1996; Stewart et al., 1992).

There is evidence that perimenopausal women do experience an increase in physical and psychological symptoms. Jaszmann et al. in 1969 reported higher psychosomatic symptoms in European perimenopausal women than in those who were premenopausal, menopausal, or postmenopausal, and in 1986, Nolan found that perimenopausal women experienced more physical symptoms than did postmenopausal women (both cited in Jackson et al., 1991). McKinlay et al. (1987) found a slight increase in depression in perimenopausal women but noted that this level returns to premenopausal levels within 12 months after the last menses. Vasomotor symptoms (e.g., hot flashes and night sweats) are the most frequently reported symptoms suffered by perimenopausal women (Morokoff, 1988). Stewart et al. (1992) tested women attending a Canadian menopause clinic and found significantly more psychological distress among those who were experiencing transition between regular menses and menopause. O'Connor et al. (1995) found that for all symptoms tested, premenopausal and postmenopausal women reported fewer symptoms, whereas perimenopausal women, current users of hormone replacement therapy, and surgically menopausal women reported more. The trend for women currently using hormone replacement to report more symptoms was a surprise, and the authors speculated that, if these women were excluded in previous studies because of excessive symptoms, there is a possibility that current treatment regimens may be less adequate than believed.

One of the most consistent findings across studies is that younger, premenopausal and perimenopausal women view menopause more negatively than do postmenopausal women (Gannon & Ekstrom, 1993; Neugarten et al., 1963, as cited in Morokoff, 1988). Neugarten, Wood, Kraines, and Loomis in 1968 (as cited in Patterson & Lynch, 1988) reported that middle-aged women in the 45-55 year old range did not necessarily see menopause as a negative event, whereas respondents in the 31-44 year old group were more negative in attitude. Several studies showed that women who were immediately premenopausal complained of more somatic and psychological symptoms than did postmenopausal women (Ballinger, 1990; McKinlay et al., 1987; Stewart et al., 1992).

Wagner et al. (1995) developed scales to test women's attitudes toward menopause and estrogen replacement therapy. They found differences between college-aged women and middle-aged women. The older women were more likely to view menopause as a benign event and to consider estrogen replacement therapy in a more positive light, despite also being aware of the possible side effects.

Gannon and Ekstrom (1993) found that those who viewed menopause from a medical model tended to have more negative attitudes toward it. They also found that older men and women held less negative attitudes toward menopause. Their overall results suggested that, particularly for women, attitudes toward menopause improved as one got older.

Psychological Impact of Menopause

As already noted about Western culture, menopause has been considered a time of physical decline and psychological difficulty. Cross-cultural research concludes that in patriarchal cultures women have fewer valued social roles, and so they are more likely to experience menopausal distress. In 1971, Bart reported data for 30 worldwide societies. She concluded that societies with a patriarchal power structure are cultures in which women reported the greatest amount of climacteric distress (as cited in Patterson & Lynch, 1988). In 1972, Bart determined that, contrary to the common psychoanalytic belief that traditionally passive, feminine women would have the least difficulty with menopause, traditional homemakers actually experienced more difficulty than those with other roles (as cited in Engel, 1987). Gannon and Ekstrom (1993) pointed to clinical and laboratory research documenting the importance of perceived control on psychological health. They stated that physicians often expressed controlling and paternalistic attitudes toward female patients. The author asserted that women benefited from having a sense of personal control over their bodies' functions rather than yielding control to experts.

Conversely, in cultures where older women are valued and even rise in status, menopause is not considered traumatic. For example, Padus' 1981 study found that complaints about menopausal symptoms were rare in tribal South African women because women welcomed menopause as evidence of a new life-stage in which they were respected for their experience and wisdom (as cited in Patterson & Lynch, 1988). In 1983, Wright compared the menopause experiences of traditional and acculturated Navajo women with Anglo-American women. Navajo

women tended to have high status throughout their lives. Their status increased further after menopause when they took on new, highly respected roles. She found that traditional Navajo women tended to focus on positive changes related to menopause and ignore other symptoms (as cited in Robinson, 1996). Other authors, such as Flint (as cited in Ballinger, 1990; in Engel, 1987; and in Robinson, 1996), concluded that when women rise in status after menopause no menopausal syndrome exists.

Women ascribe psychological and symbolic meanings to menopause (Berkun, 1986; Morokoff, 1988), and these meanings are shaped by cultural expectations. Western women have largely been socialized to view their personal worth in terms of physical attractiveness, youth, and reproductive capability. Presumably, those qualities are also esteemed by men. Self-esteem, a component of psychological health, describes the extent to which individuals value themselves (Reber, 1995). A woman who has bolstered her sense of worth by paying close attention to her youthful appearance may react negatively to menopause as a sign of aging. Furthermore, if a woman has struggled with fertility problems and could not give birth to a child, menopause may signal an unequivocal end to cherished hopes (Leiblum, 1990). How a particular woman will experience the transition from regular menstruation to a state of menopause is still very difficult to predict, yet studies on the psychological effects of menopause have revealed some definite trends.

Whereas younger women have a less than positive attitude toward menopause, almost all research has found that menopausal and postmenopausal women do not suffer more mental distress than "normal." To be sure, there are some physical signs and discomforts associated with the climacteric and menopause. A small number of women do experience a greater degree of symptoms than most (Channon & Ballinger, 1986). Vasomotor symptoms (hot flashes and night sweats) and genitourinary atrophy (vaginal changes and urinary stress incontinence) are the only symptoms consistently attributed to the drop in estrogen during the climacteric and after menopause (Channon & Ballinger, 1986; Morokoff, 1988; O'Connor et al., 1995). These conditions respond to estrogen replacement therapy. Despite marketing campaigns, however, hormone therapy has not been unequivocally shown to improve mood, relieve depression, or reduce anxiety. Claims to the contrary are generally anecdotal and based on very small samples of women from clinical populations and possibly illustrate a placebo effect (Ballinger, 1990; McKinlay et al., 1987). There may be a domino effect by which women generally feel better if estrogen reduces the number and severity of their hot flashes

(Greene, 1984, as cited in Morokoff, 1988).

Berkun's (1986) research indicated that menopause was not among the factors that affected middle-aged women's emotional state and that social and relational factors were more significant. Wagner et al. (1995) concluded that the middle-aged women in their study were more likely to see menopause as a minimal disruption, to consider it a natural life event, and to discount the stereotype that menopausal women "go crazy."

Regarding depression in mid-life women, McKinlay et al. (1987) undertook an extensive and well-designed longitudinal study that tracked 2,500 women from premenopause to postmenopause. The goal was to sort out the contribution of endocrine changes characteristic of menopause from social circumstances common to this time in life. In analyzing data concerning the effect of menopause on depression, women who had recently had a hysterectomy or bilateral oophorectomy (i.e., surgical menopause) were the only group to show an increase in depression, and they exhibited depression twice as often as the other groups. There was no reported increase in depression for premenopausal, perimenopausal, or postmenopausal women. The analysis of data concerning social circumstances (e.g., physical health factors, marriage status, education, socioeconomic status, and worry about a close relationship) revealed that these variables contributed more strongly to depression. These findings contradict the common clinical view that depression results from the hormonal changes of menopause, and they corroborate the social environment view that depression is primarily related to the social changes and stresses that are common at mid-life for women.

Matthews et al. (1990) found that women who had elevated levels of follicle stimulating hormone, which indicates a definite state of menopause, and who were receiving hormone replacement therapy, did report more depressive symptoms. The authors pointed out that their data would not allow them to conclude whether these women were experiencing effects specific to their particular hormone treatment regimens. They also suggested that this finding might reflect the psychological and biological characteristics of women placed on hormone replacement therapy, and they indicated that they would investigate this phenomenon more closely in further research.

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Mathews et al. (1990) concluded that women who experienced natural menopause and did not use hormone replacement were not at risk for increased mental distress. They reported that the only reliable psychological effect of natural menopause was that women who became postmenopausal and did not take hormones experienced a decline in the level of private self-consciousness even though they had more hot flashes. Furthermore, women who had experienced natural menopause consistently scored lower on scales of public self-consciousness, depression, paid job dissatisfaction, and anxiety than did control groups and hormone users. That is to say, experiencing less preoccupation with their feelings and motives, less worry about what others thought of them, less dissatisfaction with paid jobs, and less anxiety in general, they showed better mental health than all other groups of tested women. The investigators also concluded that natural menopause is a benign event for most healthy women and that evaluation and treatment of a middle-aged woman should give greater weight to her life's social circumstances and specific health risk factors than to the fact that she is menopausal.

After an extensive review of the literature, Ballinger (1990) concluded that physiological changes associated with menopause have very little impact on women's mental health and that there is a decline of minor psychological disorders during the decade following menopause. Social factors were more significant. Yet, negative stereotypes about menopausal women endure in Western culture. Ballinger stated: "It is a tribute to the power of culturally-determined attitudes, media pressure and the promotion of estrogen sales that this menopause myth persists, despite all the evidence to the contrary" (p. 784).

Discussion and Conclusions

On the basis of this review, I have determined that we need a more comprehensive, interdisciplinary understanding of women at mid-life. Researchers must give more attention to social, emotional, cognitive, and cultural influences on menopause. Future research should explore why surgically menopausal women report more depression than other postmenopausal women. Does such an event occur because of the sudden termination of reproductive hormones, because of the stress of serious illness and major surgery, or some other factors? A paradox for investigators is the surprising finding that current users of hormone replacement report more depressive symptoms than do naturally postmenopausal women who do not take hormones. Is this result because of certain hormone regimens, or are women who agree to hormone therapy more prone to report such symptoms?

