Gender role characteristics and depression.

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GENDER ROLE CHARACTERISTICS AND DEPRESSION

by

Norman B. Thoms

B.A., University of Alberta, 1993

A Thesis
Submitted to the College of Graduate Studies and Research
through the Department of Psychology
in Partial Fulfillment of the Requirements for
the Degree of Master of Arts at the
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1999

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ABSTRACT

The current study investigates the relationship between aspects of gender role and differences in depression between men and women. Aspects of gender role investigated are instrumentality/expressivity, silencing the self, and private self-consciousness. It was hypothesized that these aspects of gender role orientation will significantly predict vulnerability/invulnerability to depression on a measure of depressive symptomatology. Specifically, it was hypothesized that individuals adopting a more expressive gender role are likely to show higher scores on private self-consciousness, silencing the self, and depression than individuals socialized into a more instrumental gender role. Additionally, the relationship between silencing the self behaviours and private self-consciousness was examined, as this relationship has not been investigated to date. Results supported a negative relationship between instrumentality and depression for men only. This relationship became nonsignificant when self-esteem was controlled. There was a negative relationship between instrumentality and silencing the self even after controlling for sex, suggesting that higher instrumentality is related to less self-silencing in either sex. Analysis of covariance reveals that silencing the self and private self-consciousness have a significant relation to depression when sex differences are analyzed for the influence of gender role characteristics. Further regression analyses indicate that silencing the self serves as a reliable predictor of depressive symptomatology. It is suggested that private self-consciousness may moderate sex differences in depression and have a link to silencing the self through the influence of self-reflectiveness.
DEDICATION

This work is dedicated to my wife, Janice Thoms. Of all the things I have done or may go on to do, the one thing that gives me the most fulfillment is being with you. You are my constant friend, my anchor, and I cannot conceive of having completed this endeavour without your love and guidance.
ACKNOWLEDGEMENTS

Although the title page bears my name alone, there are many individuals who shaped this work.

I would like to thank the members of my committee. Thanks to Dr. Laurie Carty, who provided enthusiasm for the project when mine was waning. Thank you to Dr. Ken Cramer for being incredibly willing to help with any problem I could conceive of, and for having the strength and the ability to keep this work within the realm of quantifiable science. Special thanks to my supervisor and chairman, Dr. Michael Kral, who gives so much to so many students, and has the uncanny ability to see possibilities in everything.

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CHAPTER I
INTRODUCTION

The present study is an investigation of variables related to the higher incidence of unipolar depression in women as compared to men. A different rate of illness in any specific population raises many important questions. Is there some factor specific to that population resulting in vulnerability to that illness? If there is such a factor, can it be isolated and used to shed some light on the etiology of the disorder? In this case, what factor (or factors) within the female population could be responsible for their higher rates of depression? Information on any differences between men and women in the prevalence or experience of depression also has important treatment implications. If there are gender differences in the psychology and experience of depression, using the same treatment with men and women may not yield equivalent results. With a better understanding of gender differences in depression, treatment can be made more effective for each population.

An example of treatment needs being different for men and women can be found in the area of addictions research. The Essex County Addiction Services Review (1991) made several recommendations about the treatment of women with addictions that cited the belief that this population could not be as effectively served by programs that were primarily developed and dominated by a male point of view. It was found that men and women exhibited different kinds of drinking behaviours and that treatment programs based on a male model were actually harmful to women. Treatment protocols designed along a male model were extremely confrontational and aversive. While this was found to
be successful with males, such a program only served to exacerbate female drinking problems as it simulated patterns of abuse that many of the women were drinking to forget. This Review recommended the use of female professional staff who were "aware of the special problems and needs of women" (Essex County Addiction Services Review, 1991, pg. 60). While the current study does not address addictions, this example points out that if there are special issues related to sex in an area of psychopathology, men and women may not be equally served by the same assessment and treatment modalities.

Specifically, this study examines gender differences in depression from the standpoint of gender role orientation. The larger concept of gender role orientation is broken down into three areas of investigation: instrumentality/expressivity (masculinity/femininity), private self-consciousness, and silencing the self. It is the relationship between these variables and how they relate to depression that is of interest.

**Gender Differences in Depression**

In studies of depression, a fairly consistent finding is that women tend to show greater rates of depression than men (Boggiano & Barrett, 1991; Frank, Carpenter, & Kupfer, 1988; Leon, Klerman, & Wickramaratne, 1993; Nolen-Hoeksema, 1987; Sprock & Yoder, 1997; Weissman, Leaf, Bruce, & Florio, 1988; Weissman & Klerman, 1977). In a review of depression studies over the previous forty years, Weissman and Klerman (1977) found that among treated depressives in the United States, women consistently outnumbered men on the order of 2:1. This ratio was supported by Nolen-Hoeksema (1987) in another meta-analysis of seven studies involving cases of treated depression in the United States. This preponderance of females with depression is also seen in countries other than the United States (Nolen-Hoeksema, 1987; Weissman & Klerman, 1977). More recent studies have documented this effect as continuing into the 1990's (Leon et al., 1993), with women
receiving a diagnosis of major depression and dysthymic disorder 2 to 4 times as often as men (Sprock & Yoder, 1997). In Canada, the National Population Health Survey (1995) found that the population of females suffering from depression outnumbered males 861,000 to 393,000—which translates to a ratio of slightly more than 2:1.

In Nolen-Hoeksema’s (1987) meta-analysis of depression studies it was found that the differential rate of depression was not evident among men and women in college populations. It would appear that this finding is no longer accurate, and recent studies demonstrate more depressive symptoms among college age women when compared to college age men (Boggiano & Barrett, 1991; Waelde, Silvern, & Hodges, 1994).

It is important to determine whether the gender difference in rates of depression is a real occurrence or an artifact—a result of factors that are unrelated to the true expression of depression. Many explanations have been proposed that explain the gender difference as an artifact. One such explanation suggests that women approach stress and symptoms related to depression in a different way than men, and as a result seek help for these concerns more frequently (Nolen-Hoeksema, 1987, Weissman and Klerman, 1977). Therefore, more women would be diagnosed with depression simply as a fact of the larger numbers of women utilizing the health care system and admitting to difficulties. However, research does not support the explanation of overreporting (Nolen-Hoeksema (1990). Upon review of several studies investigating the ‘overreporting’ hypothesis, Nolen-Hoeksema (1990) found that women are no more or less likely to report depressive symptoms than men. Many other researchers, including Amenson and Lewisohn (1981) and Brehms (1995), have echoed this finding. Additionally, Weissman and Klerman (1977) point out that the help seeking patterns of women alone cannot account for the differential rate of depression as much evidence for the gender difference has come from community samples in which the participants have never sought medical or psychiatric care for depression.
There is some evidence that women receive a diagnosis of depression more often than men due to a bias on the part of the clinicians (Potts, Burnham & Wells, 1991). Specifically, there are more “false positives” (i.e., diagnosis with an illness where none exists) among women diagnosed with depression than men. However, research has demonstrated that in the case of depression, false positives may be on a continuum with true positives, and may develop into true depression at a greater rate than true negatives (Gotlib, Lewinsohn, & Seeley, 1995). It may be that the greater number of female false positives reflects a true difference in depressive symptomatology.

At this time, it is generally believed that the gender differences in depression are, in fact, real differences and not artifacts (Brehms, 1995; Joiner & Blalock, 1995; Nolen-Hoeksema, 1987; Weissman & Klerman, 1977,1985). In fact, Weissman and Klerman (1985) go so far as to suggest that the real myths in the depression literature are that women report depressive symptoms more frequently and find certain events more stressful than men. Brehms (1995), in a recent review, stated that most contemporary researchers in this area believe that the ‘artifact’ hypothesis of the female preponderance of depression is not supported and that the differential rate of depression is indicative of a real, albeit not clearly defined, difference between men and women.

Explanations for the Gender Difference

This paper will not attempt to summarize all the theories advanced to explain depression and/or the gender difference in its expression. Such a review is beyond the scope of the present study. The interested reader is referred to Nolen-Hoeksema (1987) and Weissman and Klerman (1977) for an extensive review of gender differences in depression. For the purposes of this paper it is enough to say that many of these theories have received some empirical support, but no one theory has adequately accounted for the sex difference
(Brehms, 1995; Nolen-Hoeksema, 1987; Weissman & Klerman, 1977). It is likely that the difference is determined by many factors acting in concert (i.e., biological, sociocultural, etc.), and that looking for a single answer may be a fruitless pursuit. It is critical, however, that each factor be investigated in detail to further to understanding of depression.

Gender role orientation is likely only one facet of the many that may result in the development of a unipolar depressive illness. However, it is felt that these gender role factors may play a large and important role in the development of depression and as such should be investigated.

The idea that gender role socialization may be involved in the higher rates of depression seen in women is not a new one. The psychoanalytic tradition of Freud hypothesized that women developed depression due to their resolution of the Oedipal conflict. The female personality that arose from the resolution of this conflict was characterized by narcissism, masochism, and an extreme dependency on others due to the lack of an autonomous self-structure. The depression felt by women was a result of difficulties in interpersonal relationships and excess dependency (Brehms, 1995; Weissman & Klerman, 1977). Further to this, the woman’s roles as mother, wife, homemaker, etc., interfere with self-development and independence (Gilligan, 1982; Gurian, 1987; Nolen-Hoeksema, 1987). The psychodynamic tradition held that an innate desire to bear children and depend on a man conflicted with a desire for independence, resulting in increased depression and masochism in women (Horney, 1967). It is important to note that the common thread in this theory is the failure on the behalf of the woman to form a self-structure independent from the needs of others.

As Nolen-Hoeksema (1987) and Weissman and Klerman (1977) point out, psychodynamic theories of depression have received very little empirical support. However, the concept of gender role behaviours and ideas that are differentially socialized between
men and women is an important one in understanding differences in rates of depression. For example, McGrath et al. (1991) argue that socialization into the female gender role may produce styles of defining and coping with stressors that could have serious implications for the development of depressive syndromes.

This study proposes that the behaviours and cognitions associated with the concepts of instrumentality/expressivity, private self-consciousness, and silencing the self are differentially socialized and expressed in men and women, and that these relationships are important in understanding gender differences in depression.

A Definition of Self

The concept of the self is central to the understanding of the gender role characteristics outlined below. As such, it may be helpful to define the concept of the self as it is used in the proposed study. Humanistic psychology has defined the self as “...the irreducible unit out of which the coherence and stability of the personality emerge” (Zimbardo, 1988, pg. XVI). A more cognitive orientation defines the self as being comprised of the beliefs and schemas people hold about their characteristics and personality. The questions asked by the present study are primarily interested in an individual’s own sense of self. For this reason, self is defined from a subjective point of view based on the perceptions and beliefs of the individual respondent. The self can be conceptualized as a single, subjectively felt construct that is multi-faceted by sets of beliefs or ideas that an individual may hold. Specifically, self is defined as being the construct which an individual identifies as “the real me” or “Who I really am”--the set of beliefs and ideas a specific individual feels defines his or her identity. It is this definition that is used in the following sections when referring to the concept of the self.
Instrumentality vs. Expressivity

Psychology has long labored to define masculinity and femininity. Until the early 1970's, masculinity and femininity were generally described as being on opposite ends of a continuum. Bem (1974) challenged this idea by postulating that masculinity and femininity were not on the same continuum, but were rather a constellation of behaviours and attitudes that could be held to varying amounts along two continua by someone regardless of biological sex. In Bem's conception, masculinity and femininity were composed of socially desirable behaviours that were endorsed as belonging more to one gender than the other (Bem, 1974). Socially desirable ideas and behaviours that were traditionally seen as congruent with male behaviour were designated masculine, and behaviours traditionally seen as having more connection to females were designated feminine.

