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THE RELATIONSHIP BETWEEN THE MMPI-2'S RC3 CYNICISM SCALE AND SOCIAL SUPPORT

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An Abstract of the Thesis by
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The current study examined the MMPI-2's Restructured Clinical Scale 3 (RC3) measuring cynicism from the Tellegen et al. (2003) Restructured Clinical Scales project. While RC3 has shown adequate reliability coefficients, research investigating RC3 has questioned its validity and descriptive abilities. Research suggests that adequate criterion has not been established for the scale. RC3 in this study was correlated with three types of social support: Proactive Coping, Instrumental Support Seeking, and Emotional Support Seeking. Based on a review of the literature of cynicism and social support, it was hypothesized that a negative relationship would exist between the two constructs. The study utilized 66 college participants from undergraduate psychology classes. No significant correlations between cynicism and social support were found. Implications of the lack of significant results are discussed in terms of limitations of the data set, an inadequate representation of the psychological vulnerability model, and that RC3 may not be sensitive to social support measures.

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CHAPTER I

INTRODUCTION

Purpose of the Study

The MMPI-2's Restructured Clinical scales have introduced new dynamics to a personality assessment that has been a proven staple in the field of psychology. The MMPI-2 is the most widely used and heavily researched measure of personality in the field of psychology (Butcher, Hamilton, Rouse, & Cumella, 2006). The introduction of new scales to the gold standard in the field has been the source of some debate. On one hand, there have been efforts made to improve the psychometric properties by making the MMPI-2 a more succinct instrument of measuring personality. To the contrary, researchers argue that changes have been so drastic that the RC project has given way to a "construct drift" from the core nature of the original Clinical Scales (Nichols, 2006). Centered in the debate is the inclusion of RC3, a reported measure of cynicism that has shown a negative correlation with its original clinical scale counterpart, Hysteria, which describes volatile emotional states and somatic complaints. It is the purpose of this study to give background to the RC project, describe the new scales' purposes, examine the new measure RC3, and attempt to examine one aspect of what RC3 purportedly measures. By comparing social support indexes with cynicism, this study hopes to add to the research regarding the RC project and ultimately further aid in interpretation of RC3.

Three areas of social support will be correlated with RC3 cynicism: Proactive Coping, Emotional Coping, and Instrumental Coping.

CHAPTER II

REVIEW OF THE LITERATURE

The Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943) was developed to assess mental health problems in psychiatric and medical settings through patients' true-false responses to a large number of questions regarding symptoms and attitudes. By the mid 1960's, the MMPI became the most widely used personality assessment measure for self-report assessment of psychopathology in a broad variety of settings (Butcher, Hamilton, Rouse, & Cumella, 2006). A second version of the MMPI, the MMPI-2, was released at the end of the 1980's which accentuated the decades of research carried out with the MMPI and established contemporary norms, additional validity scales, and offered standardized scores with more uniform distributions than the original MMPI (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989).

According to Tellegen et al. (2003) the original MMPI Clinical Scales were constructed primarily by *empirical keying*. The general objective of this method is to create a scale that discriminates between two psychologically distinctive groups, in this case a normative group representing the general population and a psychiatric group representing people or patients diagnosed with specific psychiatric conditions. Both groups are asked similar questions concerning various aspects of psychological difficulties. The items most often endorsed by the psychiatric group, depending on their particular diagnosis, would then become a Depression Scale, a Schizophrenia Scale, etc.

Further, ideas for the items pool on the original MMPI were suggested by existing psychometric interview forms, psychiatric textbooks, and earlier inventories.

The construction of 90% of the original MMPI Clinical Scales employed the empirical keying method and, subsequently, the clinical scales on the new MMPI-2 were transferred virtually unchanged from the original MMPI. This was done out of a desire to maintain continuity between the MMPI and the MMPI-2, particularly with respect to the Clinical Scales with which the MMPI was most heavily identified (Tellegen et al, 2003) and the central point of research involving the original MMPI (Graham, 2006).

McKinley and Hathaway (1944) readily emphasize that discriminant keying criterion was the primary identifying strategy for item placement within a scale. The authors of the original MMPI noted that "they (the items) are not selected for their content or theoretical import...it is accepted if it appears to differentiate" (p. 31-32). Therefore, while the items were selected for keying by previously established measures, inclusion criteria for a Clinical Scale were mostly dependent upon their descriptive differentiating ability between groups.

Naturally, overlapping items within scales occurred. Stated another way, items occurred on more than one scale that discriminated patients from non-patients. Tellegen et al. (2003) point out that one major problem with the MMPI-2 Clinical Scales is that several scale intercorrelations are higher than optimal. For example, there is a correlation of more than .80 between Scale 7, the Psychasthenia scale, which measures "neroticism" (Butcher, et al., 1989) and Scale 8, the Schizophrenia scale, which measures "psychoticism" (Butcher, et al., 1989). Tellegen et al. also note that several items composing the scales are of questionable validity and that empirical keying contributed to

both validity issues and high inter-correlation between scales. Further, when Hathaway and McKinley used endorsement or no endorsement for an item by either group as the sole criterion for inclusion in a scale, this process led to nonspecific items overlapping in various scales. These items known as *subtle items* were seen as less susceptible to over or under endorsement. For a short time Obvious and Subtle Subscales were published for several Clinical Scales; however, later research revealed that these scales have little to no factor loading on their intended scales (Butcher, et al., 2001) and the Subtle and Obvious Subscales were subsequently dropped from the MMPI-2. The subtle items remain included in the Clinical Scales.

Intercorrelation between scales limits a scale's ability to differentiate between types of psychological difficulties. For example, including fatigue in both a depression and a schizophrenia scale makes it difficult to specifically address the difference between the two experiences. It is clearly important to know the level of emotional distress a test-taker may be experiencing, however, having the same symptoms expressed in several clinical scales makes it difficult to know if the distress is attributed to the core items of a clinical scale or it is simply a measure of emotional distress.

The Restructured Clinical Scales

Tellegen et al (2003) developed the Restructured Clinical scales, or RC Scales, for the MMPI-2 that will be included on a shortened version of the MMPI-2 offered in the Spring of 2008 (Pearson, 2007). The RC scales are also offered with most current computer printed scoring software packages for the MMPI-2 and hand-scoring templates for the RC scales are currently available as scoring options for the MMPI-2 (Pearson, 2007). The RC Scales have attempted to address the problems of high intercorrelation

between scales, the inclusion of subtle items, and the lack of discriminant validity between scales on the MMPI-2. The authors point out that the RC Scales were designed to preserve the important descriptive properties of the existing MMPI-2 while enhancing their distinctiveness. In other words, the newly restructured clinical scales were developed to further define and interpret original clinical scale constructs, such as depression and schizophrenia, while further demarcating the psychopathology assessed by the MMPI-2 Clinical Scales. Tellegen et al. indicated that the constructs for the RC scales were defined by professional judgment guided by clinical impressions. Clinical impressions were given for question items fitting an established clinical construct, such as schizophrenia and mania. The clinicians used historically valid convergent evidence and data to substantiate their impressions. All significant data dependent decisions regarding the RC scales were based on independent analysis of four sample groups. Two groups consisted of 832 men and 380 women who completed the MMPI-2 in a residential substance abuse treatment facility (McKenna & Butcher, 1987). The remaining two groups consisted of 232 men and 191 women who completed the MMPI-2 at one of three psychiatric facilities in Ohio or Minnesota; facilities were either a psychiatric inpatient unit or a county hospital (Graham & Butcher, 1988). Therefore, while data were obtained from new participant groups, the constructs were developed by professional clinicians from established ideas about the origins of pathology.

