To the Graduate Council:

I am submitting herewith a dissertation written by Danny Steven Moore entitled "The Development and Validation of the Scale of Interpersonal Cynicism." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Warren H. Jones, Major Professor

We have read this dissertation and recommend its acceptance:

Accepted for the Council:

Associate Vice Chancellor and
Dean of The Graduate School

THE DEVELOPMENT AND VALIDATION OF THE SCALE OF INTERPERSONAL CYNICISM

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Danny Steven Moore
May 1999

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DEDICATION

This dissertation is dedicated to my former professor
and undergraduate mentor, my friend

Gary B. Nallan

who created a vision of achievement in me that did
not exist prior to my having known him.

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ABSTRACT

In a recent study (Moore, 1997) evidence suggested that interpersonal cynical attitudes grow out of real experiences and accumulate over time. Existing scales do not attempt to measure cynicism in the broader interpersonal domain. The present study describes the development and validation of the Scale of Interpersonal Cynicism (SIC), an instrument being developed to measure cynicism in that context. Thus, in addition to measuring cynical attitudes toward human nature as most measures have done in the past, the SIC also assesses cynicism toward relationships, and as a justification for negative behavior. The study also investigates the behavioral correlates of cynicism with a series of hypothesis tests.

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CHAPTER I

INTRODUCTION AND REVIEW OF LITERATURE

In the review of the literature below, I define cynicism, make note of constructs similar to cynicism, then discuss cynicism in terms of its role in the social/political realm, in organizations, and in the area of cardiovascular disease. However, research into cynicism has thus far overlooked its potential impact on personal relationships. This project is intended to address that problem. A brief review of literature showing the construct's relevance to relationships is given as a part of the statement of the problem.

Defining Cynicism

The life of the cynic is apparently filled with negativity towards interactions with others. Although most people think they know what cynicism means, it is often oversimplified or confused with other behaviors such as sarcasm. Cynicism is indeed a set of behaviors, but also much more. It is also a deeply held attitude that permeates every area of the cynic's life. A definition of the word "cynic" offered in Webster's (1996) New Universal Unabridged Dictionary is: "...a person who believes that only selfishness motivates human actions and who disbelieves in or minimizes selfless acts or disinterested points of view".

Webster's further defines "cynical" as: "1. like or characteristic of a cynic; distrusting or disparaging the motives of others. 2. showing contempt for accepted standards of honesty or morality by one's actions, especially by actions that exploit the scruples of others. 3. bitterly or sneeringly distrustful, contemptuous or pessimistic." So cynicism can be broadly characterized as an not only a behavior, but also as an active attitude.

Literature Review

Related Constructs

Cynicism is often confused with similar constructs, some of which are characterized below as components of cynicism, along with some that subsume cynicism. For example, cynical people are often pessimistic, distrustful, and scornfully question the motives of others, but cynicism is more than pessimism or distrust. The cynic assumes that hidden motives underlie honest and moral behavior. The cynic also tends to see such behavior as naive, and uses his or her cynicism to justify his or her own exploitive behavior. Below distinctions are drawn between cynicism and related constructs: trust, alienation, anomie, optimism, pessimism, Machiavellianism, and the belief in a just world.

I have previously proposed that the cynic is overly vigilant due to a fundamental lack of trust (Moore, 1998).

Trust has been tied to our expectations for others to be dependable and reliable (Rotter, 1967), or predictable and deserving of our faith (Rempel, Holmes & Zanna, 1985). Couch, Adams, & Jones (1996) included this form of generalized trust in their development of a new scale, but also extended the concept of trust to trust in social networks and relationship partners. Factor analyses of the Rotter (1967) trust scale suggest that cynicism is likely a component of trust, particularly political cynicism (Corazzini, 1977; Chun and Campbell, 1974). Corazzini (1977) also identified suspicion as a component of trust. Research suggests that high levels of suspicion and mistrust have a negative impact on cardiovascular health and mortality even when other risk factors are controlled (Barefoot, Siegler, Nowlin, Peterson, Haney & Williams, 1987). Even though a lack of trust and suspicion are related to cardiovascular health, cynicism's relationship to heart disease is even stronger and is discussed in greater detail below. Cynicism and a lack of trust are closely related, but there is a fundamental difference. Cynicism is likely more observable than a lack of trust. One can be distrustful without being overtly cynical, but the reverse is not as likely.

There are two related constructs that are also associated with cynicism, but which are tied more closely to global feelings than to expectations about the

trustworthiness of individuals. Alienation has been conceptualized in terms of powerlessness, meaninglessness, isolation, self-estrangement and normlessness (Seeman, 1959). Alienation has an aspect of depression that the cynic may or may not experience. Similarly, the construct of anomie is a global orientation associated with unpredictability and a lack of societal regulation (e.g. increases in divorce; Cashion, 1970). Anomie is possibly less consciously experienced than cynicism, and has been implicated in increased rates of suicide (Durkheim, 1951; Kelleher & Daly, 1990).

It is tempting to equate cynicism with pessimism or to consider both cynicism and pessimism as being the polar opposites of optimism. In terms of cardiovascular health, optimism and pessimism do have opposite effects, with optimism having a positive impact on recovery and symptomology (Scheier & Carver, 1992), and pessimism being related to more rapid decline in serious illnesses (Scheier & Bridges, 1995). In the development of hostile and cynical attitudes there is no evidence of such polarity. One study of personality genetics among twins showed that pessimism predicted hostility and cynicism while no such relationship was found for optimism (Plomin, Scheier, Bergeman, Pederson, Nesselroade & McClearn, 1992). While the constructs of pessimism and cynicism are related, pessimism has been shown

to be distinct from cynicism, and other measures of well being such as depression, anxiety, fatalism, job morale, life satisfaction and personal morale (Schuessler & Freshnock, 1978). Schuessler and Freshnock combined 31 tests that they considered to be measures of social life, into a pool of 107 items. Factor analysis resulted in the eight distinct factors listed above.

Machiavellianism (Christie & Geis, 1970) is another construct similar to cynicism, especially in terms of behavior. Individuals who score high on measures of Machiavellianism also report themselves to be manipulative, distrustful, less empathetic and nurturant, contemptuous toward honesty, and laboratory studies suggest they are willing to cheat in order to win (Vleeming, 1979; Jones, Nickel & Schmidt, 1979). Cynicism, while more observable than many related constructs, is likely less tied to specific behaviors than Machiavellianism. By definition Machiavellianism involves the belief that the end justifies the means, and there is evidence to suggest that cynicism is a component of Machiavellianism scores (Vleeming, 1984; Martinez, 1981; Hunter, Gerbing & Boster, 1982).

Rubin and Peplau (1975) first conceptualized a construct tied to the belief in a just world. To the believer a just world is "...a place where good people are rewarded and bad people are punished...Believers in a just

world have been found to be more likely than nonbelievers to admire fortunate people and to derogate victims, thus permitting the believers to maintain the perception that people in fact get what they deserve" (p. 65). Rubin and Peplau implicated the belief in a just world in justification rather than the pursuit of justice: justification that allows the denial of suffering. The authors created a scale to measure the construct, and those scoring high on their Just World Scale have been found to be relatively trusting, less suspicious or cynical, and more religious, but also more authoritarian (Furnham & Procter, 1989). Furnham (1995) subsequently found further support for cynicism being inversely related to the belief in a just world.

Social/Political Cynicism

I have previously argued (Moore, 1998) that a loss of faith in our societal systems creates cynicism. The popular media may play a direct role in the development of the attitude. For example, the media has been shown to have the power to negatively affect one's view of medical treatment (Wober & Gunter, 1986), and to create the belief that companies exploit their workers (Bateman, Sakano & Fujita, 1992). Inconsistency in one medium's message has been shown to generalize to other media as well (Cozzens & Contractor, 1987). The media is also seen as being preoccupied with

negative events, and this is most apparent in a shift from news gathering as the primary goal, to the profitability of news organizations (Gamson, Croteau, Hoynes & Sasson, 1992).

Specific political events such as the Watergate incident have led to cynicism according to Wright & Arbuthnot (1974). The disparity between sentencing in criminal cases, and the actual time served by those convicted of crimes has resulted in a belief in the deterioration of the criminal justice system, and cynicism in the public domain (Benzvy-Miller & Cole, 1990). Personal cynicism is connected with political cynicism (Bryder, 1991), and cynicism toward politics has been shown to predict unwillingness to participate in political expression (e.g., voting; Fife-Schaw & Breakwell, 1990). The negative tactics often used by politicians in campaigns apparently leads to low voter efficacy (Austin & Pinkleton, 1995), that is, the belief that our participation in the political system is relatively fruitless. However, cynics vote as often as non-cynics and tend to favor term limits (Southwell, 1995; Karp, 1995).

As defined above, the cynic shows contempt for moral standards and honesty, especially in regard to their own actions. The link between the growth of cynicism and moral behavior is perhaps most apparent and troubling in the younger segments of society. In one example, two samples of

4th through 11th graders showed an alarming decrease in objections to unscrupulous behaviors over an eight-year period from 1968 to 1976. The latter sample showed a seven-fold decrease in objections to shoplifting, a more than three-fold increase in seeing human nature as exploitative, and an over four-fold decrease in disapproval of pornography, prostitution, and the unethical practice of law (Tygart, 1980). In another example, college student voluntarism decreased in 1977 to less than half the levels in 1970 (Garcia, Clark & Walfish, 1979). The young may also tend to set aside moral conviction in pursuit of money. Young male students from white and blue collar families become more materialistic when they work, and students from white collar families become more accepting of unethical practices (Steinberg, Greenberger, Garduque, Ruggeiro & Vaux, 1982).

Societal disadvantage may make people more cynical, especially when gender and class interact. Whereas men are generally more cynical than women (Kanter & Murvis, 1989), and blacks are typically more cynical than whites (Ben-Porath, Shodrick & Stafford, 1995; Scherwitz, Perkins, Chesney & Hughes, 1991), there is a tendency for black women to be more cynical relative to their male counterparts than white women (Moore & Handal, 1980; Edwards, 1984). Relatively higher occupational status positively mediates

cynicism and increases tolerance of outgroups, as does education (Grabb, 1979; Davis, 1982; Kanter & Murvis, 1989).

Cynicism in Organizations

As many as 43% of American workers can be characterized as being cynical and distrustful of management, with the highest levels of such cynicism apparent in blue collar, transportation, utility and service workers (Kanter & Murvis, 1989). Cynicism in police work has been more closely examined than in any other type of organization. Niederhoffer's (1967) Police Cynicism Scale has been used in most of the research into the area, either directly or in the development of alternative measurements (O'Connell, Holzman & Armandi, 1986; Regoli, Crank & Rivera, 1990; Regoli, Culbertson & Crank, 1991). Neiderhoffer's initial findings indicated that education had little effect on police cynicism, but that rank and length of service were inversely related to the construct. One modified version of the Niederhoffer scale (Farmer, 1977) has been used to assess cynicism in the area of corrections work. This research (Farmer, 1997; Ulmer, 1992) suggests that corrections officers show high levels of police cynicism due to their frustration with the demands of administrators. Likewise, higher-ups are not immune to cynicism. Police chiefs who show anomic tendencies are more cynical toward police organizations and toward outside interest groups, and

chiefs who feel a relatively high degree of job alienation are cynical about commitment to police work (Crank, Culbertson, Poole & Regoli, 1987). Police recruits gradually become more cynical as they progress through training (Rafky, Lawley and Ingram, 1976), and show a reduction in empathetic concerns for the public (Stradling, Crowe and Tuohy, 1993). Once on the force officers may by necessity become more suspicious and cynical to protect themselves on the job (Chandler and Jones, 1979), and likely learn to objectify their emotions (Violanti & Marshall, 1983). Even though women are generally less cynical than men, female officers are quickly enculturated to police norms, and may become especially cynical and authoritarian to counteract discrimination (Davis, 1984; Remmington, 1983).

Like police recruits, medical students also experience a growth in cynicism during their years of training (Wolf, Balson, Faucett & Randall, 1989; Rezler, 1974), especially those who are interested in surgery as a career (Bing-You, 1991). The attitude may develop out of students having to complete required work while holding their personal interests in abeyance (Konefal & Provenzo, 1983), having to focus attention on the money-making aspect of medicine (Wolf et al., 1989), and having to withstand personal insults and derision from superiors (Wolf, Randall, Von Almen & Tynes, 1991). The cynicism that grows during training may have

long-term affects on the way medical students practice their profession. Students' perceptions of faculty cynicism toward health care apparently can influence the willingness to treat AIDS patients (Yedidia, Berry & Barr, 1996). Pharmacy students have shown a steady decline through the third, fourth, and fifth years of training in the perceived importance of social and environmental factors in health, as measured by the Attitudes Toward Social Issues in Medicine questionnaire (ATSIM). The Government Role sub-scale of the ATSIM also showed a decline of the acceptance of the government's involvement in regulating the costs of health care (Hatoum, Smith & Sharpe, 1982). Hatoum et al. equate both of these findings with a growth in cynicism. Likewise, Eli (1984) believes that growing cynicism is apparent in dental students, illustrated by their progressive preoccupation with extrinsic rewards (income, security, and status) and a similar decrease in the expectation of extrinsic rewards (disillusionment with the lack of intellectual stimulation, responsibility, and authority) during the course of their training (Eli, 1984).

Alcoholics (Johnson, Sandler & Griffin-Shelley, 1987; McMahon, Davidson, Gersh & Flynn, 1991;), and drug abusers (Lorr, Lorr & Devlin, 1990) appear to have high levels of cynicism. Suicidal depressives are more cynical than equally depressed counterparts who are not having suicidal thoughts

(Nierenberg, Ghaemi, Clancy-Colecchi, Rosenbaum & Fava, 1996), and victims of wartime posttraumatic stress are more cynical than other veterans (Kubany, Gino, Denny & Torigoe, 1994), but those who work in areas of intervention may themselves be prone to developing the attitude. Practitioners who work with the aged become more cynical and maintain more social distance as they get older themselves (Hickey, Rakowski, Hultsch & Fatula, 1976). Hickey et al. suggest that as these workers age they must depersonalize to protect themselves psychologically, much in the way that health care workers do in large health centers (Aitken & Schloss, 1994). Therapists who engage in long-term work with sex offenders show a growth in cynicism, and a decline in hope, expectations, and objectivity, as well as increased paranoia, vigilance, and a hardening of emotions in their personal lives (Farrenkopf, 1992).

Executives and managers in large business are often cynical about the public's attention to detail and their susceptibility to advertising gimmicks (Kanter, 1989), and may believe they are immune to legal proceedings due to the public's cynicism (Cullen and Dubeck, 1985). The most cynical people in organizations are those in the less powerful half of the "them and us" relationship (Nickerson, 1990, p. 308), and superiors who manage with a totalitarian style likely create cynicism in their organizations

(Schwartz, 1987). Cynics tend to believe good workers are exploited (Guastello, Rieke, Guastello & Billings, 1992), and transfer less of their initial training to practice on the job (Tesluk, Farr, Mathieu & Vance, 1995). Cynicism is related to job burnout (Stearns & Moore, 1993), and quality of life and symptomology (Aston & Lavery, 1993).

Hostility, Cynicism, and Cardiovascular Disease

Rosenman, Brand, Jenkins, Friedman, Strauss, & Wurm (1975) contributed greatly to the understanding of cardiovascular health when they related specific behavior styles (Type A behavior pattern) with illness. They began the examination of psychological factors as an antecedent to heart disease, beyond the previously singular focus on diet and physical activity. Eventually research shifted from an emphasis on Type A behavior, to the study of hostility, and finally to cynicism as the psychological component of risk for cardiovascular disease (Williams, 1984; Williams, 1987).

