Gender Differences in Pathology: The Relationship Between Gender Role Orientation and Internalizing and Externalizing Behavior

Erum Nadeem

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Advisor: Joseph P. Allen
Second Reader: E. Mavis Hetherington
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Abstract

Gender differences in the expression of types of pathology in adolescence have been well established. The present study examined the relationship between gender role orientation as measured by the Bem Sex-Role Inventory (Bem, 1981), internalizing and externalizing behaviors, and pathology in at-risk adolescents. The participants included 63 males and 62 females with an average age of 18.1. A continuous androgyny variable defined as the extent to which one possesses traits normally associated with the other gender was created for the study. Internalizing and externalizing outcomes were assessed through both youth and parent report. It was hypothesized that high masculinity would be protective in the development of depression and internalizing problem behaviors. It was also expected to be linked to higher levels of externalizing behaviors, drug use, and delinquency. High femininity, however, was predicted to be linked to lower levels of drug use and delinquency while high levels of androgyny was expected to be linked to lower levels of both types of pathology. The findings indicated no relationship between either internalizing outcome and gender role orientation. High femininity was significantly predictive of lower drug use and delinquency, while high masculinity only predicted high drug use after accounting for the effects of femininity. There was an interaction such that high androgyny was found to be related to lower drug use and delinquency in males while it was unrelated for females. It was concluded that gender role socialization might influence at-risk adolescents in some unconventional ways that warrant further scrutiny.
In adulthood, women are more than twice as likely to be diagnosed with depression and internalizing syndromes than men (Paykel, 1991). It has often been hypothesized that these differences in types of pathology come from differences in socialization. Explanations given for the difference in the diagnosis of depression, for example, range from ideas that women are more likely to seek out help for a disorder that is present in both sexes equally to notions that perhaps men’s distress has more outward manifestations (Paykel, 1991). The fact that it is not until early adolescence that a gender split becomes apparent in the expression of depression hints at the potentially important role of gender role socialization leading up to and during adolescence. (Nolen-Hoeksema, 1994).

In order to examine particular aspects of the link between gender role socialization and pathology, it is important to first inspect crucial changes in environment and the individual that occur at the onset of adolescence. Petersen, Sarigiani, & Kennedy (1991) proposed a developmental model for mental health in adolescence which suggested that since the girls in their sample experienced more challenges in early adolescence than the boys, they were more at risk for developing depressed affect by twelfth grade. The researchers concluded that since puberty and school change often coincide for girls, stress and pressure at a time of transition might be increased (Petersen et al., 1991). It has also been reported that girls are two to three times more likely to be the victims of sexual abuse (Finkelhor, 1979), which is associated with depression shortly and long after the abuse (Kilpatrick, Resick, & Veronen, 1981; Wirtz & Harrell, 1987). The increased fear of abuse coupled with feelings of helplessness, shame, and guilt could also be linked to higher rates of depression. (Nolen-Hoeksema, 1994).

The meanings attached to physical changes can lead to an even further understanding of the importance of gender roles in the development of pathology. At puberty, boys and girls undergo various observable changes that influence their self image. Though both girls and boys gain weight, girls increase in body fat while boys increase in lean body mass. Boys are content with the increased muscle mass while girls dislike this weight gain, a likely consequence of the
society’s idealization of thin, prepubescent looking women and strong athletic men (Lerner and Karabenick, 1974). Depressed females have been reported to exhibit more distortion of body image than males (Baron and Joly, 1988; Hammen and Padesky, 1977). It has also been found that girls who develop earlier have more self-esteem and body image problems than girls who develop at a more normal rate (Tobin-Richards, Boxer, & Petersen, 1983). In an attempt to explain the importance of all these pubertal changes and their meanings, Hill and Lynch (1983) proposed the gender identification hypothesis. The hypothesis posits that pubertal change in early adolescence highlights the issue of gender roles in such a way that boys begin to identify even more with the masculine stereotype and girls with the feminine stereotype. Each gender begins to exhibit behavior in accordance with these stereotypes.

It is this idea about masculinity and femininity and the ways that gender role orientation is related to differences in pathology between girls and boys that is the focus of the present study. Traditionally, gender role socialization is thought to lead men and women to distinctly different interpersonal orientations and priorities that may impact both behavior and pathology. Women are usually expected to assume the role of the caring nurturer focused on interpersonal relationships while independence, individualism, instrumental behaviors, and self-advancement are valued in men (Chodorow, 1989; Gilligan, 1982). Bem (1987) has defined the concepts of masculinity and femininity based on these societal conceptualizations of gender role.

One place where there is evidence of how these ideas of masculinity and femininity can become internalized is through peer and parental expectations of children and adolescents. Boys are often encouraged to become independent, pursue their goals, and achieve high status, while girls are expected to be attuned to the needs of others, even before adolescence (Gove & Herb, 1974). Rothbart and Rothbart (1976) observed that mothers were more likely to help girls on problem solving tasks than boys, regardless of whether or not help was needed. This lack of confidence in the abilities of the girls may be potentially harmful due to the decreased value and attention placed on their achievements. This deficiency may in turn lead to an
ensuing decrease in self-esteem, a characteristic commonly associated with depression.

The different coping styles and support mechanisms that girls and boys utilize provide further evidence that the internalization of these different interpersonal orientations might be linked to the development of internalizing and externalizing behaviors in girls and boys. There is evidence that social support relationships do indeed differ by gender in adolescence. For example, close relationships with parents, especially fathers, serve as protective factors on a number of scales of adjustment more often for girls than boys (Sarigiani & Petersen, 1989).

In a study of gender and social support in adults, Turner (1994) attempted to understand the discrepancy that though women tend to report more social support, which is thought to be a protective factor, they also are more likely to be depressed. Women were concluded to report both support and depression because they were more likely to experience both the positive and negative aspects of the relationship. Though women had more frequent contact with their support network, greater intimacy, emotional disclosure, and empathy, they also reported more conflict and negative interactions. This finding indicates that they are perhaps sensitive to all aspects of a relationship, a finding which supports the idea that an interpersonal orientation could be linked to pathology.