Discriminant validity within psychological assessment measures is a key factor to a test's applicability and practical value within the field. Long recognized as a threat to discriminate validity of the MMPI and the MMPI-2 are broad-emotionally colored descriptions of anxiety and depression. Welsh's Anxiety scale or "A scale" (Welsh, 2000,

1956) is sometimes referred to as the "MMPI-2 first factor" describing subjective aspects of anxiety and depression. Tellegen et al. label this first factor demoralization or a subjective index of feeling bad, down, or blue. Tellegen et al (2003) addressed the problem of item overlap in the original scales by first removing demoralization. The researchers point out that by removing aspects of demoralization, such as feeling fatigued, feeling blue, lacking motivation, and feeling sad, the more specific defining issues of the individual scales would emerge independent of an ever present demoralization. The researchers reiterate that the clinical significance of demoralization needs to be measured, but that it should be measured once, independent of other pathology. Tellegen (1985) suggested that demoralization appears to over emphasize similarities in scales that are thought to be independent of one another, and further, that demoralization is not the distinctive core of any of the Clinical Scales. That is, differences in scales can be attributed, at least partially, to a core component that exists outside of demoralization. This assumption motivated the researchers to identify a Demoralization dimension in the MMPI-2 item pool, remove these items denoting Demoralization from each clinical scale, and thus create a new set of scales, the Restructured Clinical Scales, that would represent a clearer and more valid core descriptor of each scale.

Methodologically, the demoralizing factors were extracted by elaboration of previous research done by Watson and Tellegen's (1985) model of Positive Affect (PA) and Negative Affect (NA) in which poles of negative emotions and positive emotions are established within testing measures; however, for the Restructured Clinical scales project the terms Positive Emotionality (PEM) and Negative Emotionality (NEM) were used to

reflect Tellegen's (1985) research. In previous work, Tellegen expounded on identified transient states of emotion, such as feeling "delighted" or "excited" to a broader measure of more consistent moods, such as feeling "happy" or "blue" most of the time. The researcher labeled this consistent state the Pleasantness-versus-Unpleasantness (PU) axis. Tellegen expresses the same factor analytic approach for identifying the demoralization factor on the MMPI-2 as he did for the PU axis. Tellegen examined item content comprising the original clinical scales two and seven, or depression and psychasthenia. The researchers examined the factor loadings of these items within the new four group data set. Based on the factor loadings of items from scales two and seven on the new data sets, the researchers chose any item with a Primary Factor (PF1) loading of .50 or higher for the Demoralization scale. A total of 14 items had PF1 loadings of at least .50 and 10 items were selected from this process for consideration for the Demoralization scale. Next, through a complicated series of statistical rotations, the researchers extracted 23 demoralizing items from the remainder of the MMPI-2 item pool, examined overlap between previous demoralizing items, and ultimately picked a total of 18 items for the final Demoralization scale.

In addition to removing the demoralizing component from each Clinical scale, the researchers identified items with high factor loadings on the "core" of each scale, such as schizophrenia or mania. These questions made up what the researchers denoted as "seed scales." This was accomplished by assigning to a given seed scale those items that had the highest loadings on the scale's core factor and that did not have significant factor loadings on the Demoralization factor. Also, the items could not have significant factor loadings on the other seed scales. Overlapping items and items that threatened internal

consistency were removed; thus attempting to make the seed scales distinct to promote discriminate validity. In addition, items were eliminated from most scales if they "were not appropriately correlated with conceptually relevant external criterion measures" (Graham, p. 154, 2006).

In total, eight RC scales representing core elements of Clinical Scales, 1, 2, 3, 4, 6, 7, 8, and 9 were developed in addition to the demoralization scale. The original Clinical scales and their corresponding RC Scales are as follows: Scale 1 Hypochondriasis (Hs) with RC1 Somatic Complaints (Som); Scale 2 Depression (D) with RC2 Low Positive Emotions (LPE); Scale 3 Hysteria (Hy) with RC3 Cynicism (Cyn); Scale 4 Psychopathic Deviate with RC4 Antisocial Behavior (AsB); Scale 6 Paranoia with RC6 Ideas of Persecution (Per); Scale 7 Psychasthenia with RC7 Dysfunctional Negative Emotions (DNE); Scale 8 Schizophrenia with RC8 Aberrant Experiences; and Scale 9 Hypomania with RC9 Hypomanic Activation (HPM). It should be noted that most clinical scales and their corresponding RC scales have high positive correlations, such as .89 for men and .92 for women between Scale 1 and RC 1. The actual range of correlations is .41 to .92 with a mode of .64. These correlations emphasize that, for the most part, the scales measure the same construct without the demoralization component (Graham, 2006).

An entire "special issue" volume of the *Journal of Personality Assessment* (2006) devoted its attention to a debate surrounding the RC scales. The lead author of the journal and chief detractor of the scales, David S. Nichols of Pacific University, cites several problems with the new measures (Nichols, 2006). He stresses that, to begin with, the RC Manual (Tellegen, et al, 2003) fails to include reasons why previous measures that

already compensated for covariance were not considered; he points out that the RC scales are highly correlated with existing content scales of the MMPI-2, marginalizing their necessity. He states that the "factor analytical approach on which Tellegen et al.'s primary results rest is terse." (Nichols, 2006, p. 136). With the exclusion of subjective depression from the clinical scales, it is unclear if the original constructs of Hathaway and McKinley (1940) are still the focus of measure, a problem Nichols refers to as construct drift (Nichols, 2006). Tellegen (2006) counters the criticism with a staunch defense of his scales lauding the empirically validated research that he asserts Nichols neglects, primarily that demoralization as a construct can stand alone and is not something that is always interceded with other measures. In any case, the view of this current study will echo the sentiment that overall, the RC scales have been widely accepted among the American Psychological Association, but would benefit from further convergent validity studies and discussion (Butcher, 2006). It is the purpose of this study to investigate the RC3 Cynicism scale.

RC3 Cynicism

As Graham (2006) indicated, an interesting development with the RC Scale project is the lack of correlation of RC3 Cynicism and its corresponding original Clinical Scale, Scale 3 Hysteria (Hy). Graham also points out that while reliability coefficients are within acceptable ranges, the validity of the scale is in question. In the normative sample, outpatient sample, and both inpatient samples, RC3 showed internal consistency reliability coefficients of .80 and above for men and .79 for women. Test-retest coefficients in the normative sample were .76 for men and .87 for women. The correlations of RC3 and the Hy scale for men were -.42 and for women -.24. This

correlation suggests that elevations on either scale indicate relatively opposite pathology. In addition, correlations from clinical samples reported by Tellegen et al. (2006) between RC3 and Hysteria show absolute values of below .20. This indicates that the scale is not measuring the same constructs defined by Hathaway and McKinley (1940). Also, adding to the discussion of the utility of RC3, Rogers (2003) points out that RC3 correlates heavily with already existing MMPI-2 measures of cynicism, CYN ($r = .90$), and hostility, Ho ($r = .84$). Rogers further states that the correlations between RC3 and CYN were actually higher than the alpha coefficient for RC3 (.80 for men and .79 for women). Therefore, RC3 is best considered a psychometrically parallel form of the CYN scale. In other words, if RC3 is not adding clarifying descriptions of an original scale, and its seed constructs are already represented within the MMPI-2, what is RC3's use? RC3's corresponding scale, Hysteria, measures hysterical reactions to stressful situations. The reactions are typified by an "involuntary psychogenic loss or disorder of function" (Graham, p. 70, 2006). However, the scale also deals with complaints concerning physical health and a variety of related complaints, such as heart and chest pain, nausea, vomiting, fitful sleep, and headaches. Further, this scale measures a general denial of psychological difficulty and/or emotional problems and denial of discomfort in social situations. There is an additional set of items measuring overly optimistic attitudes, or naiveté, towards other people. RC3 on the other hand does not include any of the somatic items, which were incorporated into RC1. Further, RC3 scores the naïve positive perceptions of others in the reverse direction, meaning the more readily a person endorses items related to trust in others, the less likely they may be to endorse items on RC3. High scores on RC3 would indicate a lack of trust, lack of caring, prevalence of egocentric