Upon analysis, it became apparent that the types of behaviours associated with the masculinity scale were comprised of instrumental behaviours, which can be defined as self-assertive, active, goal oriented behaviours. Femininity was made up of behaviours that can be described as expressive—interpersonally oriented, nurturant behaviours (e.g., kind, sympathetic, aware of other's feelings) (Spence, 1984). The argument was made that the scales such as the Bem Sex Role Inventory (Bem, 1974) were not measuring the larger constructs of masculinity and femininity, but aspects of them that could be referred to as instrumentality and expressivity (Spence & Helmreich, 1978; Spence, 1984). Instrumentality and expressivity are better defined not as interchangeable with masculinity and femininity, but as behaviours and ideas that are seen as more stereotypically reflective of one sex over another. However, the literature relating to such scales still tends to use these terms interchangeably. To be compatible with the existing literature, the proposed study may also use masculinity and femininity in place of instrumentality and expressiveness, but only
as operational definitions reflecting their usage in research with the Bem Sex Role Inventory (BSRI).

The domains of instrumentality and expressiveness have important linkages to mental health generally, and depression specifically. Whitley (1983, 1985) outlines three models of how masculinity and femininity relate to mental health. The first model is the congruence model, which states that psychological well being and self esteem are fostered when one's gender role orientation is congruent with one's gender. The second model comes from the work of Bem and is termed the androgyny model. This model states that situations vary in their demands for instrumental and expressive behaviours. Therefore, one who has both instrumental and expressive aspects is more flexible and better adapts to situations—resulting in better psychological adjustment. The last model is the masculinity model. This model states that the more identified with a masculine, instrumental gender role a person is, the better psychologically adjusted that person is, given that much of the Western world is male-dominated. Also inherent to the masculine model is that expressive, feminine traits have no real effect on psychological well being. In a meta-analysis of 35 studies, the masculinity model emerged as having the strongest relationship to psychological adjustment (Whitley, 1983). In a later study, Whitley (1985) looked at the three models in relation to self-esteem, and again found support for the masculine, instrumental model. However, more recent research has suggested that the impact of the instrumental model on general psychological adjustment may not be as simple as traditionally conceived. Aube, Norcliffe, Craig and Koestner (1995) have suggested that while the masculine model does seem to be associated with better psychological adjustment, this may not be universal to all individuals or contexts. The masculine model seems to work for certain individuals in certain contexts. For instance, Aube et al. (1995) suggest that more feminine, expressive traits are associated with better
adjustment and satisfaction in the context of relationships with others. A simple relation of instrumentality to better global adjustment may not be entirely accurate.

As low self-esteem and psychological well being are highly associated with depression, it follows that a more masculine, instrumental gender role orientation would be associated with less depression, independent of biological sex. In spite of a few studies advocating the androgyny model as better insulating against depression (e.g., Olofsky, 1977), this hypothesis has largely been confirmed (Feather, 1985; Hart & Thompson, 1996; Sanfilipo, 1994; Waelde, Silvern, & Hodges, 1994; Whitley & Gridley, 1993).

However, Feather (1985) argues that what others have been calling masculinity or instrumentality is in reality a measure of self-esteem. Feather found that the negative relationship between depression and masculinity disappeared when the effects of self-esteem were controlled. It was hypothesized that self-esteem reflected values of the dominant male Western culture, and therefore the concepts could not be separated. However, Whitley and Gridley (1993), using a latent variables analysis, concluded that masculinity and self-esteem were separate constructs, but that both were highly related to a larger construct of negative affectivity. This research would suggest that although self-esteem and masculinity are indeed separate constructs, there may be some confusion as to what we are talking about when we use such terms. It is possible that when talking about self-esteem we use masculine terms or ideas to define it—i.e., high self-esteem is characterized by an independent, goal-oriented person. As the traits of independence and goal oriented behaviour are valued by our masculine oriented culture, this person is seen as healthy (having good self-esteem). Further research is likely needed to resolve the true nature of the relationship between self-esteem and masculinity.
Silencing the Self

As previously mentioned, traditional theories of depression largely followed the ideas of Freud and viewed the occurrence of depression in women as a failure on their part to form individual, autonomous selves. The formation of a healthy self-structure was viewed as dependant upon the separation of one's self from all others. A separate, autonomous self was an essential element of protection from all forms of psychopathology, especially depression. In this view, women were more vulnerable to depression due to their overreliance upon relationships with others. This was considered pathological because their self esteem was seemingly based on the approval and support of others, and not from the more healthy source of an internal, autonomous self (Chodoff, 1972; Jack, 1987; Mendelsohn, 1974).

More recent theories have pointed out that this conception of women's pathology reflects a reliance on men's experiences to explain psychological health and maturity (Gilligan, 1982; Jack, 1987, 1991). Words used to describe women, such as dependent and passive, have become synonymous with psychopathology—primarily due to an emphasis lent them by a male-dominated culture that stresses autonomy as the highest form of self development (Jack, 1991). Recent theorists have suggested that women develop a self-structure in a different way than men. Instead of being pushed to separate themselves from others, women's self structures are developed within the context of relationships with others—what is termed a self in relation (Jack, 1987; Kaplan, 1986).

According to self-in-relation theory, relationships are envisioned as "...a two-way interaction, at its best a mutual process wherein both parties feel enhanced and empowered through their empathic connection with the other." (Kaplan, 1986, p.235). It is the relationship that provides the context in which the self develops, gains strength, and eventually reaches maturity. It is through the process of active participation in establishing and maintaining connectedness with others that the self becomes differentiated and develops
its own needs, desires and properties (Kaplan, 1986). Different aspects of the self come about as the complexity of one's relationships increases, demanding a variety of different actions to maintain mutually empathic relationships with others (Jack, 1991). It is the woman's drive for connectedness with others that shapes the self and therefore is a central aspect of the female identity (Jack, 1991).

The idea that women are oriented towards relationships with others is supported by research in the social psychological tradition. Watkins et al. (1998) states that the self-concept based on independence from others found in psychological literature is not appropriate for use with women from any cultural background. In fact, it seems that this conception of the self is only appropriate for males in Western, individualistic cultures—with Watkins et al. (1998) defining individualistic cultures as those: "... where persons are considered as distinct units clearly separable from their social context" (pg. 19). Even within individualistic cultures, women are found to place more value on "family values" and "social relationships" (Watkins et al., 1998). This finding is echoed by Dion and Dion (1993), but with the added premise that the individualistic orientation of the wider culture makes establishment of intimacy in relationships problematic. From these cross-cultural studies, it would seem that women in individualistic, Western societies are confronted with a culture that does not reward their orientation towards relationships.

When viewed from this perspective, it is not surprising that theorists such as Chodorow (1974), Gilligan (1982), and Jack (1987, 1991) have called for a reexamination of the "unhealthiness" of women's orientation to relationships. It is argued that a relational orientation is healthy, positive, and centrally important to psychological development and functioning (Jack, 1987). These connections are essential for a sense of well being, and contribute to a person's self-esteem in a positive way (Jack, 1991).
From such a relational standpoint, depression is a possible result of failure to establish or participate in a close, genuine relationship with valued others (Jack, 1991). Failure to maintain or establish these relationships can directly damage one’s self-esteem and identity. According to Jack (1991), the attempt to form or maintain these relationships can lead to an extreme, pathological set of cognitive schemas termed silencing the self. Caught between a need for close, empathic relationships and a culture that does not reward such an orientation, women learn to bury or silence part of their self to get along in that culture (Jack, 1991). Silencing comes about as women adopt cultural schemas about their proper role and behavior in intimate relationships that run counter to their need for connectedness (Hart & Thompson, 1996; Jack, 1991). Silencing behaviors include putting the needs of others first, censoring and repressing genuine emotion, and judging of themselves from an external standard of morality and behavior (Jack & Dill, 1992). Women may feel pressured to meet the culturally defined schemas of behaviour in a relationship, but still long for a relationship based on a more genuine, mutual standpoint.

To meet such conflicting demands, a division of self may occur. Women may construct an alternate, inauthentic self (a culturally “good” me) that subjugates the needs of their subjectively felt authentic self (“the person I really am”) to the needs of others in the interests of maintaining a relationship. The authentic self becomes deprived of its voice---which Jack (1991) defines as an indicator of self that speaks one’s thoughts and feelings. Self-silencing leads to a conflict between the authentic self and an inauthentic ideal self that is characterized by the culturally defined roles of wife, mother, daughter or friend (Hart & Thompson, 1996; Jack, 1991). The authentic self strives towards a genuine, mutually felt connectedness with others that allows for the expression and satisfaction of the self in ways that may or may not be mandated by the larger social context. The inauthentic self labours to maintain connectedness in predetermined, socially approved “roles” that involve set
behaviours and features (i.e., caring for others before yourself) that may run counter to the need for connectedness on an authentic level. The ideal self may strive to maintain relationships through sacrificing one's own needs to those of others, and is often used to judge the actual self (Hart & Thompson, 1996; Jack, 1991). Such a conflict leads to feelings of inauthenticity and despair that one is losing a sense of who they really are. Jack (1987,1991) hypothesizes that it is this conflict and the attendant loss of self that leads to depression.

Hart and Thompson (1996) state that although Jack implies that the adoption of the female gender role leads to depression, research has shown socially desirable feminine gender role traits do not contribute to depression. They argue that silencing-the-self is "...an extreme and maladaptive aspect of the feminine gender role" (Hart & Thompson, 1996, p. 410). It should be noted that when the socially mandated behaviours and roles are felt to reflect one's authentic self, there is no conflict, and self-silencing cannot be said to occur. In Jack's defense, she does state that "The crucial issue...is how to distinguish between healthy, mature interdependence and debilitating forms of connection"(Jack, 1991, pg. 19). Following Hart and Thompson (1996), it is the belief of this study that silencing-the-self and depression are an extreme reaction to problems created in securing stable, rewarding relationships.

On the basis of the preceding theories, the current study conceptualizes silencing the self as leading to depression in the following manner. Women are socialized from a young age to find self-expression or identity through mutually rewarding relationships with valued others. Women are then confronted with a larger society built along male principles of identity and self in which they are expected to form relationships according to specific roles (i.e., wife, mother, daughter). These roles may not result in relationships that allow for the mutual expression and satisfaction of needs. Women in these socially mandated roles are expected to maintain the relationship by meeting the needs of the other, possibly at the
expense of her own needs for self-expression or growth. As women become increasingly socialized into this new role, the aspects of her self that seek mutual, genuine relations become more silenced or denied. This silencing of the subjectively felt "genuine" self leads to feelings of inauthenticity and possibly despair or depression.