One of the primary tools used in the study of cardiovascular disease has been Cook and Medley's (1954) Hostility Inventory (HO), a scale derived from the MMPI. Unlike other hostility measures (e.g., Buss & Durkee, 1957) the Cook-Medley instrument, by virtue of its MMPI derivation, was well suited for its role in the search for causes of heart disease. The likely reason for its adoption over the Buss-Durkee measure lies in the availability of

archival data. For the last half century the MMPI has been used to create numerous other content scales (Harrison & Kass, 1967; Butcher, Graham, Williams & Porath, 1990), and its long history has allowed a great deal of data to be reexamined in the form of long-term follow-up studies. Content scales such as the Cook-Medley inventory, that did not exist initially in the MMPI but which subsequently have been created, can establish levels of hostility in subjects that participated in studies many years ago; long-term outcomes of high hostility could therefore be determined.

The primary goal of such research has been to discover what aspects of personality are particularly toxic. Anger, one component of HO scores, has been implicated as having a negative impact on cardiovascular health (Hardy & Smith, 1988), particularly when it goes unexpressed (Williams, 1984; Houston & Vavak, 1991), as has suspicion (Barefoot, Siegler, Nowlin, Peterson, Haney & Williams, 1987). Hardy and Smith (1988) also noted that cynicism was a likely component of what had once been assumed to be only hostility. Barefoot, Dodge, Peterson, Dahlstrom and Williams (1989) sorted HO items into categories, and found in a twenty-eight year follow-up study that cynicism, hostile affect, and aggressive responding effectively predicted mortality. Using a scale that was inspired by the Cook-Medley instrument, but separately derived from the MMPI item

pool (Costa, Zonderman, McCrae & Williams, 1985), Almada, Zonderman, Shekelle, Dyer, Daviglus, Costa & Stamler (1991) linked cynicism to behaviors that increase the likelihood of cardiac death (smoking, alcohol abuse, high intake of animal fat). Others corroborated these findings and added relationships to high fat and cholesterol intake (Musante, Treiber, Davis, Strong & Levy, 1992), and driving under the influence of alcohol (Houston and Vavak, 1991).

Reactivity and elevated physiological response have also been linked to high HO scores (Hardy & Smith, 1988; Jamner, Shapiro, Goldstein & Hug, 1991; Jorgensen, Abdul-Karim, Kahan & Frankowski, 1995). The effect is particularly pronounced when those high in hostility are placed in situations where hostile characteristics are engaged: when presenting their views (Smith & Allred, 1989), defending their views (Powch & Houston, 1996), receiving negative feedback (Prkachin, Mills, Kaufman & Carew, 1991), and when self-disclosing (Christensen & Smith, 1993).

Some may have a biological propensity for cynicism and cynical hostility. Moderate heritability has been shown in twin studies (Rose, 1988; Carmelli, Rosenman & Swan, 1988; Carmelli, Swan, Rosenman, 1990; Smith, McGonigle, Turner, Ford & Slattery, 1991). However, there is also evidence that cynicism can be acquired or even unlearned (Gidron & Davidson, 1996). Parental rejection (Houston & Vavak, 1991;

Meesters, Muris & Esselink, 1995), punitiveness, direct interference in children's personal lives (Houston & Vavak, 1991), and overprotection (Meesters et al., 1995), have been reported by those high in HO.

Issues in the Measurement of Hostility and Cynicism

Throughout the mid eighties and nineties a discussion in the literature ensued regarding what was being measured by the Cook-Medley Hostility Inventory. The discussion was important in that most of the research into the area of cardiovascular health utilized the instrument. The debate eventually implicated cynicism, measured or described in one form or another, as the toxic component, and as the best label for the Cook-Medley instrument.

Initially, in one examination of the Cook-Medely HO scale (Williams, 1984) it was suggested that the scale was actually a measure of cynicism. Williams and others (Costa, Zonderman, McCrae & Williams, 1985) then reexamined the MMPI item pool and further established, along with eight other scales, a subscale of cynicism with no mention of hostility. Furthermore the authors objected to the MMPI being used for the measurement of normal personality, except perhaps in the case of cynicism, a construct which they contended would lend itself to proper variation in terms of item endorsements. Others examined the HO items, and labeled the scale as a measure of cynical hostility (Smith & Frohm,

1985). Having previously analyzed the MMPI item pool, Costa, Zonderman, McCrae & Williams (1986) reported an analysis of the HO items alone, which led to the labeling of the scale as cynical mistrust, and identifying cynicism and paranoid alienation as two components of that measure. The HO scale was similarly characterized as a measure of cynical hostility in later papers (Hardy & Smith, 1988; Pope & Smith, 1991). Likewise, cynicism was seen as the primary component in an analysis of the factor structure and validity of the HO scale in the work of Greenglass and Julkunen (1989), and was related to another previous measure of cynicism (Jackson & Messick, 1970).

Problem

Cynicism has for the most part been measured using existing items from the MMPI via the Cook and Medley (1954) Hostility Inventory, rather than by creating a scale designed exclusively to assess cynicism. Most of the subsequent research has centered around cynical hostility as a cardiovascular health risk, or in other very specific domains such as cynicism in the workplace and in professional schools, most often measured using Cook-Medley. Furthermore, the Cook-Medley has been criticized for inconsistent correlations with regard to behavioral measures (Clark, 1994). Other measures of cynicism have been created

for very specific populations such as police officers. There is therefore a need for a scale to measure cynicism as a separate and distinct construct. But there is also evidence that another important area of psychological health, that of personal relationships, should be researched in terms of cynicism. The behaviors and attitudes associated with cynicism may negatively influence one's ability or desire to engage in meaningful long-term relations with others. For example, college students who have witnessed the divorce of their parents, and who are potentially more cynical as a result, are less optimistic toward the likelihood of having happy marriages themselves (Franklin, Janoff-Bulman, & Roberts, 1990).

Cynicism and Relationships

If cynicism toward relationships exists, it may be associated with our apparently changing expectations about love and marriage. Adultery has been shown to occur earlier in marriages over recent decades (Lawson, 1988), and some suggest it is not only natural, but something of a basic human right (Myers, 1975), or that romantic marriage is mythical (Lawson, 1988). Some have seen these diminished expectations as potentially damaging to marriages leading them to the development of interventions to counteract cynicism (Mace, 1975). Cynicism has also been characterized as the polar opposite of romantic and traditional love

(Burdsal, Greenberg, Bell & Reynolds, 1975).

Apparently, cynics do not generally fare well in relationships, experiencing more negative events and hassles, and less social support (Smith & Frohm, 1985; Hardy & Smith, 1988). Cynics also show more negativity when describing their social interactions, and describe ambiguous behavior more negatively (Allred & Smith, 1991). Cynicism has been related to temper tantrums, demanding behavior, and argumentativeness in men, and suspicion, moodiness, and suicidal risk or behavior in women (Han, Weed, Calhoun & Butcher, 1995). Cynicism is also related to shrewdness and vengefulness as measured by a "Playing Hardball" scale (Fontana, Kerns, Blatt, Rosenberg, Burg & Colonese, 1989), a scale designed to tap the belief that the two behaviors are justified in restoring justice. Cynics are also condescending and critical to the extent that they are not asked to provide social support for others (Skoe & Ksionzky, 1985).

Social support gained through our interactions with others has been shown to be an important factor in life, helping persons to cope with daily stress (Cutrona, 1982; Cutrona & Russell, 1987), and psychological distress (Dean & Lin, 1977; Lepore, Evans, & Schneider, 1991; Schaefer, Coyne, & Lazarus, 1981). Cynics do not seek or accept social support as readily as others (Houston & Vavak, 1991), they

show negative relationships between the degree of cynicism and levels of most types of support (Hart, 1996), and do not benefit from support as much as non-cynics as indicated by reduced physiological reaction to stress (Lepore, 1995). Those high in cynicism are less satisfied with the quantity and quality of their social support, and experience more conflict in marriage and at work (Smith, Pope, Sanders, Allred & O'Keefe, 1988; Watkins, Ward, Southard & Fisher, 1992). Cynics are typically more lonely and less engaged with others (Blaney, Morgan, Feaster, Millon, Szapocznik & Eisdorfer, 1991).

Preliminary Research

If as it appears, that cynicism grows out of witnessing our parents divorce, making us pessimistic about our own successful relationships, and if it grows out of the perception that our marital morals are changing for the worse, it stands to reason that direct experience with negative events could lead to cynicism as well. Indeed some unexpected events, particularly those seen as betrayals of trust have great power to increase uncertainty in relationships (Planalp and Honeycutt, 1985). The research into interpersonal betrayal that I have previously completed (Moore, 1997), and which I briefly review here, has directly led to the project described in this document.

Five-hundred and fifteen Introductory Psychology

students were administered a questionnaire designed to investigate a broad range of aspects of interpersonal betrayals. Incidents of betrayal were defined as any incident which the respondent considered to be such. Respondents were asked to provide information for two incidents in their lives: one that they considered their greatest betrayal of another, and the incident in which they felt most betrayed by someone else. Variables of interest were the type of relationship, the gender of the persons involved, the length of the relationship, and how long ago the incident had occurred. Respondents were also asked to make causal attributions, using a seven-point Likert-type scale, in regard to intentionality, blame, and revenge. The lasting effects of the incident, if any, were explored as well.

Respondents most often reported betrayals of and by a romantic partner of the opposite gender, most often involving cheating or unfaithfulness of some kind. This replicated the previous research of Jones (1988), Hansson, Jones & Fletcher (1990), and Jones & Burdette, (1994).

Some specific results led me to believe that negative experiences with interpersonal betrayals had created cynicism in respondents, and that the attitude could have grown over time. That interpretation of the findings inspired the research described below. Although others have

reported a negative relationship between age and hostility (Scherwitz, Perkins, Chesney & Hughes, 1991), I found that age was positively related to respondents reporting intentionally betraying others, betraying others out of revenge, and to attributing incidents in which they were betrayed to revenge. There was also a strong positive relationship between the number of times the respondent had been married and attributing fault to those whom they had betrayed, to betraying others intentionally, and out of revenge. A similar relationship was found between number of times married and attributing others' betrayal of the respondent to intentionality.

Relationship investment may be a factor in making such negative attributions as well. The length of relationships prior to incidents was related to respondents attributing the incident to intention and revenge. The salience of incidents may also be a factor. The length of time that had passed since the incident was related to attributions of revenge, intention, and faulting the person who was betrayed for the incident.

The lasting effect most often reported by respondents was that the incident had made them less trusting in relationships and more suspicious. Almost half of all respondents reported that view of their partners or potential partners. They were also asked to give open-ended

responses to a question regarding the lasting effects of the incident, and the results also suggested that cynicism was one outcome, especially when the betrayal involved the unfaithfulness of a romantic partner. For example, some said they had lost their faith and trust in people, or that the incident had irreversibly changed their outlook on love.

It is my belief that cynicism toward relationships grows to some degree out of actual negative experiences. It appears that these experiences can have lasting effects on our ability to maintain satisfying relationships with others, particularly in light of the self-fulfilling qualities of attitudes (Lockwood, 1992; Arcuri & Cadinu, 1997; Bargh, Hen & Burrows, 1996; Murray, Holmes & Griffin, 1996). To investigate the implications of cynicism a scale is needed to measure not only general cynicism toward human nature, but since cynical attitudes may have the power to affect relationships, it should also be designed to capture cynicism as it applies in that context: specifically cynical attitudes toward dating and romantic partners. If cynics are more likely to display certain behaviors or to justify their own negative behavior with cynical attitudes, they may adversely effect their relationships as well. Therefore a scale measuring cynicism should also include items designed to tap cynical attitudes as a behavioral justification. This project of three studies is designed to address those needs

through the development and validation of the Scale of Interpersonal Cynicism (SIC), and to show the scale's utility in discriminating between high-cynical respondents and low-cynical respondents.

CHAPTER II

PHASE ONE: INITIAL SCALE DEVELOPMENT

Method and Results

Participants

Participants were 353 students registered in Introductory Psychology classes (112 men and 241 women) with a mean age of 19.4 years. The ethnic makeup of the sample consisted of 320 Caucasians, 12 African Americans, and 20 participants listing "other" as their ethnic status, with one additional subject choosing not to respond to the ethnicity question.

Procedure

Respondents completed a biographic sheet (see Appendix A) and 68 items created for the first version of the SIC (Item generation is discussed below). The biographic variables involved both basic demographic information (e.g., gender, age, ethnic background, educational level, college GPA, number of children, yearly church attendance) as well some questions regarding the respondent's present relationship status and relationship history (e.g., presently in relationship, seriousness of the relationship, length of relationship, number of times married, a painful breakup in the past, relationship with father, relationship with mother).

Students picked up questionnaire packets and either

completed them in Austin Peay 403, or took them to bring back at a later time. Students were given extra credit for their participation.

Analysis of Initial Item Pool

Item Generation. After a review of the literature on cynicism it became apparent that cynicism had been most frequently examined as a negative attitude toward human nature. A theoretical framework was created to generate items that would measure that aspect of cynicism, and in two additional theoretical categories. An example of an item generated for the first category was, "People will tell you what you want to hear if it will get them somewhere."). The second category was created for items designed to capture cynicism toward relationships, or romantic partners (e.g., "When it comes to relationships, nice people finish last."). The third category was created for items designed to measure the propensity to use cynical statements that justify one's own negative behavior (e.g., "Sometimes you have to step on some toes to get ahead."; "Everyone else takes what they can get in life, why shouldn't I?"). One criterion validity item was included: "Basically I am a cynical person."

Reliability Assessment. The original 68 items of the SIC showed an overall reliability coefficient of .93 (alpha), with a mean inter-item correlation of .15. After dropping 21 items with low corrected item-total correlations

(below .30), the resulting scale showed an alpha of .92, with a mean inter-item correlation of .20. At this point no items showed a corrected item-total correlation below the established criterion.

Item Selection. The remaining 47 items were included for consideration in factor analysis. Using the Statistical Package for the Social Sciences (SPSS, Windows version 7.5), an exploration of possible factor structures within the remaining 47 items was performed using the extraction methods of principal components analysis, maximum likelihood, alpha analysis, and image analysis. After an examination of the factor structures produced by each extraction method, it was decided that the image analysis with a varimax rotation provided the best solution.

The image analysis is one variant of principal factor procedures, but is considered slightly more conservative, and especially appropriate for larger numbers of variables. It is distinctive in that it alters the correlation matrix before the subsequent principal analysis is performed. The method produces a variance/co-variance matrix that represents each individual variable in terms of the total of all remaining variables. This becomes the individual variable's image. The matrix is generated utilizing beta weights from a regression analysis. In the result, the variance of each variable has been reduced by the portion of

variance that cannot be predicted from all other variables (For a discussion of image analysis as compared to other extraction methods, see Nunnally and Bernstein, 1994).

An examination of scree plots suggested a six-factor solution. Using the image extraction method the data was submitted again specifying a six-factor solution. All six factors were interpretable. The results showed no items with final communalities less than .30. Items were retained only if they showed loadings on a factor of .30 or greater. This resulted in a loss of five items. Six items showed a problem with multiple loadings using the criterion: Exclude the variable if it loads .30 or higher on two or more factors. Therefore, 36 items were retained.

The following six factors were identified, explaining a total of 31% of the variance: cynicism toward human nature (20.4%); relationship cynicism (3.8%); cynical behavior justification (2.4%); cynicism toward love (1.7%); anomic cynicism (1.7%); and cynical mistrust of partner (1.0%). Table 1 shows the factor loadings for the 47 SIC items considered for factor analysis.