concerns, and exploitive views of the world. Lower scores by contrast, would indicate naiveté, gullibility, and being overly trusting of others. In the monograph for the RC project, Tellegen et al. (2003) indicate that RC3 represents a limited component of Clinical Scale 3, which the researchers indicate they "singled out as distinctive" (p. 55). After reiterating that the somatic concerns of the Hysteria scale were more appropriate to RC1, Tellegen et al. add to Graham's interpretation of their work by pointing out that RC3's development was concerned with items describing "non self-referential" (p. 55) views. Non self-referential views are basically items unconcerned with personal experiences or attitudes but with broader levels of cynicism, such as lack of trust and uncaring. Tellegen et al. guide future researchers to investigate a "broader array of criterion variables...on the validity of the RC3" (p. 85) scale.

The primary focus of this study is RC3 Cynicism and investigating what it purports to measure. As Graham (2006) indicates RC3 scale did not have strong correlates in the inpatient or outpatient samples studied to date. In other words, elevations or depressions on RC3 have not proved useful in predicting other types of pathology indicated by other measures. Graham postulates that psychopathology associated with other measures may not be associated with high scores on RC3. More importantly to this study, Graham indicates it may be that research has not yet fully developed appropriate criteria measures of the cynicism suggested by the content of items in the RC3 scale.

Cynicism

Research involving cynicism as a construct has been varied and often incorporates seemingly unrelated concepts. For example, cynicism has been used as a related construct under the guise of depersonalization, burn-out, Machiavellianism, and external locus of

control and/or fate-control. Literature supports the construct that cynicism is a held belief or attitude indicative of one who is untrusting, uncaring, concerned only about themselves, and exploitive (Graham, 2006). Type just the word cynicism into a modern search engine and the body of research will represent rating scales of cynicism, such as the Interpersonal Trust Scale, the Cook Medley Hostility Scale (Cook & Medley, 1954), the Machiavellianism scale (Mudrack, 2000) and the Paulhus Socially Desirable Responding Scales (Paulhus, 1984). Regarding research utilizing cynicism as a construct, a plethora of research with related core concepts of cynicism are represented in the literature. For example, coping styles and the development of job burnout (Carmona et al., 2006) utilized the depersonalization aspect of cynicism. The researchers point out that cynicism often represents feelings of detachment and unresponsiveness in relation to the job of police officers. Cynicism may be manifested when treating individuals as objects rather than people, displaying emotional callousness, and/or being cynical towards co-workers, clients and/or the organization, the result of which leads to lower job satisfaction and higher incidents of problems at work.

Research involving cynicism as a key component of exhaustion influencing job burnout among nurses and police officers was conducted by Bakker and Heuven in 2006. The authors showed that emotional job demands explain differences in burnout levels which were indexed as exhaustion and cynicism/disengagement. These factors were shown to negatively influence emotional dissonance or feeling detached from one's work.

Burke and Mathisen (2004) indentified exhaustion as an aspect of cynicism and investigated exhaustion's relationship to work performance in workaholics. The researchers found that cynical attitudes, such as negative beliefs toward life and life

events, increased with exhaustion and reflected lower job satisfaction in Norwegian nurses.

Izawa, Kodama, and Nomura (2006) examined cynicism's role in world outlook with regard to Japanese undergraduate students. The researchers found that hostile cognitions were significantly different between Japanese and American students. Hostile cognitions were described as negative thoughts about life and the world and defined as cynicism. The researchers suggest this may be related to characteristics of Japanese society that emphasize cooperative behavior and not expressing angry emotions

Within the field of medicine, cynicism has been examined in regard to its role in cardiovascular risk. Olson, et al, (2005) found increased levels of cynicism contributed to an increased risk of adverse events in women with suspected coronary artery disease. The researchers also showed a poorer three to six year event-free survival in those with higher reports of cynicism.

Cynicism as a component of customer attitude and its relationship to brand perception was examined by Ying Fan in 2005. The researchers indicated that cynical attitudes are correlated with the need for higher ethical guidelines within corporations, or at least their communication to customers about the ethics of their brand.

A less recent publication by Kanter and Mirvis (1989) explores the etiology of cynical Americans. The researchers describe six types of cynics in the workplace which have three developmental areas in common which include unrealistic high hopes and expectations, an experience of disappointment, and disillusionment. The researchers suggest that individuals with higher levels of cynicism tend to be less trusting of their managers and coworkers than their more optimistic/positive counterparts.

Recently, Leung et al (2004) conducted extensive research incorporating a dimension of cynicism they call *societal cynicism* into a new assessment measure, the Social Axioms Survey (SAS). The researchers reported that increased societal cynicism, defined by endorsement of distrust of common social structures, such as government or corporations, negatively affected the likelihood that individuals participating in community based acts, such as voting or attending religious services, given increased levels of recorded cynicism.

It appears evident in the literature that the operational definition for cynicism is mixed or not well defined. That is, as a construct, cynicism is often defined as burnout, depersonalization, negative attitudes, and hostile cognitions. What is also not clearly defined regarding cynicism is the role cynicism plays in the field of mental health. Clearly studies illustrate that increased cynicism or increased cynicism working in conjunction with hostility is a clear predictor of ill medical health, such as high blood pressure and increased cardiovascular disease, but research including cynicism as a predictor of pathology in mental health is not apparent.

The current study is concerned with the cynicism measure RC3 and its descriptive properties. It was the intent of the researcher to illustrate RC3's relationship to professed levels of social support. Social support was selected as an appropriate criterion measure of RC3 due to previous research involving cynical individuals and their reported lower levels of social support in contrast to people with lower levels of cynicism and more positive outlooks (Kaplan, Bradley, & Ruscher, 2003).

Social Support

Even by the mid 1980's, hundreds of academic studies and articles in which the

significance of social support for health and well-being had been considered (House et al., 1988). Veiel and Bauman (1992) indicated that judging by the impact of social support literature and its influence on current ideology, social support has joined stress and coping as one of the major areas of mental health research.

As cited in turner and Marino (1994), the body of research grew debating the links of social support and emotional well-being and so did the conceptual and operational definitions of social support (Gottlieb 1983; Turner, Frankel, & Levin 1983). A number of researchers reached conclusions that social support is a multi-factorial construct and can be described by many categories and types of social support (Dean & Lin, 1977). Today, social support is considered within a vast array of psychological research illustrated by the following examples.

The importance of social support benefiting combat soldiers in Iraq (Callahan, 2006) has emphasized the importance of developing support groups for soldiers, in and after combat, in order to ameliorate or prevent anxiety symptoms associated with Post Traumatic Stress disorder.

Research investigating drug addiction and drug addiction recovery has shown that higher professed levels of social support were related to completing a drug rehabilitation program. Also individuals reporting higher levels of social support had fewer new legal charges related to drug involvement and increased lengths of time free from substances (Zehm, 2007).

Research investigating social support and employment (Creed & Muller, 2006) showed that unemployed individuals have poorer well being and profess less utilization of social support. Research investigating social support and mental well-being in

adolescents (Wight, Botticello, & Aneshensel, 2006) has shown that the higher the perceived social support from family, friends, and other adults, by adolescents the larger the offset of poor mental health. Interestingly, social support was illustrated as most beneficial in low socioeconomic, disadvantaged areas compared to that of advantaged areas.