Recent studies have begun to look at the possibility of silencing the self in males as well as females. As the model was thought to be based on a uniquely female schema, it is surprising to note that many studies have found either equal levels of self-silencing in men and women (Spratt, Sherman, & Gilroy, 1998) or higher levels of self-silencing in men (Gratch, Bassett & Attra, 1995; Page, Stevens, & Galvin, 1996). This has important implications for both the meaning of this model and for gender role theories of depression. One possible explanation for these results is that both men and women self-silence, but for different reasons (Gratch, Bassett, & Attra, 1995). The results from a study by Page, Stevens, and Galvin (1996) suggest that their results suggest that the relationship between gender, depression and silencing the self may be more complex than originally thought in that different groups may self-silence for different reasons. Therefore, it seems natural that one of the questions asked by the current study is whether silencing the self behaviours are mandated or influenced by various aspects of gender role regardless of biological sex.

Private Self-Consciousness

Many theories dealing with individual differences in vulnerability to depression have taken a decidedly cognitive approach. Examples of such cognitive approaches include Beck's (1967) model of depression involving the cognitive distortions of depressed individuals, the model of depressive attributional style advanced by Seligman et al. (1979), and Nolen-Hoeksema's (1987) Response Style theory concerning the rumination or distraction responses of depressed individuals. One area of cognitive research that has
generated much interest is the possibility of a relationship between self-focused attentional processes and depression.

In order to discuss the implications that self-focused attention or self-consciousness has on depression, this concept will be briefly explained. Self-focused attention can be seen as those occasions in which an individual is attending to his/her thoughts or feelings, fantasizing or engaging in self-referential daydreams, or making plans or decisions about oneself. (Fenigstein, Scheier, and Buss, 1975). The dispositional tendency of an individual to consistently direct their attention inward or outward is referred to by Fenigstein et al. (1975) as the trait of self-consciousness. It is important to note at this point that when we speak of self-consciousness we are referring to a stable, dispositional tendency of an individual to focus their attention in a certain way. This is to be contrasted with the concept of self-awareness, which is an impermanent state of self-directed attention brought about by transient stimuli or situational variables (Fenigstein, Scheier and Buss, 1975). Self-consciousness seen in this way is akin to a personality variable—it is the consistent tendency of an individual across situations to react in a certain way. Self-awareness, by contrast, is a temporary event brought about by certain stimuli.

For the purposes of the current study, a further distinction must be made in regard to the concept of self-consciousness. Fenigstein, Scheier, and Buss (1975) suggest that self-consciousness has two major components that they have termed private self-consciousness and public self-consciousness. The factor of private self-consciousness can be conceived of as the tendency of an individual to attend to his/her inner life of feelings, thoughts, and self-concepts (Fenigstein, Scheier, and Buss, 1975). Public self-consciousness is defined as the “awareness of the self as a social object that has an effect on others” (Fenigstein, Scheier, and Buss, 1975, p. 523). A third element in self-consciousness is hypothesized to be social
anxiety, but the effects of this factor on the more general concept of self-consciousness is not clear and has not received significant research attention.

Many researchers such as Burnkrant and Page (1984) have suggested that private self-consciousness can be further broken down into internal state awareness (ISA)—the tendency to be aware of one’s inner feelings, and self-reflectiveness (SR)—the tendency one has to reflect upon themselves. The body of relevant literature has yet to take a definitive stand on the factor structure of private self-consciousness, but recent research by Cramer (in press) has supported the splitting of private self-consciousness into ISA and SR subscales.

The present study will primarily investigate the relationship of private self-consciousness to depression and gender roles. For this reason, it should be noted that where it is not explicitly stated otherwise, the use of the term self-consciousness is in relation to private, and not public, self-consciousness.

A significant amount of research done that suggests a strong connection between depression and individuals who are high on the dimension of private self-consciousness. Speaking generally, it has been suggested by research that individuals more likely to engage in self-focused thought or behaviour are also more likely to be depressed and stay in a depressed state longer than less self-conscious individuals (Bromberger & Matthews, 1996; Ingram & Smith, 1984; Nolen-Hoeksema, 1987; Nolen-Hoeksema & Morrow, 1991; Smith & Greenberg, 1981; Smith, Ingram & Roth, 1985). Smith and Greenberg (1981) have observed parallels between depressed mood and self-focussed attention in the areas of lowered self-esteem, causal attributions for negative events, increased negative affect, and increased accuracy of response on self-report measures. Ingram and Smith (1984) suggest that as self-focussed individuals “have an enhanced awareness of their salient self-aspects” (p. 141), these individuals would have a greater awareness of the highly salient negative affect and cognitions associated with depression. As a result, highly self-focussed
individuals may amplify these aspects of depression, which may serve to increase the severity and duration of the depression (Ingram & Smith, 1984).

This work can be seen as similar in nature to that of Nolen-Hoeksema’s (1987) Response Style theory. Response Style theory holds that depressed individuals who have a tendency to ruminate about feelings and thoughts associated with depression have greater access to those thoughts and feelings and as a result, stay depressed longer than other individuals (Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema, 1987, 1991; Nolen-Hoeksema, Morrow, & Fredrikson, 1993; Nolen-Hoeksema, Parker & Larson, 1994). Given the research in this area, it is reasonable to suspect that there is a strong relationship between persistently self-focussed attention and the severity of a depressive episode.

However, it should be noted at this point that no study to date has claimed anything more than a correlational relationship between self-focussed attention and depression. While there is strong evidence of some form of connection, there has been no evidence to confirm any type of causal relationship or a possible direction for influence in this relationship. However, there is some evidence to suggest that high private self-conscious (PrSC) individuals may be vulnerable to depression in the face of negative events (Larsen & Cowan, 1988; Hull, Levenson, & Young, 1986; Ingram, 1988; Ingram, Cruet, Johnson, & Wisnicki, 1988). The present study follows the line of reasoning that high PrSC individuals may be more vulnerable to a depressive experience or perhaps lack the insulation against such an experience that low PrSC individuals may possess.

In addition to its relationship with depression, self-consciousness may have an interesting relationship with the concept of gender roles as outlined earlier in this paper. In a study by Ingram et al. (1988), it was found that women exhibited a greater tendency to self-focus than men. In a further study concerning self-focussed attention and gender role, Ingram et al. (1988) obtained results suggesting that ‘feminine’ (expressive) individuals who
received a self-focussing manipulation responded with higher levels of self-focussed attention and were more likely to experience negative affect than any other group. This finding was interpreted as "a tendency to self-focus that might prime feminine people to experience depression, or alternatively, as a lack of self-focusing that may insulate masculine individuals from the experience of depression" (Ingram et al., 1988, p. 967).

With the use of the terms "feminine" and "masculine" above, the question would seem to be whether something about the feminine or masculine gender role has an important relationship to both self-consciousness and depression. It is suggested that the socialization into an expressive gender role builds in a greater tendency or ability to self-focus than socialization into an instrumental gender role. In a study by Bromberger and Matthews (1996), individuals low in instrumentality and high in expressivity were found to score higher on a measure of self-consciousness. Additionally, those women low in instrumentality and high in self-consciousness were found to have higher levels of depressive symptomatology in a follow-up three years after the beginning of the study.

These studies suggest that feminine individuals are more likely to self-focus than masculine individuals, and that the masculine gender role—with little tendency to self-focus—may insulate individuals from depression. Due to this research it is likely that expressive or feminine individuals will show higher scores on a measure of self-consciousness, and may show higher scores on a measure of depression.

Another aspect of private self-consciousness that is of interest is the finding that people high in self-consciousness tend to be more aware of discrepancies between real and ideal conceptions of their selves (Larsen & Cowan, 1988; Smith, Ingram & Roth, 1985). In the context of the current study, this can be considered of relevance through a possible connection to the Silencing the Self (Jack, 1987; 1991) model described above. One of the salient aspects of Silencing the Self is the split between a socially constructed ideal self
which is felt by the individual to be inauthentic, and a self that the individual conceives of as "real" (i.e., who I really am) (Jack, 1987; 1991). The more inauthentic an individual feels as a result of this discrepancy, the more it is likely that this individual will feel despair and possibly depression.

If individuals with a high degree of self-consciousness are more likely to be aware of real-ideal self discrepancies, how would such a degree of self-consciousness affect an individual who was found to engage in self-silencing behaviours? Would an individual's degree of self-consciousness make them any more or less aware of the self-discrepancies inherent in silencing the self behaviours? No research to date has addressed possible connections between silencing the self and the concept of self-consciousness, and as a result there are no ready answers to these questions. However, it may be reasonable to hypothesize that if individuals experiencing the type of self-discrepancy present in silencing the self are more highly self-conscious, and thus more aware of such a discrepancy, they may be more vulnerable to despair or depression.

The Current Study

The current study investigates differences in depressive symptomatology between men and women from the perspective of gender role orientation. Specifically, it is proposed that biological sex alone cannot account for the variance in occurrence and severity of symptoms in men and women, and seeks to explain these differences through examining the gender role characteristics of instrumentality/expressivity, private self-consciousness, and silencing the self. While many of these aspects of gender role have been previously investigated for their relationships to depression, both singly and in various combinations, they have not been brought together in the way proposed currently.
Additionally, up to this point little research has attempted to examine silencing the self with a reasonable amount of males of university age to further investigate the meaning of silencing the self scores for this population.

**Hypotheses**

1. It is hypothesized that the variables of instrumentality, expressivity, silencing the self, and private self-consciousness predict occurrence and severity of depressive symptoms more effectively as a group than biological sex.

2. Research is unclear on the issue of whether instrumentality’s relationship to depression can be separated from the variable of self-esteem. The current study will include a self-esteem measure to investigate a possible confound of self-esteem with instrumentality. It is hypothesized that self-esteem will show a strong relationship with instrumentality, but that instrumentality will still be significantly correlated with depression even after controlling for self-esteem.

3. It is hypothesized that individuals showing higher scores on expressivity are more likely to show higher scores on measures of private self-consciousness, silencing the self, and depression than individuals scoring higher in instrumentality, regardless of biological sex.

4. It a hypothesis of the current study that an individual’s level of private self-consciousness may interact in an important way with silencing the self behaviours, consequently having an impact on the experience or severity of a depressive episode.
CHAPTER II

METHOD

Participants

The current study enlisted 67 female and 27 male undergraduate psychology students enrolled in psychology classes at the University of Windsor. These students were given one bonus mark towards their course grade for their participation. Due to insufficient numbers available in classes offering a bonus point, additional students were recruited from other undergraduate psychology courses. For their participation in the study, these students had their names entered in a draw for dinner for two at a local restaurant. Both groups were similar in age and university level.