In a study of adolescents, Gore, Aseltine, and Colten (1993) similarly found that the stereotypically feminine interpersonal caring orientation was linked to distress levels and depression. Higher levels of interpersonal caring orientation and increased involvement in the problems of others, especially the mother, accounted for one fourth of distress levels. Boys were also involved in family distress situations but they appeared to be somehow protected from its effects. Perhaps this might be explained by boys’ more self-focused orientation.

Susan Nolen-Hoeksema’s work indicates that gender differences in the internal coping strategies of rumination and distraction can also be related to ideas about gender orientations and socialized to reactions to distress. Ruminative responses to depressive moods are defined as thoughts and behaviors that focus the individual’s attention on his or her symptoms and possible
causes, whether it be through contemplation or discussion. The contrasting response style is to use distractions to relieve symptoms and to perhaps engage in active, constructive problem solving (Nolen-Hoeksema, Morrow, & Frederickson, 1993; Nolen-Hoeksema, 1994).

Nolen-Hoeksema, Morrow, and Frederickson (1993) examined the relationship between rumination, distraction, and the length of depressed mood and discovered that the more rumination the participants engaged in the longer the depressed mood lasted. Though there was no significant sex difference in the number of days some level of depressed mood was reported, women did experience more depressive episodes and were more likely than men to ruminate. These ruminating responses have been found to interfere with the ability to concentrate and engage in simple instrumental behaviors and effective problem solving techniques, an ability usually associated with masculinity (Lewinsohn, Hoberman, Teri, & Hautzinger, 1985; Lyubormirsky & Nolen-Hoeksema, 1995; Musson & Alloy, 1988; Morrow, 1990). Seligman & Nolen-Hoeksema (1987) suggest that this limitation in ability could lead to a sense of failure, helplessness, and lower perceived self-competency which may be linked to depression.

It has been found that both prepubescent and adolescent girls were more likely to endorse ruminative coping responses than boys (Girgus, Nolen-Hoeksema, and Seligman, 1990; Koenig and Juhasz, 1991). Considering these findings, Nolen-Hoeksema (1994) argues that this socialized tendency towards ruminative coping styles interacts in such a way with the biological changes and increased stressors such as sexual abuse and parental and peer expectations that it could account for the increased internalization and risk for the development of depression in adolescent girls. In relation to gender role constructs, ruminating responses can be associated with a lack of instrumental and action oriented traits associated with masculinity.

All of these gendered patterns that emerge in coping styles and other aspects of socialization appear to be related to an overall trend in which girls are more likely than boys to be involved in internalizing behaviors. Conversely, boys have been found to be more likely to engage in antisocial behaviors and drug use (Dohrenwend & Dohrenwend, 1976). An analysis
of the extent to which adolescent males and females are traditionally masculine or feminine may be revealing of how likely they are to follow these patterns of internalizing and externalizing behaviors.

Researchers have sought ways to empirically measure masculinity and femininity and perhaps even develop a construct for psychological androgyne in which the individual has high levels of both feminine and masculine traits. The most common contemporary conceptualization of masculinity and femininity considers the concepts to be independent instead of polar opposites as was the case previously (Bem, 1981; Spence & Helmreich, 1978). One of the main goals in doing so is to begin to demonstrate that differing levels of masculinity and femininity can be linked to aspects of functioning and it is possible and perhaps even desirable for an individual to possess traits that are sex-typed for both genders (Bem, 1987).

A number of ideas regarding the possible link between functioning and gender role orientation have been proposed over the years. The original model of congruence, which has since been for the most part abandoned by researchers, states that psychological well-being is best realized for males who have high levels of masculinity and low levels of femininity and for females who have high femininity and low masculinity (Lubinski, Tellegen, & Butcher, 1981). More recently, some theorists have proposed an androgyne model which suggests that those who incorporate high levels of instrumental, masculine and expressive, feminine characteristics are most adaptive and therefore most well-adjusted (Bem, 1981; Spence & Helmreich, 1978). A third model suggests that one’s psychological well-being is a function of the extent to which one has a masculine sex-role identity (Whitley, 1984). Evidence of the latter ideas can be seen in the recent literature.

Much of the research on the possible psychological outcomes linked to levels of masculinity, femininity, and androgyne have implications for internalizing and externalizing behaviors. This relationship is not always clear and often does not describe outcomes for adolescent populations, however, indicating that further study of how gender role orientation is
related to psychosocial functioning is required.

Studies examining factors that are commonly associated with depression such as self-esteem and perceived competency suggest that the extent to which one is masculine or feminine may play an important role in vulnerabilities and protection. Examinations of gender role orientation and self-esteem suggest high masculinity has been shown to be a better predictor than femininity of high self esteem regardless of sex (Kelly & Worrell, 1977; Lundy & Rosenberg, 1987; Whitley, 1984). This might be explained by the idea that instrumentality and masculinity are often linked to notions of a strong self-image.

There are also indicators that gender role orientation is related to levels of perceived self-competency and confidence in ability. The research in this area points to both the protective power of masculinity and the idea that androgyny is related to higher functioning. Some researchers have discovered that adolescents high in masculinity had higher perceived competency (Wilson and Cairns, 1988). Rose and Montemayor (1990) found that adolescents with the highest perceived self-competency were defined as androgynous in a categorical measure. When masculinity and femininity were examined separately, however, masculinity did account for more of the variance than femininity.

In an examination of the link between the decision to be in control and gender role orientation, Baucom (1983) studied masculine and feminine women who were placed in either a helpless or nonhelpless condition. Masculine women, regardless of experimental condition took part in and were eager to lead group problem solving tasks while women who were low on masculinity were unlikely to lead in either condition. No feminine participants in the helpless condition chose to lead the group.