Extensive research has been done investigating social support, stress, and the body (Taylor, 2006) illustrating a positive relationship between professed levels of social support and overall well being and individuals reporting fewer somatic complaints.

Especially in the field of health, social support research has been vast. For example, investigations to the connection between lower blood pressure (Piferi & Lawler, 2006) and giving social support have shown that participants with a higher tendency to give social support reported greater received social support, greater self-efficacy, greater self-esteem, less depression, and less stress than participants with a lower tendency to give social support to others. Lower levels of depression have also been reported by lung cancer patients who profess higher levels of social support than those who report minimal to no social support (Walker, Zona, & Fisher, 2006).

Bookwala (2005) illustrated the role of social support in regard to physical health in a married and aging population. The researchers describe a protective influence of marriage on physical health by illustrated by increased morbidity rates among widows and widowers.

Research investigating the amount of social support utilized by both men and women has been abundant. Thoits (1989) showed that women were more likely than men to share intimate feelings and cope with negative stimuli by seeking social support.

Taylor (2002) indicated that throughout adulthood, women turn to others for support and are typically not inclined to depend on their spouses for social support as much as men. Other studies have shown that males have been discouraged from developing intimate relationships by showing compassion and sympathy for others because these behaviors could be viewed as unmasculine and too emotionally driven (Eisler & Levine, 2002). Further, receiving large amounts of social support could render males vulnerable to external threats and may ultimately induce feelings of distress and solitude (Lindorff, 2000). Taylor et al. (2002) suggest that men typically seek social support in order to gain access to females, defend against aggressive threats, or develop or sustain a position of dominance. Conversely, even at younger ages, females have more personal friendships than males do and establish larger supplies of social networks for themselves (Taylor, 2002).

In regard to types of social support sought by both men and women, Greenglass et. al (2006) discuss *coping strategies* defined as a "multidimensional process involving cognitive, behavioral, and emotional efforts to deal with stressful events that create demands on the individual" (p.16). The primary coping strategies employed by both men and women to alleviate distress appear to be both emotion-focused and problem focused (Malterud, Hollnagel, & Witt, 2001). Females may have a tendency to employ more emotion-focused behaviors and seek more social support, whereas males may have a propensity to utilize more problem-focused, or instrumental, behaviors (Byrne, 2000). Emotion-focused behaviors may involve resignation, emitting emotions, tension-reduction, humor, problem recognition, ruminating, self-blame, socialization, and interpreting difficulties in a positive manner. In contrast, problem-focused behaviors are

those that attempt to alter or eradicate stressful life events by employing instrumental actions, such as problem-solving, confronting difficulties, active strategizing, and planning (Miller & Kirsch, 1987; Tamres, Janicki, & Helgeson, 2002). Emotion-focused strategies involving social support may involve sympathy, communicating about love and compassion, and seeking comfort. Conversely, seeking instrumental support may refer to seeking assistance, information, or counsel on decision-making; therefore, instrumental support is primarily targeted to solve difficulties and obtain concrete aid from others (Tamres, Janicki, & Helgeson, 2002).

In addition to emotion-focused and instrumental coping strategies involving social support, a third type of coping strategy involves proactive coping. Proactive coping is conceptualized more broadly as an approach to life in which an individual's efforts are directed towards goal management where demands and different situations are seen more as challenges rather than stressors (Greenglass, 2002; Schwarzer & Taubert, 2002) The extent to which individuals offset, eliminate, reduce or modify stressful events, particularly utilizing social support networks, illustrates how proactive coping can improve one's life. (Greenglass, Fiksenbaum, & Eaton, 2006). Social support involving proactive coping may involve planning with others, goal setting, organization, and mental stimulation (Aspinwall & Taylor, 1997). By using proactive coping, the individual strives actively for improvement in one's life instead of mainly reacting to an adversity (Greenglass, Fiksenbaum, & Eaton, 2006). Previous research (Greenglass, 2002; Schwarzer & Taubert, 2002) shows an integral relationship between proactive coping and social support. Resources such as social support lead to the development of proactive coping (Greenglass, 2002). Resources from one's network, such as information, practical

assistance, and emotional support, can contribute positively to the construction of individual coping strategies (Greenglass, 1993). Research has also shown that social support, defined as practical help, advice, and/or encouragement, was associated with greater proactive coping in a sample of elderly hospital inpatients undergoing physical rehabilitation (Greenglass, et al., 2003).

For the purpose of this study, social support and coping mechanisms will be examined in relation to the MMPI-2 and its new measure of cynicism. With the body of research over the last 30 years, it is safe to say that social support is a relevant descriptor of mental health and emotional well being. As described below, cynicism appears to be a related construct of social support: The relationship between scores on RC3 and a common measure of social support warrants an investigation. First, a brief description of recent research involving both constructs.

Cynicism and Social Support

Although gender difference is a significant factor among the research regarding social support, and is especially vital to the research discussing differences in types of social support utilized by either men or women, gender will not be included as an independent variable in this study. While some studies regarding cynicism have investigated men or women exclusively, gender difference as a key aspect of cynicism is not apparent in the literature to date.

Kaplan, Bradley, and Ruscher (2003) examined social support and cynicism with regard to the attacks of September 11th. They indicated that more cynical individuals often reported receiving less social support, suggested by quality and amount achieved. Utilizing a simple design, participants answered a cynicism measure and several open

ended questions about their involvement with significant others on the day of the terrorist strikes. Results showed that cynical attitudes hindered the offering of sympathetic support to others; cynical attitudes also predicted lower levels of professed received support on that day. Cynicism also proved to be an effective predictor of less sympathetic and more calloused responses in the open-ended questions.

Prevalent among cynicism and social support researchers are Smith and his peers (Smith & Pope, 1990; Smith & Christensen, 1992). They suggest that cynicism is a potential cause of low levels of social support and propose a "psychological vulnerability" model in which hostility and cynicism work in tandem to create low levels of social support. They suggest that these two factors working in conjunction increase levels of detrimental health risks or disease susceptibility. Essentially, the researchers point out that cynical individuals' elevated risks of ill health are due to a prevalence of stress events in conjunction with inadequate coping mechanisms to buffer the stress.

Specifically, Smith and Pope (1990) indicate that cynicism working in conjunction with hostility lowers an individual's level of social support due to affective factors such as arguing with others and behaving aggressively. The researchers give evidence that cynicism and hostility resulting in lower levels of social support are indicative predictors of cardiovascular disease. They also further draw strong correlates to cynicism and interpersonal conflict, high levels of interpersonal stress, as well as labile tendencies to create conflict that further hinder social support. The researchers indicate that the previous 30 years have provided evidence to support the conclusion that elevated levels of cynicism and hostility are psychosocial risks factor for death, medically-related disability, and ill-health

Even earlier work using the Cook-Medley Hostility (Ho) scale (Cook & Medley, 1954) supports the idea that insufficient levels of social support may be associated with individuals reporting hostile behaviors and cynical attitudes (Hardy & Smith, 1988; Smith, Pope, Sanders, Allred, & O'Keefe, 1988). In addition, Hardy and Smith (1988) found that highly cynical individuals exhibit relatively low levels of social integration and are dissatisfied with the quality of support that they receive.