Due to the fact that many hypotheses involved in this study have their basis in Western, industrialized culture, and may not be applicable to other cultures, only participants with English as a first language were used in the study. It was felt that this restriction would accomplish the purpose of selecting students socialized and raised in a Western culture.

Measures

Bem Sex Role Inventory (BSRI)(Bem, 1974). The BSRI is a 60 item self report measure that asks a person to indicate how well the masculine, feminine and gender neutral items on the test describe him/herself. The 60 items that make up the measure are broken up into groups that reflect masculine/instrumental traits (20 items), feminine/expressive traits (20 items), and a gender neutral scale designed to detect a tendency to respond in to items in a socially desirable fashion (20 items)(Bem, 1974). The participant rates the items as being reflective of him or herself on a seven-point scale ranging from 1 (almost or never true) to...
7 (always or almost always true). The items are not identified as masculine or feminine based on differential endorsement by males or females. Rather, the masculine or feminine designations of items are based on the sex-typed social desirability of those items (Bem, 1974). Put more simply, items perceived to be more socially desirable in a male were designated as masculine, while items perceived to be more socially desirable in a female were designated feminine.

On the basis of responses to the masculine, feminine, and gender-neutral items, the respondent receives three scores: a Masculinity score, a Femininity score, and an Androgyny score (Bem, 1974). If so desired, a Social Desirability score may also be computed. The Masculinity and Femininity scores reflect the degree to which the respondent endorses masculine or feminine traits as being descriptive of him/herself. The Androgyny score reflects a difference score between Masculine and Feminine scales—namely, if one scores highly on both scales, the value of the difference approaches zero and indicates a more Androgynous sex role orientation (Bem, 1974). A high score on one scale versus a low score on the other is indicative of the respondent’s gender role orientation. For instance, a high Masculinity score coupled with a low Femininity score is interpreted as that individual being typed as “masculine” in gender role orientation. For the purposes of this study, subjects will not be categorically placed into a “masculine” or “feminine” group, as it is the various levels of response that are of interest. This is to say, the current study is interested in how the degree to which one endorses masculine or feminine items effects scores of other hypothesized aspects of gender role and depressive symptomatology.

Psychometrically, the measure is quite sound, with internal consistency scores for the masculine, feminine, and social desirability scores reaching coefficients of .86, .82, and .70 respectively (Bem, 1974). Reliability of the Androgyny difference score was reported at coefficients of .85 and .86 in two samples (Bem, 1974). Test-retest reliability after a four
week interval is also reported to be quite high (Masculinity r=. 90; Femininity r=. 90; Androgyny r=. 93; and Social Desirability r=. 89)(Bem, 1974).

In terms of construct validity, Bem (1974) showed that the scale had modest correlations with the Masculinity-Femininity subscale of the California Psychological Inventory, with the BSRI construct of masculinity correlating -.42 and -.25 for males and females respectively. The negative correlation is due to the fact that masculinity is reverse scored on the CPI. Correlations of the CPI with the femininity scale of the BSRI were not as impressive, with males and female correlations of .27 and .25 respectively. However, construct validity has also been assessed through factor analysis across various populations with the items of the BSRI consistently loading on two factors that can be called masculinity and femininity (Bem, 1981; Campbell, Gillspy, & Thompson, 1997; Chung, 1995; Lippa, 1985; Ramanaiah and Martin, 1984). Ramanaiah and Martin (1984) established that the BSRI had some discriminant validity by reporting non-significant correlations of the masculinity and femininity scales with scales measuring dominance and nurturance, respectively.

**Self-Esteem Scale (Rosenberg, 1965).** The Self-Esteem scale is a 10 item self-report measure used to determine global feelings of self-esteem and general self-evaluation. The items are framed as statements that subjects evaluate on a five-item Likert scale. Higher scores on this measure are interpreted as showing higher self-esteem, with a possible range of scores from 10 to 50. The scale contains four reverse-scored items to control for a positive responding bias (Feather, 1985).

Rosenberg (1965) has established construct validity of the scale through correlation using various measures of psychopathology. The Self-Esteem scale correlates negatively with measures of depression, anxiety, and psychosomatic symptoms; which corresponds to Rosenberg’s hypothesis that self-esteem insulates against psychopathology (Rosenberg,
Rosenberg (1965) also reported the scale’s internal consistency to be approximately .92.

*Silencing the Self-Scale (STSS)* (Jack, 1991). The Silencing the Self Scale (STSS) is a 31 item scale designed to measure specific schemas concerning the establishment and maintenance of intimate relationships that may be related to depression in women (Jack and Dill, 1992). Items on the scale are phrased as first person endorsements of schemas and behaviours found in the clinical interview narratives of Jack’s (1991) longitudinal study of clinically depressed women. Items are endorsed by respondents as reflective of themselves on a five point scale calibrated from 1 (**strongly disagree**) to 5 (**strongly agree**). Scores on these items are tallied, with higher scores reflecting greater self-silencing.

Jack and Dill (1992) state that the items on the STSS do not reflect personality traits, but culturally derived cognitive schemas that guide women’s social behaviours and self-assessment. Items do not refer to the feminine role directly, but rather its directives concerning the maintenance of intimate relationships (Jack and Dill, 1992).

The scale is grouped into four subscales reflecting hypothesized relationships of silencing the self to depression (Jack and Dill, 1992). These subscales are as follows:

1. **Externalized self-perception**: This subscale reflects the extent to which respondents judges themselves by external standards.
2. **Care as self-sacrifice**: The extent to which respondents put the needs of others before themselves in order to secure relationships.
3. **Silencing the self**: The extent to which respondents inhibit fulfilling their own needs and expressing themselves in order to preserve harmony in a relationship.
4. **The divided self**: The extent to which respondents outwardly present an alternate, socially compliant version of themselves while their inner self is silenced and becomes increasingly hostile.
As the STSS is a new instrument, information on its psychometric properties is only now becoming available. However, the studies that have been done are generally supportive of its reliability and validity. Jack and Dill (1992) found internal consistencies of .86, .89, and .94 respectively with samples of undergraduate females, women involved in a study on pregnancy and drug use, and women from selected battered women’s shelters. Test-retest data from these groups demonstrated coefficients of .88, .89, and .94 respectively. As the STSS was designed to measure schemas that may be related to depression, construct validity was assessed through the correlation between the STSS and the Beck Depression Inventory for all three groups of women ranging from $r = .52$ to $r = .50$. Additionally, construct validity was assessed through a comparison of group means across the three groups of women that varied in the hypothesized direction—specifically, the highest levels of self-silencing were found in the shelter sample, followed by mother-to-be and female student samples (Jack and Dill, 1992). Carr, Gilroy, and Sherman (1996) confirm “that the STSS appears to be a valid measure of cognitive schemas in intimate relationships posited to be related to depression in women” (p. 387). In their study of silencing the self and the moderating role of race, Carr et al. (1996) found an overall correlation of .49 between the BDI and the STSS for African American and White women. When tested only with White women, this correlation rose to .65, suggesting that although the STSS does indeed have construct validity, it may be less effective as an instrument for use with African American women. More research on the implications of ethnicity on the STSS has been called for in the literature, and has yet to be undertaken.

Private Self-Consciousness (PrSC) Subscale of the Self-Consciousness Scale (Fenigstein, Scheier and Buss, 1975). The Private Self-Consciousness Scale is a subscale of Fenigstein, Scheier and Buss’ (1975) Self-Consciousness Scale, a self-report instrument
containing items measuring the constructs of public self-consciousness, private self-consciousness, and social anxiety. Each subscale of the Self-Consciousness Scale was factor analytically derived, and research has determined that each subscale has adequate construct validity (Fenigstein, Scheier, and Buss, 1975). The PrSC consists of ten items that are related to a tendency to attend to one’s inner thoughts and feelings—reflections on the self. Ratings are based on a 5 point scale from 0 (extremely uncharacteristic) to 4 (extremely characteristic), with some items being reverse scored.

Much research suggests that the psychometric properties of this scale are sound (Fenigstein, Scheier & Buss, 1975; Ingram & Smith, 1984; Smith & Greenberg, 1981). Test-retest correlations after a two week interval for the individual subscales were reported, with the Private Self-Consciousness Subscale achieving a coefficient of .79 (Fenigstein, Scheier & Buss, 1975). Construct validity of this scale has been assessed through the finding of a significant correlation with Guildford-Zimmerman Thoughtfulness Scale of .48, and a correlation of .30 with the Paivio Imagery Scale (Turner, Scheier, Carver & Ickes, 1978). Additionally, Turner et al. (1978) assessed the scale’s discriminant validity by obtaining a nonsignificant correlation (.06) with the Marlowe-Crowne Social Desirability Scale. This result was interpreted as suggesting that social desirability could not provide an alternative explanation for subjects scores on this measure. Further discriminant validity has been established by Carver and Glass (1976) with their report that the PrSC subscale does not correlate significantly with measures of IQ (.16), emotionality (.11), or need for achievement (.16), all of which have been suggested as alternative explanations for PrSC scores.

For the purposes of this study it is important to make one final note about the PrSC. As stated previously, there is some concern that the PrSC may actually be comprised of two subscales labeled internal state awareness (ISA) and Self-reflectiveness (SR) (Burnkrant and Page, 1984; Cramer, in press). While the literature has not definitively stated the accepted
factor structure, it is clear that the two subscales do make up a larger domain of internally
directed attention that can be called private self-consciousness. In the current study, it is felt
that in their current state of definition, the proposed ISA and SR subscales overlap
significantly and do not add enough discriminative or predictive value to be considered
separately here. For the purposes of this study the PrSC will be treated as one scale.

Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977). The
CES-D is a twenty-item scale designed to assess depressive symptomatology in the general
population. This scale differs from previous self-report depression measures such as the
Beck Depression Inventory (BDI) as it was not designed for diagnosis at clinical intake or
measurement of illness severity over the course of therapy (Radloff, 1977). It measures the
current level of depressive symptomatology, focusing on the affective component of
depressed mood, rather than the behavioural or somatic correlates of major depression used
by the BDI and other measures (Shaver & Brennan, 1991). These features make the CES-D
well suited for survey research with a general, non-clinical population in which depression
may be less severe than in a clinical setting, but even at mild levels may be quite distressing
and problematic for sufferers (Shaver & Brennan, 1991).

The scale consists of twenty items representing components of depressive
symptomatology. Respondents are asked to rate how frequently they have experienced such
symptoms within the past week. Responses are categorized as follows: 1 [Rarely or never
(less than 1 day)], 2 [some or a little of the time (1-2 days)], 3 [occasionally or moderately
(3-4 days)] and 4 [most or all of the time (5-7 days)]. These categories are then respectively
assigned a number from 0 to 3 for scoring, yielding a scale that runs from 0 to 60. Higher
scores are taken as indicative of greater levels of depressive symptoms, with a cutoff score of
16 indicating mild depression (Radloff, 1977).
Psychometrically, the scale appears reliable and reasonably well validated, with Radloff (1977) reporting internal split-half consistency of .85 for patient groups and .77 for normal populations. Convergent validity of the CES-D has been well established with correlations of .81 with the BDI and .90 with the Self-Rating Depression Scale (SDS) (Weissman, Prussof & Newberry, 1975 as cited in Shaver & Brennan, 1991). The scale seems to discriminate between normal and patient populations (Radloff, 1977).