Overall, Western women do not suffer great mental distress as a result of menopause. There may be a rise in depression during perimenopausal years, but this rise quickly abates after menopause. Most middle-aged women consider menopausal women calmer, freer, and more confident than before menopause (Neugarten, as cited in Patterson & Lynch, 1988). Indeed, postmenopausal women may experience more psychological comfort than ever before. Their levels of public and private self-consciousness tend to decline. As long as they do not experience major social or relational upheavals, they may sense that life is getting better and, perhaps, even increase their interest in sex (von Mühlen et al., 1995). Cutler, Garcia, and McCoy (cited in Morokoff, 1988) found that 10% of the perimenopausal women they studied noted an increase in sexual arousability. There may also be satisfaction in freedom from restrictions imposed by child rearing and appreciation in describing that the mothering role has not ended, only changed (Berkun, 1986).

Western culture has changed during the past 30 years. There is more sensitivity to gender issues. From this literature review, I have concluded that, for the most part, women's self-esteem and mental health, which seem to be determined more by social factors than by menopause-related changes, do not suffer as a result of menopause and may even improve. The years after menopause may offer new opportunities and challenges to women, including career development, educational pursuits, and the arrival of grandchildren (Morokoff, 1988). Cultural attitudes, socioeconomic factors, work opportunities, health status, and beliefs about gender all have an impact on women's experience of menopause (Leiblum, 1990). One can hope that more interdisciplinary studies will examine not just the biology, but also psychosocial and cultural factors that influence women's experience of menopause. Findings from such studies can contribute to a model that integrates elements of all of those perspectives about menopause.

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Electroconvulsive Therapy:
Administration, Side-Effects, and Effectiveness

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This article reviews the administration and effects of electroconvulsive therapy (ECT), describing in detail the current research findings about ECT side effects and effectiveness. The professional controversy about unilateral and bilateral electrode placement is addressed. This review shows that bilateral placement provides more effective treatment than unilateral placement and has few lasting cognitive deficits. The data support the conclusion that ECT is an effective and safe way for treating some psychiatric conditions. Suggestions for future research include determining the mechanism through which ECT effects brain mechanisms.

Electroconvulsive therapy (ECT), the administration of an electric current to the head to effect activity in the brain, has long been used as a treatment for various psychiatric disorders but has only recently been subjected to controlled studies (Cotter, 1967; Patterson & Kesner, 1981). Since first tried, investigators have learned much about the effective use of ECT. Although the mechanism through which the treatment works is not completely understood, several hypotheses exist. Additionally, an educated public can discover that ECT is not irresponsibly or indiscriminately administered to control the behavior of unruly patients as depicted in the movie "One Flew Over the Cuckoo's Nest" (Zaentz, Douglas, & Forman, 1975).

Clinicians primarily use ECT to treat major depression and acute mania (Mukherjee, Sackeim, & Schnur, 1994), particularly when individuals cannot tolerate standard medications or when medication has proven ineffective (Potter & Rudorfer, 1993). Practitioners also use ECT when a person is suicidal and there may not be time for medications to work (Potter & Rudorfer, 1993). Dabiri (1995) cited quicker response time and patient safety, especially with elderly individuals, as reasons for choosing ECT over medication. The present article reviews literature concerning administration, side effects, physiological effects, and effectiveness of ECT.

Administration

ECT administration typically employs the following procedures: the patient is instructed not to eat or drink anything for 8 hr before the treatment; on the morning of the treatment, the patient is instructed to wear loose clothing or a hospital gown; the patient lies on a bed and is connected to blood pressure, pulse, and electroencephalograph (EEG) monitors, as well as to an intravenous tube. Personnel establish baseline measures. Required personnel include an anesthesiologist, a nurse, and an experienced psychiatrist. Several medications are administered to keep the patient relaxed, comfortable, and injury free. To reduce the secretion of saliva, atropine is administered intravenously to ensure the patient's comfort; a mild anesthetic is given, typically a barbiturate such as thiopental or methohexital (Kotin, 1993). Maintaining a superficial level of narcosis avoids raising the seizure threshold, the minimum level of stimulation needed to produce a seizure (d'Elia, Ottosson, & Stromgren, 1983). If the level of the narcosis increases the seizure threshold, the seizure produced by the typical ECT treatment may not be strong enough to produce an effect. To localize the effects of the seizure caused by ECT, and for the patient's comfort and safety, a muscle relaxant, usually Succinyl-choline, is also administered (d'Elia et al., 1983). After the administration of the muscle relaxant, artificial ventilation is necessary to keep the patient's oxygen level adequate.

The electric shock can be delivered bilaterally or unilaterally. d'Elia et al. (1983) noted that when using bilateral ECT one electrode is placed on each temporal region. In unilateral ECT, both electrodes are placed on the nondominant temporal and parietal regions. Although Kotin (1993) argued that the right temporal and parietal lobes are preferable for unilateral ECT to avoid affecting the verbal center of the brain, the choice of placement is under the discretion of the physician.

Shock is a pulsating electrical current, ranging from 70-130 volts, delivered for 3 to 6 s (d'Elia et al., 1983). Although the shock is brief, the seizure lasts 30-60 s (Kotin, 1993) and is localized in the brain as a result of the muscle relaxants. A typical ECT treatment plan to treat endogenous depression, as reported by d'Elia et al.

(1983), is five to eight unilateral ECT sessions administered two to three times per week.

Side Effects

Controversy exists among researchers about side effects associated with ECT. Although discrepancies exist, there is general agreement regarding the short-term side effects. For example, medications administered before the treatment may cause daytime sleepiness, dry mouth, nausea, constipation, low blood pressure, blurred vision, and weight gain (Kotin, 1993). Common short-term side effects resulting from the electric current are headaches and a loss of memory for events shortly before and during treatment (Potter & Rudorfer, 1993).

There is, however, considerable debate about the long-term cognitive side effects associated with bilateral and unilateral electrode placement. The short-term loss of memory and other longer-term cognitive deficits differ depending on the method. Fromm-Auch (1982) reviewed 22 studies concerning the memory functioning of patients before and after ECT. He found non-dominant, unilateral ECT produced less impairment in verbal memory than bilateral ECT. Times following treatment varied from 30 min to 1 week. Sackeim et al. (1993) measured impairment immediately after treatment and showed that patients who received bilateral treatment had more impairment in a variety of memory and orientation assessment measures than patients who received unilateral treatment. For virtually all objective, cognitive measures in the week following the administration, bilateral treatment resulted in greater cognitive deficits than unilateral treatment. Yet, at a 2-month follow up, cognitive functioning was found to be similar in both groups.

Collectively, these studies suggest that unilateral treatment results in less short-term cognitive side effects than bilateral treatment. However, the long-term side effects of ECT remain hotly debated and are in need of further study. Longitudinal studies of more than 2 months would be beneficial.

Physiological Effects

Knowledge about how ECT affects brain structure or chemistry is lacking. Some researchers suggest ECT increases the transmission or production of certain hormones and that ECT changes the permeability of the blood-brain barrier (Rich; as cited in Groves & Rebec, 1988). Nobler (as cited in "... and aided," 1994) reported drops in cerebral blood flow 1 hr after the ECT treatment in patients who showed improvement. This finding is par-

ticularly problematic because reduced blood flow has been recorded in the brains of untreated depressed people as compared to the blood flow in the brains of non-depressed adults ("... and aided," 1994).

One explanation for the effect of ECT on depression refers to adrenocorticotrophic hormone (ACTH) and cortisol. Depressed individuals have higher than normal levels of cortisol secretion from the adrenal cortex caused by increased secretion of ACTH, which contributes to the regulation of cortisol release. Cortisol and ACTH release are controlled by the interworking of the hypothalamus, pituitary, and adrenal cortex. When depressed individuals are given a dexamethasone suppression test, which measures cortisol suppression, suppression of cortisol and ACTH release does not occur as it does in non-depressed individuals (Groves & Rebec, 1988). This result suggests a deficit in the homeostatic mechanisms of the system. Ideally the hypothalamus, pituitary, and adrenal cortex, through the release of cortisol and ACTH, are able to keep each other in balance and working properly. After ECT, the hypothalamus may respond more effectively to the increased levels of cortisol, thus controlling the amount of cortisol and ACTH released and reducing depression (Weiner, 1984). In a paradoxical finding, Allan, Denney, Kendall, and Blachly (1974) found ECT treatments resulted in a rapid increase of ACTH and a slower increase of cortisol. This outcome would seem to point to a change in the effect of ACTH upon the release of cortisol as a result of ECT, but not on the suppression of ACTH and cortisol.

Another proposed effect of ECT is that electrically induced seizures have been found to decrease pre-synaptic norepinephrine re-uptake and increase the number of norepinephrine post-synaptic receptor sites in mice (Welch, Hendley, & Turek, 1974). As a result, more norepinephrine is received by the post-synaptic neuron, hypothetically reducing depression because of the increased levels of norepinephrine. This finding is less paradoxical in light of theories linking depression to norepinephrine depletion.

ECT is also known to have anticonvulsant properties. During ECT treatment, there is a greater cumulative increase in the seizure threshold in responders to ECT versus nonresponders. After reviewing 50 years of ECT use for acute manic episodes, Mukherjee et al. (1994) said that we do not know whether the anticonvulsant properties of ECT are causally related to the antimanic effect, the remission of mania, or if the association reflects the effects of a common, yet unidentified, neural process which accounts for both. Nevertheless, some ani-

mal studies indicate that ECT has stronger anticonvulsant properties than anticonvulsant drugs.