Analysis of Resultant Scale

The 36 items remaining in the scale following the factor analysis showed an alpha of .90, with a mean inter-item correlation of .20. Reliabilities (alpha)/mean inter-item correlations for each individual factor were .77/.27

Table 1
Factor Loadings for SIC Items

Item	Factor 1	2	3	4	5	6
54. You have to watch your back in this world.	.51	.19	.28	.08	.02	.01
11. People are basically selfish.	.49	.11	.09	.01	.21	.14
20. People will tell you what you want to hear if it will get them somewhere.	.48	.24	.07	.03	.09	.25
13. I believe people are primarily motivated by self-interest.	.45	.12	.20	-.04	.09	.09
36. Self-interest is all most people care about. (*)	.45	.10	.22	.03	.37	.04
4. If you give people an inch they will take a mile.	.44	.05	.09	.22	.20	.18
9. People will try to get you back if you do them wrong.	.41	.14	.23	-.05	.04	.07
34. It seems that just when you think you're getting ahead someone knocks you down. (*)	.38	.26	.31	.09	.13	.06
58. Only a fool would trust most people. (*)	.37	.14	.32	.27	.26	.02
5. People only give things to get things in return.	.35	.03	.11	.17	.29	.06
53. You can't be too careful with people. (*)	.35	.31	.24	.03	.12	.02
12. Most people would break laws if they could be sure they wouldn't be caught.	.34	.09	.16	-.11	.12	.33
46. For most people, good looks is more important than what's "on the inside".	.30	.13	.15	.01	.04	.12
52. I would rather be alone most of the time rather than let people run over me. (*)	.28	.24	.08	.09	-.00	.12
67. Eventually relationships end...its only a matter of time.	.03	.58	.19	.25	.10	.05
66. I don't know if I can trust my judgement in relationships.	.07	.54	.11	.11	.08	.11
43. Sooner or later most relationships end.	.05	.52	.11	.11	.01	.06
32. Its easy to get used by someone you are dating.	.25	.47	.02	.04	.12	.22
39. I have very little faith in relationships.	.11	.46	.16	.38	.18	.10
61. Sometimes I am afraid my partner will hurt me.	.19	.42	.06	.11	.11	.09
8. Its a fact of life...someone's going to get hurt in a relationship.	.19	.41	.09	-.02	.03	.12
21. Relationship partners are usually after something.	.16	.35	.04	.11	.19	.13
19. When it comes to relationships, nice people finish last. (*)	.30	.33	.17	.19	.14	.14
65. I hold back with people until I can figure out what they want from me. (*)	.22	.33	.23	.16	.07	-.02
40. I guess some people are destined to be alone.	.14	.24	.18	.18	.02	.02
51. Sometimes you have to get people before they get you.	.21	.16	.51	.18	.09	.13
26. Sometimes you have to step on some toes to get ahead.	.22	.07	.50	.03	.17	.10
25. Everyone else takes what they can get in life, why shouldn't I?	.15	.09	.50	.07	.10	.11

Table 1 (Continued)

Item	Factor 1	2	3	4	5	6
27. Sometimes you have to even the score with people.	.17	.13	.50	.10	.07	.14
64. I do what I want because everyone else does whatever they want.	.17	.08	.48	.07	.14	.10
33. We're here for a while then we die, its just the way it is.	.09	.25	.36	.24	.09	.04
62. I take care of myself first, because no one else will.	.11	.27	.35	.11	.18	.13
38. Someone is almost always after your partner in relationships. (*)	.20	.15	.21	.08	.07	.18
41. I believe that true love really exists. (R)	-.05	.14	.05	.67	.16	.05
48. True love is a myth.	.08	.16	.07	.63	.05	.06
49. The truth is...no one wants to spend a lifetime with another person.	-.11	.21	.16	.52	.15	.08
2. Sometimes people will help you and not want anything in return. (R) (*)	.15	.04	.10	.30	.30	.11
29. Basically I am a cynical person.	.18	.13	.26	.30	.16	.03
59. If my partner is too nice, they must be up to something. (*)	.09	.26	.14	.28	.16	.01
28. Nobody really trusts anyone.	.09	.14	.16	.11	.51	.20
17. People can't be trusted.	.22	.26	.07	.19	.44	.11
37. People don't care about each other anymore.	.08	.08	.15	.15	.44	.01
30. Most people watch out for "number one" and little else.	.26	.10	.29	.11	.41	.13
47. Not even family members can be trusted all the time. (*) .12		.19	.20	.10	.10	.20
68. Most people would have an affair...its a matter of the right person, the right place and the right time.	.21	.21	.23	.09	.15	.60
60. Most people would have an affair if they knew they would not get caught.	.22	.16	.23	.14	.09	.57
6. No one is completely honest with their relationship partners.	.12	.20	.09	.12	.11	.46

Notes: (R) = reversed scored. (*) denotes items that were dropped for insufficient or multiple loadings.

for cynicism toward human nature, .77/.28 for relationship cynicism, .76/.31 for cynical behavior justification, .68/.39 for cynicism toward love, .68/.35 for anomic cynicism, and .71/.46 for cynical mistrust of partner. The means and standard deviations for the overall scale and subscales can be seen in Table 2.

The criterion validity item showed a .40 correlation ($p < .01$), with the sum of all other scale items. The criterion item correlations for each factor were: cynicism toward human nature, .26; relationship cynicism, .26; cynical behavior justification, .36; cynicism toward love, .29; anomic cynicism, .34; and cynical mistrust of partner, .20. All criterion by factor correlations were also significant at the $p < .01$ level.

Cynicism and Biographic Variables. Table 3 shows the means and standard deviations for total SIC scores and subscales by gender. A one-way analysis of variance procedure showed that men scored significantly higher than women on cynicism toward human nature, $F(1, 348) = 5.90$, $p < .02$; cynicism toward relationships, $F(1, 350) = 4.33$, $p < .04$; cynical behavior justification, $F(1, 351) = 4.37$, $p < .04$; cynicism toward love, $F(1, 344) = 6.70$, $p < .02$; cynical mistrust of partner, $F(1, 351) = 5.98$, $p < .02$; and on total cynicism scores, $F(1, 341) = 7.38$, $p < .01$. There were no significant gender differences on the subscale of

Table 2
Means and Standard Deviations for Overall SIC and Subscales

Scale	M	SD
Cynicism Toward Human Nature	32.55	5.65
Relationship Cynicism	24.87	6.08
Cynical Behavior Justification	18.97	4.94
Cynicism Toward Love	6.92	2.44
Anomic Cynicsim	9.58	2.83
Cynical Mistrust of Partner	8.07	2.95
Total SIC	97.65	17.61

Table 3

Means and Standard Deviations for Total SIC and Subscales By Gender

Scale	Men		Women	
	M	SD	M	SD
Cynicism Toward Human Nature	30.83	5.27	29.42	4.95
Relationship Cynicism	25.36	5.29	23.92	6.36
Cynical Behavior Justification	19.78	5.31	18.60	4.72
Cynicism Toward Love	7.42	2.64	6.69	2.32
Anomic Cynicism	9.72	2.58	9.52	2.94
Cynical Mistrust of Partner	8.63	2.83	7.81	2.98
Total SIC	101.53	17.37	95.99	17.59

anomic cynicism. Using a standard deviation split procedure for total SIC scores (at least one SD above or below the mean), high cynics reported attending church fewer days per year (M = 23.21, SD = 33.39) than did low scorers (M = 41.58, SD = 33.53), $t(95) = 2.70$, $p < .01$. Those high in cynicism also reported their current relationships having lasted less than half as long (M = 10.30 weeks, SD = 10.99) as low cynicism scorers (M = 29.21 weeks, SD = 31.76), $t(56) = 3.62$, $p = .001$.

Using the same variable created for high versus low cynicism, two 2 x 2 factorial analyses of variance procedures were used to test the possibility of differences in the quality of relationships with respondents' fathers, and with their mothers. Respondents were asked to rate their relationship with their father and mother on a Likert-type scale from 1 (very poor) to 5 (very good). The analysis for relationship with father did not reach significance. The model for relationship with mother was significant, $F(1, 99) = 3.10$, $p < .05$. There was no main effect for gender and no interaction, but a main effect for cynicism was observed. The mean rating for the quality of relationship with mother was higher for low cynicism scorers (M = 4.55, SD = .85) than for high cynicism scorers (M = 4.02, SD = .94), $F(1, 99) = 5.51$, $p = .021$.

Of particular interest in this study was the potential

effect of present relationship status (in a relationship presently or not in a relationship), and having or not having past experience with painful breakups on cynicism scores. An analysis of variance procedure with two factors (relationship status by painful breakups) was performed with the total cynicism score as the dependent variable. An interaction was found for relationship status and painful breakups, $F(1, 334) = 4.06$, $p < .05$ (See Figure 1). For those not presently in a relationship cynicism scores were generally higher than for those who were not, but within that group there was little difference in the mean total cynicism scores for those who had experienced a painful breakup versus respondents who had not ($M = 102.25$, SD = 17.66 versus $M = 103.38$, SD = 19.96). However for those presently in a relationship total cynicism scores were somewhat lower for respondents who had never experienced a painful breakup (M = 87.59, SD = 15.47) versus those who had experienced such a negative event (M = 96.05, SD = 16.66), (See Table 4).

Repeating the previous analysis, and using relationship cynicism scores from the SIC, there was no interaction, but a main effect for relationship status, $F(1, 343) = 34.10$, $p < .001$, and a main effect for painful breakups, $F(1, 343) = 10.85$, $p = .001$. The relationship cynicism scores were greater for those not presently in a relationship (M =

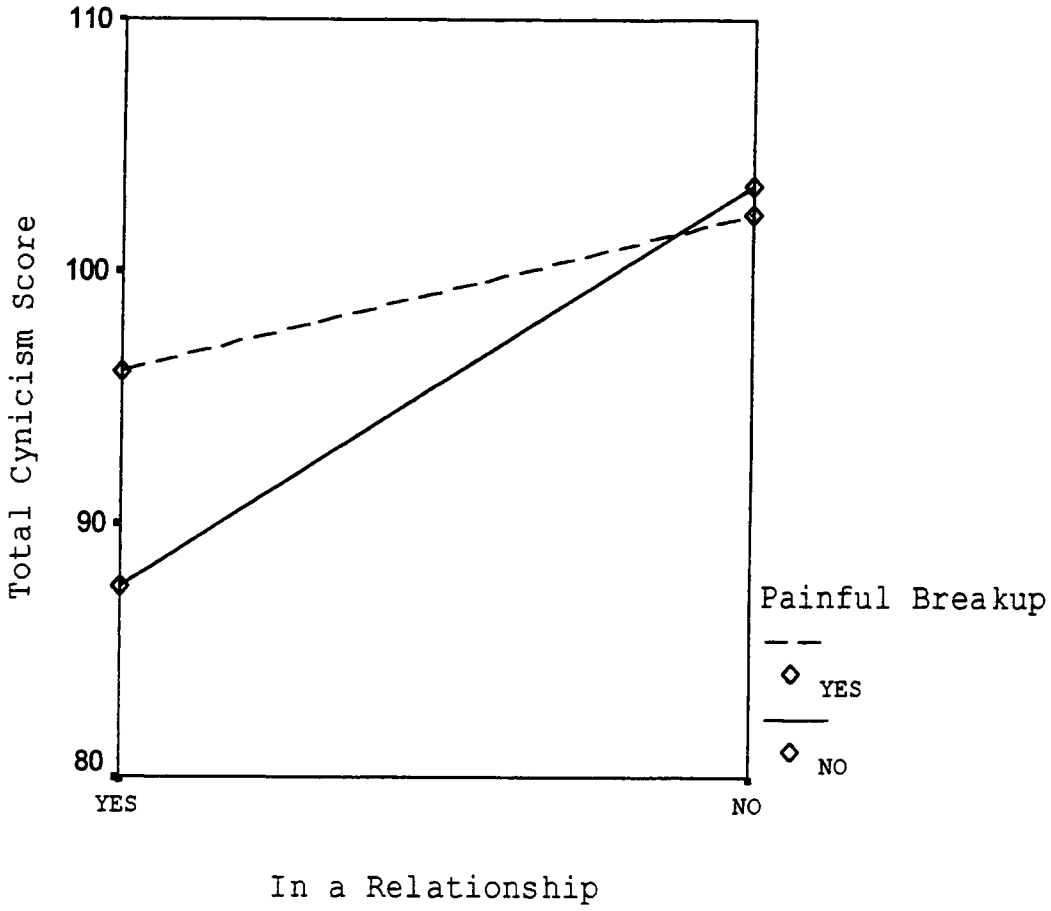

Figure 1: Cynicism By Relationship Status and Experience With Painful Breakups

Table 4
Means and Standard Deviations for Total SIC Scores For Relationship Status and Painful Breakups

	Yes Rel.		No Rel.	
Painful Breakup	M	SD	M	SD
Yes	96.05	16.66	102.25	17.66
No	87.59	15.47	103.38	19.96

26.61, SD = 5.91) versus those presently in a relationship (M = 22.75, SD = 5.68). Relationship cynicism scores were also higher for those who had experienced a painful breakup (M = 24.87, SD = 6.13) than for those who had not (M = 22.29, SD = 5.45).

As stated above, part of the impetus for this research was a preliminary finding that age and the number of times married were related to particularly negative attributions in regard to incidents of betrayal. To explore these relationships further a correlational analysis was performed. As can be seen in Table 5 neither total cynicism or any subscales of the SIC were related to age. The number of times married was related only to cynical behavior justification $r(338) = -.146$, $p < .01$. All correlations between the SIC subscales were highly significant.

Test-retest Sample

A separate sample was taken for an eight-week test-retest for reliability, using the 36 items which survived the analyses in study one. Thirty-two students from two upper level psychology classes completed the SIC as an in class activity. The overall SIC test-retest correlation was highly significant ($r = .871$, $p < .01$). All subscales of the SIC showed highly significant test-retest correlations (all at the $p < .01$ level). The correlations for the subscales of cynicism toward human nature, relationship cynicism,

Table 5

Correlations for Age, Times Married, SIC Subscales, and Total Cynicism

	Age	Tmarr	CynAno	CynBeh	CynHum	CynLuv	CynRel	CynTru	CynTot
Age	--	.622**	.021	-.069	-.040	.100	.040	.069	.010
Tmarr		--	-.027	-.146**	-.074	.058	-.034	.011	-.069
CynAno			--	.432**	.452**	.382**	.396**	.389**	.662**
CynBeh				--	.474**	.392**	.436**	.424**	.773**
CynHum					--	.216**	.423**	.483**	.750**
CynLuv						--	.406**	.282**	.559**
CynRel							--	.454**	.782**
CynTru								--	.684**

Note: ** Correlation is significant at the 0.01 level.

behavioral justification, cynicism toward love, anomic cynicism, and cynical mistrust of partner were .797, .794, .760, .686, .577, and .678 respectively. An examination of test-retest correlations for individual items showed high reliability as well. Twenty-five items were highly significant with a mean Pearson correlation of .59 ($p < .01$). Five items were significant with a mean Pearson correlation of .42 ($p < .05$). The mean Pearson correlation for the remaining six non-significant items was .21. The overall mean Pearson correlation was .41.

Discussion

The results of the first phase of this study are encouraging. The initial overall cynicism scale, and the scale that resulted after a screening for low corrected item-total correlations showed high degrees of internal consistency. Mean inter-item correlations were at acceptable levels as well. This is especially so considering the wide band-width of a construct such as cynicism, one that would manifest in many domains as is suggested by the theoretical framework employed. This suggests that further examination of cynicism as a unitary construct is warranted. Likewise the strong test-retest correlations on the overall scale, its subscales, and at the item level suggest that the construct is a powerful one, and that levels of cynicism are

trait rather than state oriented. The very high correlation between the scale and the criterion reference item also is a good preliminary indication of construct validity. The criterion item correlated with all subscales at acceptable levels.

The image analysis also suggests that within the pool of cynicism items, the theoretical framework had merit. As expected, primary factors representing cynicism toward human nature, cynicism toward relationships, and cynicism as a behavioral justification were found. The additional factors identified, cynicism toward love, anomic cynicism, and cynical mistrust of partners add little to the overall understanding of cynicism, and it is expected in future refinements of the scale that some or all of these factors will become either more clear, or be assimilated into the three relatively strong primary factors. All factors also showed a high degree of reliability.

The results of the analyses of the SIC in relation to selected biographic variables are also encouraging, and show that the scale has good potential for utility in research. Consistent with most research in the area men scored higher on all measures except anomic cynicism. There was also evidence that high and low cynicism scores correspond to behaviors that may be seen as being related to cynicism. Those scoring high on the scale attended church less often,

and were presently involved in shorter lived relationships than those who scored low. High scorers also retrospectively reported a less positive relationship with their mothers.