Procedure

As stated above, participants in this study were recruited from the Introductory Psychology participant pool and other available undergraduate psychology courses. As in Hart and Thompson (1996), the study was described to participants as a study about how people think and feel in close relationships and how people feel about themselves. Before receiving the measurement packet, participants were required to sign a consent form outlining their rights and responsibilities in the experimental context, and the number of bonus points they would receive for their participation. Participants were not be required to put their names or any other identifying markings on the test packet, and were assured of the confidentiality of the testing situation.

Due to the group administration, it was not practical to provide an oral debriefing of the experiment. After completion of the measurement packet, participants were given a written debriefing outlining the exact nature of the study and its theoretical premises. As well, the debriefing outlined resources in the local area that are available to distressed or depressed individuals for the use of participants should they need it. Information on how to contact the experimenter or ethics board was also be included in the debriefing.

The measurement packets were collected by the experimenter and scored by computer for later analysis.
CHAPTER III

RESULTS

Prior to analysis, all variables involved in the study were examined for missing values, outliers, and normality of distribution. For the purposes of this screening, data were analyzed separately for the 67 women and 27 men. This procedure identified one male outlier on measures of instrumentality and expressivity ($Z_s > 3.29, ps > .001$, two tailed). On both measures this case showed a $z$ score of greater than an absolute value of 3.29 ($p < .001$, two tailed) which was used as the cutoff value for outliers following Tabachnik and Fidell (1996). In order to prevent this case from exerting undue influence on descriptive statistics and results of analyses, it was eliminated from further analyses, leaving 26 male respondents.

Among female participants all variables except depression were normally distributed according to visual inspection and acceptable values for skewness and kurtosis. Scores on the depression scale for both sexes were somewhat skewed towards lower values, but this is an expected effect, given the low rate of depressive pathology in this population. Additionally, this skew value was not extreme for either group, and given the robustness of the analyses proposed, should not create false or misleading conclusions.

For all results reported below, an alpha level of .05 was required for any result to reach statistical significance. Cronbach’s alpha was computed for all scales and all alphas were of acceptable magnitude (see Tables 2 and 3). First, the data were grouped according to sex, and analyses of mean sex differences on the variables were performed. Table 1 contains the summary data of these analyses. There was no statistically significant difference between men and women on the measure of depression, $F(1,91) = .254, p = .615$, $MSE = 126.85$. Although a difference in mean depression scores between male and female subjects in
this study was expected, such a finding is not necessary for exploration of the major hypotheses of this study.

The male and female groups showed no statistically significant difference between group means on the variable of instrumentality. A sex difference was found on the measure of expressivity, with the females scoring significantly higher than males, $F(1,91)=12.56$, $p=.001$, $\text{MSE} = .296$.

Male subjects’ mean score on the Silencing the Self Scale (STSS) show a trend towards higher values on the STSS than the female mean score. This difference was not of sufficient magnitude to be statistically significant, $F(1,91)= 2.76$, $p=.100$, $\text{MSE} = 313.08$.

**Correlational Analyses**

A correlational analysis was performed with male and female groups combined in order to produce an omnibus test of the relationships between variables. This omnibus analysis also allows one to begin examination of whether relations between these variables are dependent upon, or go beyond, biological sex. Results of this analysis are summarized in

**Table 1**  
Mean Sex Differences Investigated

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male Mean n=26</th>
<th>Male Std. Dev.</th>
<th>Female Mean n=67</th>
<th>Female Std. Dev.</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression (CES-D)</td>
<td>14.54</td>
<td>9.75</td>
<td>15.85</td>
<td>11.79</td>
<td>.254</td>
</tr>
<tr>
<td>Instrumentality (BSRI)</td>
<td>5.10</td>
<td>.60</td>
<td>4.91</td>
<td>.74</td>
<td>1.41</td>
</tr>
<tr>
<td>Expressivity (BSRI)</td>
<td>4.89</td>
<td>.51</td>
<td>5.34</td>
<td>.56</td>
<td>12.56*</td>
</tr>
<tr>
<td>Silencing the Self (STSS)</td>
<td>83.96</td>
<td>18.75</td>
<td>77.17</td>
<td>17.28</td>
<td>2.76</td>
</tr>
<tr>
<td>Private Self-Consciousness (PrSC)</td>
<td>37.11</td>
<td>6.60</td>
<td>35.92</td>
<td>5.93</td>
<td>.705</td>
</tr>
</tbody>
</table>

*p=.001
Table 2. A correlational analysis was then performed with the groups split along the dimension of biological sex. This analysis was examined for unique or shared relationships between the variables for men or women (i.e., sex differences).

Preliminary inspection of the omnibus matrix reveals that neither instrumentality nor expressivity has a significant association to depression. For the variable of instrumentality, the important relations that emerge are a negative correlation with expressivity \( r(93) = -0.289, p < .001 \), a negative relationship with self-silencing \( r(93) = -0.413, p < .001 \), and a positive relationship with self-esteem \( r(93) = 0.371, p < .001 \). However, this result is not free from the effects of biological sex. To discover the effects of masculine gender role on silencing the self regardless of biological sex, a partial correlation controlling for sex is performed. A significant negative correlation \( r(90) = -0.446, p < .001 \) between instrumentality and self-silencing is found, suggesting that regardless of the sex of respondents, those individuals adopting a more masculine role were less likely to self-silence.

The correlation matrix split along the dimension of biological sex found a statistically significant association between the STSS and levels of depressive symptomatology for both men and women (see Table 3 for summary). The correlations between scores on the CES-D and the STSS for men and women are \( r(26) = 0.466, p < .05 \) and \( r(67) = 0.648, p < .01 \), respectively. A test for correlation differences in independent samples (Howell, 1997) between the male and female coefficients was performed, and the results were nonsignificant (see Table 4).
Table 2

**Correlation Matrix (Combined Group)**

<table>
<thead>
<tr>
<th></th>
<th>SEX</th>
<th>INSTR</th>
<th>EXPR</th>
<th>ESTEEEM</th>
<th>STSS</th>
<th>DEP</th>
<th>PrSC</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX</td>
<td>1.00</td>
<td>.123</td>
<td>-.348*</td>
<td>.072</td>
<td>.172</td>
<td>-.053</td>
<td>.088</td>
<td>------</td>
</tr>
<tr>
<td>INSTR</td>
<td>1.00</td>
<td></td>
<td>-.289*</td>
<td>.371**</td>
<td>-.413**</td>
<td>-.201</td>
<td>.062</td>
<td>.864</td>
</tr>
<tr>
<td>EXPR</td>
<td>1.00</td>
<td></td>
<td></td>
<td>.091</td>
<td>-.048</td>
<td>-.103</td>
<td>.082</td>
<td>.806</td>
</tr>
<tr>
<td>ESTEEEM</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>-.648*</td>
<td>-.762**</td>
<td>-.186</td>
<td>.877</td>
</tr>
<tr>
<td>STSS</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>.579**</td>
<td></td>
<td>-.072</td>
<td>.882</td>
</tr>
<tr>
<td>DEP</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.117</td>
<td></td>
<td>.906</td>
</tr>
<tr>
<td>PrSC</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.747</td>
</tr>
</tbody>
</table>

**Correlation is significant at .001 (2-tailed).**

For females, there was a statistically significant negative relation ($r (67) = -.476$, $p < .001$) between instrumentality and scores on the STSS, but males show no relation between STSS scores and instrumental or expressive gender role orientation.

Contrary to hypothesis, private self-consciousness did not have statistically significant associations with any other variables, most notably that with depressive symptomatology.

Only men demonstrate a significant negative relation $r (26) = -.433$, $p < .01$ between instrumentality and depressive symptomatology. The observed negative relation between instrumentality and depression among the male group may be illuminated.

Table 3

**Correlation Matrices for Female and Male Groups**

*(Female values above diagonal, Male values below diagonal)*

**Correlations**

<table>
<thead>
<tr>
<th></th>
<th>Instr</th>
<th>Expr</th>
<th>Esteem</th>
<th>STSS</th>
<th>Depression</th>
<th>PrSC</th>
<th>Alpha (males)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instr</td>
<td>1.00</td>
<td>-.234</td>
<td>.277*</td>
<td>-.476**</td>
<td>-.137</td>
<td>.129</td>
<td>.818</td>
</tr>
<tr>
<td>Expr</td>
<td>-.372</td>
<td>1.00</td>
<td>.133</td>
<td>.097</td>
<td>-.225</td>
<td>.022</td>
<td>.711</td>
</tr>
<tr>
<td>Esteem</td>
<td>.695**</td>
<td>-.079</td>
<td>1.00</td>
<td>-.654**</td>
<td>-.801**</td>
<td>-.136</td>
<td>.900</td>
</tr>
<tr>
<td>STSS</td>
<td>-.367</td>
<td>-.213</td>
<td>-.635**</td>
<td>1.00</td>
<td>.648**</td>
<td>.102</td>
<td>.893</td>
</tr>
<tr>
<td>Depression</td>
<td>-.433*</td>
<td>.205</td>
<td>-.721**</td>
<td>.466**</td>
<td>1.00</td>
<td>.077</td>
<td>.866</td>
</tr>
<tr>
<td>PrSC</td>
<td>-.172</td>
<td>.377</td>
<td>-.270</td>
<td>-.060</td>
<td>.254</td>
<td>1.00</td>
<td>.785</td>
</tr>
<tr>
<td>Alpha (Females)</td>
<td>.891</td>
<td>.830</td>
<td>.866</td>
<td>.875</td>
<td>.918</td>
<td>.730</td>
<td>------</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).
through the relationship that instrumentality has with self-esteem. When a partial correlation is performed to assess the association between instrumentality and depression in the male group, controlling for self-esteem, the relation becomes nonsignificant, \( r(23) = .1384, p = .509 \).

To further analyze the possibility of sex differences in the associations between variables, correlations of interest were tested for significant differences between male and female groups. Analysis for significant differences by sex was achieved using the test for correlation differences in independent samples (Howell, 1997). Correlations selected for this analysis and results found are summarized in Table 4. The only significant finding was that the male group showed a significantly stronger relation between instrumentality and self-esteem than the female group.