In sum, there are many explanations for how ECT works, but none have unequivocal empirical support. When the mechanisms or processes that ECT affects are better understood, our understanding of the physiological basis of depression will also improve.

Effectiveness

Much of the controversy about using ECT surrounds its effectiveness in treating mania and depression, and whether to use unilateral or bilateral placement of electrodes. d'Elia et al. (1983) stated that for mildly depressed individuals ECT results in considerable improvement in 80% of cases, whereas antidepressant drugs have the same results in only 60% of cases. They also reported that the effectiveness of ECT is even greater in patients with severe depression. However, one year after treatment, Sackeim et al. (1993) found that 59% of patients who received ECT met the criteria for relapse regardless of bilateral or unilateral placement.

Using data from ECT treatment of 589 manic patients, Mukherjee et al. (1994) reported 80% success, defined as marked improvement or complete remission. From their review, the authors recommend use of bilateral ECT and conclude that ECT is effective as a first-line treatment for acute mania. Measured one week after ECT, Sackeim et al. (1993) found right unilateral ECT effective but not at the level of bilateral ECT.

On the other hand, Fromm-Auch (1982) found equal efficacy of bilateral and non-dominant unilateral treatment in his review of the past 20 years of ECT use. He recommended unilateral treatment because the findings of less short-term memory impairment. Although, as mentioned previously, Sackeim et al. (1993) found unilateral- and bilateral-treated patients had similar cognitive functions at a 2-month follow up.

ECT is an effective way to treat mania and depression. Some authorities recommend ECT as a first line of treatment. Although Sackeim et al. (1993) found that 59% of the patients relapsed, none of the patients in the study responded to any other form of treatment. Given the recalcitrance of the depression in this sample, one can judge 41% success as relatively high.

Conclusions

The use and understanding of ECT has dramatically increased since being used simply to control behavior or as a treatment for nearly any mental illness. However, the earlier stigma associated with ECT use may take many years to abate. As a result of careful scientific study, ECT is no longer used indiscriminately but is only used for a few mental illnesses such as mania and depression. ECT's side effects and effectiveness have been carefully documented. ECT procedures continue to be modified on the basis of new discoveries to insure the safety and well being of patients.

ECT is approximately 80% successful for depression and acute mania (d'Elia et al., 1983). As with all medical or psychological treatments, 59% relapse is a concern (Sackeim et al., 1993), but most candidates for ECT have already failed to respond successfully to medication and psychotherapy. On the other hand, many patients become symptom free after ECT or are better able to control their symptoms with medications that were previously ineffective.

Controversy about the use of unilateral or bilateral ECT has not been resolved. Current research, although not unanimous in its findings, points to bilateral treatment as having greater long-term effectiveness but causing more short-term cognitive deficits (Mukherjee et al., 1994; Sackeim et al., 1993). In contrast, unilateral treatment has a slightly lower level of success and causes fewer short-term cognitive deficits (Fromm-Auch, 1982). The long-term cognitive effects of both forms of ECT have not been adequately studied. Before researchers can make a definite recommendation, much more research is needed. Future researchers also need to address the question of the mechanism through which ECT affects the brain because little information exists about how ECT affects the microstructure and processes of the brain. Despite questions regarding its safety, long-term effectiveness, and mechanisms for action, ECT is securely joined to the conventional repertoire of psychiatric interventions.

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Gender Differences In Relationships:
The Progression of Intimacy and Commitment

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Gender differences in relationships have been the focus of many research endeavors. In this article, I analyze men's and women's viewpoints regarding intimacy and commitment, as well as identify and discuss other attributes that may affect the levels of intimacy and commitment in relationships, such as jealousy, self-esteem, and dishonesty. Suggestions for additional research include examination of the impact of personal experiences, cultural beliefs, and personality types on the assessment of intimacy and commitment by men and women.

Commentators have noted differences between men and women since early in recorded history. Some of these reported differences have changed over the centuries and across cultures. Yet some of these differences have been repeatedly identified. Many men and women have been frustrated by the different perspectives about intimacy and commitment in the opposite sex. The exceedingly high level of divorce in the Untied States would seem to support the view that marriage requires a highly committed and intimate relationship. Furthermore, the popularity of a contemporary book about the sexes, *Men are From Mars, Women Are From Venus* (Gray, 1992), supports the assertion that differences exist between the sexes with regard to intimate (dating) relationships.

In this article, I will focus on several issues all relating to the concepts of intimacy and commitment and how these issues play out in male and female interpersonal relationships. First, I will consider the connection between intimacy and commitment as reflected in the psychological literature. This summary will provide a frame of reference for subsequent discussions about intimacy. Second, I will examine the development of intimacy and commitment and how these concepts differ for men and women. Third, I will discuss several other attributes that could affect intimacy and commitment, including romantic involvement outside of the relationship, jealousy, self-esteem, and dishonesty involving fidelity.

I would like to clarify that the information I present in the following paragraphs represents several age groups and different dating statuses. Ages range from adolescence to middle adulthood (mid 30's) and dating status varies from no involvement to marriage. Thus, the focus of this article is not on one age group with a particular style of dating.

The Connection Between

Intimacy and Commitment

Moss and Schwebel (1993) developed a definition of intimacy that involves five characteristics—commitment, mutuality, and affective, cognitive, and physical intimacy. All of the characteristics are interrelated, but "Commitment is viewed as the foundation that provides opportunities for the other intimacy dimensions to develop" (p. 33). Thus, commitment is a very important foundation for the development of intimacy. One could almost say, from the perspective of this definition, that commitment must be achieved before intimacy can occur.

Moss and Schwebel (1993) attempted to assess their definition of intimacy for use in practice and research. Although the five characteristics of intimacy were a part of the assessment, I will describe only the information that pertains to commitment because the focus of this section is on the connection between intimacy and commitment. The authors found that increased commitment often leads one "to focus affective and cognitive attention toward that other individual" (p. 35), which may encourage the development of positive feelings for that person. Additionally, the authors found that commitment had a significant correlation with "affective, cognitive, and physical aspects of intimacy," as well as being "positively associated with scales of marital adjustment and satisfaction" (p. 35). These findings appear to support the conclusion that commitment is a necessary component for a relationship before intimacy and romantic relations can occur.

Van den Broucke, Vandereycken, and Vertommen (1995) gave special attention to the development of marital intimacy. They identified four models of marital intimacy—life span development, motivational, equilibrium, and equity models. These authors pointed out that inti-

macy can be multi-dimensional. They viewed was of inti-macy as a process, "a characteristic way of relating which develops over time" (p. 220) or a state of the relationship.

Moreover, Van den Broucke et al. (1995) identified three components of intimacy: (a) the involvement of two people who exhibit a connection including cognitive, affective, and behavioral components; (b) the importance of the individual, specifically their authenticity and open-ness; and (c) the consideration of the social group because relationships do not occur in a vacuum. The authors also identified three determining factors for inti-macy, including self-disclosure, identity, and a break with the family of origin.

Roscoe, Kennedy, and Pope (1987) used open ended questions to determine how intimacy was defined for adolescents. Components of intimacy, according to the participants, were "sharing, physical/sexual interaction, trust/faith, openness, and love" (p. 513). However, the authors found two differences between boys and girls in their self-reports. Boys' most commonly cited component was physical/sexual interaction, whereas girls' most com-monly cited component was openness. Gender differ-ences appear to exist between the sexes, but the investi-gators also reported that intimacy was a multidimension-al construct, and that there was a general agreement among the sexes as to the components of intimacy. Surprisingly, commitment was not mentioned as a com-ponent of intimacy by this group of participants. The authors pointed out that changes in society have occurred, and as a result, "individuals are no longer pre-pared or willing to experience commitment" (Roscoe et al., 1987, p. 515).

To summarize, commitment and intimacy are com-plex concepts and somewhat difficult to define. Generally, intimacy has many components, all of which are necessary for the achievement of intimacy. Commitment is one of the most vital components for the development of intimacy. Although there is general agreement between the sexes about some elements of intimacy, there are differences between them about the relative importance of the elements.

Development and Assessment of Intimacy

and Commitment in Dating Relationships

In this section of the article, I will discuss the devel-opment and assessment of intimacy and commitment in various types of dating relationships. Paul and White (1990) reviewed the literature regarding the development

of intimacy, primarily in adolescents. The authors cov-ered a wide variety of issues but mainly used previous definitions of intimacy, which included cognitive, behav-ioral, and affective aspects with commitment occurring as a part of the behavioral aspect. They also defined rela-tionships according to levels of maturity, with each level representing a different level of commitment. The first level consists of focus on the individual and how the rela-tionship benefited him or her. The second level is role-focused; here the focus shifts to the other person and to his or her attitudes and beliefs. The person's intention is to remain within the relationship, but "commitment to an individual (rather than the romantic partner role itself) is not articulated" (Paul & White, 1990, p. 378). The authors described the third level as individuated-connect-ed, incorporating the development of self-understanding together with others' points of view. Commitment to both the individual and the relationship is evident at this level. The levels advance progressively as one ages.

Paul and White (1990) also cited Orlofsky, who developed a set of intimacy stages. Each stage demon-strates a different level of commitment: (a) intimate, which is "characterized by deep, committed relation-ships," (b) preintimate, which is a "deep relationship, but with evidence of ambivalence about commitment," (c) pseudointimate, which is a "relationship lacking close-ness and depth, but committed," (d) stereotyped, which are "superficial relationships, limited in closeness and communication," and (e) isolate, which involves the "absence of personal relationships" (p. 380).