Presently being in a relationship mediated the affects of having had a painful breakup in the past. Overall those not in a relationship showed high levels of cynicism. Comparable levels were found for those presently in a relationship who had also experienced a painful breakup in the past, but those who had not showed the lowest levels of cynicism of any grouping. Likewise, using only the relationship cynicism subscale scores, those not in a present relationship, and those who had experienced a painful breakup in the past showed higher levels of cynicism.

The lack of significant correlations between the SIC or its subscales, and the age of respondents was disappointing. The original proposition that levels of cynicism increase over time was not supported. This will be investigated further in the next phase of the study. Only cynical behavior justification was related to the number of times married, and it, in the opposite direction than was predicted. This could well be a function of the sample along with the mediating effects of being presently in a relationship. The original betrayal data was gathered from a more diverse group in terms of age, a group that by virtue

of age may have had more experience with divorce. The present sample, being of a younger mean age may in fact only be represented by those who would answer the question for number of times married with a response of "one" because they were married at the time. It is not likely that students of that age have had the time to marry and divorce before they have graduated from the university.

CHAPTER III

PHASE TWO: REFINEMENT OF SCALE AND VALIDATION

Method and Results

The second phase of this project was designed to further assess the operating characteristics of the Scale of Interpersonal Cynicism. The four primary goals of Phase Two were: 1) to identify high and low cynicism respondents to participate in follow-up behavioral hypothesis testing; 2) to confirm the internal consistency of the SIC; (3) to reassess the factor structure with a second series of factor analyses; and 4) to administer validity measures placing the SIC in an appropriate nomological network of related constructs.

Participants

Participants were 328 Introductory Psychology students attending the University of Tennessee (138 male, 189 female), with a mean age of 19.7 years. The sample was comprised of 285 Caucasian, 22 African American, and 16 of other ethnic designations, and 5 subjects did not respond to the ethnicity item.

Procedure

Subjects were administered questionnaire packets as in Phase One. Identical biographic items were included (See Appendix A). In addition, respondents completed the 13 measures listed below and a second version of the SIC.

Measures

In regard to the SIC, the 47 items showing internal consistency from Phase One and 13 experimental items were used in Phase Two.

Five instruments were used to assess convergent validity. The cynicism subscale of the MMPI-2 Cook-Medley Hostility Inventory, as described in detail above, the cynicism subscale of the Wrightsman (1974) Revised Philosophies of Human Nature scale, the cynicism subscale of Jackson and Messick's (1970) Differential Personality Inventory, Rosenberg's (1957) Faith in People Scale (also known as The Mysanthropy Scale), and the suspicion subscale of the Buss & Durkee (1957) Hostility Inventory. A highly positive correlation with the SIC was expected for all five convergent measures.

Three related scales were used to establish a moderate degree of convergence with the SIC. The Srole (1956) Anomia scale was used to assess the construct of anomie. Alienation was assessed using the Interpersonal Relations subscale of the Maddi (1979) Alienation Test. Machiavellianism was measured using the Mach V scale constructed by Christie & Geis (1970). The instrument is designed to assess the willingness to manipulate others.

Five scales were used to establish discriminant validity. Optimism was assessed using the Snyder, C.R.

(1995) Hope Scale. No relationship of optimism was expected between the SIC and optimism given that it has been shown that cynicism is related to pessimism, but not to optimism (Plomin et al., 1992). Rubin and Peplau's (1975) Belief in a Just World Scale was included. The scale measures the tendency for people to believe that good people are rewarded in life and bad people are punished. Level of trust was assessed using the Couch, Adams & Jones (1996) Trust Inventory. The instrument is designed to measure both generalized trust and partner trust. The two subscales were used as separate validity measures. Also of interest was the general level of satisfaction that respondents felt in their life. This aspect of respondents lives was measured using the Diener (1985) five-item Satisfaction With Life Scale. The brief instrument measures global life satisfaction. All the discriminant measures were expected to show negative relationships to the SIC.

The relationship of individual factors of the SIC to the validity measures listed above was also explored.

Analyses

Reliability. Reliability was assessed by the same method as in the first administration of the scale, using the corrected item-total correlations to exclude weak items, and using the alpha statistic as well as the mean inter-item correlation to assess internal consistency. In the first

assessment, all 60 items showed an alpha coefficient of .92, with a mean inter-item correlation of .16. Ten items showed a corrected item-total correlation below .30 and were dropped from further consideration. The resulting 50 items showed an alpha coefficient of .92, and a mean inter-item correlation of .18. At this point one additional item was lost to low corrected item-total correlation, and one with a marginal value (.29, "True love is a myth"), was retained for further consideration for its theoretical relevance. Finally the remaining 49 items showed an alpha coefficient of .92, with a mean inter-item correlation of .19. No items in this iteration showed low corrected item-total correlations, including the marginal item from the previous step.

Item Selection. To assess the convergence between the two samples in Phase One and Phase Two, a similar strategy to the one in the first administration of the SIC was employed with the second factor analysis, exploring the best factor structure using a variety of extraction methods available in SPSS for Windows version 7.5. A preliminary principal components analysis, with a varimax rotation, and with no number of factors specified resulted in 14 factors explaining a total of 60% of the sample variance. After an examination of the structure, it was decided that 14 factors could not be interpreted in a meaningful fashion. Similar to

the results in Phase One, an examination of the scree plot confirmed that a good solution would have a maximum of six factors. A series of extraction methods were employed to find the best solution using, maximum likelihood, generalized least squares, alpha analysis, and image analysis. Varimax rotation was used for each iteration. For each extraction method an analysis was performed specifying six, five, four, and three factors to be extracted. For each potential solution items were excluded with final communalities less than .3. Items were retained only if they loaded at a level of .3 or above on their respective factors. Beyond this step, items were excluded if they showed multiple loadings (loading at the .30 level on more than one factor). Out of the 16 detailed solutions it was decided that the best and most interpretable one was the generalized least squares solution, with four factors specified. Generalized least squares is a variant of maximum likelihood extraction, both of which minimize what is called loss function, or the sum of squared differences between estimated and actual scores. Generalized least squares uses weighted estimates of these residuals (For a discussion of generalized least square as compared to other extraction methods, see Nunnally & Bernstein, 1994).

Out of the 49 items left for consideration after the reliability assessment, none were lost to low communalities,

and 13 were lost to multiple loadings. The remaining 36 items were interpreted using the following four factors descriptions, explaining a total of 34.4% of the sample variance. The four factors were: cynical behavior justification (20.5% variance explained); cynicism toward relationships (5.3%); cynicism toward human nature (4.6%); and cynicism toward love (4.0%). Table 6 shows the factor loadings for the 49 items considered for factor analysis.

Reliability Assessment of the Final SIC. The 36 items constituting the final version of the SIC showed an alpha of .89, and a mean inter-item correlation of .18. Reliabilities (alpha/mean inter-item correlations) for each factor were: cynical behavior justification (.79/.24); cynicism toward relationships (.74/.27); cynicism toward human nature (.74/.26); cynicism toward love (.71/.24). Table 7 shows the means and standard deviations for the total SIC and its subscales.

The criterion validity item showed a .40 correlation with the sum of all other scale items, .37 with cynical behavior justification, .24 with cynicism toward relationships, .28 with cynicism toward human nature, and .35 with cynicism toward love. All criterion correlations were at the $p < .01$ level.

Table 6
Factor Loadings for Final SIC Items

Item	Factor 1	2	3	4
16. Sometimes you have to even the score with people.	.65	.00	.00	.00
14. Everyone else takes what they can get in life, why shouldn't I?	.60	.00	.17	.12
34. Sometimes you have to get people before they get you.	.59	.13	.00	.21
42. I do what I want because everyone else does whatever they want. (*)	.52	.16	.00	.35
15. Sometimes you have to step on some toes to get ahead.	.50	.00	.13	.00
37. You have to watch your back in this world.	.47	.16	.24	-.10
36. You can't be too careful with people.	.43	.14	.21	.00
41. I take care of myself first, because no one else will.	.37	.12	.00	.29
22. It seems that just when you think you're getting ahead someone knocks you down.	.34	.20	.22	.14
38. Only a fool would trust most people.	.34	.00	.23	.18
25. Someone is almost always after your partner in relationships.	.31	.30	.22	.18
53. Its a dog-eat-dog world out there.	.31	.23	.10	.00
43. I hold back with people until I can figure out what they want from me.	.31	.11	.18	.11
21. We're here for a while then we die its just the way it is. (*)	.26	.26	.10	.00
46. Most people would have an affair...its a matter of the right person, the right place and the right time.	.25	.70	.00	.00
40. Most people would have an affair if they knew they wouldn't get caught.	.20	.61	.20	.00
45. Eventually relationships end...its only a matter of time. (*)	.00	.54	.00	.43
29. Sooner or later most relationships end. (*)	-.12	.50	.00	.35
56. In most relationships people do things they must hide from their partners.	.21	.47	.19	.14
48. Love is more like a battlefield than a playground. (*)	.13	.45	.17	.35
5. Its a fact of life...someone's going to get hurt in a relationship.	.13	.44	.17	.12
4. No one is completely honest with their relationship partners.	.00	.41	.25	.20
59. When it comes to relationships, heartaches are just a fact of life.	.11	.41	.24	.00
47. Sometimes I am afraid my partner will hurt me.	.00	.34	.29	.24
30. For most people, good looks is more important than what's "on the inside".	.20	.33	.22	.00
55. Life these days is becoming more and more a confusing mess. (*)	.20	.29	.13	.00
7. People are basically selfish.	.00	.18	.63	.00
23. Self-interest is all most people care about.	.17	.00	.58	.18
10. People can't be trusted.	.16	.00	.48	.30

Table 6 (Continued)

Item	Factor 1	2	3	4
8. Most people would break laws if they could be sure they wouldn't be caught. (*)	.19	.31	.47	.00
12. People will tell you what you want to hear if it will get them somewhere. (*)	.00	.33	.45	.00
9. I believe people are primarily motivated by self-interest.	.17	.13	.45	.00
20. Its easy to get used by someone you are dating.	.00	.24	.43	.12
3. People only give things to get things in return.	.24	.00	.42	.16
19. Most people watch out for "number one" and little else.	.18	.00	.40	.16
2. If you give people an inch they will take a mile.	.27	.13	.36	.00
6. People will try to get you back if you do them wrong. (*)	.28	.00	.29	.00
33. The truth is...no one wants to spend a lifetime with another person.	.00	.00	.00	.68
32. True love is a myth.	.00	.00	.00	.64
39. If my partner is too nice, they must be up to something.	.22	.17	.17	.54
26. I have very little faith in relationships. (*)	.00	.36	.17	.54
17. Nobody really trusts anyone. (*)	.24	.00	.36	.45
50. People need love like they need a hole in the head.	.22	.30	.00	.43
11. When it comes to relationships, nice people finish last. (*)	.12	.15	.37	.38
1. Sometimes people will help you and not want anything in return. (R)	.15	.00	.30	.35
24. People don't care about each other anymore. (*)	.00	.00	.32	.33
44. I don't know if I can trust my judgement in relationships.	.17	.27	.21	.32
58. In relationships, its "out of sight, out of mind."	.19	.17	.11	.31
18. Basically I am a cynical person.	.28	.00	.25	.31

Notes: (R) = reversed scored.
(*) denotes items that were dropped for insufficient or multiple loadings.

Table 7
Means and Standard Deviations for Overall Final SIC and Subscales

Scale	M	SD
Cynical Behavior Justification	34.92	6.63
Cynicism Toward Relationships	23.53	5.28
Cynicism Toward Human Nature	23.52	4.36
Cynicism Toward Love	16.25	4.14
Total SIC	98.37	16.18

The Final SIC and Biographic Variables. The means and standard deviations for total SIC scores and subscales by gender can be seen in Table 8. As in Phase One, a one-way analysis of variance procedure was used to assess gender differences on total SIC scores and its subscales. Men scored higher than women on total cynicism, $F(1, 316) = 4.46$, $p < .05$, and on cynicism toward relationships, $F(1,324) = 7.31$, $p < .01$. Gender differences for cynical behavior justification, cynicism toward human nature, and cynicism toward love were not significant.

Using the same standard deviation split procedure as in Phase One, high cynics reported attending church fewer days per year ($M = 21.07$, $SD = 20.68$) than low cynics ($M = 37.62$, $SD = 41.50$), $t(69) = 2.49$, $p = .015$. Even though high cynicism scorers reported their present relationships having lasted less than half as many days ($M = 14.77$, $SD = 14.88$) as low cynics ($M = 31.45$, $SD = 42.47$) the comparison did not reach significance, $t(57) = 1.91$, $p = .061$.

The same two-factorial design as in Phase One (high and low cynicism by gender), was used to test differences between the groups in terms of the respondents' relationship with their father and mother. No main effects were found for cynicism or for gender, and no interactions were observed.

Also as in Phase One, the possible effects on total cynicism scores of having experienced a painful breakup in

Table 8

Means and Standard Deviations for Final SIC and Subscales By Gender

Scale	Men		Women	
	M	SD	M	SD
Cynical Behavior Justification	35.61	6.24	34.38	6.87
Cynicism Toward Relationships*	24.46	5.31	22.87	5.16
Cynicism Toward Human Nature	23.81	4.19	23.30	4.48
Cynicism Toward Love	16.70	4.32	15.93	3.99
Total SIC*	100.59	15.58	96.72	16.51

Note: * Signifies a significant gender difference.

the past, and the respondent's present relationship status was investigated. No main effects were found for having experienced a painful breakup, or for being presently in a relationship. No interaction was observed. Using cynicism toward relationships as the dependent variable in an identical model, an interaction effect was found, $F(1, 316) = 4.42$, $p = .036$. For those not presently in a relationship, respondents who had experienced a painful breakup in the past had a higher cynicism toward relationships score ($M = 24.88$, $SD = 5.22$) than those who had not experienced a painful breakup ($M = 22.55$, $SD = 5.08$). For those presently in a relationship there was little difference in cynicism toward relationships for those who had experienced a painful breakup ($M = 22.86$, $SD = 5.00$) versus those who had not ($M = 23.29$, $SD = 5.77$). Figure 2 shows this interaction in graphical form. The same analysis using cynicism toward love revealed no main effect for having experienced a painful breakup, and no interaction, but a main effect for present relationship status was found, $F(1, 312) = 6.66$, $p = .010$. For those presently in a relationship the mean cynicism toward love score was lower ($M = 15.66$, $SD = 3.95$) than for those who were not ($M = 17.00$, $SD = 4.21$).