**Analysis of Covariance**

It should be noted that, as stated above, the current study found no significant difference between men and women on a measure of depression. This finding is unexpected, but does not invalidate further examination of results. Sex differences in depression are well documented (Boggiano & Barrett, 1991; Frank, Carpenter, & Kupfer, 1988; Leon, Klerman, & Wickaramaratne, 1993; Nolen-Hoeksema, 1987; Sprock & Yoder, 1997; Weissman, Leaf, Bruce, & Florio, 1988; Weissman & Klerman, 1977), and need not be replicated here in order to examine differences between men and women that could possibly result in sex differences in observed depression.
Table 4

Sex Differences in Correlation Coefficients

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Female (r)</th>
<th>Male (r )</th>
<th>Z score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumentality and Self-esteem</td>
<td>.277*</td>
<td>.695**</td>
<td>2.36***</td>
</tr>
<tr>
<td>Instrumentality and Femininity</td>
<td>-.234</td>
<td>-.372</td>
<td>.630</td>
</tr>
<tr>
<td>Self-esteem and Depression</td>
<td>-.801**</td>
<td>-.721**</td>
<td>-.790</td>
</tr>
<tr>
<td>Instrumentality and Depression</td>
<td>-.137</td>
<td>-.433*</td>
<td>-1.38</td>
</tr>
<tr>
<td>STSS and Depression</td>
<td>.648**</td>
<td>.466**</td>
<td>1.09</td>
</tr>
</tbody>
</table>

*Correlation is significant from zero at p > .05 (two-tailed)
**Correlation is significant from zero at p > .01 (two-tailed)
***Difference between correlations is significant at p > .05 (two-tailed)

As stated above, all variables were inspected before analysis for violations of the assumption of normal distribution. Removal of one case in the male group significantly corrected any significant values for skewness and kurtosis across the variables. It was determined for the purposes of the following analysis that distributions were normal.

One further assumption unique to ANCOVA is homogeneity of regression slopes, which assumes that groups follow parallel regression slopes. To test this assumption, an interaction term between all relevant variables was included in the analysis. This interaction term was nonsignificant, \( F(2,85) = .726, p = .487, \text{MSE} = 78.19 \).

The ANCOVA that follows was calculated using a Type I Sum of Squares, which results in a hierarchical deconstruction of the results. This means that the effect of each variable is calculated after taking into account the effect of the variable that precedes it in the model. Through this method of calculation, some idea of the importance of the variables in relation to each other can be determined.
A between-subjects ANCOVA was performed using biological sex as the independent variable and depression scores as the dependent variable. Silencing the self, instrumentality, expressivity, and private self-consciousness were included as covariates in this model. Self-esteem was not included as a covariate as it is only used as a check of instrumentality, not as a gender role variable. After adjustment by the covariates, depression scores did indeed show a significant variation with biological sex (as summarized in Table 4) with \( F (1,85) = 7.10, p = .009 \). MSE = 78.19. Inspection of mean values after adjustment by the covariates shows a higher mean rate of depression in women (adjusted \( M = 17.16 \)) than men (adjusted \( M = 11.18 \)). This indicates the presence of a real difference between the sexes in depressive symptomatology when covariates related to gender role are controlled and evaluated.

Silencing the self was chosen to enter the analysis first as it shows the highest correlation with depression for both men and women. This suggests that silencing the self might have the greatest potential to contribute variance to overall depression scores. The analysis confirms that silencing the self does indeed have a significant effect on the

Table 5

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean Square</th>
<th>( F )</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>STSS</td>
<td>3878.96</td>
<td>49.61</td>
<td>.001</td>
</tr>
<tr>
<td>Instrumentality</td>
<td>20.57</td>
<td>.263</td>
<td>.609</td>
</tr>
<tr>
<td>Expressivity</td>
<td>47.86</td>
<td>.612</td>
<td>.436</td>
</tr>
<tr>
<td>PrSC</td>
<td>313.62</td>
<td>4.01</td>
<td>.048</td>
</tr>
<tr>
<td>Sex</td>
<td>554.80</td>
<td>7.10</td>
<td>.009</td>
</tr>
<tr>
<td>Group Interaction*</td>
<td>113.47</td>
<td>.726</td>
<td>.487</td>
</tr>
<tr>
<td>Error</td>
<td>78.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Group Interaction = Sex * Instrumentality * Expressivity * STSS * PrSC
variation between depression scores and the sex of respondent, with $F (1, 85) = 49.6$, $p = .001$, $\text{MSE} = 78.19$. Instrumentality and expressivity contribute no significant variance to depression.

Private self-consciousness has a significant effect in this model, with $F (1, 85) = 4.01$, $p = .048$, $\text{MSE} = 78.19$, even after showing no significant relations with any of the variables through correlational analysis.

Hierarchical Regression

The previous ANCOVA between biological sex and depression with the selected covariates is useful in determining which of the variables entered in the analysis have a significant relation with depression and are important in moderating the variance of the association between sex and depression. This analysis can only tell one which variables are important in this association, but has limited utility in determining how important those variables are in their relationship to depression and to each other. For this reason, a hierarchical (stepwise) regression was performed on depression using the variables that were significant in the ANCOVA entered as independent (predictor) variables. In other words, the variables of biological sex, self-silencing and private self-consciousness were evaluated for their relative contribution towards predicting scores of depression.

Variables were entered in the analysis according to their level of significance as determined by the ANCOVA. Therefore, silencing the self was entered as the first variable, followed by sex and private self-consciousness. Instrumentality and expressivity were excluded from further analysis, as they do not seem to add any significant clarifying power to the model.

With males and females treated as one group, regression indicates that silencing the self is the only variable that is significant in accounting for the variance in depression scores,
with \( t = 6.77, p = .001 \). The regression model indicates that neither sex of respondent nor private self-consciousness contribute any significant prediction to the variance in depression after the effects of silencing the self are accounted for. Altogether, 34\% (33\% adjusted) of the variability in depression scores between men and women is accounted for by scores on the variable of silencing the self. This suggests that regardless of biological sex, silencing the self has an important relationship to depression.

To check for the possibility of sex differences in the use of silencing the self and private self-consciousness as predictors of depression, the above regression model was run separately for the male and female groups. Results from these regressions confirm that only silencing the self serves as a reliable predictor of depression in both groups. In the female group, 42\% (41\% adjusted) of the variability in depression scores was attributable to silencing the self, with \( t = 6.86, p = .001 \). In the male group, 22\% (18 \% adjusted) of variance in depression scores was attributable to silencing the self, \( t = 2.588, p = .017 \). Private self-consciousness does not add any predictive power to the model for male or female groups.
CHAPTER IV

DISCUSSION

Many theories have attempted to explain the observed difference in rates of depression between men and women. The current study hypothesizes that aspects of an individual's gender role can have important implications in explaining and, to some extent, predicting the occurrence and severity of depressive symptoms in men and women. In general, the gender role aspects of instrumentality, silencing the self, and private self-consciousness were found to have associations to depressive symptomatology, although some of these variables did not react with depression or each other in ways that previous literature or the current study had predicted. As predicted, it was found that the relations between aspects of gender role and their relation to depression go beyond the biological fact of one being male or female. In particular, silencing the self was found to have an important negative association to instrumentality regardless of actual biological sex.

Instrumentality/Expressivity

Of the variables involved in the current study, the constructs of instrumentality and expressivity are those most closely identified with gender role. It was hypothesized that individuals showing higher femininity/expressivity scores would be more likely to be reporting depressive symptoms. However, the results obtained are consistent with the idea that it is masculinity/instrumentality that has an important negative relationship with depression. Many authors have suggested that expressivity has little or no relationship with depression, but that high instrumentality insulates the individual against the occurrence of depressive symptoms (Feather, 1985; Hart & Thompson, 1996; Sanfilipo, 1994; Waelde, Silvern, & Hodges, 1994; Whitley, 1983, 1985; Whitley & Gridley, 1993). The current study's findings are at least partially consistent with this hypothesis, evidenced by
the significant negative correlation $r(26) = -.433, p < .01$ between instrumentality and depression in the male group.

These results are at odds with the literature cited above, which suggests that an instrumental gender role orientation should insulate against depression across both sexes. The high instrumental female respondents in the current study do not show any of the same protection against depression—in fact, for women, this trait showed no significant association to depression at all in this study. Some of this finding may be explained by Nolen-Hoeksema’s (1987) statement that gender differences in depression are often not found in college or university populations due to the fact that females attending college tend to be self-selected for psychological health. Females not attending college may be the ones adopting more extreme expressive gender role orientations or suffering from psychopathology, and as such do not feel comfortable in a college or university environment. Alternatively, those women obtaining secondary education may be oriented to a more integrated gender role that protects them from psychological distress. By comparison, males have always been welcomed in college environments, and as a result, the male campus population may show more variation in psychopathology.

Additionally, high instrumental males may show a higher negative association to depression due to a masculine ideal of denying of any kind of psychological distress. For example, Cramer and Neyedley (1998) found that males showing a masculine orientation were less likely to admit to feelings of loneliness. They further hypothesized that sex differences in loneliness may actually be present, but are suppressed by the “masculine individual’s attempts to avoid social reproach from admitting personal distress and vulnerability” (Cramer and Neyedley, 1998, pg. 650). Masculine females may feel less socially uncomfortable in admitting to psychological distress, resulting in a smaller negative association to depression, and consequently, a statistically nonsignificant finding. Males may
feel an equivalent level of discomfort as females, but deny it due to socially stereotyped images of the strong, silent male.

The relationship between instrumentality and depression becomes even more difficult to interpret when the variable of self-esteem is considered. As stated above, Feather (1985) suggested that the negative linkage between masculinity and depression could be better interpreted through the construct of self-esteem. This interpretation followed the logic that self-esteem reflects values held to be important in our present Western society, namely masculine-oriented instrumental traits. Therefore, one exhibiting these traits would be socially reinforced and experience enhanced self-esteem (Feather, 1985). Feather (1985) goes on to suggest that self-esteem and masculinity may in fact measure the same thing, and that self-esteem is a more powerful predictor of depression.

The current study echoes Feather’s (1985) findings in which the relationship between instrumentality and depression disappears when controlling for self-esteem. This would suggest that indeed, instrumentality and self-esteem are a single construct and that the sex role variable of masculinity/instrumentality does not serve a useful purpose in predicting depression. However, Whitley and Gridley (1993) offer an alternative explanation through their finding that masculinity and self-esteem do emerge as separate constructs in a confirmatory factor analysis with depression. Whitley and Gridley (1993) tested the hypothesis that masculinity, self-esteem, and depression were highly related, but separate constructs that all loaded on the larger, latent variable of Negative Affectivity found in the “Big Five” personality taxonomy. This would suggest that self-esteem and instrumentality are not the same thing, but that self-esteem may function as a mediator of the relationship between instrumentality and depression (Whitley and Gridley, 1993).

It is not within the scope of the current study to determine which of these hypotheses can more adequately explain the results obtained. Not enough subjects were used in
gathering the current data for a confirmatory factor analysis to be performed here. The partial correlation between instrumentality and depression found in the current study is supportive of Feather (1985) as involving self-esteem.