Employment is another factor that can affect the development of intimacy. As more women enter the work force and more couples become dual-income families, there is an increased probability that employment will impact relationships. Matula, Huston, Grotevant, and Zamutt (1992) discussed the liberality of men's and women's gender role beliefs concerning the roles men and women play in the work world and how these beliefs effect their relationships. These authors specifically stud-ied how commitment to a career and commitment to a relationship interacted among college-level men and women. Results indicated that among lower division women there was less involvement in their relationships when they placed a great deal of importance on work. Upper division women evidenced more commitment to their dating partner when they were more certain of their vocational identity, however, they exhibited less involve-ment in the relationship when there was a strong desire to work after marriage. Lower division men were less com-mitted to the relationship when they placed a great deal of importance on work, whereas upper division men with

strong vocational identities were more involved in the relationship. These results suggest that working outside the home may influence the level of commitment to the relationship and that factors differ for men and women. This study's findings also support conclusions about the influence of a vocational sense of self on a relationship.

Other Attributes Affecting

Intimacy and Commitment

Several other attributes affect levels of intimacy and commitment to the relationship, including outside romantic involvement, jealousy, self-esteem, and dishonesty in the relationship. I will examine each of the attributes.

Romantic Involvement

Involvement in outside romantic relationships affects the level of commitment in the primary relationship. Seal, Angostinelli, and Hannett (1994) assessed gender and sociosexuality and their relationship to extradyadic involvement. One measure of the study involved men's and women's "willingness to interact with a stranger in three differing situations" (p. 3). The findings were that men had a greater willingness to interact with a stranger when (a) they were noticed by an attractive stranger and (b) they carried on a conversation with the stranger. Men exhibited higher willingness scores when the stranger was uninvolved (in a relationship) versus involved.

A second measure of the Seal et al. (1994) study was the extent men and women would go when provided with information about a computer date's involvement; action ranged from 1 (*hugging at car*) to 14 (*having sex*). The authors found that men indicated more willingness than women to be physically intimate, although those with shorter dating periods expressed increased willingness to engage in physically intimate acts extradyadically than those with longer relationships. Moreover, the authors found that men were less influenced by the length of their personal relationship than women. Surprisingly, commitment factors were not significantly different. One qualification about the Seal et al. (1994) study was that the scenarios were hypothetical and written responses could, therefore, be different from those in real life situations.

Jealousy

Jealousy is another characteristic within relationships that may affect levels of intimacy and commitment. Nadler and Dotan (1992) conducted a study regarding levels of commitment of married couples and the effects this variable would have in jealousy-creating situations. The investigators found that men and women reacted more strongly when the rival relationship was highly committed and the rival was quite attractive. The authors explained that these conditions provided the greatest threat to the self and the current relationship.

Nadler and Dotan (1992) also found differences in the ego styles of men and women and how they handle jealousy. Women were seen as essentially exposing themselves to vulnerability by "approaching the partner who has betrayed their trust" (p. 309). The authors argued that women exposed their egos to save the relationship. On the other hand, men avoided the partner as a way of punishment; hence, they withdrew from the relationship to save their egos. Thus, men and women appear to react differently to jealousy, particularly to threats from outside the relationship.

Self-Esteem

McDonald and McKinney (1994) assessed the levels of self-esteem among male and female high school students in relation to steady dating. The researchers found that boys had higher self-esteem than girls, but among both boys and girls, those who were going steady exhibited lower self-esteem than those not going steady. However, participants who went steady in the past exhibited higher self-esteem than participants who had never gone steady.

This study indicated that past levels of commitment (steady dating) were positively associated with self-esteem. Yet, present levels of commitment (steady dating) negated effects of the past. Data from McDonald and McKinney's study support the argument that consistency, "going steady," is important at some time in adolescence. However, the nature of the conflicting results of such commitment leaves many questions as to the pursuit of such relationships. The authors suggested that adolescent boys and girls entered relationships for different reasons, which may affect their feelings of self-esteem when committed and non-committed.

Honesty

Honesty in committed relationships is almost a characteristic that is taken for granted, yet there are many relationships in which committed individuals are dishonest. Stebleton and Rothenberger (1993) performed a study to assess honesty in sexual relations. The authors found that the majority of participants (78%) in the study said they were involved in monogamous relationships, and 91% of these individuals were sexually active. Sixty-four percent of individuals not involved in monogamous relationships indicated sexual activity within the last year. In response to the statement, "I believe that two partners should be in love before engaging in sexual intercourse," 68% of women agreed whereas 43% of men agreed. Men and women appeared to have different ideas about the feelings they should have before becoming physically intimate.

The authors also reported that 36% of the men indicated they were unfaithful to a current and/or previous partner, whereas 21% of the women agreed to the statement. One surprising finding was that those in monogamous relationships lied more often than those in non-monogamous relationships. The investigators proposed different reasons for this phenomenon, such as the size of the sample and the differences in definitions of monogamous among researchers and students.

Discussion

The issues described in this article are a sample of those surrounding intimacy and commitment. Because levels of commitment rise and fall in relationships, the data presented in each of these studies may represent different periods within each individual's relationship. I was surprised to discover that gender differences were not as pervasive as I had expected. Differences do exist between men and women, but they are not as dramatic as one might expect in terms of the progression of intimacy and commitment.

Future research should examine the impact of personal experiences, cultural beliefs, and personality types on the assessment of intimacy and commitment by men and women. Research could also investigate the influence of peer groups and familial relationships. Gender differences in views toward relationships need not be detri-

mental. Understanding the differences between men and women is a first step toward discovering how to use those differences to develop healthy relationships.

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Special Features

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University of Nebraska at Kearney

This Special Features section includes two topics that should be of considerable interest to students. The first topic (pp. 42-49) has to do with the ethical responsibilities of faculty. The "Call for Papers" invited contributors to describe incidents illustrating specific ethical concerns about faculty behavior. Forrest, Helleberg and Miller developed a list of 22 ethical responsibilities for faculty and asked students to rate the importance and frequency of each behavior; the authors describe their findings. Will Spurgeon elaborates on several ethical behaviors and poses a provocative question about an ethical concern not addressed in the "Call." Kelly Farrell provides several scenarios that illustrate some of the ethical concerns that may arise in determining publication credit for work done jointly by students and faculty.

The second topic (pp. 49-53) describes students' experiences in preparing conference presentations. Amy Wolverton discusses the need for long-term planning and preparation prior to submitting a paper for possible presentation. John Helleberg makes several recommendations to first time presenters, including attending a conference prior to the one at which you will be presenting. Maria Khersonskaya emphasizes the value of the preparation and practice as the prelude to presentation. Kerry Towler provides some very practical advice, particularly on the use of visual aids in making a presentation. Annie Schapman concludes by offering helpful advice about preparing a poster presentation.

Students' Perceptions of the Ethical Responsibilities of Faculty

Krista D. Forrest, John R. Helleberg, and Richard L. Miller

University of Nebraska at Kearney

Are there differences between faculty behaviors that are unfair or annoying and those behaviors that are downright unethical? Svinicki (1994) addressed this issue in her chapter "Ethics in College Teaching." She suggested that although some behaviors are universally accepted as unethical for faculty by faculty, others are less clearly defined. If faculty cannot decide which of their behaviors are ethical and which are not, how are students to make those same judgments? Svinicki said, "students in an individual's class are not usually aware of the ethical standards that shape an instructor's course policies and teaching practices; they see only the outcomes of those standards" (p. 270). Given this perspective, much of the research that has addressed ethics in teaching has been concerned primarily with faculty's reflections upon their own behaviors.

Behaviors that faculty generally agree are unethical include accepting undeserved authorship on a student's published paper, teaching while under the influence of cocaine or other illegal drugs, and providing false or misleading information when writing a letter of recommendation for a student. (Tabachnick, Keith-Spiegel, & Pope, 1991). In addition to those behaviors about which everyone agreed, there were several behaviors that faculty had difficulty in uniformly accepting as unethical. Examples included "teaching in a setting lacking in adequate ethnic diversity" and "teaching when too distressed to be effective" (Tabachnick et al., 1991, p. 513).

Keith-Spiegel, Tabachnick, and Allen (1993) have suggested that most ethical issues associated with teaching fall into four distinct categories: sexual harassment, rights of "subject-pool" participants, teaching values to students, and scientific misconduct. In their study, students rated 107 faculty behaviors on the degree to which those behaviors would be ethical. Fifty-nine of these statements were generated by faculty and came from an earlier study (Tabachnick et al., 1991). The rest of the items were student generated. Data indicated that students were most likely to rate behaviors as unethical if those behaviors also contributed to unfair grading or student ridicule. Examples of such behaviors included

"ignoring strong evidence of cheating, using a grading procedure that does not adequately measure what students have learned, allowing how much a student is liked to influence grading, insulting or ridiculing a student in the student's presence" (Keith-Spiegel et al., 1993, p. 161).

Because so few studies have considered students' perceptions about faculty behavior, our goal was to expand on that work. The present study examined two issues. First, what kinds of faculty behavior do students consider unethical? To answer that question, the present study differed from earlier ones in that it limited itself to examining only those behaviors that students themselves indicated were ethical. Second, the present study examined students' perceptions about also how often teachers' unethical behaviors was likely to occur.