Peers attitudes have been found to reflect these ideas as well. Peers have been found to give more control for enjoyable tasks to women with high masculinity and control of less enjoyable and methodical tasks to women lower on masculinity. Interestingly, tasks requiring interpersonal skills, a desirable component of femininity, were given to highly feminine women.
Gender Role Orientation (Baucom & Weiss, 1986). These findings indicate that a more fluid gender role orientation may indeed be linked to the likelihood to take action and the ability to perform well in varied situations. In fact, in some cases it has been found that college-aged androgyneous females as they are defined by the categories of the Bem Sex Role Inventory (Bem, 1981) were more assertive than both sex-typed and sex-reversed individuals (Gayton, Havu, Baird, & Ozman, 1983).

In relation to depression directly, masculinity appears to be a key predictor because it has been shown to have a strong negative relationship with depression while femininity appears to have an unstable relationship with some researchers finding relationships and others finding none for both adolescents and adults (Wilson & Cairns, 1988; Whitley, 1984). Further evidence of the complexity of the issues can be seen through Sanfilipo’s (1994) finding that high femininity was associated with more positive outcomes for some adult women on some scales.

The results of all of these studies indicate that differing levels of conformity to traditional gender roles are related to various measures of psychological adjustment in both adolescents and adults. There does not, however, appear to be an immediately clear way to deduce from these studies whether the relationships apply to both adults and adolescents or whether they apply to males, females, or both. The overall trends suggest that the more likely one is to accept the feminine role and reject the masculine role, the more likely he or she is to be depressed or perhaps engage in internalizing behaviors. Conversely, a highly masculine orientation may indeed be protective. This high level of masculinity, however, might also be associated with a likelihood to engage in maladaptive externalizing problem behaviors as suggested by the idea that extreme distraction can be negative (Nolen-Hoeksema, Morrow, & Frederickson, 1993). Furthermore, none of the studies included a continuous measure of androgyny which would reveal whether the level of androgyny was related to functioning.

Few studies have incorporated these ideas in a way that enables a direct examination of gender role orientation as it is linked to depression and internalizing behaviors and the
contrasting externalizing behaviors in adolescents. Horowitz and White (1987) used the Personal Attributes Questionnaire (Spence & Helmreich, 1978) with a normal sample of adolescents to examine the relationship between gender role orientation and psychological distress, delinquency, and drug abuse problems in adolescence. Internalizing behaviors were assessed through generalized distress scale and did not include depression as a separate construct. Before incorporating masculinity and femininity, males were indeed found to be more likely to engage in delinquent behavior than females. Females were most likely to experience psychological distress. Higher distress was linked to lower levels of masculinity for males and females beginning after the age of twelve. In keeping with previous research (Whitley, 1984), femininity was unrelated to distress. It was negatively related to drug use and delinquency for females, however, while masculinity was only related to drug use for males who were beyond adolescence. Analysis of the categorical measure of androgyny did suggest a link to lower levels of pathology in both males and females. This trend in the results points again to possibility of examining androgyny as a continuous variable.

Huselid and Cooper (1994) also examined a normal sample of adolescents to determine whether masculinity and femininity determined by the Personal Attributes Questionnaire (Spence & Helmreich, 1978) was a mediator in the exhibition of internalizing and externalizing behaviors. As in the Horowitz and White (1987) study, depression was not measured directly and a general scale of psychological distress was utilized. As expected, masculine instrumental attributes were negatively related to internalizing problem behaviors. Instrumentality was positively correlated with delinquent behavior while feminine expressive attributes had a negative relationship. Expressivity, interestingly, was also found to be negatively linked to self-esteem, a finding which counters previous research (Baucum, 1983; Lundy & Rosenberg, 1987). The fact that both femininity and masculinity were linked to positive outcomes suggests again that an examination of androgyny in the case of gender stereotypical pathologies is worthwhile.
In order to further analyze these issues, the present study included along with masculinity and femininity a continuous androgyny variable constructed from the Bem Sex-Role Inventory (Bem, 1981). Depression and internalizing behaviors were examined as separate constructs. Externalization was assessed utilizing a separate measure of overall delinquency and drug use and another measure for a general externalizing behaviors. In addition, parent reports were included for depression, internalizing, and externalizing behaviors with the intention of gaining information from independent observers. A moderately at-risk sample of adolescents was utilized in order to allow for scrutiny of the issues in question within a maximally meaningful range of functioning. There was an ample number of adolescents who functioned both adequately and poorly. The use of such a sample also had the potential to reveal that gender role meanings may not follow all of the same patterns for at-risk adolescents.

It was predicted that there would be an initial gender difference indicating that females in the sample would be the most likely to be depressed and engage in internalizing behaviors while the males would be more likely to exhibit externalizing behaviors. It was hypothesized that masculinity would serve as a protective factor in the development of depression and general internalizing behaviors. For the externalizing outcomes, masculinity was hypothesized to be positively related to both externalizing behaviors and drug use and delinquency. Femininity was predicted to have a negative relationship with these outcomes. The continuous androgyny variable was predicted to protect both genders from the development of either stereotypical gender-typed pathology due to the fact that it has been hypothesized in the past to be linked to higher functioning and adaptability. Exploratory analyses which included masculine, feminine, androgynous, and undifferentiated categorical groups were conducted in order to determine if there were differences in behavior based on group.

**Method**

**Participants**

The participants in the study included 63 male and 62 female adolescents and their
parents, 119 mothers and 39 fathers. The mean age for the adolescents was 18.1 years (SD = 0.97) ranging from 15.9 to 22.0 years. 60.8% of the adolescents were Caucasian, 38.4% were African-American, and 0.8% were other racial or ethnic backgrounds such as Native American, Asian, or multiracial. The mean family income was $31,292 (SD = 20,047) with a range of $2,500 to $70,000. 67.7% of the participants came from single parent households while the rest were from two-parent households in which the parents were biological, adoptive, or step-parents. Participants lived in rural, suburban, and urban environments.

Ninth and tenth grade adolescents were recruited through the local school systems for participation in a two wave longitudinal study. Participants were chosen based on the presence of at least one of the four following risk factors; multiple absences, suspensions, course failure, and grade retention. These criteria were developed in order to establish a sample of moderately at risk adolescents. Data used in this study was collected in the second wave. Adolescents had been previously assessed at age 16.