However, findings of the current study suggest that the linkage of instrumentality and self-esteem may be not be as clear as Feather (1985) has outlined. Feather’s (1985) study suggests that instrumentality and self-esteem are linked across sexes. The finding of sex differences in the correlation between instrumentality and self-esteem raises the question of whether instrumentality and self-esteem are as closely linked for women as they are for men. As stated above, the male correlation between instrumentality and self-esteem is significantly higher than the female correlation. This suggests that adopting an instrumental gender role is much more important to a male’s self-esteem than it is to a female’s self-esteem. It is suggested that, for a male, high self-esteem is much more contingent on adopting more stereotypically instrumental behaviours and attitudes, and that adoption of more expressive behaviours may result in lower self-esteem due to lack of social reinforcement for expressive behaviours in a male. Conversely, females may find some self-esteem through the same mechanism (i.e., being instrumental and competing in a “man’s world”), or but will also find self-esteem through adoption of an expressive gender role as such an orientation would be socially rewarded in females. These ideas have yet to be tested, but the current study’s findings do suggest that instrumentality and self-esteem cannot be conceived of as measuring the same concept for men and women.

These results are supportive of a longitudinal study by Aube and Koestner (1992) in which the socialization or adoption of instrumental or expressive traits in adolescents were linked to different adjustment outcomes for males and females. Males endorsing more expressive traits at age twelve were found to have poorer social-personal adjustment at ages 31 and 41. No such effects were found for women. Aube and Koestner (1992) suggested
that "harsher social consequences follow when adolescent boys endorse nontraditional gender-related interests and undesirable traits than when girls do so." (pg. 485). This supports the current study's findings that instrumentality is more important to male's self-esteem than females. Aube and Koestner's (1992) study suggests that this process is socialized differently in boys and girls from an early age.

Silencing the Self

As hypothesized, silencing the self did have an important relationship to depression. The significant correlations of .47 and .65 for men and women, respectively, suggest that as silencing the self behaviours increase, depressive symptoms increase as well. The hypothesis of this study that both men and women show a relationship between silencing the self behaviours and depression is confirmed. It should be noted that this is only evidence of a relationship between the variables. No causal direction can be advanced from this analysis.

One interesting result was the finding that men's scores showed a trend towards a higher mean score on silencing the self than did women. While this result is statistically nonsignificant, it does raise questions about the validity of silencing the self as a uniquely female set of schema that lead to depression. This finding echoes previous work by Gratch, Bassett & Attra, 1995 and Page, Stevens, & Galvin, 1996 in which scores of males were either higher than or equivalent to females on Jack's (1991) Silencing the Self Scale (STSS).

This question is made even more relevant by the finding that females with higher instrumentality scores showed a significant negative relationship to self-silencing, whereas males showed no relationship between self-silencing and either instrumentality or expressivity. It may be that the behaviours measured by the STSS mean different things or are interpreted differently by men and women. Page et al. (1996) suggest the possibility that for some people silencing the self is a failure to express important needs in an effort to maintain a relationship, but that others may self-silence as a way of maintaining power in the
relationship. In this way, non-disclosure to one’s partner is actually a way of getting what one wants from the relationship, and “does not involve denial of self or creation of a new persona” (Page et al., 1996, pg. 393). The authors also suggest that when viewed from this perspective, it is possible that endorsement of items on the STSS may take place with a different intent. One who values non-disclosure as a tool for the maintenance of power in a relationship may endorse the items in the same way as one who self-silences to appease their partner, and consequently achieve a high STSS score for entirely different reasons (Page et al., 1996). The idea that men and women may self-silence for different reasons is echoed by Gratch et al. (1995). They suggest that self-silencing in men is a possible result of men simply not having a language or ability to truly express relational or emotional feelings, whereas women’s self-silencing comes from a reluctance to express personal or relational needs.

It should be noted as this time that the ideas suggested above have not yet been tested, but they certainly raise the question of whether it is possible that different people approach self-silencing from different perspectives. In this light, the findings of the current study could be interpreted as suggesting that high instrumental women and all men may approach the items of the STSS in a different way or self-silence for different reasons than low instrumental women. While this is purely supposition, it does suggest the need for further work to be done in determining the meaning of self-silencing among different groups.

Gender Role Characteristics and Depression

Many studies have attempted to explain the sex difference in reported depression through the use of gender role and related behaviours. However, the constructs of instrumentality, expressivity, silencing the self and private self-consciousness have never been tested together for their possible relationships to depressive symptomatology. One of the major hypotheses of this study is that when these constructs associated with gender role
are taken together, they serve to better illuminate the relationship between sex and depression than any one construct alone, including that of biological sex. This hypothesis is partially confirmed by the findings obtained. Behaviours associated with gender role do have a significant relationship to depression and seem to moderate the relationship between sex and depression.

Analysis of covariance with sex as an independent variable and depression as the dependent variable reveals that silencing the self and private self-consciousness have a significant relationship to depression, and suggests that they may have an important role in moderating the relationship between sex and depression. When these covariates are evaluated and controlled, a sex difference in depression emerges. Contrary to hypothesis, the constructs of instrumentality and expressivity do not have significant effects on depression in the current model. This finding is curious, given the extensive literature documenting a negative relationship between instrumentality and depression (Feather, 1985; Hart & Thompson, 1996; Sanfilipo, 1994; Waelde, Silvern, & Hodges, 1994; Whitley, 1983, 1985; Whitley & Gridley, 1993).

One possible explanation for the finding of nonsignificance for instrumentality is due to its association with silencing the self. When the effects of silencing the self are accounted for before the effects of instrumentality, instrumentality does not contribute any additional significant variance to the model. It may be that there is some variance shared by silencing the self and instrumentality that is completely accounted for when silencing the self enters the model first. One possible source of shared variance may be that of self-esteem. As stated above, the current findings echo the work of Feather (1985) and suggest that instrumentality and self-esteem may measure the same domain of personality variance. If self-esteem also shares a relationship to silencing the self, then the finding of nonsignificance for
instrumentality may be explained by suggesting that silencing the self has accounted for variance that falls along the dimension shared by instrumentality and self-esteem.

Such a relationship between silencing the self and self-esteem has been demonstrated by Page et al., 1996, who found that silencing the self was only related to depression when the respondent also manifested low self-esteem. Subjects with higher self-esteem scores showed less of a relationship to depression even when they had higher STSS scores (Page et al., 1996). If instrumentality is really measuring the same domain as self-esteem, then the relationship between instrumentality and silencing the self may be less clear than originally proposed. The issue becomes even more complex when considering the findings of the current study that the relationship between instrumentality and self-esteem may be different for men than it is for women. Clearly, this is an area that calls for further research.

It was hypothesized that private self-consciousness and silencing the self may have a special association to depression, wherein scores on one covariate may moderate scores on the other. Results from the analysis of covariance indicate that a relation does exist. Silencing the self and private self-consciousness are the both reach significance as covariates with depression, suggesting that they may act together in some way to moderate the relationship between sex and depression. However, it is important to view any interpretation of this finding with caution. In the preliminary correlational analysis, private self-consciousness showed no relation to depression, and no sex differences were present on this variable. Additionally, an analysis of covariance can only determine that variables are related to the dependent variable of interest. It cannot determine how covariates relate to each other or specifically how they mediate the relationship between independent and dependant variables. However, the finding of significance of silencing the self and private self-consciousness in the model does support the possibility of a relationship and the need for further research into the structure of such a relationship.
However, further analysis through the use of regression indicates that the only reliable predictor of depression in this model is silencing the self. Private self-consciousness and biological sex do not explain sufficient amounts of variance beyond that accounted for by silencing the self. When regressions are performed with male- and female-only groups, this relationship is again confirmed. Silencing the self is the only reliable predictor of depression in the male and female models, supporting the findings of the omnibus regression.

It should be stated that the finding of significance of silencing the self in the male-only regression is quite important, given the low power of this analysis. Tabachnik and Fidell (1996) suggest that the number of subjects in such an analysis should be greater than or equal to 50 plus 8 times the number of predictors to find evidence of prediction, given a medium effect size. The current study has only 26 males, which is far below the 66 that would be required for this analysis according to Tabachnik and Fidell (1996). This would suggest that silencing the self has an extremely large effect size in regard to prediction of depression scores. However, this means that the findings of the male-only regression should be viewed with some caution. Given more power, it may be that the predictor of private self-consciousness may have emerged as significant as well. It could be hypothesized that the effect size of private self-consciousness in males is simply smaller than the current analysis can detect.

One possible reason for the disappearance of private self-consciousness as a predictor relates to the new literature suggesting that the PrSC is composed of two factors, internal self-awareness (ISA) and self-reflectiveness (SR) (Burnkrant and Page, 1984; Cramer, in press). There is a growing body of literature that suggests that ISA and SR may impact upon depression in different ways. It has been found that only the SR dimension of the PrSC is correlated to depression (Anderson, Bohon, & Berrigan, 1996; Reeves, Watson, Ramsey, & Morris, 1996). In the study by Reeves et al. (1996), it was found that the ISA dimension had
an inverse relationship with depression, prompting the authors to suggest that SR seems to measure a dysphoria-enhancing cognitive process, whereas ISA taps a dysphoria-inhibiting process. Anderson et al. (1996) echoes these findings, and suggests that the SR items may measure a negative form of private self-consciousness, and that ISA items related to a more neutral, possibly positive form of self-consciousness.

Proceeding from this basis, the fact that PrSC does not serve as an effective predictor of depression may be seen as the canceling out of the negative effects of SR by the mildly positive effects of ISA. However, this does not necessarily negate the findings that PrSC may have an important relationship with depression. The SR dimension may be effective in serving to moderate the relationship between sex and depression, and it may be this factor that serves as a possible link between silencing the self and private self-consciousness. However, this is all conjecture at this point, as the current study does not evaluate PrSC with regard to its two factor structure.

The finding that sex does not serve as an effective predictor of depression by itself confirms the hypothesis of this study. Even though covariant analysis confirms the existence of a true sex difference in depression when gender role covariates are controlled, biological sex alone cannot be used reliably to predict the likelihood of developing depression.

Limitations

It is a limitation of the current study that there are a small number of males involved. As it stands, it is possible that some of the differences observed may be due to inequality in the sizes of the groups in the analysis, and not due to the effects of variables as hypothesized. For instance, the omnibus correlation matrix may show associations as significant or nonsignificant as a reflection of the greater numbers of female subjects exerting more influence than the male subjects. However, this limitation is partially corrected in the current study by examination of correlations within each sex group. This inequality is a difficult
issue to address when using undergraduate psychology students, as the majority of this population is female. This may also raise questions of self-selection, as males who do enroll in psychology courses may already be different than similarly aged males in the greater population. This self-selection may have implications for the generalizability of findings to the larger male population.

The low numbers of males in the current study may also mean that some analyses, such as the male-only regression, may not have had sufficient power to detect anything other than extremely large effect sizes. It may be that other variables in the model are significant, but are of medium or small effect sizes and go undetected. Further research with these variables should attempt to sample a larger number of male respondents.

On a more general level, findings associated with a university undergraduate student sample may have limited generalizability to the wider population. This limitation does not negate the current study’s findings, but it should be noted that sex differences in depression might take a slightly different form within the general population.