Method

Participants

Forty-five undergraduate psychology students generated a list of potentially unethical faculty behaviors. Another 40 undergraduate students enrolled in sociology, history, and psychology courses rated items in the final survey.

Materials

Generation of Items. Students were asked to generate a list of behaviors that they considered unethical for the faculty. Two independent raters sorted items into similar categories.

Survey form. Twenty-two ethically problematic behaviors were included on the final survey. Students rated each behavior on two 5-point Likert scales. The first scale asked students to indicate how important the ethical behavior was to them. Responses ranged from 1 (*not at all important*) to 5 (*extremely important*). The second scale had students rate how frequently they thought the ethical principle was violated. Responses ranged from 1 (*never*) to 5 (*always*).

Results

The types of ethical behaviors that students generated fit into four categories. The categories were: teaching mechanics, teaching style, student advising, and personal conduct.

Teaching Mechanics

Teaching mechanics refers to procedures and materials faculty members use in class. Figure 1 illustrates the mean ratings of importance and frequency for each ethical behavior related to teaching mechanics. The ethical behavior with the highest importance rating was teaching the information students are required to know ($M = 4.73$), grading fairly ($M = 4.53$), using the best materials for the class ($M = 4.50$), having a clear syllabus ($M = 4.35$), and being prepared for class ($M = 4.05$). The two ethical behaviors rated highest for importance (teaching the information students were required to know, grading fairly), were also those that were rated as more likely to be violated. The frequency ratings for those behaviors were 2.61 and 2.57, respectively. Ethical behaviors rated as less likely to be violated included using the best course materials for the subject ($M = 2.35$), having a clear syllabus $M = 2.57$), and preparing for class ($M = 2.40$).
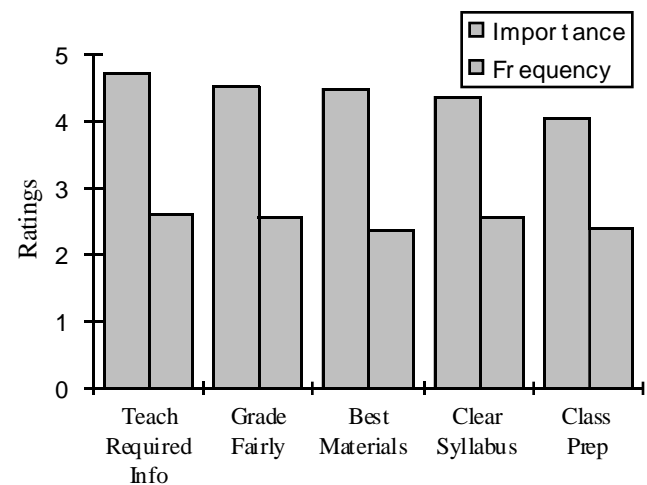

Figure 1. Mean importance and frequency ratings for faculty ethical behaviors related to teaching mechanics.

Teaching Style

Ethical behaviors associated with teaching style generally involved teaching techniques or in-class behaviors. Figure 2 provides the students' mean ratings of importance and frequency for each ethical behavior related to teaching style. The ethical behavior related to teaching style with the highest importance rating was being responsive to student questions ($M = 4.73$), showing enthusiasm ($M = 4.45$), varying teaching style ($M = 4.43$), using opinions only if both sides are presented ($M = 4.33$), and encouraging student participation ($M = 3.98$). According to the students, the ethical behavior most like-
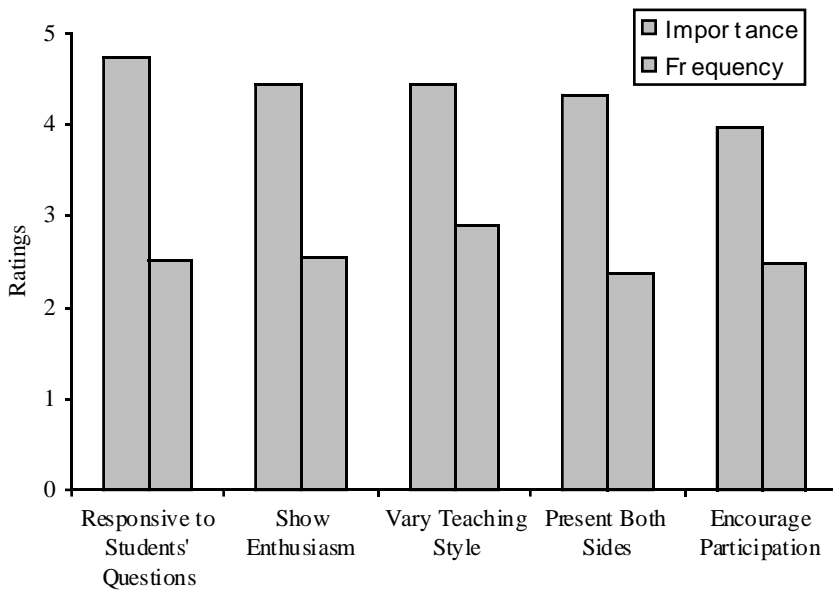
Figure 2. Mean student ratings of importance and frequency for ethical behaviors related to faculty teaching style.

Student Advising

Ethical behaviors related to student advising concerned aspects of teaching which generally occur outside of the classroom. Figure 3 shows the mean student ratings of the ethical behaviors associated with student advising. The ethical behavior related to student advising with the highest importance rating involved keeping student information confidential ($M = 4.45$). Being available for outside help ($M = 4.43$), showing interest in student success ($M = 4.35$) and having flexible office hours ($M = 4.25$) were also rated high for importance. According to our sample, the ethical behavior rated as most likely to be violated was showing interest in students' success ($M = 3.05$) and the least likely was keeping student information confidential ($M = 1.85$). Ethical behaviors rated as less likely to be violated included having flexible office hours ($M = 2.67$) and being available for outside help ($M = 2.57$).

ly to be violated was varying teaching style ($M = 2.92$). The ethical behavior students rated as least likely to be violated was voicing opinions in the classroom without presenting both sides of the issue ($M = 2.37$). The mean ratings of ethical violations were similar across the following items: responding to student questions ($M = 2.52$), showing enthusiasm ($M = 2.55$), and encouraging participation ($M = 2.50$).
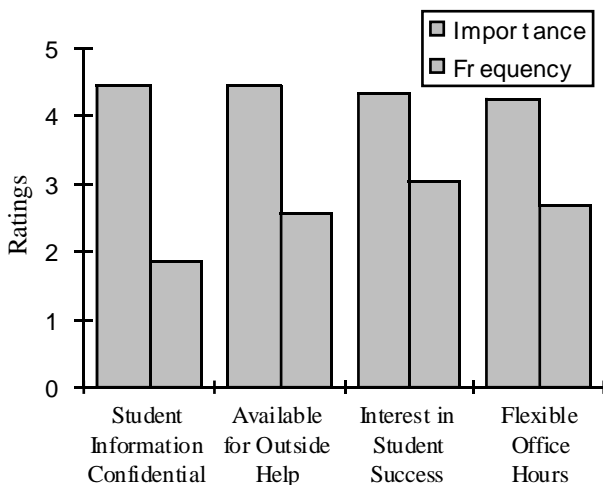
Personal Conduct

Ethical behaviors associated with personal conduct included personal behaviors either within or outside of the classroom. Figure 4 shows the mean student ratings of the ethical behaviors associated with personal conduct. The ethical behaviors related to personal conduct with the highest importance ratings were showing respect for other students and faculty ($M = 4.47$) and not discriminating in any way ($M = 4.43$). Ethical behaviors with lower importance ratings included conducting oneself appropriately (including language, attitudes, behavior, and hygiene) ($M = 4.30$) and dating a current student ($M = 3.61$). Students indicated that the ethical behavior with the highest importance rating was also the one most likely to be violated, showing respect for other students and faculty ($M = 2.60$). Other ethical behaviors rated as less likely to be violated included discriminating on the basis of sex or race ($M = 2.30$), behaving appropriately ($M = 2.10$) and dating current students ($M = 1.90$).

Discussion

In general, students are aware of the types of issues faculty members consider when creating standards for their courses. They seem especially aware of these standards when their own status in a course may be jeopardized by favoritism or unfair grading. These findings are
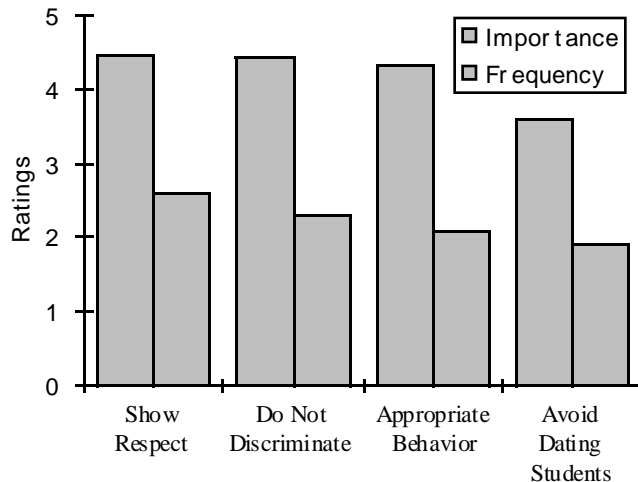

Figure 3. Mean student ratings of ethical behaviors associated with faculty student advising.

Figure 4. Mean student ratings of importance and frequency for ethical behaviors associated with personal conduct.

consistent with Keith-Spiegel et al. (1993). In addition, previous studies have identified behaviors that both students and faculty see as clearly unethical. Fortunately, our data indicate that students do not perceive many of these behaviors as occurring frequently.