Measures

Masculinity and Femininity

Bem Sex-Role Inventory (BSRI). The 60 item Bem-Sex Role Inventory (Bem, 1981) consisted of 20 masculine, 20 feminine, and 20 neutral descriptive words and phrases. Masculine items included words such as aggressive, self-reliant, and competitive. Feminine items included warm, cheerful, and yielding. Neutral items included inefficient, friendly, and secretive. Participants rated themselves on a seven point Likert scale that ranged from almost never true to almost always true. Participants were given a masculinity score and a femininity score by taking their mean responses for masculine and feminine items. Bem (1981) reported that the measure is reliable, has been normed on a sample of young adults, and that construct validity has been established for instrumentality and expressivity. Spence (1991) reported substantial correlations between the masculinity and femininity scales of the Bem Sex-Role Inventory and the Personal Attributes Questionnaire.
Participants were also categorically divided through a median split method into four groups, masculine, feminine, androgynous, and undifferentiated based on their mean scores for femininity and masculinity. Masculine was defined as a high masculinity score and a low femininity score. Feminine was defined as a high femininity score and a low masculinity score. Androgyny was defined as high scores for both masculinity and femininity, and those adolescents that feel in the undifferentiated category had low score for both masculinity and femininity.

Androgyny

Bem Sex-Role Inventory (BSRI) (Bem, 1981). In order to create a continuous measure of androgyny, the construct was defined as the possession of traits commonly associated with the other gender. Using this method, the androgyny score for males was their feminine mean score and the androgyny score for females was the masculine mean score.

Internalizing and Externalizing Behaviors

Youth Self Report (YSR). The Youth Self Report was a self-report measure filled out by the teens in the study that contained 112 items regarding both internalizing and externalizing behaviors (Achenbach & Edelbrook, 1991). Answers were given on a three point scale ranging from not true to somewhat true. The measure included questions regarding a broad range of topics including delinquency, aggression, somatic problems, hyperactivity, and withdrawal. In order to determine the internalizing score, items from the withdrawn, somatic complaints, and anxious/depressed subscales were summed. The externalizing score was determined from a sum of the delinquent and aggressive behavior subscales. The Youth Self Report has been normed on a sample of 1,315 boys and girls between the ages on eleven and eighteen and was shown to have a Cronbach alpha of .74 (Achenbach & Edelbrook, 1979). In addition, adequate test-retest reliability and the measure’s ability to discrimination between youth who have or have with not been referred for mental health services has been established (Achenbach, 1991).
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Child Behavior Checklist (CBCL). Parents filled out a 55 item modified short form of the Child Behavior Checklist, a measure similar to the Youth Self Report, in which they reported on their teen’s behavior. The shortened version has been found to maintain the reliability and validity of the original (Lizotte, Chard-Wiershem, Loeber, & Stern, 1992). For this study, 42 items were included from the short form and 13 were retained from the original version.

Depression

Beck Depression Inventory (BDI). The Beck Depression Inventory (Beck and Steer, 1987) included 21 items in which participants indicate the severity of depressive symptoms. Items were rated on a four point scale that ranged from 0-3 with each increase in number indicated an increase in severity of a symptom. Scores were summed for an indication of self-report depression. Schaefer et al. (1985) reported good concurrent validity for the Beck Depression Inventory with depression scales on the Minnesota Multiphasic Personality Inventory. The measure has also been found to be highly reliable, have concurrent validity, and be comparable to observer ratings in both girls and boys aged 12-17 (Jolly, Wiesner, Wherry, & Jolly, 1994).

Weinberger Adjustment Inventory (WAI). The depression subscale from the 37 item short form of the Weinberger Adjustment Inventory, a questionnaire designed to measure long-term functioning and social-emotional adjustment, was used as another indication of self-report depression (Weinberger, 1989). The two primary dimensions of the Weinberger Adjustment Inventory include self-restraint and distress which consists of the anxiety, depression, and low self-esteem subscales. The 12 item distress scale included the three items of the depression subscale. Questions were answered on a five point scale that ranged from ?false? to ?true?. Social-adjustment as measured by the Weinberger Adjustment Inventory has been found to be related to children’s intellectual competence (Wentzel, Feldman, & Weinberger, 1991) and has been validated for use on both clinical and nonclinical samples (Weinberger, 1989).
Youth Self Report (YSR) and Child Behavior Checklist (CBCL). The Youth Self Report and Child Behavior Checklist (Achenbach and Edelbrook, 1979; Lizotte, Chard-Wiershem, Loeber, & Stern, 1992) included depression/anxiety subscales. From the Youth Self Report, the 16 item anxiety/depression subscale was utilized for self-report information while the parallel scale retained from the long form of the Child Behavior Checklist provided a parent report of their child’s depressive behavior. Examples of items included in the depression/anxiety subscale of the measure are, “I feel lonely,” “Cries a lot,” “Feels worthless or inferior” and, “Feels s/he has to be perfect.”

Delinquency and Drug use

Problem Behavior Inventory (PBI). The Problem Behavior Inventory was a well-validated interview measure in which participants were questioned about their involvement in 38 delinquent and illegal behaviors ranging from vandalism and theft to violent and aggressive behavior (Elliot & Ageton, 1980). The interviewer asked the participant to answer how many times in the past six months he or she was engaged in a particular behavior. Once the participant indicated involvement in an activity, the interviewer asked whether or not the incident happened alone or with others and whether or not the participant took drugs before engaging in the activity. The items on the measure were summed to determine an overall delinquency score. The Problem Behavior Inventory has been found to be correlated significantly with reports from independent observers and official reports of deviant behavior (Elliot & Ageton, 1980). It has also been determined to be correlated with adolescent expectations and values (Allen, Leadbeater, & Aber, 1990).

Alcohol and Drug Use Questionnaire (ADUQ). This measure was based on the Monitoring the Future survey (Johnston, O’M alley, & Bachman, 1987) and the Alcohol and Other Drug Survey by the University of Virginia Institute of Substance Abuse Studies (1990). Participants were asked to report the frequency and types of substances used over the past year. Questions were asked in regards to cigarettes, soft drugs such as alcohol and marijuana, and
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hard drugs such as cocaine, LSD, heroin, barbituates, and amphetamines. Frequency of use over the past six months and two weeks was determined for soft drugs and cigarettes. The measure also included items regarding behaviors and consequences from substance use, attitudes towards substance use, and perceptions of parent and peer attitudes. Johnston et al. (1987) attained high reliability from year to year for their measure and logically related measures of drug use. The Alcohol and Drug Use Questionnaire has been linked to qualities of adolescent-parent relationships (Moore, 1993).