A further limitation is the use of the Bem Sex Role Inventory (BSRI) as a measure of masculine and feminine gender role orientation. It should be noted that the BSRI (Bem, 1974) is now a 25 year old instrument. It is not inconceivable that the ideas of what comprises masculine or feminine traits in the eyes of the larger society may have changed to some degree since the BSRI’s conception. Roles of men and women in modern Western society have been in a state of flux in the last 25 years, and as such may not be adequately framed by the BSRI in its original state. This is unfortunate, because no other instrument has been conceived or implemented in the recent past to examine more current conceptions of masculinity and femininity, nor has the BSRI been significantly revised to account for any possible changes.
Lastly, a significant limitation of the current study is the nonexperimental nature of this research. Participant of this study were not assigned to groups in a random manner, and none of the variables involved were directly manipulated by the experimenter. To some extent, this is a potential downfall of any investigation into sex differences. Obviously, it is difficult to achieve random assignment to groups when the independent variable is that of biological sex. As a result, no form of causal direction between sex differences, instrumentality, expressivity, silencing the self, private self-consciousness and depression can be determined from this study. It can only be said that relationships do exist, and that these relationships suggest possible forms of interaction among these variables. The exact form and direction of these relationships can only be determined through random assignment to an experimental context.

**Directions for Future Research**

The construct of self-silencing clearly has a part to play in the relationship between sex and depression. However, the current study’s findings do raise some questions about the structure of Jack’s (1991) STSS, introduced as an instrument for the measurement of female-specific schemas of depression. Recent results of equal or greater levels of self-silencing in men on the STSS (Gratch et al., 1995; Page et al., 1996) suggest questions concerning whether men self-silence in the same way as women, if they self-silence for different reasons, or if men interpret items in a different light than women. The current study also suggests that even within a female group, the STSS may have different implications towards depression for women displaying an instrumental gender role.

The STSS is still a new instrument, and the literature on its properties and uses is still growing. It is clear that the underlying structure of the STSS may still require clarification. An exploratory factor analysis of the STSS with a female group was performed by Stevens and Galvin (1995) that largely confirmed the factor structure hypothesized by Jack (1991).
However, no study has attempted to investigate the factor structure of the STSS with a male population. A confirmatory factor analysis using a male and female population could clarify issues of interpretation of the STSS, and possibly shed light on the existence of male self-silencing.

The relationship between instrumentality and self-esteem still requires clarification. The finding of sex differences in this relationship raises the question of the importance of instrumentality to self-esteem in males versus in females. Further research should focus on defining this relationship for male and females before making the assumption that instrumentality and self-esteem universally measure the same construct.

Some of the current study's findings may be explained by hypothesizing a relationship between silencing the self, instrumentality and self-esteem. However, in the context of this study, this relationship is purely conjecture. Page et al., (1996) demonstrated a relationship between silencing the self and self-esteem, but no study to date has considered the possible influence of instrumentality in mediating this relationship. Further clarification of this relationship is desirable and should be undertaken.

Despite the existence of literature documenting the relationship between private self-consciousness and depression (Bromberger & Matthews, 1996; Ingram & Smith, 1984; Nolen-Hoeksema, 1987; Nolen-Hoeksema & Morrow, 1991; Smith & Greenberg, 1981; Smith, Ingram & Roth, 1985), the current study could not conclusively demonstrate the existence of such a relationship. Further research into the underlying structure of the PrSC subscale and its relationship to depression should be performed. Specifically, the existence of the ISA and SR factors must be more conclusively demonstrated and analyzed for their relationships to depression. If the ISA factor does not measure or clouds the relationship between private self-consciousness and depression, it should perhaps be left out of future analyses.
Finally, the majority of research done in the areas of silencing the self and private self-consciousness has been performed with non-clinical populations. The current study is no exception. Clearly, if either construct is to be truly appreciated for their relationship to depression, they should be evaluated using a depressed clinical sample. This type of research is undoubtedly more difficult given the difficulties in accessing large numbers of clinically depressed individuals able to participate in research. However, the generalizability of findings in depression with a non-clinical population towards actual depressed populations may be limited. A replication of the current study using a clinical population may have significant utility in demonstrating the importance of gender role-related behaviors in explaining, predicting, and treating depression.
APPENDIX A

SAMPLE QUESTIONNAIRE
Please indicate your biological sex:

A. Female
B. Male

Questionnaire 1

Instructions: Please fill in the letter on the additional sheet that best describes how you feel about each of the statements listed below where:

A = Strongly Disagree
B = Somewhat Disagree
C = Neither Agree or Disagree
D = Somewhat Agree
E = Strongly Agree

1. I think it is best to put myself first because no one else will look out for me.
2. I don't speak my feelings in an intimate relationship when I know that they will cause disagreement.
3. Caring means putting the other person's needs in front of my own.
4. Considering my needs to be as important as those of the people I love is selfish.
5. I find it is harder to be myself when I am in a close relationship than when I am on my own.
6. I tend to judge myself based on how I think other people see me.
7. I feel dissatisfied with myself because I should be able to do all the things people are supposed to do these days.
8. When my partner's needs and feelings conflict with my own, I always state mine clearly.
9. In a close relationship, my responsibility is to make the other person happy.
10. Caring means choosing to do what the other person wants, even when I want to do something different.
11. In order to feel good about myself, I need to feel independent and self-sufficient.
12. One of the worst things I can do is to be selfish.
13. I feel I have to act in a certain way to please my partner.
14. Instead of risking confrontations in close relationships, I would rather not rock the boat.
15. I speak my feelings with my partner, even when it leads to problems or disagreements.
16. Often I look happy enough on the outside, but inwardly I feel angry and rebellious.
17. In order for my partner to love me, I cannot reveal certain things about myself to him/her.
18. When my partner's needs or opinions conflict with mine, rather than asserting my own point of view I usually end up agreeing with him/her.
19. When I am in a close relationship I lose my sense of who I am.
20. When it looks as though certain of my needs can't be met in a relationship, I usually realize that they weren't very important anyway.
21. My partner loves and appreciates me for who I am.
22. Doing things just for myself is selfish.
23. When I make decisions, other people's thoughts and opinions influence me more than my own thoughts and opinions.
24. I rarely express my anger at those close to me.
25. I feel that my partner does not know my real self.
26. I think it's better to keep my feelings to myself when the do conflict with my partner's.
27. I often feel responsible for other people's feelings.
28. I find it hard to know what I think and feel because I spend a lot of time thinking about how other people are feeling.
29. In a close relationship I don't usually care what we do, as long as the other person is happy.
30. I try to bury my feelings when I think they will cause trouble in my close relationship(s).
31. I never seem to measure up to the standards that I set for myself.
33. In regards to this last questionnaire, has responding to these items made you think about these issues:
   A. No more than usual
   B. About the same as usual
   C. A little more than usual
   D. Much more than usual

34. In regards to this last questionnaire, has responding to these items made you think about these issues:
   A. No differently than usual
   B. The same way as usual
   C. A little differently than usual
   D. Much differently than usual

Questionnaire 2

Instructions: Please rate the following statements to the degree that they describe yourself using the following scale:

A= Extremely Uncharacteristic
B= Mildly Uncharacteristic
C= Neutral
D= Mildly Characteristic
E= Extremely Characteristic

35. I'm always trying to figure myself out.
36. Generally, I'm not very aware of myself.
37. I reflect about myself a lot.
38. I'm often the subject of my own fantasies.
39. I never scrutinize myself.
40. I'm generally attentive to my inner feelings.
41. I'm constantly examining my motives.
42. I sometimes have the feeling that I'm off somewhere watching myself
43. I'm alert to changes in my mood.
44. I'm aware of the way my mind works when I work through a problem.
Questionnaire 3

Instructions: Below is a list of the ways you might have felt or behaved recently. Please tell me how often you have felt this way during the past week using the following scale:

A= Rarely or none of the time (less than 1 day)
B= Some or a little of the time (1-2 days)
C= Occasionally or a Moderate Amount of the time (3-4 days)
D= Most or all of the time

During the past week:

45. I was bothered by things that don’t usually bother me.
46. I did not feel like eating; my appetite was poor.
47. I felt that I could not shake off the blues even with help from my family or friends.
48. I felt that I was just as good as other people.
49. I had trouble keeping my mind on what I was doing.
50. I felt depressed.
51. I felt that everything I did was an effort.
52. I felt hopeful about the future.
53. I thought my life had been a failure.
54. I felt fearful.
55. My sleep was restless.
56. I was happy.
57. I talked less than usual.
58. I felt lonely.
59. People were unfriendly.
60. I enjoyed life.
61. I had crying spells.
62. I felt sad.
63. I felt that people dislike me.
64. I could not get “going”.

Questionnaire 4

DIRECTIONS: Please answer each question using the following scale:

A=Strongly Disagree
B=Somewhat Disagree
C=Somewhat Agree
D=Strongly Agree

65. I feel that I am a person of worth at least on an equal basis with others
66. I feel that I have a number of good qualities.
67. All in all, I am inclined to feel that I am a failure
68. I am able to do things as well as most other people
69. I feel I do not have much to be proud of
70. I take a positive attitude toward myself
71. On the whole, I am satisfied with myself
72. I wish I could have more respect for myself
73. I certainly feel useless at times
74. At times, I think I am no good at all.
Questionnaire 5

Instructions: Please rate how well each of the following characteristics describes yourself using the following scale:

1= Never true
2= Almost never true
3= Rarely true
4= Neutral
5= Sometimes True
6= Almost always true
7= Always True

1. Self Reliant
2. Yielding
3. Helpful
4. Defends own beliefs
5. Cheerful
6. Moody
7. Independent
8. Shy
9. Conscientious
10. Athletic
11. Affectionate
12. Theatrical
13. Assertive
14. Flatterable
15. Happy
16. Strong personality
17. Loyal
18. Unpredictable
19. Forceful
20. Feminine
21. Reliable
22. Analytical
23. Sympathetic
24. Jealous
25. Has leadership abilities
26. Sensitive to the needs of others
27. Truthful
28. Willing to take risks
29. Understanding
30. Secretive
31. Makes decisions easily
32. Compassionate
33. Sincere
34. Self-sufficient
35. Eager to soothe hurt feelings
36. Conceited
37. Dominant
38. Soft spoken
39. Likable
40. Masculine
41. Warm
42. Solemn
43. Willing to take a stand
44. Tender
45. Friendly
46. Aggressive
47. Gullible
48. Inefficient
49. Acts as a leader
50. Childlike
51. Adaptable
52. Individualistic
53. Does not use harsh language
54. Unsystematic
55. Competitive
56. Loves children
57. Tactful
58. Ambitious
59. Gentle
60. Conventional
References


Cramer, K. (in press). Comparing the relative fit of various full and reduced
Self-Consciousness Scale factor models to two independent samples. *Journal of Personality Assessment.*


VITA AUCTORIS

Norman B. Thoms was born in 1971 in Ottawa, Ontario. He graduated from John Maland High School, Devon, Alberta, in 1989. From there he went on to the University of Alberta where he obtained a Bachelor of Arts degree in Criminology in 1993. Since September 1997, he has been enrolled in the doctoral programme in Adult Clinical Psychology at the University of Windsor.