What is surprising is the emphasis students placed on ethical behaviors related to teaching style. Although most teachers would recognize that being responsive to student questions could easily be considered an ethical behavior, what about showing enthusiasm or varying teaching style? Although many faculty members may be surprised to find those behaviors listed as ethical concerns, students seem to view them as an ethical responsibility related to "doing the job of a teacher properly."

These findings may help explain why students' evaluation of their teachers may be based on course presentation as much as course content. In a recent controversial study, Ceci demonstrated that his teaching evaluations for developmental psychology were significantly improved when he increased the number of hand gestures, varied the pitch of his voice, and, in general, talked with more enthusiasm (Williams & Ceci, 1997). Although his ratings were higher, the students grades did not differ from those he had taught in other semesters. He concluded that student evaluations were less related to learning objectives and more indicative of whether students liked faculty. However, if students see various teaching styles and enthusiasm as faculty ethics, then the evaluations may be based less on whether the students liked faculty and more

on whether they thought faculty did everything possible to make that material more accessible.

These ethical behaviors were generated by students, indicating that they are important ethical responsibilities to them. How can faculty use this information? First they can acknowledge that students' perceptions about ethical behaviors may be different from their own. Second, they can inform their students how their strategies for structuring a class relate to underlying needs to maintain ethical standards. Third they can model ethical behavior through their interactions with students as well as other faculty.

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Ethics and Undergraduate Education in Psychology

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When my fellow students provided ideas contained in the "Call for Papers" concerning the ethical responsibilities of faculty, they identified several issues that stemmed from problems they had experienced. A few of the issues were sufficiently self-evident (e.g., the confidentiality issue) to warrant my immediate nod and nothing more; but when looking at other issues, I placed them under five headings with themes that encourage us to recall the purpose of undergraduate education. The headings were: (a) respect, (b) expectations students properly

have for the professor, (c) what students may not as easily expect, (d) the prevalent danger of the lazy student, and (e) additional ethical issues. I hope that examining these themes with their assumptions will provide guidelines that can help us avoid future conflicts.

Respect

Three of the ethical responsibilities noted in the "Call" involved respect for students. They were: (a) show respect for students and other faculty, (b) be open-minded and responsive to students' questions, comments, and paper topics, and (c) conduct oneself appropriately, including language, attitudes, behavior, and hygiene. Overall, the request is that the professor be respectful, including respect for students' minds. The college environment should be one of sophisticated academic harmony, where learning and the sharing of ideas occurs in a healthy and professional manner to the benefit of everyone involved. Respect for students' own thoughts and mental explorations are a critical part of creating such an environment. A reminder to fellow students, respect is a two-way street.

Expectations Students Properly Have

of the Professor

Some of the expectations listed in the "Call" included: (a) prepare for class by studying lecture notes and having materials at hand, (b) attend class on time unless avoidable, (c) use the best textbook and teaching materials for a particular subject, (d) include pedagogical approaches that aid students' understanding of difficult material, and (e) thoroughly teach the material that students are required to know.

The students' argument is that "this is the very thing we pay for, after all." These suggestions describe the basic job of a professor. Though each student's motivation may differ (grades, course credit, knowledge, etc.), we have all paid for quality instruction. We expect the professor to be on time, to be prepared to do his or her job, and to do it masterfully (i.e., actually teach versus just talking). We count on exposure to all the relevant information society expects this class to provide us. These issues are part of the implicit agreement we make with the university when we enroll in the class. We should remember that budget constraints may limit what materials are available to the professor, but we justly expect that his or her best effort has been made to provide the highest quality learning experience possible. Further, we do not pay to teach ourselves unaided. For a professor

to test students on material not adequately covered in class is unfair to the students' GPA and mental health. The professor has the difficult task of delivering all the relevant material in palatable form, to the understanding of all the students, without leaving out difficult though important subjects, and without expecting too much or too little of students. Such is not an easy job, but that is what we expect.

What Students May Not as Easily Expect

The "Call" suggests that many students believe that professors should be flexible on posted office hours for students who need help and should show interest in each student's success. We must remember that professors are real people with real lives, too, and that they have many responsibilities to which they are ethically obliged. Sometimes they must shut their doors even if they would like to help us.

Secondly, the professor's job does not include patting everyone's back. The professor has many students and does well to keep up with the success of the class overall. Also, should the professor show an interest in each student's failure? I think not. At most, I would ask the professor to keep an eye on the higher and lower ends of the totem pole that require unique assistance.

The Prevalent Danger of the Lazy Student

The "Call" suggests that professors should: (a) ensure fair grading by developing tests that accurately assess knowledge gained, (b) offer friendly outside help to student's having problems with material, and (c) assign a reasonable amount of outside work. These concerns are genuine, but we must be cautious. I remember a test in which the professor asked us to apply the chapter material to a real world problem. One student, representing a significant number of others, was very upset because he thought that the task was unfair. I piped up and asked "Yeah, do you expect us to think for ourselves?", which of course the professor did. Yet no doubt the disgruntled student felt the question inaccurately assessed his knowledge.

Although friendly outside help sounds fine on paper, we must be sure that it does not translate into "Don't hold me accountable for not putting any effort into this class until now," because the professor's job does not consist of making up for students' lack of work. What is a reasonable amount of outside work? For personal reasons, I have wished a professor had not required as much, but students must seriously ask themselves, "Why are we in

college?" Working like crazy is part of the deal. The professor's responsibility is to expect students to learn, not to make college easier.

Additional Ethical Issues

Should faculty grade students equally? I think that ethics gives professors the freedom to demand more of higher-caliber students in certain situations. Should a high-caliber student who slacked off on an essay test, yet performed better than many in the class, really be graded with the same criteria as the lower-caliber student who struggled like mad to produce work that reached an acceptable level for the first time? Or should the professor push the higher-caliber student to earn his or her grade just as the lower-caliber student has had to do? Is it more fair to "grade everyone equally" than it is to "push everyone equally?" "No discrimination in grading" sounds like a simple ethical behavior but it is not as straightforward as we commonly assume. Some discrimination on the part of the professor can actually be very healthy.

The "Call" identified the following as ethical issues: Vary style of teaching to keep student's attention, show enthusiasm about the subject material, and encourage participation and include everyone in the discussion. Are these really ethical concerns or just the "sight and sound" generation demanding that it be constantly entertained. Enthusiasm and varied teaching style are nice to have in a professor because such qualities make class more fun, and the same goes for discussion, but such things cannot be ethically required. The professor's job is to teach well, and whether this should include discussion or class participation is going to depend on the topic and the professor's discernment of what the students are capable of addressing in an intelligent manner. We should recognize that periodic monotony is another price of education.

Another Suggestion

If the professor, in class discussion, questions the validity of material in the text, the professor cannot then give the standard book test that comes with the text. My view is that the professor must create a new text or modify the old one so as to avoid ambiguity in questions about those topics.

Last Question:

How Should the Professor Deal With Me?

I have discussed several ideas concerning the assumptions about undergraduate education that can form a decent guide to what we can consider the "ethical responsibilities of the faculty." In closing, I would like to pose one more ethical question to which future contributors to this journal might respond. I approach education as a search for knowledge, not just a degree. My schooling is very personal, and I often take an active hand in shaping it to fit my individual desires, working to create the most rewarding learning experience possible. This approach causes some projects to be late, such as take home tests that I will not complete until I have finished the reading. This behavior frustrates my professors because they do not like docking me points. Suppose I do all the projects required for a class, and I do them all exceptionally well, but I do not turn anything in until the last day. Here is the question. Should the professor give me a low overall grade simply because I am late? I did accomplish the principle objective of the class after all. In fact, I did very well. Yet according to a late-points-off policy, I deserve a D. If you were a professor, what would you do?

Difference of Opinion?
Defining Academic Honesty in
Disputes about Publication Credit

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Because research experience and publication are so important for students pursuing graduate school admission, receiving proper credit for the work they do is imperative. Ideally, the aim of professors is to assist students. At times, however, the person deserving the most credit on a project is unclear. The terms "academic honesty" seems inherently black and white, but the matter can be gray. Consider the following anecdotes.

Susan, an undergraduate, proposed a research project that was approved. Near the conclusion of the study, she was assigned a faculty supervisor, Dr. Jones, whose responsibility was to offer advice in preparing articles

for publication. The study was impressive, and Dr. Jones remembered his need for another publication to maintain good standing as a faculty member. He proceeded to insert his name as first author.

Eric was a graduate student, who had written a thesis and performed extensive research. However, his work was performed in conjunction with a larger project designed by his faculty advisor, Dr. Martinez. When Eric submitted manuscripts to journals for publication, Dr. Martinez insisted that she deserved first authorship because she had originally proposed the research and received grant money for the study. Eric believed that although his work was initially derivative of Dr. Martinez's project, he deserved the credit because he had carried out the majority of the project on his own and had substantially written the articles.

Andre, another undergraduate student, was a research assistant for one of his professors, Dr. Smith, who had a long history of brilliant research. Andre was eager to join her team. Andre made several major contributions to the study; he was also a proficient writer and assisted in writing a journal article. Because Dr. Smith often praised Andre and thanked him for his hard work, Andre was disappointed to discover that when the article was published his name was last in the list of authors.