Procedure

Adolescents who met selection criteria were approached through a letter and then by telephone. Teenagers and parents who agreed to participate in the study were paid a total of $115 for attending two three hour long sessions. Consent was obtained from the participants and confidentiality was ensured throughout the interview process. Participants were also told that they were allowed to skip any items that they did not feel comfortable answering. During the sessions, participants completed a variety of interview and written self-report measures covering a broad range of issues including behaviors, family relationships, and psychosocial development. With the exception of a family interaction task, family members completed the surveys separated from each other. At the end of each session, participants were given a debriefing form which included referrals for community services that provided further opportunity to discuss issues brought up during the sessions if the participants so desired.

Results

Preliminary Analyses

Composites. Composites were calculated for each of the four outcome variables. The composite for depression included the summed scores of the self-report Beck Depression Inventory, the depression subscale on the Weinberger Adjustment Inventory, the depression/anxiety subscale on the Youth Self Report, and the parallel subscale on the parent-reported Child Behavior Checklist. The alpha level for the depression composite was adequate
at .68. In order to create the internalizing behaviors composite, the internalizing scores for the Youth Self Report and the Child Behavior Checklist were used. The alpha level for internalizing behaviors was .82. The externalizing behaviors composite also consisted of the corresponding subscales on the Youth Self Report and the Child Behavior Checklist and yielded an adequate alpha, $\alpha = .69$. Finally, the drug use and delinquency composite had an alpha of 0.63 and was created utilizing the total delinquency scale on the self-reported Problem Behaviors Inventory and the adolescent reported drug use questions on the Alcohol and Drug Use Questionnaire.

Gender differences in the variables. Simple t-tests were conducted in order to determine whether or not significant gender differences occurred in the masculine, feminine, and androgyny means and the outcome variables. The means and standard deviations of all of the variables and are shown in Table 1. Significant gender differences occurred indicating that females had a significantly higher mean for femininity on the Bem Sex-Role Inventory than the males in the sample. As expected, females also had significantly higher levels of internalizing behaviors and depression. In measures of self-reported drug use and delinquency, males reported significantly higher levels than females. No significant gender differences occurred for masculinity, androgyny, and externalizing behaviors. Due to gender differences that occurred among the outcome variables, analyses were conducted for the whole sample and were also conducted for each separately for each gender.

Variable relationships with income and minority status. Correlational analysis revealed that there were no significant relationships between income and the four outcome variables. Simple t-tests were conducted between the minority and non-minority group and each of the variables. There were no significant differences aside from a trend that suggested that non-
minority adolescents were more likely to engage in drug use and delinquency, $t(80)= 1.70$, $p< .10$. The mean for drug use and delinquency among non-minority adolescents was 14.03 ($SD = 44.11$) and the mean for minority adolescents was 5.31 ($SD = 6.70$).

Categories on the Bem Sex Role Inventory (BSRI). For exploratory purposes, univariate analyses of variance were conducted using the categories on the BSRI. The number of participants in each category is indicated in Table 2. It is important to note, however, that the sample sizes were too small in some categories to make generalizations.

Depression and Internalizing Behaviors: Analyses for the whole sample

Correlations. Contrary to the hypothesis that masculinity and androgyny would be negatively related to depression and internalizing behaviors, there were no significant correlations. There were also no significant relationships for femininity. Correlations for all variables for the whole sample are depicted in Table 3.

Regressions. Separate regressions were examined for masculinity, femininity, and androgyny in order to determine how much of the variance was accounted for in depression and internalizing behaviors after accounting for gender, minority status, and income value. In each instance, the model was only able to account for depression with gender as the only significant predictor.
Correlations and Regressions. As was the case for the entire sample, there were no significant correlations between masculinity, femininity, and androgyny and any of the internalizing variables. Correlations by gender for both internalizing and externalizing outcomes are shown in Table 4. Regressions conducted for gender role orientation and the outcome variables yielded no significant results.

Insert Table 4 about here

Externalizing Behaviors and Drug Use and Delinquency: Analyses for the whole sample

Correlations. Contrary to the hypotheses, there was no correlation between masculinity and the externalizing outcomes. There was only a trend suggesting its association with higher levels on externalizing behaviors in general. There was a significant relationship in the predicted direction between femininity and drug use and delinquency which suggested that the higher one’s femininity, the lower the drug use and delinquency. There was also a trend in the same direction for androgyny (See Table 3).

Regressions. Separate regressions were run predicting the externalizing outcomes from masculinity, femininity, and androgyny for the whole sample after accounting for demographic characteristics. In predicting drug use and delinquency, Table 5 indicates that femininity accounted for a significant amount of the variance. When both masculinity and femininity were used to predict drug use and delinquency, both variables accounted for a significant amount of the variance but there was no interaction between them (See Table 6). Masculinity was not found to be a significant predictor of externalizing behaviors or drug use and delinquency when examined separately.

Insert Table 5 about here
Gender, androgyny, and the interaction between gender and androgyny were significant predictors of drug use and delinquency (See Table 7). Figure 1 illustrates this interaction which indicated that the more androgynous a male was the less likely he was to be involved in drugs and delinquency and the less androgynous he was the more likely to be involved in such activities. The level of androgyny did not make a difference in drug use and delinquency for females.

Externalizing Behaviors and Drug Use and Delinquency: Analyses by gender

Correlations. Analyses conducted separately by gender revealed that some relationships existed for one gender and not the other (See Table 4). For males, there was a significant positive correlation between masculinity and externalizing behaviors such that higher masculinity was related to increased involvement in externalizing behaviors. No relationships between externalizing behaviors and gender role orientation occurred for females. Regarding drug use and delinquency, positive trends existed for males suggesting that high femininity and androgyny might be linked to lower drug use and delinquency. For females, high levels of
androgyny and masculinity were significantly related to increased drug use and delinquency.