Hart (1996) attempted to expand the literature of social support and cynicism suggesting that most research until 1996 had been done with the Cook-Medley Scale and had examined men. The researcher then examined specific aspects of types of support deficits experienced in highly cynical and hostile women. After adjusting for confounding affects of neuroticism, which the researcher points out is a common influence on the data, both cynicism and hostility showed moderate inverse correlations with common social support measures. Further, Hart suggests that cynical hostility among young adult females is related to deficiencies in the perceived availability of a number of types of social support. The findings from Hart's study suggested that cynical women tend to perceive that people are unavailable to offer information, to give advice or guidance, to provide assistance, build self-esteem, and promote a sense of belonging.

Further research by Smith et al (1988) examined psychosocial correlates of cynicism, primarily in the workplace and at home. The article described four studies; primarily, studies one through three echoed previously reported findings with regard to cynicism and perceived social support, i.e. low levels of social support were indicative of high levels of cynicism; however, one study showed that cynicism was associated with greater reported stress in interpersonal aspects of work, with less job satisfaction, and

with a negative view of work relationships. Smith and Frohm (1985) also demonstrated that cynicism and hostility were closely correlated with measures of anger and suspicion.

The Present Study and Hypotheses

Clearly, a link between cynicism and social support has been investigated concerning the fields of health, occupation, and interpersonal stress. However, little if any research has been conducted with the new cynicism measure RC3 and social support. The current study will investigate the nature of cynicism reportedly measured on the MMPI-2 by examining three types of social support in relation to the cynicism measure. The present study has three hypotheses:

1. RC3 will be significantly negatively correlated with Proactive Coping where the lower the cynicism score, the higher the Proactive Coping score.

2 .RC3 will be significantly negatively correlated with Instrumental coping where the lower the cynicism score, the higher the coping.

3. RC3 will be significantly negatively correlated with the Emotional Seeking coping where the lower the cynicism score, the higher the coping.

CHAPTER III

METHODOLOGY

Participants

All participants for this study were enrolled in general psychology courses at a Midwestern regional university. Participants were not excluded based on gender, race, socioeconomic status, and ethnic background. Several sources were used to notify participants about the study, including, 1) Notices posted in the hallway outside the Department of Psychology and Counseling offices with sign-up forms for participants to schedule appointments for participation, and 2) Announcements made to students in general psychology classes.

Materials

Participants were administered the Minnesota Multiphasic Personality Inventory, 2nd Edition (MMPI-2) and the Proactive Coping Inventory (PCI).

The MMPI-2 consists of 567 true or false question related to psychopathology of the individual. According to Graham (2006), concerning validity, the first step in interpreting the MMPI-2 is to determine if the test taker responded to the items without consideration of their content. The responses to an MMPI-2 administration may be random in nature or may follow some systematic approach (e.g. all true or all false) that is not related to item content. Variable Response Inconsistency (VRIN) and True Response Inconsistency (TRIN) scales are examined for this purpose.

The VRIN scale measures a respondent's tendency to answer inconsistently to

like worded items while the TRIN scale identifies persons who tended to respond entirely true or entirely false indiscriminately throughout the testing. The MMPI-2 manual (Butcher et al., 1989, 2001) suggests that a T-score greater than or equal to 80 on the VRIN or TRIN scale invalidates the resulting protocol; this cutoff was used for the present study.

The F scale was designed to detect over reporting or psychological symptoms; it is also suggested that the F scale helps detect random responding. As suggested by the manual, a T-score cutoff of 80 for the F scale was used for the present study. In other words, any score profile with an F scale T-score of 80 or over was omitted.

The L, K, and S validity scales were developed to detect guarded answers; test-takers exaggerating psychopathology; malingering; or appearing overly virtuous and free of psychological problems. In accordance with the MMPI-2 manual suggestions, L,K, and S T-scores above 69 were not used. The MMPI-2 manual suggests that low scores for these scales also be considered in a relative context to other validity indicators. For purposes of this study, no score profiles were omitted due to questionably low, (T-score of 40 or below) L,K, and S scores.

According to Graham (2006), the MMPI-2 was based on census data from 1980 and the participant solicitation for the MMPI-2 was guided to better represent the American population than did the original MMPI. To ensure geographic representativeness, seven testing sites (Minnesota, Ohio, North Carolina, Washington, Pennyslvania, Virginia, and California) were selected. To ensure representativeness of the sample, people from special groups were added including military personnel and Native Americans. Further, all participants completed a biographical-information form

and life-events form. Couples completed two additional forms describing the nature and length of their relationships and rating each other on 110 characteristics. Using these procedures, approximately 2900 participants were tested. Persons were then eliminated because of test invalidity or incompleteness of other forms making the final sample 2600 participants (1138 men and 1462 women).

Participants for this study were administered the Proactive Coping Inventory (PCI), developed by Greenglass, Schwarzer, and Taubert (1999). At the recommendation of the authors, the title of the scale given to respondents will be the Reactions to Daily Events Questionnaire. The PCI is a 55-item inventory comprised of seven subscales: Proactive Coping, Preventative Coping, Reflective Coping, Strategic Planning, Instrumental Support Seeking, Emotional Support seeking, and Avoidance Coping. The seven subscales of the PCI were derived from the original PCI, which consists of 137 items, 18 subscales, and five dimensions. The abbreviated form was developed to provide succinct yet in-depth descriptions of social support. The seven subscales of the PCI were developed using data from a sample of Canadian students and validated with a sample of Polish-Canadian adults and students. The scoring on the PCI is based on a likert scale of 1 to 4, with 1 representing "not true at all", 2 representing "barely true", 3 representing "somewhat true", and 4 representing "completely true". For purposes of this study, Instrumental Support Seeking subscale, the Emotional Support Seeking subscale, and the Proactive Coping subscale were used.

The Instrumental Support Seeking subscale consists of eight items that focus on gathering advice and support from community networks, such as "When solving my own problems other people's advice can be helpful" and "Information I get from others has

often helped me develop my own solutions to problems." Alpha values of .85 and .84 were reported for the Canadian and Polish-Canadian samples (Greenglass et al., 1999) with regard to the instrumental support seeking subscale.

The Emotional Support Seeking subscale is a five item scale that describes a participants willingness to disclose subjective emotional distress. Items comprising the emotional support seeking subscale include "When I'm depressed I get out and talk to others" and "I confide my feelings in others to build up and maintain close relationships." Alpha values of .73 and .64 were reported for the Canadian and Polish-Canadian samples (Greenglass, et al., 1999).

The Proactive Coping subscale consists of 14 items and combines autonomous goal setting with self-regulatory goal attainment cognitions and behavior. Examples of items are, "I always try to find a way to work around obstacles; nothing really stops me" and "I turn obstacles into positive experiences." The proactive support seeking subscale obtained reliability Cronabach alphas of .85 and .80 and had consistently high internal reliability ratings ranging from .79 to .87 with most values for internal reliability at greater than .80. Moderate to high correlations of .42 to .62 were obtained between proactive coping and scores on active coping and preventative coping. Other research utilizing the proactive scale reported moderate significant correlations between proactive coping scores, denial (-.310 and self-blame (-.47) in Canadian university students (Greenglass, Schwarzer, & Taubert, 1999). Proactive coping correlates significantly and negatively with depression in Canadian university students (-0.49) and in Polish university students (-.51) (Pasikowksi et al., 2002). Findings further indicate that proactive coping was significantly associated with lower burnout and higher professional

efficacy in employed Canadian teachers (Schwarzer & Taubert, 2002). Broadly, data suggests that proactive coping is a self-regulatory coping strategy that is associated with higher levels of well-being and better psychological functioning.