Also of interest, as in Phase One was age and the number of times married and their relationship to cynicism scores. Table 9 shows the correlations for those variables

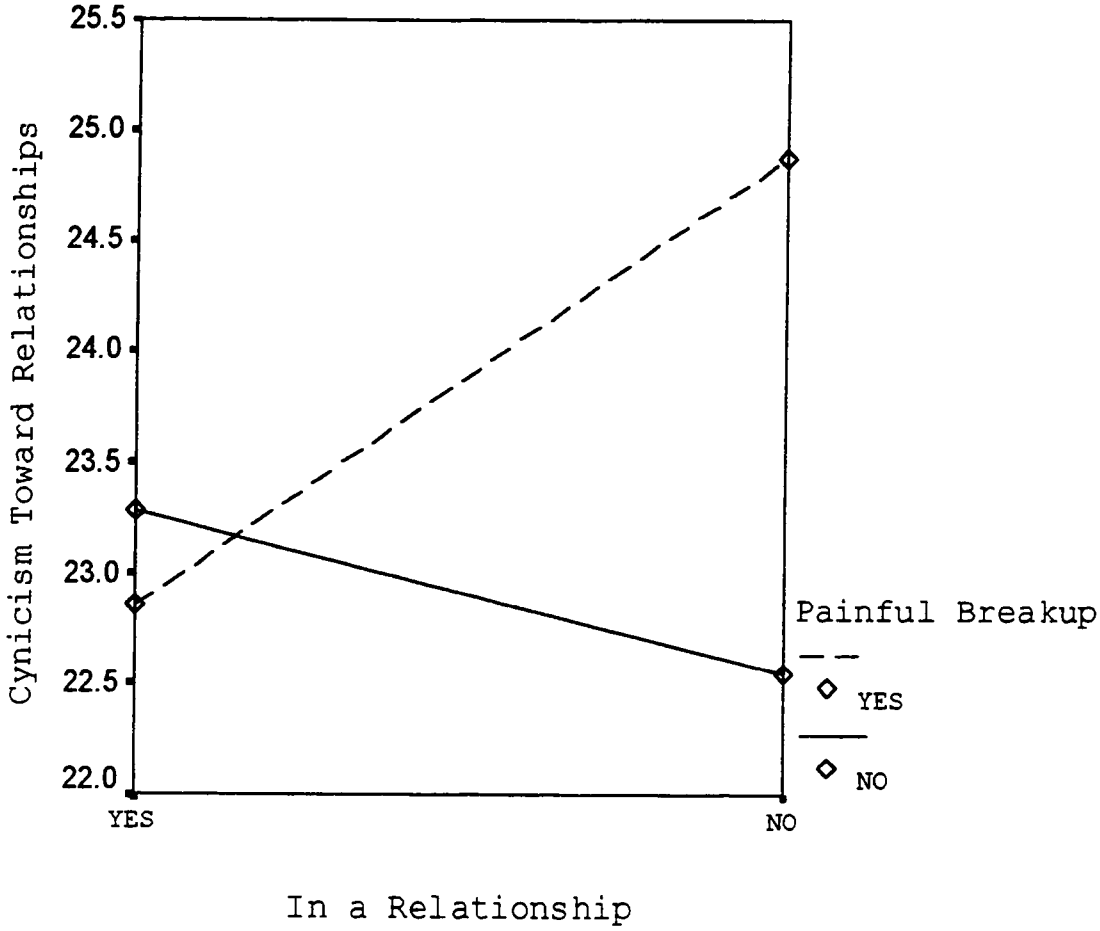

Figure 2: Cynicism Toward Relationships By Relationship Status and Experience With Painful Breakups

Table 9

Correlations for Age, Times Married, Final SIC Total Scores and Subscales

	Age	Tmarr	CynBeh	CynRel	CynHum	CynLuv	CynTot
Age	--	.808**	-.122*	-.023	-.114*	-.055	-.106
Tmarr		--	-.208**	-.028	-.126*	-.149*	-.169**
CynBeh			--	.486**	.526**	.501**	.838**
CynRel				--	.518**	.491**	.791**
CynHum					--	.442**	.766**
CynLuv						--	.745**

Note: ** Correlation is significant at the 0.01 level.
* Correlation is significant at the 0.05 level.

as well as the correlations between the cynicism subscales. All subscales were highly correlated. As can be seen, age was negatively related to cynical behavior justification, and cynicism toward human nature. The number of times married was negatively related to total cynicism, and all the SIC subscales except cynicism toward relationships.

Convergent and Discriminant Validity Measures

Table 10 shows the comparisons of the SIC and its subscales, with the validity measures chosen for this study. The first five scales listed in Table 10 (Cynicism[a], Human Nature, Cynicism[c], Mysanthropy, and Suspicion) are the primary convergent measures, and as can be seen, all were highly positively correlated to the total SIC score. The following three scales (Anomia, Alienation, and Machiavellianism) are the secondary convergent measures. Alienation and Machiavellianism were both consistent with the predicted intermediate levels of association, however, the anomia scale was more highly related in a positive direction to the SIC than were any of the primary measures of convergence. As predicted, four of the five discriminant measures (Belief in a Just World, Generalized Trust, Partner Trust, and Life Satisfaction) were all negatively related to the overall SIC. Also as expected, the correlation of the SIC with the Snyder (1995) Hope Scale did not reach significance. The SIC subscales of Cynical Behavior

Table 10
Correlations Between Validity Measures and the SIC Totals and Subscales

	CynTot	CynBeh	CynRel	CynHum	CynLuv
Cynicism[a]	.61**	.54**	.44**	.58**	.37**
Human Nature[b]	.62**	.55**	.46**	.53**	.41**
Cynicism[c]	.61**	.59**	.42**	.47**	.39**
Mysanthropy[d]	.58**	.54**	.37**	.50**	.37**
Suspicion[e]	.62**	.56**	.42**	.44**	.52**
Anomia[f]	.65**	.55**	.45**	.49**	.52**
Alienation[g]	.43**	.32**	.29**	.32**	.47**
Machiavellianism[h]	.31**	.28**	.28**	.22**	.16*
Hope[i]	-.09	.00	.00	-.03	-.29**
Just World[j]	-.35**	-.28**	-.26**	-.33**	-.25**
Generalized Trust[k]	-.46**	-.43**	-.25**	-.30**	-.43**
Partner Trust[l]	-.48**	-.23**	-.50**	-.29**	-.55**
Life Satisfaction[m]	-.28**	-.17**	-.25**	-.18**	-.28**

Notes: * Correlation is significant at the $p < .05$ level.
** Correlation is significant at the $p < .01$ level.
[a] Subscale of the Cook & Medley (1954) Hostility Inventory
[b] Wrightsman's (1974) Philosophies of Human Nature Scale
[c] Subscale of Jackson & Messick's (1970) Differential Personality Inventory (DPI)
[d] Rosenberg's (1957) Faith in People Scale
[e] Suspicion subscale of the Buss & Durkee (1957) Hostility Inventory
[f] Srole's (1956) Anomia Scale
[g] Interpersonal Relations subscale of the Maddi (1979) Alienation Test
[h] Mach V scale, Christie & Geis (1970)
[i] Snyder's (1995) Hope Scale
[j] Rubin & Peplau's (1975) Belief in a Just World Scale
[k] Couch, Adams & Jones (1996), Trust Inventory
[l] Couch, Adams & Jones (1996), Trust Inventory
[m] Diener's (1985) Satisfaction With Life Scale

Justification, Cynicism Toward Relationships, and Cynicism Toward Human Nature showed patterns of correlations similar to those observed in regard to the total SIC score, with the highest relationships apparent in regard to the primary measures, and with the Srole (1956) Anomia scale also reaching levels of primary convergence. Likewise, no significant relationship was found between those subscales of the SIC and the Snyder (1995) Hope Scale. Although the pattern of correlations were similar for the SIC Cynicism Toward Love subscale, two exceptions were observed. In addition to the Anomie Scale, alienation was also related to Cynicism Toward Love at levels that could be considered primary convergence. In an unexpected finding, optimism (as measured by Snyder's (1995) Hope Scale) and Cynicism Toward Love showed a highly significant inverse relationship.

Discussion

Phase Two of the study also indicated that the development of the SIC has merit, and similar to findings in Phase One, the utility of the scale was demonstrated. In an initial examination of the 47 surviving items from Phase One, plus the 13 experimental items, a high degree of internal consistency was found. When items were excluded for insufficient corrected item-total correlations, a resultant scale of 49 items also showed a high level of reliability.

As in the previous study, a variety of extraction methods were employed and one solution utilizing the generalized least squares method was decided upon. After excluding items for multiple loadings a four-factor solution that resembled the solution in Phase One was found. This solution was comparable to the first in variance explained but consisted of only four subscales, and a much clearer structure that more closely followed the theoretical framework established at the outset. Furthermore, beyond the expected factors of Cynicism Toward Human Nature, Cynicism Toward Relationships, and Cynical Behavior Justification, the additional factor of Cynicism Toward Love showed some discriminant value in terms of optimism and alienation. An examination of the internal consistency of each of the four factors showed good reliability (alpha). This is especially so considering the few items in each subscale. There was an increase in the mean inter-item correlations in individual factors compared to Phase One. As in Phase One, the criterion item performed at high levels with the total cynicism score, and with individual subscales as well.

Results regarding the biographic variables were also similar to those in Phase One. Men scored higher than women on the total SIC score, Cynicism Toward Relationships, Cynical Behavior Justification, Cynicism Toward Human Nature, and Cynicism Toward Love, but only the total SIC

scores and Cynicism Toward Relationships reached significance. Considering both studies, the cynicism toward relationships items were an important contributor to the utility of the SIC.

High cynicism scorers in Phase Two also reported attending church significantly fewer days per year than low scorers, and were presently in relationships less than half as long, however the level of significance was marginal for the latter analysis in this sample. The strength of the difference in study one, along with the marginal difference in study two suggest that there is likely a true difference. The failure to reach significance could be an artifact of the present sample. However, the only known differences between the two samples were the semester in which the questionnaires were administered, with Phase One occurring in Fall and Phase Two occurring in the Spring, and a larger proportion of men in sample two (42% versus 32%).

Unlike Phase One in which high cynicism scorers reported significantly less quality in the relationship with their mothers, no effect for cynicism was found in Phase Two. Their were no effects for gender and no interactions were found.

The effects of having experienced painful breakups in the past, and the present relationship status of respondents showed no main effects or interactions for total cynicism

scores. However the interaction effect described above, with Cynicism Toward Relationships scores as the dependent variable suggests that there is utility in the subscale beyond the total cynicism scores. Similarly, the subscale of Cynicism Toward love showed apparent utility in the main effect that was found for present relationship status. The utility of a focus on relationships, was also apparent in the correlations with age and times married in Phase Two, however the direction of the relationship further refuted the original assumption that as age and experience with negative events increased cynicism. As in Phase One, it is again suggested that the failure may be due to the sample having a lack of life-experience compared to the original betrayal sample.

An examination of the validity measures and their relationship to total cynicism scores and its subscales for the most part produced the predicted pattern of correlations. The surprisingly strong relationship between all SIC scores and Srole's 1956) Anomia Scale was unexpected. Perhaps this can be explained by the rather unconscious aspects of anomie. As Durkheim (1951) showed, people are quite unaware of their anomie. Cynics may be appropriately more cynical in an ever-changing world, and are not likely aware of all of the things that contribute to their levels of cynicism.

The subscales of the SIC may in the future prove to be especially useful when examining relationships in terms of alienation and optimism. An unexpectedly strong relationship between alienation and Cynicism Toward love could suggest that those who are especially cynical in regard to love feel more alienated as a result, or their high levels of alienation may interfere with finding satisfying intimate relationships. Cynicism Toward Love was the only SIC subscale related to optimism. Those that show high levels of cynicism toward love may feel little optimism that intimacy can be attained, especially in light of the likelihood of experiencing feelings of alienation.

CHAPTER IV

PHASE THREE: BEHAVIORAL CORRELATES OF CYNICISM

Problem

As defined above, cynicism is the attitude or belief that humans are basically self-serving and untrustworthy, and importantly that the cynic often believes he/she is able to detect the real nature and motives of people where others cannot. Cynics have also been shown to be tense and anxious (Clark, 1994), and often to be disparaging of others (Hardy & Smith, 1988). This researcher is unaware of any attempt to relate specific facial or body mannerisms to cynicism scores that exists in the literature. Given the paucity of research into observable behaviors, the experimenter attempted to identify important behavioral correlates for hypothesis testing. Since it is believed that cynical attitudes have the power to affect how cynical people perceive others, and how the cynic is perceived by others, they could be of particular importance in romantic relationships. In short, the cynic may unknowingly participate in producing the outcomes that his/her cynical expectations would predict. This was seen to be of the utmost importance by the researcher, and provides a theoretical context for Phase Three.

Most of us believe we know cynicism when we see it, however it is more difficult to express the actual behaviors

that cause us to arrive at that assessment of others. This study attempted to identify variables that might be important cues as to the demeanor of the cynic. Some of the variables proposed for measure were therefore theoretical in nature.

Phase Three had two primary goals. The first was to further show the utility of the SIC in discriminating between highly cynical respondents and low-cynics. The second goal was to show the convergence of the SIC scores with hypothesized behavioral correlates.

Two themes regarding cynical attitudes guided Phase Three. Cynics display behaviors and attitudes that 1) are overt and quantifiable, and 2) create the impression that they are cynical as seen by those who observe them. Six overt and quantifiable variables were identified for analyses: the number of direct suggestions for a breakup, or a suggestion that the respondent would end the relationship if they were in that situation; number of direct references to the bad nature of people or their lack of trustworthiness; brevity of response, measured in total accumulated time for all speech in the video; number of times the respondent blames the victim (e.g., seeing them as naive or gullible and/or insulting, ridiculing or belittling the victim); number of mannerisms of distaste or disgust (e.g., smirks, sneers, snarls, scoffs); eye contact,

measured in time spent looking into the "eye" of the video camera. Four impressionistic variables (measured in a 1-5, strongly disagree to strongly agree Likert-type format) were identified: the likelihood that raters would see this person's behavior as attractive in a partner; the likelihood that they would seek advice or counseling from this person if they were in a situation similar to the one described in the scenario; the extent to which they believed the respondent displayed sarcasm; and the extent to which they believed the respondent displayed a cynical attitude.

It was hypothesized that participants with high cynicism scores would, as opposed to low-cynics: offer more suggestions of breakup; display more mannerisms of disgust; spend more time talking about the hypothetical situation; would blame the victim more frequently; would make more negative references to human nature; and spend less time making "eye contact" with the video camera

In terms of impressionistic variables, it was hypothesized that the mean impression ratings of cynical respondents, as given by lab assistants would be lower for desirability as a partner, and for the respondent's being someone they would seek out for advice/counseling, but higher in terms of sarcasm, and cynicism.

Method and Results

Identification of High and Low SIC Scorers

Of the 328 participants in Phase Two, 100 were identified as being either one standard deviation above or below the mean on their total cynicism score, as measured by the 36 item scale from Phase One. Fifty-two were categorized as low cynicism scorers, with a mean Z score of -1.48, and a median score of -1.38. Seven respondents scored between 2 and 3 standard deviations below the mean, and 45 scored between 1 and 2. Forty-eight respondents were categorized as high scorers, with a mean Z score of 1.61, and a median of 1.52. One respondent scored over 3 standard deviations above the mean, nine scored between 2 and 3, and 39 scored between 1 and 2 standard deviations above the mean. Of the potential participants contacted by the researcher, 14 high cynics and 15 low cynics agreed to participate in the follow-up study.

Subjects

Participants were 29 students registered in Introductory Psychology classes. With the administration of the materials in Phase Two, in addition to completing the revised SIC and the validity measures, respondents were asked if they would be interested in participating in an extension of the study they had just completed. Those chosen to participate in the follow-up study were offered their choice of extra credit, or a five-dollar cash payment. The

choice was intended to provide an incentive for those who had already received the maximum extra credit allowable for the course.

Procedures

Participants were brought into Austin Peay suite 215, a room especially configured for video-taping, where the nature of the procedure for the study was reviewed, informing the subjects that they would be video-taped and asking their permission to allow viewing of the tape by research assistants. Each participant was asked to read and sign an informed consent form. Participants were told that they were free to withdraw from the experiment at any time without penalty, although they were required to complete the procedure to receive credit or the cash incentive. If they consented to the study, the subjects were situated in front of a fixed video camera. All subjects were seated in an identical fashion, relative to room surroundings and the video equipment. The experimenter pointed out the video equipment and encouraged the participants to relax, reassuring them that their responses would be kept confidential, and that there were no correct or incorrect responses.

The experimenter asked the subjects to carefully read a written hypothetical scenario regarding a fictitious person, of the same sex as the participant, who was experiencing

doubts about the faithfulness of a romantic partner. They were instructed to imagine that the person was a close friend of theirs. The subjects were then told that they would speak to the camera as if the person would be hearing their advice later. The experimenter asked the subjects if they had any questions before the session began. The video tape was started and the experimenter left the room while the tape ran for two full minutes. There was no further prodding or explanation as to what was expected of the subject.

Hypothetical Scenarios. The respective hypothetical scenarios for both male and female subjects were as follows:

> Male Subjects: Imagine for a moment that Jim is a close friend of yours. Jim has been seeing his present girlfriend Jane for sometime, in an exclusive romantic relationship. He is very serious about the relationship. Over the last week, Jane has become more and more distant, and Jim suspects that Jane is seeing her ex-boyfriend. Last night Jane failed to show up at Jim's house for a date that was made the night before. Throughout the evening and until 3:00 AM, Jane was not home to answer the phone, and on Jim's way to work he noticed that Jane's car was still not in her driveway. Jim is extremely upset. He has asked for your advice and counseling as to what he should do about the

situation. Please face the video camera and do your best to give Jim your best advice and counseling.