Regressions. Regressions run by gender indicated that after accounting for the demographic characteristics, neither masculinity, femininity, nor androgyny predicted the externalizing behaviors for either gender. Significant relationships did occur for drug use and delinquency, however. Table 8 indicates that femininity was found to be a significant predictor of drug use and delinquency only for males. Masculinity and androgyny were not found to be significant predictors of drug use and delinquency for either gender.

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Exploratory Analyses: Categories on the Bem Sex-Role Inventory

Analyses were conducted in order to determine whether differences in the outcome variables occurred between categories on the Bem Sex-Role Inventory (Bem, 1981). Table 9 shows the means and standard deviations for each group on each of the variables. Univariate analyses of variance (ANOVA) were conducted on each group. There were no differences between any of the groups for depression, internalizing behaviors, and drug use and delinquency. Significant differences was found for externalizing behaviors, \( F(3,107) = 2.98, p < .05 \). The Bonferroni t-test for post-hoc comparisons revealed that masculine adolescents exhibited more externalizing behavior than feminine adolescents.

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Insert Table 9 about here
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Discussion

The present study sought to develop further understanding of the relationship between gender, gender role socialization, and differences in adolescent pathology. It was hypothesized that adolescent females would be more likely than males to exhibit depression and internalizing
behaviors. Males were expected to exhibit higher involvement in drugs and delinquency and general externalizing behaviors. In regards to the internalizing outcomes, it was predicted that higher levels of masculinity and androgyny would be protective. For externalizing outcomes, high levels of masculinity were anticipated to be linked to higher levels of externalizing behaviors and drug use and delinquency. High femininity and androgyny were hypothesized to predict decreased involvement in these outcomes. Analyses were also conducted on the categorically masculine, feminine, androgynous, and undifferentiated individuals as an exploratory endeavor.

The hypothesized relationship of gender differences in types of behaviors and pathology was supported revealing that females were more likely to be depressed and exhibit internalizing behaviors while males were higher in drug use and delinquency. There was no gender difference, however, for general externalizing behaviors. Contrary to the hypotheses, gender role orientation was not related to internalizing behaviors or depression. Relationships did exist, however, for both externalizing outcomes. In regards to drug use and delinquency, it was found that the more feminine an adolescent was the less likely he or she was to be involved in drug use and delinquency. Again, though there was no significant gender interaction, femininity was a significant predictor for males while there was no relationship for females. A gender interaction was found which indicated that higher levels of androgyny were predictive of lower drug use and delinquency for males in the sample but not for the females. For the entire sample, high masculinity was found to be related to increased drug use and delinquent activity only after accounting for the effects of its relationship with femininity.

The finding that there were indeed gender differences in the types of behaviors exhibited by adolescent males and females conforms to the findings of previous researchers (Dohrenwend & Dohrenwend, 1976; Horowitz & White, 1987; Huselid & Cooper, 1994). Females were more likely to internalize and to be depressed. The fact that the difference did occur in the data reaffirms the need to investigate how gender role socialization can influence behavior.
Conformity to and deviation from society defined gender role traits appear to have impact on some outcomes and not others.

The lack of a relationship between gender role orientation and depression or internalizing behavior is interesting as previous researchers have found one, particularly between high levels of masculinity and low levels of depression and depressive characteristics (Lundy & Rosenberg, 1987; Whitley, 1984). One possible explanation for this finding might be that among at-risk adolescents, gender role socialization in its traditional sense may not function the same way. The level of instrumentality may not be as important in this group and though it may help, perhaps environmental and familial situations are more crucial.

The findings for drug use and delinquency reveal a number of interesting relationships. In keeping with previous research (Huselid & Cooper, 1994), femininity was found to be predictive of lower involvement in drugs and delinquent behavior for the sample as a whole. Analyses by gender indicated that this relationship still remained for males and did not exist for females. The connection between feminine expressive traits and lack of delinquency is not clear. One possible interpretation is that the possession of qualities associated with kindness, warmth, and nurturing might preclude one from involvement in aggressive behavior (Huselid & Cooper, 1994). The fact that femininity was predictive of lower drug use and delinquency only in males might be explained by the possibility that females may already be expected to be caring nurturers. In this present study, males are perhaps deviating from their tradition gender role and it is possible that the effects of deviation are more pronounced than the effects of conformity.

Further evidence that males’ stereotypical gender role deviation may be influential in predicting certain kinds of behavior comes though the finding that androgyny was protective for males in terms of drug use and delinquency and made little to no difference for females. The androgyny scale developed for this study measured the extent to which one possesses the trait of the other gender. For the females in the sample, the androgyny measure assessed their
possession of masculine, instrumental characteristics. High masculinity was correlated with drug use and delinquency for girls, but the relationship only existed in the correlations indicating its effects were not substantial. This finding provides evidence that androgyny may not be as predictive for girls. Were androgyny to be protective for females in development of gender-typed pathology, the relationship might have most likely existed between depression or internalizing behaviors. This did not occur once again suggesting that the possibility that the effects of gender role deviation are more pronounced for males.

Contrary to the hypotheses, no strong relationships existed for masculinity as key predictor or correlate of drug use and delinquency or general externalizing behaviors by itself. High masculinity was a predictor of drug use and delinquency after accounting for the effects of femininity, however, a finding which does echo previous research (Huselid & Cooper, 1994). The reason that masculinity did not make a significant impact on drug use and delinquency by itself is perhaps because before accounting for the relationship it has with femininity, it is difficult to clearly see what may occur when the components of masculinity are separated.

The link between masculinity and drug use and delinquency might perhaps be explained by the idea that a highly action oriented at-risk individual might be more prone to act out, especially amongst others who are involved in delinquent activity. One without this orientation would perhaps be more likely to engage in more passive behaviors. This relationship between masculinity and delinquency provides a possible connection to the idea that distraction in its extreme form may be linked to externalizing pathological behavior (Nolen-Hoeksema, Morrow, & Frederickson, 1993). This connection is dependent on a link between masculinity and distractive coping styles, an issue that warrants further investigation.