The Proactive Coping Inventory has shown adequate validity. Validity was assessed by subjects in the Canadian and Polish-Canadian samples completing additional scales which measured coping styles, related attitudes, and depression. The scales included were the Proactive Attitude Scale, General Perceived Self-Efficacy Scale, Brief COPE, Hopkins Symptom Checklist, and the coping Inventory of Peacock and Wong to evaluate internal control, preventative coping, and self-blame. Regarding the Canadian sample, the Instrumental Support Seeking subscale of the PCI correlated moderately with proactive attitude (.31, $p<.001$) and instrumental support (.65, $p<.001$) as measured by the Brief COPE. Small correlations were suggested between active coping (.17, $p<.001$), positive reframing (.30, $p<.001$), and acceptance (.17, $p<.05$) as measured by the Brief COPE. Regarding the Polish-Canadian sample, the Instrumental Support Seeking subscale correlated positively with proactive attitude (.21, $p<.01$). It also correlated positively with emotional support (.50, $p<.001$) and instrumental support (.64, $p<.001$) as measured by the Brief COPE (Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999).

The Canadian sample showed the Emotional Support Seeking subscale of the PCI correlated positively with proactive attitude (.36, $p<.001$), self-efficacy (.33, $p<.001$), preventative coping (.26, $p<.001$), and internal control (.13, $p<.05$). Negative correlations were found between depression (-.17, $p<.01$) and self-blame (-.18, $p<.01$). The Emotional Support Seeking subscale showed positive correlations with active coping (.15, $p<.05$),

positive reframing (.33, p<.001), acceptance (.18, p<.01), emotional support (.60, p<.001), and instrumental support (.60, p<.001) as measured by the Brief COPE. With regard to the Polish-Canadian sample, the Emotional Support Seeking subscale correlated positively with proactive attitude (.31, p<.001). Further positive correlations were found with emotional support (.56, p<.001) and instrumental support (.59, p<.001) also measured by the Brief COPE (Greenglass, Schwarzer, Jakubiec, Fiksenbaum, & Taubert, 1999).

Procedure

According to Graham (2006), The MMPI-2 can be administered either individually or in groups using the forms of the test and answer sheets most convenient for the examiner. For purposes of this study, the group format was used. Participants completed the MMPI-2 and the PCI in six different testing sessions held over a two week period. All groups completed questionnaires in rooms of the Whitesitt building. A total of 120 minutes was given to complete the questionnaires. Participants were invited to participate once they had received a verbal and written summary of the procedures, benefits, risks, confidentiality, and rights as research participants. Participants were also provided with a debriefing statement on completion of the questionnaires. The principle investigator's name and contact information were also listed on the debriefing form so that participants could contact him with further questions or concerns.

Method of Analysis

Statistical analyses were performed using Pearson r Product Moment-Correlation Coefficients. Scores examined and correlated were the MMPI-2 Restructured Clinical

Scale number 3, or RC3, and scores obtained from three subscales of the PCI. Correlations between RC3 and the Proactive Coping Inventory's (PCI) Proactive Coping subscale were examined. Correlations between RC3 and the Emotional Support Seeking subscale were examined. Correlations between RC3 and the Instrumental Support Seeking subscale were examined.

CHAPTER IV

RESULTS

A total of 83 individuals participated in this study. Of the 83 individuals, 17 were excluded due to invalid profiles on the MMPI-2 leaving 66 participants for consideration in the study. Criteria for validity regarding the MMPI-2 were established by guidelines suggested by Graham (2006). Exclusion factors for validity were the following: a VRIN, TRIN, or F T-score greater than or equal to 80; and L, K, and S T-score greater than equal to 70. Criteria for validity regarding the Proactive Coping Inventory were established by guidelines suggested by Greenglass (2003). The sole exclusion factor was dismissal of a particular scale if two or more items of a scale were left unanswered.

Regarding participants race 60 (90.9%) were White/Caucasian, 4 (6.1%) were African-American, 1 (1.5%) was Asian, and 1 (1.5%) was Hispanic. Of the 66 participants, 41 (62.1%) were female and 24 (36.4) were male. Regarding age, 41 (62.1%) were 18 years of age, 16 (24.2%) were 19 years of age, 3 (4.5%) were 20 years of age, 2 (3.0%) were 21 years of age, 1 (1.5%) was 25 years of age, 2 (3.0%) were 28 years of age, and 1 (1.5%) was 32 years of age.

Concerning education level, 53 (80.3%) reported freshman year status, nine (13.6%) reported sophomore year status, two (3.0%) reported junior year status, and two (3.0%) reported senior year status. Reported majors by participants were as follows: 16 (24.2%) in the field of Arts & Sciences, 7 (10.6%) in the field of Business, 9 (13.6%) in Education, 12 (18.2%) in General Studies, 11 (16.7%) in the field of Technology, and 11 (16.7%) in an undecided major.

Scores for particular subtests on the Proactive Coping Inventory were found by compounding likert scores (one through four) from designated questions by Greenglass et al. (2005) for a particular scale. Ranges for measures used in this study were as follows: Proactive Coping Subscale, 14-56; Instrumental Support Subscale, 8-32; and Emotional Support Subscale, 5-20. In addition, scores for RC3 subscales were converted from raw scores, zero to 15, to t-scores. T-scores over 65 indicate a suggested clinical range for psychological difficulty (Graham, 2003).

Pearson Correlation coefficients, (one-tailed tests), were used to compare RC3 T-scores to specific scales on the Proactive Coping Inventory. No significant results were found between RC3 scores ($M = 53.79$) and the Proactive Coping Subscale ($M = 44.41$), $r(65) = -.076$, $p<,05$. No significant results were obtained between RC3 scores and the Instrumental Coping subscale ($M = 24.44$), $r(65) = .10$, $p < .05$. Further, no significant results were found between RC3 ($M = 53.79$) and the Emotional Coping Subscale ($M = 15.48$), $r(65) = -.059$, $p<.05$.

TABLE 1

RC3 T-SCORE DISTRIBUTION

T-SCORE	FREQUENCY	PERCENT
37	1	1.5
41	3	4.5
43	3	4.5
45	4	6.1
47	2	3.0
48	11	16.7
50	3	4.5
52	9	13.6
56	11	16.7
60	6	9.1
63	7	10.6
69	4	6.1
74	2	3.0

CHAPTER V

DISCUSSION

The goal of this study was to add to the sparse literature on the MMPI-2's RC3 Cynicism scale. It was the desire of the researcher to be able to better describe what the scale actually is measuring given its negative correlation with its Clinical Scale counterpart, Hysteria. In addition, the assignment of the physical difficulties included in the Hysteria scale to RC1, somatic complaints, further flagged RC3 among researcher as a new scale in its own right without a clinical scale counterpart. Graham (2006) also stated succinctly that "research studies have not included appropriate criterion measures of the cynicism suggested by the content of items" (p.164) on RC3. Therefore, social support was examined in relationship to RC3 to better describe the type of cynicism that RC3 may be capturing.

Tellegen et al. (2003) indicated that high scorers on the MMPI-2's RC3 scale see other people as untrustworthy, uncaring, concerned only about themselves, and exploitive. Conversely, he points out that low scorers on this scale are likely to be naïve, gullible, and overly trusting of others. It was hypothesized for this study that RC3 would be negatively correlated with subscales of the Proactive Coping Inventory (PCI), a common measure of social support. Simply stated, as scores elevated or dropped on designated subscales of the PCI, RC3 scores would be significantly lower or higher in relation to the social support scores. Contrary to expectations, no significant correlations were found between RC3 and the three subscales chosen for this study; the Emotional

Support Seeking subscale, the Instrumental Support Seeking subscale, and the Proactive Coping subscale.