Female Subjects: Imagine for a moment that Jan is a close friend of yours. Jan has been seeing her present boyfriend Joe for sometime, in an exclusive romantic relationship. She is very serious about the relationship. Over the last week, Joe has become more and more distant, and Jan suspects that Joe is seeing his ex-girlfriend. Last night Joe failed to show up at Jan's house for a date that was made the night before. Throughout the evening and until 3:00 AM, Joe was not home to answer the phone, and on Jan's way to work she noticed that Joe's car was still not in his driveway. Jan is extremely upset. She has asked for your advice and counseling as to what she should do about the situation. Please face the video camera and do your best to give Jan your best advice and counseling.

Data Coding. Both overt/quantifiable and impressionistic variables were coded and rated by four research assistants. The research assistants were asked first to give their impressionistic ratings to the video-taped responses of the subjects. This insured that the process of coding overt/quantifiable variables did not

influence their impressions.

After the research assistants had given their responses for the impressionistic variables for the subjects on video tape, they participated in training sessions for coding of O/C variables. Training consisted of the assistants responding to several protocols that did not reach the criterion for inclusion in the experiment, but for which data had been collected. This served both as training and as piloting, and was intended to identify unforeseen problems in coding and quantifying. The research assistants were then asked to rate each experimental subject on the O/C variables. It was decided that only two raters were required for the variables that would be timed, therefore, brevity of response was scored by two assistants, and eye contact was scored by the remaining two assistants.

Analyses

Two of the overt/quantifiable variables had very few or no occurrences in any of the video-taped protocols: negative references toward human nature, and blaming the victim. Therefore, these two variables were not analyzed.

Inter-rater Reliability. The remaining four O/C variables, and four impressionistic variables were first assessed for inter-rater reliability. Chronbach's alpha and the mean inter-item correlation (representing the inter-judge correlation) between the four raters were calculated

for each variable. Calculations were made first for the four impressionistic variables. The likelihood that raters would see this person's behavior as being attractive in a partner showed an alpha of .69 and a mean inter-item correlation of .37. The likelihood that the rater would seek this person out for advice showed an alpha of .81 and a mean inter-item correlation of .52. The extent to which they believed the respondent displayed sarcasm showed an alpha of .79 and a mean inter-item correlation of .53. The extent to which they believed the respondent displayed a cynical attitude showed an alpha of .77 and a mean inter-item correlation of .46.

The times scored for brevity of response and eye contact were correlated between the two raters. The correlation for eye contact was highly significant, $r(28) = .95$, $p < .001$. The correlation for brevity of response was also highly significant, $r(28) = .99$, $p < .001$.

Regarding the remaining two overt and quantifiable variables, mannerisms of disgust showed an alpha of .84 and a mean inter-item correlation of .65. Suggestions for a breakup showed an alpha of .97 and a mean inter-item correlation of .90.

Hypothesis Testing. A series of two-factor (gender by high/low cynicism) analyses of variance were performed for each of the remaining eight variables. The mean for the four ratings made by assistants was used as the value for testing

hypotheses in regard to timed variables and impressionistic variables. For the two variables that represented counts of specific occurrences of behaviors (mannerisms of disgust, suggestions for a breakup) it was decided that the median rating made by assistants would represent the most "correct" number of occurrences.

A significant interaction was found for gender and cynicism in terms of the number of suggestions for a breakup, $F(1, 28) = 7.52$, $p = .011$ (See Figure 3). There was little difference between men and women for the low cynicism group ($M = .88$, $SD = 1.75$ versus $M = .59$, $SD = .58$), but in the high cynicism group women were much more likely to suggest a breakup than were men ($M = 2.25$, $SD = 1.54$ versus $M = .31$, $SD = .46$).

A significant interaction was found for the level of sarcasm shown $F(1, 28) = 4.89$, $p = .036$ (See Figure 4). Men scoring low on cynicism were judged as being more sarcastic ($M = 2.06$, $SD = .66$) than women who scored low on cynicism ($M = 1.55$, $SD = .48$). For high cynicism scorers the opposite pattern was observed: Women were judged as being more sarcastic ($M = 2.42$, $SD = 1.21$) than men ($M = 1.69$, $SD = .46$).

For the variable of eye contact no interaction was found and no main effect was found for cynicism, although eye contact was different in the hypothesized direction

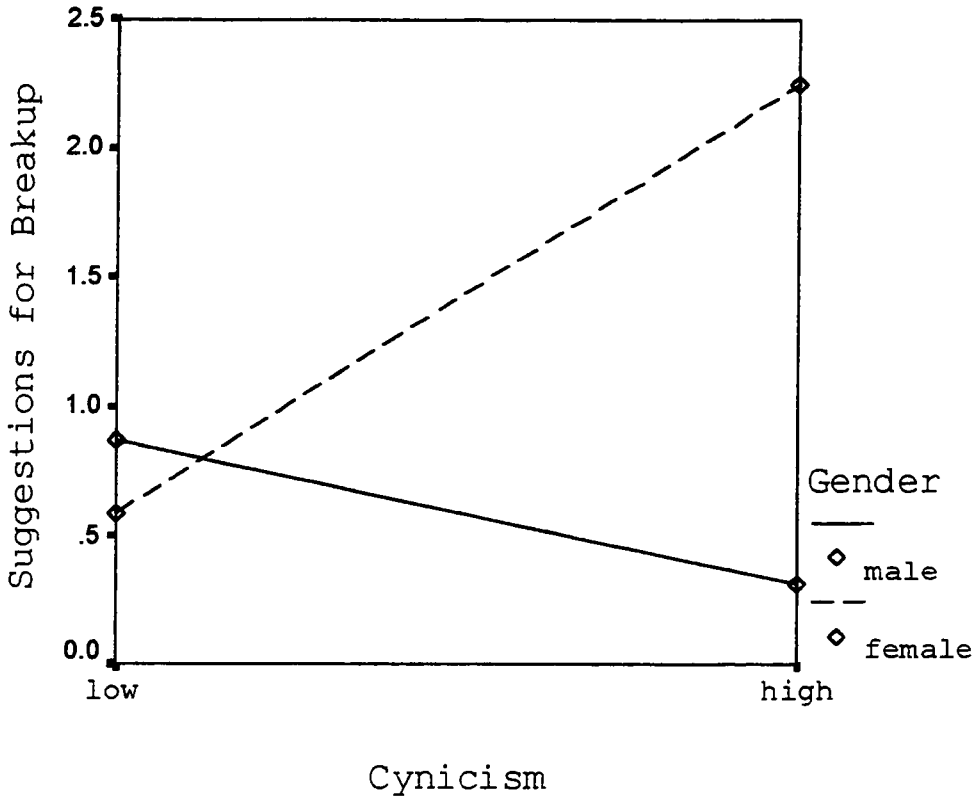

Figure 3: Suggestions For Breakup By Level Of Cynicism and Gender

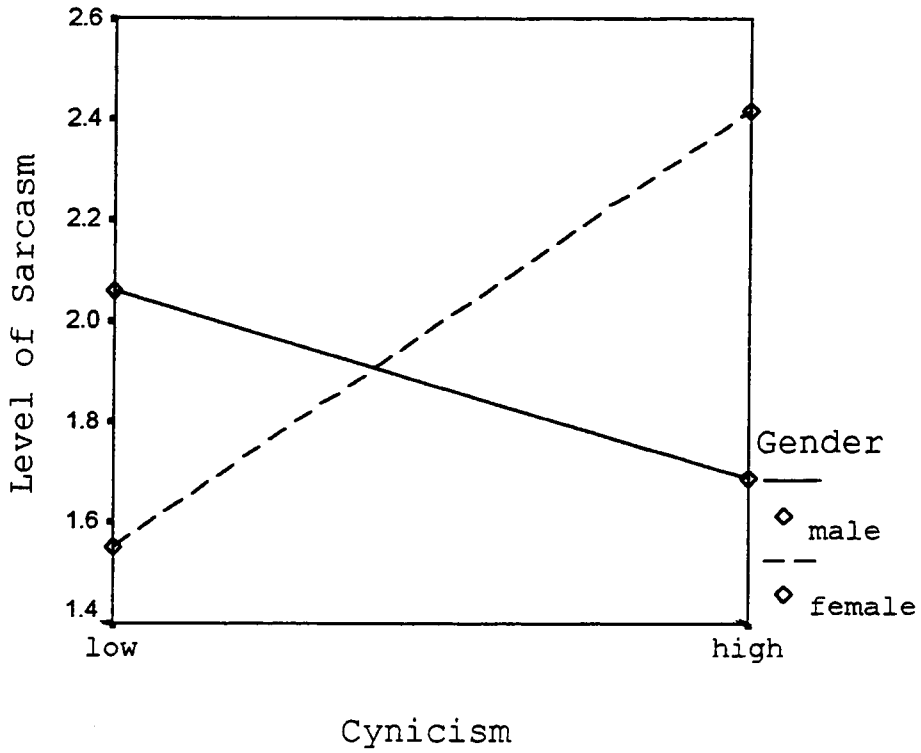

Figure 4: Level Of Sarcasm By Level Of Cynicism and Gender

(cynics spent less time looking into the camera). A main effect was found for gender, $F(1, 28) = 6.46$, $p = .018$. Women looked directly into the camera for longer periods (M = 32.21 seconds, SD = 21.60) than men (M = 12.92 seconds, SD = 10.12).

For the remaining variables no significant interactions, and no reliable main effects were observed. However, all the variables showed differences in the hypothesized directions for cynicism: Mannerisms of disgust were more frequent for cynics; cynics were seen as less attractive as a partner; cynics were less likely to be sought out for advice; cynics were seen more as displaying a cynical attitude, and cynics spent more time talking about the hypothetical incident.

Discussion

The utility of the SIC as an instrument to identify high and low levels of cynicism in respondents was further demonstrated in Phase Three of this project. A wide range of scores in terms of standard deviations suggest that there is sufficient variability in SIC scores to make categorization possible. In considering future research, the results of this study suggest that the yield of participants scoring either high or low should be around thirty percent with high and low scorers occurring in relatively equal numbers.

The variables chosen were easily recognized by the raters. A high degree of reliability between raters was observed for all overt/quantifiable variables and all impressionistic variables. So in future research, it has been shown that hypothetical behavioral correlates can be measured accurately.

On the other hand, the existence, or at least the measurement of overt/quantifiable variables posed a larger problem than expected. None of the quantifiable variables resulted in significant effects in terms of high and low cynicism. Further research should examine ways to improve and refine the process, establish other variables that are possible correlates, and investigate other hypothetical scenarios or manipulations that could either support or further refute the existence of overt/quantifiable behaviors relative to cynicism.

In terms of hypothesis testing it was not the original intention to make gender a primary issue in the project, however, an examination of gender showed important interactions that in essence were washed out in comparisons of only high and low cynicism, that is, differences existed that were not apparent without the use of gender as an independent variable.

While overall differences in suggestions for a break up in high versus low cynicism scorers were illusive, the

interactions found suggest that cynical women may be more willing to put the attitude into practice in decision making. It may be that women may have more reason in our society to display this kind of vigilance. This could be a behavioral difference of psychological origin, but also may come to be by virtue of a higher level of engagement in the experimental task. Women after all did spend more time facing the hypothetical "person" involved, (facing the camera). Likewise women may have come into the experimental task with more experience and willingness to participate in such personal counseling among their peers.

Apparently cynical women are more likely to exhibit the sarcasm that goes with the construct. However, the level of sarcasm may reflect the need for vigilance suggested in examining suggestions for a breakup.

The failure of the impression of cynicism, and other variables to show significant differences was disappointing, however, cynicism is often misinterpreted or equated with sarcasm. Also, the training given to raters in regard to the identification of cynicism may not have been sufficient to tease out the differences if they did exist. What is encouraging for future behavioral studies is that all of these variables, including cynicism were different in the hypothesized directions, and the problem could have been one of insufficient sample size.

CHAPTER V

OVERALL DISCUSSION

In Phase One, the SIC as a good measure of cynicism was shown. It was reliable in terms of internal consistency, and test-retest properties indicated that the SIC produces scores that are stable over time. The factor analysis in Phase One showed that a focus on relationships is plausible. The factors of cynicism toward human nature, cynicism toward relationships, and cynicism as a behavioral justification were found, all of which supported the original theoretical framework. In addition, the factors of cynicism toward love, anomic cynicism, and cynical mistrust of partners were found.

The utility of the SIC in research was also shown. Consistent with prior research, men were more cynical than women. Behaviors assumed to be associated with cynicism were also shown to vary with the level of cynicism. High cynicism scorers attended church less often, reported less than positive relationships with their mothers, and had been involved in their present relationship less than half as long as low scorers. Respondents who had had past experiences with painful breakups showed higher levels of both total cynicism and cynicism toward relationships. However, being in a relationship at the time of their response to the questionnaire somewhat mediated the effects

of those bad experiences. No support was found in Phase One for the original proposition that cynicism grows over time.

Phase Two also showed the SIC to be an internally consistent measurement of cynicism. In the factor analysis the scale was further refined, producing a factor structure more closely resembling the initial theoretical structure. The factors of cynicism toward human nature, cynicism toward relationships, and cynical behavior justification were found, and one additional factor of cynicism toward love. The utility of a focus on cynicism toward relationships and cynicism toward love was therefore further supported.

It was also shown that the SIC exhibits adequate convergent and discriminant validity, being highly related to similar measures that were originally intended to tap cynicism, and also similar to those that were created to measure constructs such as hostility: instruments that were later found to be more appropriately labeled as measures of cynicism or cynical hostility. Construct validity was also bolstered by the finding that the SIC was not related to optimism, and in its negative relationships to measures of more positive attitudes such as trust and a belief in a just world.

Further evidence for the utility of the SIC in research was found in Phase Two. Similar to the results of Phase One, men scored higher than women on all cynicism measures. High

cynicism scorers attended church less often, and were presently involved in shorter lived relationships. Respondents who had experienced a painful breakup in the past had higher cynicism toward relationships scores, but there was a mediating effect for being in a relationship at the time of the response to the questionnaire.

In Phase Three, the SIC was shown to effectively distinguish between high and low cynics. Further evidence of ecological validity was garnered in terms of two of the hypothesized variables, at least for women in the sample. Highly cynical women were more likely to make suggestions for a breakup in response to the hypothetical situation, and also were rated as being more sarcastic in their response to the scenario. No significant differences on those variables were apparent in men in this sample.

The relationship of the SIC and the Snyder (1995) Hope Scale warrants reconsideration at this point in terms of reversed scored items. The Hope scale is purported to be a measure of optimism, and people often believe that optimism is the opposite of pessimism. However, pessimism predicts hostility and cynicism while optimism does not (Plomin et al., 1992). Similarly, as expected and noted above, the Snyder scale was unrelated to SIC scores. This is informative in regard to the lack of internal reliability of reverse scored items in the SIC. In the original version of

the SIC, of the eleven reverse scored items written for the original item pool in Phase One, all except one were eventually lost to low communalities observed in the two studies. It may be that the cynic is less contemptuous of positive attitudes toward people than he or she is ambivalent, while ready and willing to endorse negatively worded items. Further attempts should be made to explore that possibility.

The negative relationship observed in the studies described above between cynicism and the number of times married may be a function of range restriction in the sample. College students who are married, and therefore who contributed in great degree to the correlation, have not likely experienced the negativity associated with divorce. They may also be subject to the mediating effects of being presently in a relationship, as was described above, having a decreased likelihood of dissolution of the relationship while still in college. Future research should include a broader range of samples.

The general issue of cynicism as a function of age needs further exploration as well. Consistent with the finding of Scherwitz et al. (1991), who reported that younger respondents showed more hostility than older respondents, the original proposition that increased age was related to increased cynicism was not supported in these

studies. However, the theoretical framework was informative in that regard, showing a negative relationship to age and cynical behavior justification. Apparently the young feel more justified in their negative attitudes. Cross-sectional comparisons to further investigate the possibility would be of great interest.