According to the published guidelines for ethical behavior (American Psychological Association, 1992, p. 1599), psychologists are to "seek to promote integrity in the science, teaching, and practice of psychology ... [and are to be] ... honest, fair, and respectful of others." Concerning publications, students are to receive credit for work that is primarily derived from their theses or dissertations. Students are also to receive credit for work they have done regardless of relative status to their supervisors. In addition, psychologists are to "take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have contributed" (APA, 1992, p. 1609). Finally, the APA asserts that psychologists should recognize the power they hold over those they supervise and are not to "knowingly engage in behavior that is harassing or demeaning to persons with whom they interact in their work" (p. 1601).

How do these ethical standards apply to the scenarios described above? Susan was definitely cheated by Dr. Jones; he took credit for work he did not do. Eric, on the other hand, was probably not cheated. Although he did perform his own research, he might have realized from the outset that his project was not independent of Dr. Martinez's work. Eric and Dr. Martinez simply experienced a difference of opinion. Andre's case is not as clear as Susan's and Eric's. If Andre was listed last in the authorship credits simply because he was an undergraduate, he was deprived of credit he deserved. However, Andre was on a high-caliber research team, and although his work was exceptional, he may still have been the person who contributed the least.

Because academic honesty exists on a continuum from honesty to difference of opinion to cheating, many students may find themselves in difficult situations like Susan, Eric, and Andre. Although students may feel as though someone has infringed on their rights, there are consequences for speaking out. APA (1992) states that accusing someone of an ethical violation is a serious allegation that should not be "frivolous"; professional reputations can be harmed. Students also must consider the fact that they need their professors to write good letters of recommendation for them. However, if a professor has cheated a student, the student ought to risk the loss of a letter of recommendation and blow the whistle.

There are several ways to resolve disputes about academic honesty. APA (1992) suggests that professors could avoid conflict in the first place by being familiar with and following psychologists' ethical principles. Also, objectives and expectations about responsibilities and rewards should be clearly stated before beginning a project. Students and faculty have a responsibility to be open and assertive in the discussion of these issues. Finally, students and faculty ought to actively strive to maintain a safe environment for reporting violations.

Despite preventative measures, there will be cases in which individuals breach codes of academic honesty. A student who believes he or she has been cheated should first try to resolve the matter through direct discussion with the faculty supervisor. The next step is to discuss the situation with the department chair or the dean of the school. If such attempts are not successful, the student should make a formal report to an ethics committee. Hopefully, the loss of a letter of recommendation from the supervisor will be offset by other faculty members, who respect students' courage and will write letters.

Life would be easier if the world were always straightforward. Unfortunately, it is not. Yes, academic honesty can be difficult to define. However, if codes of conduct are followed and lines of communication between students and faculty are kept open, unnecessary disputes can be avoided.

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Establishing an Ideal Program of Research

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As I sat through presentations that preceded mine at the Nebraska Psychological Society Convention (NPSC), I watched, listened, and analyzed. I asked myself several questions. Did I sound that prepared? Was I talking that fast? Could I have answered that question? I anxiously paged through my notes, took a deep breath, and knew I would be fine.

Because of the numerous exposures to the items associated with re-writing, rehearsals for timing, and constructive faculty feedback, I anticipated a professional presentation. Suddenly, my turn arrived. I remember giving my presentation as if I were on automatic pilot, pausing, emphasizing, directing, and making points that had become routine to me. After my presentation, I answered questions with considerable confidence and felt a huge relief rush over me as I answered the last question.

Preparing myself for an oral presentation of a literature review in my senior year of college had been part of my game plan since the spring of my junior year. I realized how much I had really planned only after I finished the presentation. I discovered a process for providing a clear-cut path for planning an ideal program of research and increasing the odds for a successful presentation. In this article, I will describe my discoveries.

First, begin a literature review during the first semester of your junior year. Prior to signing up for the Independent Study course, I identified a faculty sponsor and told her about my research area, my ideas, and what I hoped to do with the research. After that faculty member agreed to sponsor my study, my sponsor and I focused my study, and I wrote a mission statement. My specific topic was Howard Gardner's multiple intelligence theory.

I want to emphasize that the literature review is a crucial and time-consuming part of research programs. I had numerous articles, inter-library loan materials, and books. I even made contacts with professional sources who knew more about my topic and could direct me further. I read each article, taking thorough notes, and organized information that supported and refuted my thesis.

The second step was to begin the paper. I made an effort to combine my notes into a perfect paper. Not so fast! To produce one paper of any substance, one without a plethora of colored ink from my sponsor, required an entire semester and several rewrites. By then, I was in the spring of my junior year, and I wanted to present the paper in the fall at NPSC.

In the third step, I wanted to re-focus my presentation to be of interest to college professors and students at the convention. I had a manuscript in excess of 30 pages on the topic of multiple intelligence in children. Therefore, my revision included the usefulness of multiple intelligence in upper levels of education. The revision required part of the summer and the beginning of the fall semester of my senior year.

During the beginning of my senior year, my sponsor and I re-evaluated my goals. The deadline for submitting a proposal to NPSC was October 10. Yet, I knew that I also wanted to extend my literature review into some sort of empirical study. Thus, while cutting, re-drafting, and analyzing the literature review into a 12 min presentation for the convention, I had already begun empirical research for presentation at the Great Plains Students' Psychology Convention (GPSPC) during the spring semester. I hope that readers appreciate the importance of planning to the completion of an empirical study with adequate time for GPSPC.

Because the submission deadline for GPSPC was in early February, I had to begin empirical research during the fall semester. While preparing to present at NPSC I had begun empirical research. I looked forward to having collected data by mid-November. That way, I still had several weeks to write the manuscript for an empirical study.

And so I return to the NPSC presentation. My greatest strength was the planning that I had done to prepare for this convention. By starting during my junior year, I was able to: (a) conduct a thorough review of literature, (b) commit my time the following semester to polishing the paper and presentation, and, (c) begin an empirical study. Presenting at NPSC, gave me experience present-

ing in front of faculty and peers in a lower-pressure situation. In the spring, I will have the confidence, experience, and some exciting data to present at GPSPC.

Only now am I able to reflect on what led me to a feeling of accomplishment about my research. Having identified and described my discoveries, I hope the reader appreciates what may lead him or her to the same feeling and that he or she will use the steps that I have learned to find a path for an ideal program of research.

Ways To Prepare For Undergraduate Paper Presentations

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When my psychology professor approached me about presenting the previous semester's lab research at a regional convention in Lincoln, Nebraska, I pictured myself standing in front of a crowd the size of the one at the Democratic National Convention, behind a microscopic podium, shaking in my shoes, and wishing I had not accepted this opportunity. I also thought that I did not have the time to deal with this extra responsibility while I was busy with my other classes. Looking back, I see that fear of the unknown caused me the most anguish. By the time I finished my second presentation at a regional convention, I realized that my previous fears were unfounded and that these conventions are wonderful opportunities that students should not ignore.

There are several things that I would recommend students do before presenting research at their first convention. Attending a convention in order to see firsthand how they are conducted would help reduce students' fears when the time comes for them to present their own research. Attendance can also be beneficial by exposing students to the many formats in which research is presented. At my first convention, I presented my paper in a poster format. While I was pinning my plain black and white poster to the display board, I noticed that the other students had used color to highlight their graphs and even had photographs of their experiment in progress. I could have learned much about how to present research and lowered my anxiety by attending a convention before I was asked to participate in one.

Another recommendation for first time presenters would be to practice presenting the research in front of other students and faculty members who might give suggestions for improvement. Often, people who have not been working on a project can recognize minor things, which, if changed, could improve the presentation and make it easier to understand. Additionally, by doing a trial run, presenters can hone their presentation skills and reduce the fear of speaking in public. By thoroughly preparing for the convention, presenters help to ensure themselves a more favorable experience, which will be a major asset in the future.

There are many different ways in which attending a convention can be beneficial to students. For one thing, a convention is a place for people with similar interests to get together and discuss new ideas. Such experiences help students to learn how science progresses and gives them the opportunity to make connections with others actively doing research in their field. For those students who are planning to attend graduate school, presentation of research at a convention serves as an impressive credential when sending applications to graduate programs.

These reasons make it very important to seize every opportunity to attend and be active at conventions. I was very intimidated by the idea of presenting research for the first time. However, after two conventions, these experiences have improved my self-confidence.

Impressions and Advice about Making an Undergraduate Research Presentation

Maria Y. Khersonskaya

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I believe that one of the most exciting and complicated aspects of scientific research is the presentation of the results. The way you present your paper may influence how your findings are accepted by the audience. Even the most significant results will seem unimpressive if presented in a hasty and unprofessional way. On the other hand, a good presentation can promote productive discussions that will create new research ideas, even from less-than-perfect research. I would like to share with you some of the lessons I learned from presenting my

research at the Arkansas Symposium for Psychology Students.

A key to a successful presentation is solid research. By this, I do not mean outstandingly significant results or breakthrough discoveries, but rather a detailed search of material and genuine knowledge of the topic. Facing several familar professors and unfamiliar students can be overwhelming. Nothing will give you more self-confidence in this situation than your competence in and expertise about the subject.

A beneficial technique in preparing for presentation, as I found out, is extensive practice. Presentation of research is similar to a performance, and no effective performance goes on stage unrehearsed. For me, practicing numerous times in front of professors and friends, who could contribute valuable comments and ask questions, was the most effective preparation.

When actually presenting a paper, getting the audience's interest in the topic is crucial. Remember that your research idea interested you enough to make you spend several months working on it. There is a high probability that the topic will get the audience's attention!