Beginning with the Emotional Support Seeking subscale, no significant negative correlation was found between an emotional support seeking style and RC3. Greenglass (1999) described emotional support seeking as people possessing a general expressiveness or a willingness to share verbally with others. Such people may seek sympathy, comfort, and security in others. The lack of a significant correlation with RC3 and the Emotional Support Seeking subscale is somewhat surprising. This subscale in particular was consistent with the nature of the Kaplan, Bradley, and Ruscher (2004) study concerning the attacks on September 11th where individuals higher in cynicism were less likely to report receiving *sympathetic* support. Sympathetic support in the New York study was defined as family members expressing concern for the participants and the participants expressing concern to close friends, such as hugging and exuding hope. Indexing cynicism and social support after an attack on the nation may have produced a more polarized set of data than the current study, but it appeared logical that participants in the current study would express similar relationships between expressive support and cynicism given that it deals with human coping. The findings from this study, however, found no relationship between expressive, sympathetic social support and RC3.

Secondly, no significant negative correlations were found between RC3 and the Instrumental Support Seeking subscale. Greenglass (1999) describes instrumental support as seeking assistance, information, or counsel on decision-making. Further, instrumental support has been defined as obtaining concrete aid from others while problem solving (Tamres, Janicki, & Helgeson, 2002). Given the context of research done by Smith in

1992, the lack of a significant finding between RC3 and the Instrumental Support Seeking subscale is interesting. Smith, whose transactional model is still cited frequently in the research involving cynicism, suggests that cynical individuals actively create an unsupportive environment due to affective factors, such as arguing with others, which may lead to an underutilization of social support networks. Findings from this study suggest that the relationship between cynicism and the utilization of others while problem solving is less than significant.

Finally, no significant negative correlation between RC3 and the Proactive Coping subscale was found. Proactive coping can be broadly conceptualized as an approach to life in which an individual's efforts are directed towards goal management where demands and different situations are seen more as challenges rather than stressors (Greenglass, 2002; Schwarzer & Taubert, 2002). It may follow logic that people professing an untrusting, suspect disposition may not be as apt to integrate a "can do" outlook toward their environment. Further, cynical individuals tend to perceive social support as inadequate, even if it has been made available to them (Hardy & Smith, 1988). Other research suggests that general characteristics and outlook largely determine the benefits or effectiveness of potentially supportive interactions (Harris, 1992). Findings from the current study suggest that the relationship between an active approach to life and cynical attitudes is not significant.

Because the results from the study are contrary to recent trends involving social support and cynicism, three possible scenarios should be examined in regard to the data and conclusions. Specifically, it may be that the data is misleading due to extraneous factors such as demographics, sample size, and the range of T scores. Also, it is possible

that social support and RC3 have no significant correlative relationship. Finally, the psychological vulnerability model of Smith and Pope (1990) which examines hostile attitudes and cynicism working together to lower reported levels of social support was not adequately represented by the study. More specifically, the current study did not examine hostile attitudes and behaviors in conjunction with cynicism effecting social support.

Beginning with an examination of the data, the study was comprised of approximately 90% white, 18 year-old freshman, of which approximately 60% were women. With such an homogenous population, the results may be speaking less to a relationship of social support and cynicism in the general population, but to social support and cynicism regarding young college-aged females. Further, the data suggests that participants fell within mid range on both RC3 and the PCI giving little room for variance and subsequent correlations. In other words, it is difficult to draw comparisons from data with such a restricted range. This may have been further compounded by the sample size of 66. In addition, there may have been a confounding variable regarding the disposition of participants who actually signed up for the study. Because two hours were required for completion of the study, which is arguably a sizeable amount of work for general psychology students, we may have obtained a disproportionate number of well adjusted, "middle of the road", optimistic students. While this percentage of moderate cynicism T-scores coincides with the participants for the RC3 data, this remains a restricted range of clinical scores. The data supports this suggestion with a mean cynicism T-score of 53 and 80.3% of cynicism scores falling between 45 and 63. Subsequently, there were only a total of six participants (9%) with a cynicism T-score

over 65. While the rate of approximately 9% of participants reporting T-scores of 65 and higher is in keeping with Tellegen's findings of approximately 8% in the four RC project data samples, a larger sample, with a greater variance in social support scores in relation to elevated cynicism, may have produced results more in accord with current research describing cynicism and an individual's professed lower level of social support.

After taking into consideration the data limitations of the current study, another explanation for the lack of significant results obtained could be that there is no relationship between RC3 and social support as measured by the PCI subscales indicated. Butcher, Hamilton, Rouse, and Cumella (2006) answer the question "What does RC3 Construct Actually Measure?" with the sentiment that this information was not presently available in the RC Scales. The researchers are quick to point out that Tellegen et al. did not provide information on the relationships between the RC Scales and MMPI-2 Content Scales, PSY-5 scales, or any other supplemental measures on the test. The researchers suggest the complete overhaul of the Hy scale, in which only five items are shared by Hy and RC3, may undermine its sensitivity to psychopathology. Rogers et al. (2006) echo this sentiment by illustrating that the removal of overlapping items not just between RC3 and Hy, but within the entire RC project, has resulted in an over-representative amount of clinical profiles that end up "within normal limits" (p. 151) Rogers et al estimate that almost half of clinically referred cases assessed with the RC Scales will have within normal limits profiles for which any clinical interpretations would likely be minimal. Applying this sentiment to the present study, it may be that the moderate elevations from this population on RC3 are not due to homogeneity of the participants, but due to the scale's inability to record clinical pathology related to the purported cynicism measured,

although more would need to be known about the prevalence of cynicism among 18 year-old university females.

In any case, an analysis of RC3 item clusters from this study reveal some consistent percentages of items endorsed or ignored by the entire sample, suggesting that some questions may have low factor loadings on actual clinical range cynicism. For example, only 16 out of 66 participants (24%) reported a suspicion of infidelity in relationships, only 6 of 66 (9%) endorsed a non-affectionate disposition for significant others, and 9 of 66 (14%) endorsed an unfavorable outlook of marriage. This trend may be more reflective of views of significant others and idealized love than a cynical outlook toward the world. This suggestion may be supported by the fact that if all three relationship questions are discounted from the cynicism scale, average cynicism raw scores jump 10%, from 52 % to 62% of cynicism questions endorsed. Further, regarding this three-item cluster, the disavowal of these questions may be illustrating optimism in a youthful female population regarding relationships rather than personal cynicism. Conversely, 58 of 66 (88%) endorsed "I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others"; 54 of 66 (82%) endorsed "people generally demand more respect for their own rights than they are willing to allow for others"; and 50 of 66 (76%) endorsed "I think most people would lie to get ahead". In other words, because these items are consistently endorsed by the entire sample, they may have little to do with changes in clinical cynicism and may reflect a broader more generalized value of the RC3 test takers. In keeping with Rogers et al. (2006) sentiments, the overwhelming presence of mid range RC3 T-scores may be due to the elimination of the somatic overlapping items, or the nature of the new cynicism being measured, or

both. It would follow logic that a scale that had an inability to capture the presence of clinical cynicism, or lack thereof, would not correlate with fluctuations in professed social support. Granted, the RC6 scale which captures ideas of persecution will better capture clinical levels of extreme negative attitudes such as feeling targeted, picked on, or controlled (Graham, 2006), but it is still paramount to RC3's descriptive ability to continue to correlate it with other descriptive measures, such as with optimism scales or indices of more personally held beliefs.