As reported in previous research, men were more cynical than women in these studies. However, in one case a reversal of this pattern emerged, in that women appeared more willing or able to put cynical attitudes into practice. Women were much more likely than men to suggest a breakup in response to the hypothetical situation presented to them in Phase Three. They were also rated as more sarcastic in regard to the hypothetical situation. If these findings prove to be replicable in future studies, the implication is that women may be more able to act on their beliefs, or may show more consistency between feelings and actions. It may also suggest that they are more cautious. In a modern context of relative male dominance it may be necessary for women to be more vigilant, or more willing to take action to protect their interests.

Implications and Limitations

As is the case in most research, new questions were generated by this project. These studies have therefore

provided many opportunities for future research. Indications of reliability, factor structure, and validity are not necessarily endpoints in measurement research. Reliability should be reassessed further in subsequent studies, as should factor structure, perhaps with the inclusion and consideration of additional experimental items. Validity is also an ongoing pursuit, and further evidence should be gathered with additional criteria. For example, in future studies a measure of pessimism should be included to further clarify the relationship between the SIC and optimism/pessimism. The unexpected high correlation between the SIC and anomie will require further examination as well. Both anomie and cynicism may be a direct result of increased rates of divorce in modern western society, as Cashion (1970) has suggested in regard to the former.

One area of potential future research is tied to two questions that one might ask: "Is cynicism always bad?"; "Are there areas of employment, such as retail security, tax and insurance investigation, or police work in which the cynic would excel by virtue of their cynicism?" As for the latter, a distinction should be made between proper professional training and cynicism. For example, police do not necessarily enter the line of work being more cynical, in fact they come to police work typically with marked idealization for the job and begin to lose their faith in

people and in administrative systems as their training progresses (Farmer, 1977; Ulmer, 1992; Crank et al., 1987; Rafky et al., 1976; Stradling et al., 1993). They are similarly trained to be cautious for their own protection (Chandler and Jones, 1979). Likewise tax and insurance investigators, and security personnel are highly trained to recognize illegal behavior. It should be recalled that highly cynical people have very poor interactions in their dealings with others. They not only show high levels of negativity in social interaction (Allred & Smith, 1991; Han et al., 1995; Fontana et al., 1989), but also seem incapable of accepting or giving support (Allred & Smith, 1991), and are not readily offered support (Skoe & Ksionzky, 1985). It requires no great leap of faith to think the same would be true for cooperation in the workplace, especially considering that cynics tend to believe that workers are exploited (Guastello et al., 1992), and that high levels of cynicism are related to job burnout (Stearns & Moore, 1993), and a reduction in quality of life (Aston & Lavery, 1993). I would suggest that in the context of work, training, wisdom and caution are preferable, and likely more functional than high levels of cynicism. This of course provides an empirical question.

There is also a great self-fulfilling potential in cynical attitudes. There is direct evidence that we tend to

assimilate confirmatory evidence for stereotypical expectations, and ignore disconfirming behaviors (Arcuri & Cadinu, 1997; Lockwood, 1992), and that there is automaticity attached to stereotypical beliefs (Bargh et al., 1996). For example, teachers show self-fulfilling expectancies in regard to their students' math scores (Jussim & Eccles, 1992), and student expectations toward peers who they are led to believe suffer from learning disabilities manifest in actual negative behavior toward the targets (Harris, Milich, Corbitt, Hoover & Brady, 1992). Specifically regarding relationships, the idealization of partners leads to more happiness on the part of both partners, fewer conflicts, less doubt about the long-term viability of the relationship, and a positive self-concept on the part of the idealized person (Murray et al., 1996).

Given the self-fulfilling potential of cynicism, future research should explore the direct effect that cynical attitudes have on peoples' lives, particularly the possible effects that cynicism toward relationships may have on the likelihood of satisfying relations with others. If cynicism can grow out of mistreatment in fields of training (Wolf et al., 1991) it stands to reason that the perception of mistreatment in relationships may produce cynicism as well. If cynics are more prone to anger arousal, finding themselves in anger provoking situations, and having a more

hostile outlook as Houston and Vavak (1991) found, there seems to be clear implications in the overall viability of relationships for cynics as opposed to non-cynical people.

The social developmental side of the construct would also be of great interest: the ways in which the attitude develops. Factors such as parental rejection and overprotectiveness apparently lead to increased levels of hostility and cynicism (Meesters et al., 1995). Would such parental practices also lead to higher levels of cynicism toward relationships, or more troubled relationships? If college students who have seen their parents divorce have a more pessimistic view of their future relationships than those who have not, especially in situations of high parental conflict (Franklin, Janoff-Bulman, & Roberts, 1990), then it would be of great interest to establish whether or not this leads to more cynicism toward relationships; Does the resultant cynicism lead to more problems in the relationships of children coming from such a situation? Further clarification of the effect of direct experience with divorce on respondents themselves would also be of great interest.

The three studies described above utilized samples of college students, and many believe that such research is not generalizable to the general population, both in terms of level of education and age. While it is known that the

educated are typically less cynical than the uneducated (Grabb, 1979; Davis, 1982), these samples have shown a good range of internal variability, with as many subjects scoring high relative to their peers as having scored low. Furthermore, most research into cynicism has examined older populations; those already in professional settings, in the work force, and in programs of training. It would seem appropriate therefore to take such samples of college students. Granted, there would be great interest in a broad cross-sectional sample in regard to cynicism. These studies have taken a preliminary step in the development of a measure of cynicism, and also provide an interesting new area to explore in terms of cynicism toward relationships relative to demographic groups. Given the importance of cynicism in the social and political realms, and the obvious effects of cohort and time, comparisons of college students, young adults, middle-aged, and the elderly would be of great interest in establishing the temporality of the construct, as well as making clearer distinctions between the educated and the less educated. Longitudinal data would be of great interest as well. Ideally future studies could, and perhaps should focus on following relatively young respondents throughout their adolescence, through the college years and into adulthood.

Self-report methods are also criticized for failing to

capture overt behavior, and for relying too heavily on perceptions and recollections that may not be accurate. Perceptions are exactly what are at work in the manifestation of cynicism, and regardless of their accuracy or origin, it is these perceptions which affect our behavior. This study also attempted to not only capture self-reports but also began the extension of the study of cynicism into the collection of laboratory generated behavioral data. The hypothetical scenario used in these studies are of course limited in their ability to generate cynical responses. Future research can not only vary greatly the range of hypothetical situations, but also can study cynicism as a function of actual betrayal incidents. These studies were designed to precede such research with the development of an instrument broad in applicability.

The methods used in this study may be the only way in which the construct can be studied ethically. Cynicism is an attitude, and as such, it likely develops over periods of time, perhaps as the result of many incidents, as a process of learning in childhood, or as an outcome of particular parental strategies. Cynicism may also be tied to a constitutional propensity toward negativity. Therefore it is impossible to induce the attitude in the laboratory for true experimentation. If it were possible, the likelihood of producing long-term negative effects in the lives of

subjects would make the manipulation unethical.

Finally, self-report methods are often criticized for being subject to social desirability bias. Although response sets are a potential problem, in these studies they were minimized by not having the researcher present when respondents answered the questionnaire, a problem that could preclude other methods such as detailed interviewing.

Clearly the idea that cynicism should be viewed as a unique construct has been strengthened by these studies. The construct is a robust one with great potential in social psychological research, and has yielded well to scaling.

The study of cynicism as a personality construct has historically been limited to a focus on human nature, to specific organizations, and to its impact on cardiovascular health. Beyond the limitations acknowledged above, the studies described in this document have made a step toward expanding the study of cynicism into what this author believes is a well founded focus on relationships. They have laid groundwork in the development of a valid and reliable measure of cynicism; They have provided findings that have implications in social behaviors where cynicism may be a factor, such as involvement in religious activities. Specific to the area of relationships, they have identified behaviors that are more likely to be seen in highly cynical people, where the cynic may be likely to take inordinate

action in ambiguous situations, perhaps especially for cynical women; They have shown that one's present status in relationships can likely alleviate some cynicism, cynicism which is more apparent in cases where people have experience with painful breakups. It is my belief that these studies have shown great promise for the application of cynical attitudes research to the study of relationships.

REFERENCES

REFERENCES

Aitken, C.J. & Schloss, J.A. (1994). Occupational stress and burnout amongst staff working with people with an intellectual disability. Behavioral Interventions, 9(4), 225-234.

Allred, K.D. & Smith, T.W. (1991). Social cognition in cynical hostility. Cognitive Therapy and Research, 15(5), 399-412 .

Almada, S.J., Zonderman, A.B., Shekelle, R.B., Cyer, A.R., Daviglus, M.L., Costa, P.T. & Stamler, J. (1991). Neuroticism and cynicism and risk of death in middle-aged men: The Western Electric Study. Psychosomatic Medicine, 53, 165-175.

Arcuri, L. & Cadinu, M.R. (1997). Cognitive and affective factors in the development and maintenance of biased intergroup relations. Swiss Journal of Psychology, 56(3), 145-155.

Aston, J. & Lavery, J. (1993). The health of women in paid employment: Effects of quality of work role, social support and cynicism on psychological and physical well-being. Women and Health, 20(3), 1-25.

Austin, E.W. & Pinkleton, B.E. (1995). Positive and negative effects of political disaffection on the less experienced voter. Journal of Broadcasting & Electronic

Media, 39, 215-235.

Barefoot, J.C., Dodge, K.A., Peterson, B.L., Dahlstrom, W.G. & Williams, R.B. (1989). The Cook-Medley hostility scale: Item content and ability to predict survival. Psychosomatic Medicine, 51, 46-57.

Barefoot, J.C., Siegler, I.C., Nowlin, J.B., Peterson, B.L., Haney, T.L. & Williams, R.B. (1987). Suspiciousness, health, and mortality: A follow-up study of 500 older adults. Psychosomatic Medicine, 49, 450-457.

Bargh, J.A., Chen, M. & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. Journal of Personality and Social Psychology, 71(2), 230-244.

Bateman, T.S., Sakano, T. & Fujita, M. (1992). Roger, me and my attitude: Film propaganda and cynicism toward corporate leadership. Journal of Applied Psychology, 77(5), 768-771.

Ben-Porath, Y.S., Shondrick, D.D. & Stafford, K.P. (1995). MMPI-2 and race in a forensic diagnostic sample. Criminal Justice and Behavior, 22(1), 19-32.

Benzvy-Miller, S. & Cole, D.P. (1990). Integrating sentencing and parole. Canadian Journal of Criminology, July 1990, 493-502.

Bing-You, R.G. (1991). Changes in students' attitudes and values during medicine versus surgery clerkships.

Medical Education, 25, 383-388.

Blaney, N.T., Morgan, R.O., Feaster, D., Millon, C. Szapocznik, J. & Eisdorfer, C. (1991). Cynical hostility: A risk factor in HIV-1 infection? Journal of Applied Social Psychology, 21(8), 668-695.

Bryder, T. (1991). Generalized social attitudes and perceptions of youth employment policy-making: A cross-cultural comparison of adolescents in Denmark, Finland, Norway, and Sweden. Political Psychology, 12(3), 431-455.

Burdsal, C. Greenberg, G., Bell, M. & Reynolds, S. (1975). A factor-analytic examination of sexual behaviors and attitudes and marihuana usage. Journal of Clinical Psychology, 31(3), 568-572.

Buss, A.H. & Durkee, A. (1957). An inventory for assessing different kinds of hostility. Journal of Consulting Psychology, 42, 155-162.

Butcher, J.N., Graham, J.R., Williams, C.L. & Ben-Porath, Y.S. (1990). Development and Use of the MMPI-2 Content Scales. Minneapolis: University of Minnesota Press.

Carmelli, D., Rosenman, R.H. & Swan, G.E. (1988). The Cook and Medley HO scale: A heritability analysis of adult male twins. Psychosomatic Medicine, 50, 165-174.

Carmelli, D., Swan, G.E. & Rosenman, R.H. (1990). The heritability of the Cook and Medley hostility scale revisited. In Strube, M.J. (Ed.), Type A Behavior. Newbury

Park, CA.: Sage Publications.

Cashion, B. (1970). Durkheim's concept of anomie and its relationship to divorce. Sociology and Social Research, 55(1), 72-81.

Chandler, E.V. & Jones, C.S. (1979). Cynicism-An inevitability of police work? Journal of Police Science and Administration, 7(1), 65-68.

Christensen, A.J. & Smith, T.W. (1993). Cynical hostility and cardiovascular reactivity during self-disclosure. Psychosomatic Medicine, 55, 193-202.

Christie, R., & Geis, F.L. (1970). Studies in Machiavellianism. New York: Academic Press.

Chun, K-T., & Campbell, J.B. (1974). Dimensionality of the Rotter Interpersonal Trust Scale. Psychological Reports, 35, 1059-1070.

Clark, M.E. (1994). Interpretive limitations of the MMPI-2 anger and cynicism content scales. Journal of Personality Assessment, 63(1), 89-96.

Cook, W.W. & Medley, D.M. (1954). Proposed hostility and pharisaic-virtue scales for the MMPI. Journal of Applied Psychology, 38, 414-418.

Corazzini, J.G. (1977). Trust as a complex multi-dimensional construct. Psychological Reports, 40, 75-80.

Costa, P.T., Zonderman, A.B., McCrae, R.R. & Williams, R.B. (1985). Content and comprehensiveness in the MMPI: An

item factor analysis in a normal adult sample. Journal of Personality and Social Psychology, 48(4), 925-933.

Costa, P.T., Zonderman, A.B., McCrae, R.R. & Williams, R.B. (1986). Cynicism and paranoid alienation in the Cook and Medley HO scale. Psychosomatic Medicine, 48(3/4), 283-285.

Couch, L.L., Adams, J.M. & Jones, W.H. (1996). The assessment of trust orientation. Journal of Personality Assessment, 67, 305-323.

Cozzens, M.D. & Contractor, N.S. (1987). The mediating effects of conflicting information on media skepticism. Communication Research, 14(4), 437-451.

Crank, J.P., Culbertson, R.G., Poole, E.D. & Regoli, R.M. (1987). The measurement of cynicism among police chiefs. Journal of Criminal Justice, 15, 37-48.

Cullen, F.T. & Dubeck, P.J. (1985). The myth of corporate immunity to deterrence: Ideology and the creation of the invincible criminal. Federal Probation, 49(3), 3-9.

Cutrona, C.E. (1982). Transition to college: Loneliness and the process of social adjustment. In L.A. Peplau, & D. Perlman (Eds.), Loneliness: A Sourcebook of Current Theory, Research, and Therapy (pp. 291-309). New York: Wiley.

Cutrona, C.E., & Russell, D.W. (1987). The provisions of social relationships and adaptations to stress. In W.H. Jones, & D. Perlman (Eds.) Advances in Personal

Relationships (pp. 37-67). Greenwich, Conn.: JAI Press.

Davis, J.A. (1982). Achievement variables and class cultures: Family, schooling, job, and forty-nine dependent variables in the cumulative GSS. American Sociological Review, 47, 569-586.

Davis, J.A. (1984). Perspectives of policewomen in Texas and Oklahoma. Journal of Police Science and Administration, 12(4), 395-403.

Dean, A., & Lin, N. (1977). The stress buffering role of social support. Journal of Nervous and Mental Disease, 165(6), 403-417.

Diener, E., Emmons, R.A., Larsen, R.J. & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71-75.

Durkheim, E. (1951). Suicide, a study in sociology: translated by John A. Spaulding and George Simpson. (J.A. Spaulding & G. Simpson, Trans.). Glencoe, Ill.: Free Press. (Original work published 1897)

Edwards, D.J.A. (1984). Perception of personality and social behaviour in different racial groups by black and white university students. South African Journal of Psychology, 14(3), 79-89.

Eli, I. (1984). Professional socialization in dentistry: A longitudinal analysis of changes in students' expected professional rewards. Social Science and Medicine

18(4), 297-302.