Gender differences for externalizing outcome and masculinity were only suggested in the correlations. High masculinity was related to increased general externalizing behaviors for males and drug use and delinquency in females. There were no gender interactions, however, indicating that these differences were not substantial. The lack of a relationship between
masculinity and the more specific externalizing behaviors of drug use and delinquency for males coupled with the significant relationship for females is particularly intriguing. A possible reason that there are suggestions of an influence of masculinity on drug use and delinquency for females is due to the specific nature of the variable and that possibility that it is a very specific type of girl who is involved in these activities. Externalizing behaviors as measured in this study was more general and this might be more readily related to the general gender trends, evident in the finding that masculinity and externalizing behaviors were correlated only for males. The lack of a consistent relationship indicates, as it did with internalizing behaviors, that perhaps gender role socialization in an at-risk population has somewhat different implications for behavior.

The relationships between gender role orientation and internalizing and externalizing behaviors for at-risk teenagers described in the present study indicate that gender traits can be a crucial factor in determining the ways in which females and males develop different pathologies. It appears that overall, gender role orientation may not function in all of the same ways that it does in normal populations. Since the selection criteria of the study was based on outwardly, observable information, the females that were recruited may have been more likely to exhibit externalizing behavior and therefore the relationships may have been influences by this. In dealing with these sorts of teenagers, it seems possible that the conventional pathways do not apply, especially in the case of the females in the sample. It is interesting that conformity to and deviance from traditional gender role orientation did not appear to have as much of an impact in the outcomes for females, who are often thought of as having more stressors and pressures in regards to their gender role. Future researchers may find it beneficial to examine what kinds of psychosocial outcomes are in fact related to gender role orientation for other groups of at-risk females.

The fact that generally gender role orientation did impact the behaviors and pathologies of males in a more pronounced manner than it did for females indicates a need for further
Gender Role Orientation

scrutiny of the issue of gender role for adolescent males. The present study’s analyses for femininity and androgyny suggested that males might be most affected by gender deviation. Deviation was most protective of development of the gender stereotypical pathology of drug use and delinquency. Future research may want address the idea that perhaps dependent on the situation and context, high femininity or deviation from traditional roles may also be detrimental for males even though it did not predict depression or internalizing behaviors in males in the present study.

Future researchers may also explore some of the issues raised in this study by further examining the concept of androgyny. The present study defined androgyny as the possession of traits that are normally associated with the other gender which is different from Bem’s (1987) definition of androgyny as high levels of both masculinity and femininity. The development of a continuous measurement of this concept may reveal more information about the true adaptable nature of highly androgynous individuals. An individual who also has higher levels of masculinity and femininity than others may be able to more readily establish a different orientation depending on the requirements of the situation. It could also be the case that in adolescence, androgyny may not yet be developed in such a way that it would be beneficial to the individual. Though adolescents may possess traits associated with both genders, it may be possible that they are not able to use skills to the best of their ability, an issue that requires investigation.

There are limitations to the present study evident in the fact that though some interesting gender role issues were discovered, the generalizability of these findings is limited because an at-risk sample was utilized. There is good reason, however to perhaps want to compare at-risk to normal populations, a possible endeavor for future research. Some of the indicators of relationships were based on simple correlations and trends making it difficult to assess causal relationships. The exploratory analyses of the categories on the Bem Sex Role Inventory (Bem, 1981) should also be examined taking into account the fact that the sample sizes were relatively
small. It may also have been beneficial to examine the construct of gender role orientation in more than one manner, in order to examine more of the nuances of the ways gender role and behavior were related.

The present study has shown that the influence of gender role orientation on the possession of instrumental and expressive traits may be substantial in assessing the possible pathways to gender specific styles of behavior and pathology. Though gender role orientation did little to explain the differences in the development of depression, it has demonstrated its ability to predict externalizing outcomes in at-risk adolescent males and females. Further understanding of why these gender differences occur in addition to an analysis of normal samples may aid in the ability of the population as whole in their encounters with different styles of pathology.
References


Table 1

Means and Standard Deviations for Internalizing and Externalizing Outcomes and Sex Role Orientation by Gender

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine Mean</td>
<td>5.27</td>
<td>5.14</td>
<td>.84</td>
<td>.90</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feminine Mean</td>
<td>5.30</td>
<td>5.86</td>
<td>1.22</td>
<td>.77</td>
<td></td>
<td>-3.07**</td>
<td></td>
</tr>
<tr>
<td>Androgyny Mean</td>
<td>5.30</td>
<td>5.14</td>
<td>1.22</td>
<td>.09</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>26.42</td>
<td>37.00</td>
<td>12.36</td>
<td></td>
<td>21.40</td>
<td>-3.25**</td>
<td></td>
</tr>
<tr>
<td>Internalizing Behaviors</td>
<td>27.67</td>
<td>35.47</td>
<td>15.54</td>
<td>21.80</td>
<td></td>
<td>-2.15*</td>
<td></td>
</tr>
<tr>
<td>Externalizing Behaviors</td>
<td>36.71</td>
<td>31.53</td>
<td>18.08</td>
<td>17.94</td>
<td></td>
<td>1.49</td>
<td></td>
</tr>
<tr>
<td>Drug Use and Delinquency</td>
<td>17.61</td>
<td>3.50</td>
<td>47.98</td>
<td></td>
<td>4.78</td>
<td>1.49*</td>
<td></td>
</tr>
</tbody>
</table>

Note: ***p < .001  **p < .01  *p < .05  + p < .10

Due to missing values, sample size ranges from N = 57 to N = 63 for males and N = 58 to N = 62 for females.
Table 2