Welcome questions. I was rather surprised to discover that the main motive people have for asking questions is not to humiliate you publicly but rather to find out more about an interesting experiment. Questions will bring attention to your research like nothing else.

Even the most extensive preparation, unfortunately, will not guarantee that you will be absolutely free from nervousness. At some time, however, you will find yourself actually looking forward to the event and wishing for a larger audience.

The most valuable experience for me was the discussion after the presentation. I was surprised to find how many people were interested in my research. Their comments gave me several new valuable research ideas. A much-dreaded presentation turned out to be one of the most exciting and beneficial experiences in my college career.

Preparing for the Student Research Presentation Experience

Kerry Towler

University of Central Arkansas

Writing can be very enjoyable. One can circumspectly add thoughts to a body of words and vigorously test their meaning without the pressure of on-the-spot accuracy and continuity that oral exposition requires. Also, one does not feel pressured by being the focal point of attention. Unfortunately, I cannot give public speaking the same high marks. Expressing a clear and cogent argument in a comprehensible and flowing style is essential for transmitting ideas to the audience. The ideas have to be communicated well the first time, without an opportunity to edit or revise. Thoroughly knowing the topic is very important to one's credibility. Finally, having the audience's attention focused on you can be intense. This attention can be a knock-you-off-your-feet reality. The audience's attention caused me the most difficulty in presenting material at a convention. Needless to say, my experience at the Arkansas Symposium for Psychology Students (ASPS) was no exception. However, careful preparation of the material helped to ease some of my jitters. With the timely planning and organization of the material, effective use of visual aids, and practice with a few key ideas in mind, my personal goal for the presentation was more comfortably achieved.

My presentation dealt with an in-progress physiological psychology study. Although the results were not available to share, my advisor assured me that talking about ongoing research could be as valuable as presenting results. Equipped with a pencil, paper, computer, and confident assurances, I began organizing the pertinent material into an outline. I typed my presentation from an outline comprised of the following topics: background (historical and current studies), hypotheses (questions of interest), methods (how the questions will be tested), and expectations (the researchers' expected findings). Through trial and error, I found that using a large font size and double spacing the document allowed for easy reading during practice sessions. I found 14 point, Times New Roman font was satisfactory.

I developed visual aids by making a list of ideas that needed elaboration. I listed the visual aids in the exact location I would use in the presentation, using a separate

line of text plus bolding and/or capitalization, making the entry eye-catching. Numbering visual aid entries and labeling the corresponding transparencies allowed easy access during the presentation. The reason for this procedure was to avoid distracting the audience by not flipping pages while looking for the correct transparency. Finally, I had the text reviewed by someone whom I trusted to be objective and critical but who would not annihilate my carefully nurtured self-esteem. This last step allowed me to check my logic and make sure that my ideas were being clearly conveyed.

Because of what visual aids bring to a presentation, I will elaborate on that topic. One purpose of these tools is to describe your idea simply and clearly. A few of the presentations I observed at the convention had very detailed graphs and large amounts of data that were difficult to assimilate all at once. Distributing the data among two or more graphs or groups of figures or cutting back on the scope of the data increases the audience's understanding. Visual aids also help clarify a complicated concept. If the audience is wrapped up in deciphering an idea, then you can be sure that they are not paying attention to the entire presentation. Sometimes necessity requires that we hold the audience's hand to facilitate understanding. Moreover, visual aids are useful for drawing the audience into the discussion so that they are silently asking questions and forming opinions. A little creativity and contrast works wonders.

Once sure of the material and comfortable with its organization, I began practicing. Because the body of the presentation was completed early enough, I had a few days to conduct practice sessions. The first task was just reading the material to familiarize myself with its flow. The next step involved a mirror. That's right, I talked very eloquently to myself. My reflection listened patiently with no heckling nor snide comments when I tripped over my tongue.

A mirror is fine for preparing yourself to present material, but speaking to a group at a convention is more of a challenge. Timing, enunciation, and body language are also parts of the experience. The last part of my practice regimen involved running through my presentation in front of an audience. An audience can be friends, family, or professors. In my case, I chose my husband. The time required to give the presentation in front of a mirror is different than that of a live performance. As such, timing accuracy is important to permitting time for question and answer.

As I practiced, my listener took particular notice of how I expressed words, how clearly I spoke, and the degree to which I altered my voice inflection so as to avoid a monotone. The last task for my audience involved watching for body posture and movements. I discovered that I exhibited a tendency common to many mothers: I rock back and forth when standing as if rocking one of my children. Such motion can be distracting to the audience. In addition, eye contact is very important for drawing the audience into the discussion. Many more techniques are available and useful in developing a strong set of presentation skills. I focused on only a few skills that I thought would not be beyond the limits of my ability and time. In other words, I set myself up for success!

Keep in mind that success is a relative concept. Although my efforts did what they were supposed to do by giving me the needed tools and bolstering my self-confidence, the presentation itself was far from perfect. But I was not looking for perfection. Preparation helped me know the material so that I could focus nervous energy in a positive direction and thus enhance the quality of the presentation. In general, I was very pleased with my presentation. I proved to myself that this skill, with practice, would be mine one day. What a relief to make this discovery amidst a mountain of self doubt!

The preparation and the practice are the hard parts of the process for presenting at a convention. Looking at the full magnitude of such a project can be daunting. Breaking down the project into the simpler tasks of determining the ideas to be communicated, organizing the material, and planning the time for the project made the task less intimidating. As the adage says, "How does one eat an elephant? One bite at a time." Once the text is written and you have determined how best to communicate ideas, all that remains is practice. By familiarizing myself with the material and knowing my nonverbal messages to the audience, I found that presenting research in front of a room full of people was a breeze. At least I lived through the experience.

Tips for Presenting a Poster

Ann M. Schapman

Creighton University

The 1997 Great Plains Student Psychology Convention (GPSPC) at the University of Nebraska at Kearney (UNK) was the first psychology research meeting I attended. Three colleagues and I presented research about attractiveness and attribute scores given to people of different ethnic groups. The experience taught me a considerable amount about preparing for a convention and presenting research, and I will describe my insight to assist future participants.

First and foremost, I would advocate a golden rule for conducting research. Do not procrastinate! The process of conducting research and preparing a poster will take you longer than you think. My colleagues and I began planning for the convention in September of 1996, but on the morning of March 21, 1997, the day of our presentation, we were in the UNK library putting together our final product. We finished our poster with an hour to spare. Now that is cutting it close!

We wanted to make our poster as clean and neat as possible and discovered several tools that helped. Speaking from experience, I would advice that you use a paper cutter to ensure crisp and straight lines. In addition, use spray adhesive to secure pages on the poster to eliminate unwanted bubbles and bulges caused by liquid glue or tape. A no-frills approach is most appropriate. Keep in mind that the most important part of the poster is the content, and even the most professional-looking poster cannot compensate for weak content.

When the time came for us to present, I was somewhat nervous. I did not know what to expect. Fear of the unknown is a common reaction. However, I was comforted by colleagues who reminded me that we were the experts on our topics. We were the ones who had devoted ourselves to hours of literature searches and data analysis. There should be no question we could not answer. I found this advise very helpful. However, inner confidence should also be expressed. Straight posture and hand gestures, as well as articulated speech, are external manifestations you should display to demonstrate confidence.

Finally, if you do make a presentation at a conference, be proud of yourself. Such presentations require hard work and devotion. Making a presentation is a huge accomplishment, one uncommon to the majority of psychology college students. Hope to see you at the 1998 GPSPC.

An Invitation to Contribute to the Special Features Section

The special features section of the next edition of the *Journal of Psychological Inquiry* will consist of papers that address one of the following two topics:

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1. Applying to Graduate School: Processes and Pitfalls

2. The Use of Humor to Illustrate Psychological Principles

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1. **Short essays.** Provide insight or advice on the process of applying to graduate school. Specific topics that may be addressed include:
   (a) Choosing a school that will choose you.
   (b) Obtaining faculty support and faultless letters of recommendation.
   (c) Meeting those unchangeable deadlines.
   (d) Focusing your interests: From Renaissance person to narrow specialist.
   (e) Preparing for the GRE: Helpful courses, study methods, preferences for the paper vs. computer version.

2. **Humor.** Send in your favorite joke, humorous story, or cartoon that illustrates a psychological principle. Remember to explain what principle is being illustrated. For example:

Use of a MnemonicDevice as an Aid to Memory

Two elderly couples were enjoying friendly conversation when one of the men asked the other, "Fred, how was the memory clinic you went to last month?"

"Outstanding," Fred replied. "They taught us all the latest psychological techniques—visualization, association—it made a huge difference for me."

"That's great! What was the name of the clinic?"

Fred went blank. He thought and thought, but couldn't remember.

Then a smile broke across his face and he asked, "What do you call that flower with the long stem and thorns?"

"You mean a rose?"

"Yes, that's it!" He turned to his wife … "Rose, what was the name of that clinic?"

Submission: Send materials for the Special Features section to Dr. R. L. Miller at the Department of Psychology, University of Nebraska at Kearney, Kearney, NE 68849 or via e-mail to miller@platte.unk.edu. Please observe the following:
   1. Use APA style.
   2. Include a self-addressed, stamped postcard with your submission unless submitting by e-mail.
   3. Provide the following information:
      (a) Names, current addresses, and phone numbers of all authors. Specify what address should be used in correspondence about your submission.
      (b) Name and address of your school.
      (c) Name, phone number and address of your faculty sponsor.
      (d) Permanent address and phone number (if different from the current one) of the primary author.

Deadline: December 1, 1998