Smith and Pope's (1990) psychological vulnerability model of cynicism and hostility working in one's life to lower professed levels of social support may have not been adequately represented here. The researchers correlated hostility *and* cynicism aspects of the Cook Medley measure which has both components. Hart (1996) reiterates that people with negative attitudes and high hostility show a decrease in stress buffering resources. It may be that a cynical disposition measured by RC3 is not adequately describing cynicism. It may be that a key component to research with cynical attitudes is the added descriptive value of hostility, meaning that individuals who act on their cynicism, in keeping with the psychological vulnerability model, are experiencing less social support than those who are simply negative.

Tellegen et al. (2003) indicate that disavowal of cynicism is negatively correlated with the presence of psychopathology but further research is needed with RC3. Populations such as medical or forensic settings may benefit from research illustrating predictive validity of RC3 and ill health or RC3 and legal difficulties. Perhaps research with more moderate populations, such as college students and vocational training institutes, would enhance RC3's predictive validity as these populations report differing

levels of cynicism from a clinical population. Further research involving RC3 may be warranted to age specific populations. Given this study's homogeneous sample, it may be beneficial to further assess age-related cynicism given particular issues by subject specific item clusters.

Tellegen et al. (2003) indicated in the RC project monograph that further research validating the criterion of RC3 will prove beneficial to the measure. Given the varied role of cynicism, such as job burnout inventories defined by depersonalization (Carmona et al., 2006) and exhaustion and cynicism affecting workaholics (Burke & Matthisen, 2004), it is difficult to explain what is meant by cynicism. Tellegen explains that RC3 describes a non-self referential cynicism in which personal experiences are not represented as much as personal beliefs. Research, such as Graham (2006), has described RC3 as a measurement of untrusting and uncaring attitudes. However, given research utilizing cynicism and hostility, acting out on negative beliefs about one's life and world may be a key component to a descriptive cynicism measure in the field of psychopathology. Future research with RC3 may benefit from action-oriented measures coinciding with RC3 to enhance predictive validity of crucial areas of well being such as social support. It may be that the hostility scale already on the MMPI-2 with the RC3 interpretation would yield significant results with measures like the Proactive Coping Inventory. In addition, because cynicism has been portrayed in research under burn-out, hostile cognitions, depersonalization, and exhaustion, RC3 may be describing one crucial area of cynicism, a non self-referential cynicism based on attitudes rather than experiences. Future research explaining the distinction between personally held beliefs and a willingness to act on those beliefs may be beneficial to RC3 in terms of how

cynicism represented by the scale may affect an individual's well being.

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APPENDIX

APPENDIX A

CONSENT FORM

TITLE OF PROJECT: The Association Between the MMPI-2's RC3 Cynicism Scale and Social Support

PRINCIPAL INVESTIGATOR: Blake K. Webster, 1902 S. Broadway, A10, cell#347-323-6008

INFORMED CONSENT

You are invited to participate in a study that will investigate personality traits and the effectiveness of assessment measures. You were chosen for this study because you are currently enrolled at Pittsburg State University and volunteered through our sign-up notices. There is no cost for participating in this study.

You will be told if any new information is learned which may affect your condition or influence your willingness to continue participation in this study.

Your participation in this study is entirely voluntary, and you may withdraw your consent at any time.

ALTERNATIVES

These are the alternatives available to you:

1. You could choose to participate in the study.
2. You could choose not to participate in this study at this time, with the knowledge that you could reconsider and participate in this study in the future, if you still meet the study eligibility and the study is still underway.

PROCEDURES

1. If you agree to participate, you will be asked to complete two questionnaires; one concerned with your reactions to daily events and another assessing your personality. It is estimated that your involvement in the study will take approximately 120 minutes (two hours).

BENEFITS AND RISKS FOR PARTICIPATION

1. The information you provide may have benefits for science because this study will contribute to research concerned with assessment measures in the field of psychology. Based on these findings, we may be able to apply these findings to improve or better describe current assessment measures within psychological testing. WE CANNOT AND DO NOT GUARANTEE OR PROMISE THAT YOU WILL RECEIVE ANY BENEFITS FROM THIS STUDY
2. The psychological risks of participation in this study are minimal . The potential psychological risks involve a heightening of psychological distress as a result of completing self-report questionnaires. If you experience any negative psychological effects, the prinicpal investigator, Blake K. Webster, and his advisor, Dr. Jan Smith, will be available for follow-up services through the Pittsburg State University Department of Psychology and Counseling.
3. .The physical risks of participation in this study are none. If you think you have experienced a research-related injury, please call Blake K. Webster, 347-323-6008.
4. A potential legal risk that exists is the principal investigator and\or research personnel may be ethically and\or legally obligated to report certain actions or potential for actions by you to protective, regulatory, or law enforcement agencies. This includes serious risk for harm to self or others (suicidal or homicidal\violent behavior) or suspected involvement in elder\child abuse or neglect.

COMPENSATION

1. There is no compensation for your participation in this investigation.

FREEDOM TO WITHDRAW WITHOUT PREJUDICE

1. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time. Your desire to withdraw from the investigation will not negatively impact your ability to complete your course work within your representative class.
2. At the discretion of the principal investigator, participants may be taken out of this study due to unanticipated circumstances (e.g., if distress becomes too severe).
3. The principal investigator may take participants out of the study if the study is cancelled or if they need treatment.

CONFIDENTIALITY STATEMENT

1. All the data you provide will be kept confidential. You will be identified by a code number only on all forms you complete. The data will be stored in locked file cabinets in offices that have limited access so that they are available only to the appropriate professional staff on the project.
2. Any data that may be published in scientific journals will not reveal the identity of participants.

INVITATION TO QUESTION

1. If you have any questions, we expect you to ask us. If you have any additional questions later, Blake K. Webster, will be happy to answer them. Please contact Blake K. Webster at 347-323-6008.
2. If you are not satisfied with the manner in which this study is being conducted or if you have any questions concerning your rights as a study participant, please contact Mary Jo Litten, Ph.D., Chairperson, Committee for the Protection of Human Participants, Department of Psychology and Counseling, Pittsburg State University, 620 235 4492.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND THAT YOU UNDERSTAND THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

_____

Printed Name of the Participant

_____ _____

Signature of Participant Date

APPENDIX B

DEMOGRAPHIC INFORMATION

AGE

Age: _____

GENDER

Male:	O
Female:	O

RACE

Asian	O
Black/African-American	O
Hispanic	O
White/Caucasian	O
Other	O

YEAR IN SCHOOL

Freshman	O
Sophomore	O
Junior	O
Senior	O

MAJOR IN SCHOOL

Arts & Sciences	O
Business	O
Education	O
General Studies	O
Technology	O
Undecided	O
Other	O

APPENDIX C

Debriefing Statement

Thank you for participating in this research investigation which is titled, *Measuring Cynicism: The MMPI-2's Restructured Clinical Scale Number Three (RC3) and its Relationship to Social Support.* The student investigator for this research project is Blake Webster, B.S. and he is conducting this study as part of his thesis project. If you have any concerns or request additional information regarding this research investigation you can contact Blake Webster or his faculty adviser, Dr. Janet Smith, at 620-235-4537.

During this study, you were requested to provide information about your thought processes, personal beliefs, and psychological disposition. The purpose of this research study is to examine various aspects of personal beliefs in regard to social support networks and/or systems. It was a primary interest to the student examiner to assess cynical attitudes in relationship to social support. More specifically, the study is concerned with how cynicism is measured in current psychological assessment.

Because there may be additional participants involved in this study, it is requested that you do not discuss this project with other students. If prospective participants were given information regarding this research investigation beforehand, the validity of this project could be compromised. In addition, the student investigator and his faculty adviser request that you do not discuss specific questions from the assessment instruments with other people to protect the validity of these instruments in the field.

Thank you for your participation. Your responses will make a valuable contribution to research regarding psychological assessment.