Number of Adolescents in Categories on the Bem Sex-Role Inventory

<table>
<thead>
<tr>
<th>Category</th>
<th>Whole Sample</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine</td>
<td>22</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(18%)</td>
<td>(29%)</td>
<td>(6%)</td>
</tr>
<tr>
<td>Feminine</td>
<td>14</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(11%)</td>
<td>(5%)</td>
<td>(18%)</td>
</tr>
<tr>
<td>Androgynous</td>
<td>63</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>(50%)</td>
<td>(46%)</td>
<td>(55%)</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>26</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(21%)</td>
<td>(21%)</td>
<td>(21%)</td>
</tr>
</tbody>
</table>
Table 3

Correlations of Masculinity, Femininity, and Androgyny with Outcomes for Whole Sample

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Internalizing Behaviors</th>
<th>Externalizing Behaviors</th>
<th>Drug Use and Delinquency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculinity</td>
<td>-.09</td>
<td>-.08</td>
<td>.17+</td>
<td>.08</td>
</tr>
<tr>
<td>Femininity</td>
<td>.01</td>
<td>.10</td>
<td>-.12</td>
<td>-.24**</td>
</tr>
<tr>
<td>Androgyny</td>
<td>-.10</td>
<td>-.04</td>
<td>.03</td>
<td>-.14+</td>
</tr>
</tbody>
</table>

Note: ***p≤ .001    **p≤ .01    *p≤ .05    +p≤ .10
Due to missing values, sample size ranges from N=108 to N=125.
Table 4

Correlations of Masculinity, Femininity, and Androgyny with Outcomes by Gender

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>-.00</td>
<td>-.05</td>
</tr>
<tr>
<td>Internalizing Behavior</td>
<td>-.04</td>
<td>.03</td>
</tr>
<tr>
<td>Externalizing Behavior</td>
<td>.28*</td>
<td>-.02</td>
</tr>
<tr>
<td>Drug Use and Delinquency</td>
<td>.07</td>
<td>-.23+</td>
</tr>
</tbody>
</table>

Note: ***p < .001    **p < .01     *p < .05     +p < .10

Due to missing values, sample size ranges from N=57 to N=63 for males and N=58 to N=62 for females.
Table 5

Regression Predicting Self-Reported Drug Use and Delinquency from Femininity After Accounting for Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>R²</th>
<th>2R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Gender</strong></td>
<td>-.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=M; 2=F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority</td>
<td>-.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0=Non-Minority; 1=Minority)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-.00</td>
<td>.07</td>
<td>.07</td>
</tr>
<tr>
<td><strong>II. Femininity</strong></td>
<td>-.23*</td>
<td>.11**</td>
<td>.04*</td>
</tr>
</tbody>
</table>

Note: ***p< .001  **p< .01  *p< .05  +p< .10

β weights are those taken from entry of variables into models.
Table 6
Regression Predicting Self-Reported Drug Use and Delinquency from Masculinity and Femininity After Accounting for Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Gender (1=M; 2=F)</td>
<td>-0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority (0=Non-Minority; 1=Minority)</td>
<td>0.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-0.00</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>II. Femininity</td>
<td>-0.23*</td>
<td>0.11**</td>
<td>0.04*</td>
</tr>
<tr>
<td>III. Masculinity</td>
<td>0.26*</td>
<td>0.16**</td>
<td>0.05*</td>
</tr>
</tbody>
</table>

Note: ***p ≤ .001    **p ≤ .01    *p ≤ .05    +p ≤ .10

β weights are those taken from entry of variables into models.
Table 7
Regression Predicting Self-Reported Drug Use and Delinquency from Androgyny After Accounting for Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>R²</th>
<th>R²?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Gender (1=M; 2=F)</td>
<td>-.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority (0=Non-Minority; 1=Minority)</td>
<td>-.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>-.00</td>
<td>.07</td>
<td>.07</td>
</tr>
<tr>
<td>II. Androgyny</td>
<td>-.19*</td>
<td>.10*</td>
<td>.03*</td>
</tr>
<tr>
<td>III. Androgyny*Gender</td>
<td>.19*</td>
<td>.13**</td>
<td>.03*</td>
</tr>
</tbody>
</table>

Note: ***p ≤ .001   **p ≤ .01   *p ≤ .05   +p ≤ .10
β weights are those taken from entry of variables into models.
Table 8

**Regression Predicting Self-Reported Drug Use and Delinquency from Femininity After Accounting for Demographic Characteristics for Boys**

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>R²</th>
<th>²R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Minority (0=Non-Minority; 1=Minority)</td>
<td>-.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>II. Femininity</td>
<td>-.27**</td>
<td>.09*</td>
<td>.07**</td>
</tr>
</tbody>
</table>

**Note**: ***p< .001  **p< .01  *p< .05  +p< .10

β weights are those taken from entry of variables into models.
Table 9
Means and Standard Deviations on Outcome Variables for Gender Role Category

<table>
<thead>
<tr>
<th></th>
<th>Masculine</th>
<th>Feminine</th>
<th>Androgyny</th>
<th>Undifferentiated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Depression</td>
<td>28.83</td>
<td>12.89</td>
<td>27.80</td>
<td>17.62</td>
</tr>
<tr>
<td>Internalizing Behaviors</td>
<td>29.09</td>
<td>13.50</td>
<td>32.08</td>
<td>24.45</td>
</tr>
<tr>
<td>Externalizing Behaviors</td>
<td>41.00</td>
<td>17.87</td>
<td>22.53</td>
<td>14.00</td>
</tr>
<tr>
<td>Drug Use and Delinquency</td>
<td>24.4</td>
<td>62.71</td>
<td>2.5</td>
<td>2.93</td>
</tr>
</tbody>
</table>

Significant Comparisons

Note. Due to missing values, sample size range from N=19 to N= 22 for the masculine category, N= 53 to N= 60 for the androgynous category, and N= 22 to N= 26 for the undifferentiated category. For the feminine category, N= 14.
Figure Caption

Figure 1. Level of androgyny and drug use and delinquency for adolescent males and females.
Appendix

**Measures**

Alcohol and Drug Use Questionnaire (ADUQ)

Beck Depression Inventory (BDI)

Bem Sex-Role Inventory (BSRI)

Child Behavior Checklist (CBCL)

Problem Behavior Inventory (PBI)

Weinberger Adjustment Inventory (WAI)

Youth Self Report (YSR)