Farmer, R.E. (1977). Cynicism: A factor in corrections work. Journal of Criminal Justice, 5, 237-246.

Farrenkopf, T. (1992). What happens to therapists who work with sex offenders? Journal of Offender Rehabilitation, 18(3-4), 217-223.

Fife-Schaw, C. & Breakwell, G.M. (1990). Predicting the intention not to vote in late teenage: A U.K. study of 17- and 18-year-olds. Political Psychology, 11(4), 739-755.

Fontana, A.F., Kerns, R.D., Blatt, S.J., Rosenberg, R.L., Burg, M.M. & Colonese, K.L. (1989). Cynical mistrust and the search for self-worth. Journal of Psychosomatic Research, 33(4), 449-456.

Franklin, K.M., Janoff-Bulman, R., & Roberts, J.E. (1990). Long-term impact of parental divorce on optimism and trust: Changes in general assumptions or narrow beliefs? Journal of Personality and Social Psychology, 59(4), 743-755.

Furnham, A. & Procter, E. (1989). Belief in a just world: Review and critique of the individual difference literature. British Journal of Social Psychology, 28(4), 365-384.

Furnham, A. (1995). The just world, charitable giving and attitudes to disability. Personality and Individual Differences, 19(4), 577-583.

Gamson, W.A., Croteau, D., Hoynes, W. & Sasson, T. (1992). Media images and the social construction of reality. Annual Review of Sociology, 18, 373-393.

Garcia, S.A., Clark, C. & Walfish, S. (1979). Student voluntarism in transition. Journal of Community Psychology, 7, 74-77.

Gidron, Y. & Davidson, K. (1996). Development and preliminary testing of a brief intervention for modifying CHD-predictive hostility components. Journal of Behavioral Medicine, 19(3), 203-220.

Grabb, E.G. (1979). Working-class authoritarianism and tolerance of outgroups: A reassessment. Public Opinion Quarterly, 43, 36-47.

Greenglass, E.R. & Julkunen, J. (1989). Construct validity and sex differences in Cook-Medley hostility. Personality and Individual Differences, 10(2), 209-218.

Guastello, S.J., Rieke, M.L., Guastello, D.D. & Billings, S.W. (1992). A study of cynicism, personality, and work values. The Journal of Psychology, 126(1), 37-48.

Han, K., Weed, N.C., Calhoun, R.F. & Butcher, J.N. (1995). Psychometric characteristics of the MMPI-2 Cook-Medley hostility scale. Journal of Personality Assessment, 65(3), 567-585.

Hansson, R.O., Jones, W.H., & Fletcher, W.L. (1990). Troubled relationships in later life: Implications for

support. Journal of Social and Personal Relationships, 7, pp. 451-463.

Hardy, J.D. & Smith, T. (1988). Cynical hostility and vulnerability to disease: Social support, life stress, and physiological response to conflict.

Harris, M.J., Milich, R., Corbitt, E.M., Hoover, D.W. & Brady, M. (1992). Self-fulfilling effects of stigmatizing information on children's social interactions. Journal of Personality and Social Psychology, 63(1), 41-50.

Harrison, R.H. & Kass, E.H. (1967). Differences between Negro and white pregnant women on the MMPI. Journal of Consulting Psychology, 31, 454-463.

Hart, K.E. (1996). Perceived availability of different types of social support among cynically hostile women. Journal of Clinical Psychology, 52(4), 383-387.

Hatoum, H., Smith, M.C. & Sharpe, T.R. (1982). Attitudes of pharmacy students towards psychosocial factors in health care. Social Science and Medicine, 16(12), 1239-1241.

Hickey, T., Rakowski, W., Hultsch, D.F. & Fatula, B.J. (1976). Attitudes toward aging as a function of in-service training and practitioner age. Journal of Gerontology, 31(6), 681-686.

Houston, B.K. & Vavak, C.R. (1991). Cynical hostility: Developmental factors, psychosocial correlates, and health

behaviors. Health Psychology, 10(1), 9-17.

Hunter, J.E., Gerbing, D.W. & Boster, F.J. (1982). Machiavellian beliefs and personality: Construct invalidity of the machiavellianism dimension. Journal of Personality and Social Psychology, 43(6), 1293-1305.

Jackson, D.N. & Messick, S. (1970). The Differential Personality Inventory. New York: Research Psychologists Press.

Jamner, L.D., Shapiro, D., Goldstein, I.B. & Hug, R. (1991). Ambulatory blood pressure and heart rate in paramedics: Effects of cynical hostility and defensiveness. Psychosomatic Medicine, 53, 393-406.

Johnson, R.A., Sandler, K.R. & Griffin-Shelley, E. (1987). Spirituality and the regulations of self-esteem. Alcoholism Treatment Quarterly, 4(3), 1-12.

Jones, W.H. (1988, July). Psychological and interpersonal issues in betrayal and treachery. Paper presented at the Fourth International Conference on Personal Relationships, Vancouver, British Columbia, Canada.

Jones, W.H., & Burdette, M.P. (1994). Betrayal in relationships. In A.L. Weber, & J.H. Harvey (Eds.), Perspectives on Close Relationships (pp. 243-262). Boston: Allyn and Bacon.

Jones, W.H., Nickel, T.W. & Schmidt, A. (1979). Machiavellianism and self-disclosure. The Journal of

Psychology, 102, 33-41.

Jorgensen, R.S., Abdul-Karim, K., Kahan, T.A. & Frankowski, J.J. (1995). Defensiveness, cynical hostility and cardiovascular reactivity: A moderator analysis. Psychotherapy and Psychosomatics, 64(3-4), 156-161.

Jussim, L. & Eccles, J.S. (1992). Teacher expectations II: Construction and reflection of student achievement. Journal of Personality and Social Psychology, 63(6), 947-961.

Kanter, D.L. & Murvis, P.H. (1989). The Cynical Americans. San Francisco: Jossey-Bass.

Kanter, D.L. (1988-89). Cynical Marketers at work. Journal of Advertising Research, 28(6), 28-34.

Karp, J.A. (1995). Explaining public support for term limits. Public Opinion Quarterly, 59, 373-391.

Kelleher, M.J. & Daly, M. (1990). Suicide in Cork and Ireland. British Journal of Psychiatry, 157, 533-538.

Konefal, J. & Provenzo, E.F. (1983). Medical students' attitudes toward learning and learning-related skills: A four year study. Communications, 58, 143-146.

Kubany, E.S., Gino, A., Denny, N.R. & Torigoe, R.Y. (1994). Relationship of cynical hostility and PTSD among Vietnam veterans. Journal of Traumatic Stress, 7(1), 21-31.

Lawson, A. (1988). Adultery: An Analysis of Love and Betrayal. New York: Basic Books.

Lepore, S.J. (1995). Cynicism, social support, and cardiovascular reactivity. Health Psychology, 14(3), 210-216.

Lepore, S.J., Evans, G.W., & Schneider, M.L. (1991). Dynamic role of social support in the link between chronic stress and psychological distress. Journal of Personality and Social Psychology, 61(6), 899-909.

Lockwood, G. (1992). Psychoanalysis and the cognitive therapy of personality disorders. Journal of Cognitive Psychotherapy: An International Quarterly, 6(1), 25-42.

Lorr, J.A., Lorr, M. & Devlin, P. (1990). Mood changes in substance abuse patients as a result of therapy. Journal of Clinical Psychology, 46(6), 912-915.

Mace, D.R. (1975). We call it ACME. Small Group Behavior, 6(1), 31-44.

Maddi, S.R., Kobasa, S.C. & Hoover, M. (1979). An alienation test. Journal of Humanistic Psychology, 19, 73-76.

Martinez, D.C. (1981). Group composition and machiavellianism. Psychological Reports, 49, 783-793.

McMahon, R.C., Davidson, R.S., Gersh, D. & Flynn, P. (1991). A comparison of continuous and episodic drinkers using the MCMI, MMPI, and ALCEVAL-R. Journal of Clinical Psychology, 47(1), 148-159.

Meesters, C., Muris, P. & Esselink, T. (1995).

Hostility and perceived parental rearing behaviour. Personality and Individual Differences, 18(4), 567-570.

Moore, C.D. & Handal, P.J. (1980). Adolescents' MMPI performance, cynicism, estrangement, and personal adjustment as a function of race and sex. Journal of Clinical Psychology, 36(4), 932-936.

Moore, D.S. (1997). Interpersonal betrayal: Self-serving biases, cynicism, and the mediating effects of apology. Unpublished master's thesis, University of Tennessee-Knoxville.

Moore, D.S. (1998). Re-contextualizing the study of cynicism: A new emphasis on its role in relationships. Unpublished manuscript.

Murray, S.L., Holmes, J.G. & Griffin, D.W. (1996). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. Journal of Personality and Social Psychology, 71(6), 1155-1180.

Musante, L., Treiber, F.A., Davis, H., Strong, W.B. & Levy, M. (1992). Hostility: Relationship to lifestyle behaviors and physical risk factors. Behavioral Medicine, 18(1), 21-26.

Myers, L. (1975). Adultery and Other Private Matters: Your Right to Personal Freedom in Marriage. Chicago: Nelson-Hall.

Neirenberg, A.A., Ghaemi, S.N., Clancy-Colechi, K.,

Rosenbaum, J.F. & Fava, M. (1996). Cynicism, hostility, and suicidal ideation in depressed outpatients. Journal of Nervous and Mental Disease, 184(10), 607-610.

Nickerson, B.E. (1990). Antagonism at work: Them and us, a widget worldview. American Behavioral Scientist, 33(3), 308-317.

Niederhoffer, A. (1967). Behind the shield. Garden City, N.Y.: Doubleday.

Nunnally, J.C. & Bernstein, I.H. (1994). Psychometric Theory. New York: McGraw-Hill.

O'Connell, B.J., Holzman, H. & Armandi, B.R. (1986). Police cynicism and the modes of adaptation. Journal of Police Science and Administration, 14(4), 307-313.

Planalp, S., & Honeycutt, J.M. (1985). Events that increase uncertainty in personal relationships. Human Communication Research, 11(4), 593-604.

Plomin, R., Scheier, M.F., Bergeman, C.S. & Perdersen, N.L., Nesselroade J.R. & McClearn, G.E. (1992). Optimism, pessimism and mental health: A twin/adoption analysis. Personality and Individual Differences, 13(8)

Pope, M.K. & Smith, T.W. (1991). Cortisol excretion in high and low cynically hostile men. Psychosomatic Medicine, 53, 386-392.

Powch, I.G. & Houston, B.K. (1996). Hostility, anger-in, and cardiovascular reactivity in white women. Health

Psychology, 15(3), 200-208.

Prkachin, K.M., Mills, D.E., Kaufman, F.L. & Carew, W.L.C. (1991). Cynical hostility, the perception of contingency and cardiovascular activity. Canadian Journal of Behavioural Science, 23(4), 455-468.

Rafky, D.M., Lawley, T. & Ingram, R. (1976). Are police recruits cynical? Journal of Police Science and Administration, 4(3), 352-360.

Regoli, B., Crank, J.P. & Rivera, G.F. (1990). The construction and implementation of an alternative measure of police cynicism. Criminal Justice and Behavior, 17(4), 395-409.

Regoli, B., Culbertson, R.G. & Crank, J.P. (1991). Using composite measures in police cynicism research: An application of canonical factor regression. Journal of Quantitative Criminology, 7(1), 41-58.

Remmington, P.W. (1983). Women in the police: Integration or separation? Qualitative Sociology, 6(2), 118-134.

Rempel, J.K., Holmes, J.G., & Zanna, M.P. (1985). Trust in close relationships. Journal of Personality and Social Psychology, 49(1) pp. 95-112.

Rezler, A.G. (1974). Attitude change during medical school: A review of the literature. Journal of Medical Education, 49, 1023-1030.

Rose, R.J. (1988). Genetic and environmental variance in content dimensions of the MMPI. Journal of Personality and Social Psychology, 55(2), 302-311.

Rosenberg, M. (1957). Occupations and Values. Glencoe, Illinois: The Free Press.

Rosenman, R.H., Brand, R.J., Jenkins, C.D., Friedman, M., Strauss, K., & Wurm, M. (1975). Coronary heart disease in the Western Collaborative Group study: Final follow-up experience of 8 1/2 years. Journal of American Medical Association, 233, 872-877.

Rotter, J.B. (1967) A new scale for the measurement of interpersonal trust. Journal of Personality, 35, 651-665.

Rubin, Z. & Peplau, L.A. (1975). Who believes in a just world? Journal of Social Issues, 31(3), 65-89.

Schaefer, C., Coyne, J.C., & Lazarus, R.S. (1981). The health-related functions of social support. Journal of Behavioral Medicine, 4(4), 381-406.

Scheier, M.F. & Bridges, M.W. (1995). Personality predispositions and acute psychological states as shared determinants for disease. Psychosomatic Medicine, 57(3), 255-268.

Scheier, M.F. & Carver, C.S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. Cognitive Therapy and Research, 16(2), 201-228.

Scherwitz, L., Perkins, L., Chesney, M. & Hughes, G. (1991). Cook-Medley hostility scale and subsets: Relationship to demographic and psychosocial characteristics in young adults in the CARDIA study. Psychosomatic Medicine, 53, 36-49.

Schuessler, K. & Freshnock, L. (1978). Measuring attitudes toward self and others in society: State of the art. Social Forces, 56(4), 1228-1244.

Schwartz, H.S. (1987). On the psychodynamics of organizational totalitarianism. Journal of Management, 13(1), 41-54.

Seeman, M. (1959). On the meaning of alienation. American Sociological Review, 24, 783-791.

Skoe, E.E. & Ksionzky, S. (1985). Target personality characteristics and self-disclosure: An exploratory study. Journal of Clinical Psychology, 41(1), 14-21.

Smith, T.W. & Allred, K.D. (1989). Blood-pressure responses during social interaction in high- and low-cynically hostile males. Journal of Behavioral Medicine, 12(2), 135-143.

Smith, T.W. & Frohm, K.D. (1985). What's so unhealthy about hostility? Construct validity and psychosocial correlates of the Cook and Medley HO scale. Health Psychology, 4(6), 503-520.

Smith, T.W., McGonigle, M., Turner, C.W., Ford, M.H. &

Slattery, M.L. (1991). Cynical hostility in adult male twins. Psychosomatic Medicine, 53, 684-692.

Smith, T.W., Pope, M.K., Sanders, J.D., Allred, K.D. & O'Keeffe, J.L. (1988). Cynical hostility at home and work: Psychosocial vulnerability across domains. Journal of Research in Personality, 22, 525-548.

Snyder, C.R. (1995). Conceptualizing, measuring, and nurturing hope. Journal of Counseling and Development, 73(3), 355-360.

Southwell, P.L. (1995). "Throwing the rascals out" versus "throwing in the towel": Alienation, support for term limits, and congressional voting behavior. Social Science Quarterly, 76(4), 741-748.

Srole, L. (1956). Social integration and certain corollaries. American Sociological Review, 21, 709-716.

Stearns, G.M. & Moore, R.J. (1993). The physical and psychological correlates of job burnout in the Royal Canadian Mounted Police. Canadian Journal of Criminology, 35(2), 127-147.

Steinberg, L.D. Greenberger, E., Garduque, L., Ruggiero, M. & Vaux, A. (1982). Effects of working on adolescent development. Developmental Psychology, 18(3), 385-395.

Stradling, S.G., Crowe, G. & Tuohy, A.P. (1993). Changes in self-concept during occupational socialization of

new recruits to the police. Journal of Community and Applied Social Psychology, 3, 131-147.

Tesluk, P.E., Farr, J.L., Mathieu, J.E. & Vance, R.J. (1995). Generalization of employee involvement training to the job setting: Individual and situational effects. Personnel Psychology, 48, 607-631.

Tygart, C.E. (1980). Student social structures and/or subcultures as factors in school crime. Adolescence, 15(57), 13-22.

Ulmer, J.T. (1992). Occupational socialization and cynicism toward prison administration. The Social Science Journal, 29(4), 423-443.

Violanti, J.M. & Marshall, J.R. (1983). The police stress process. Journal of Police Science and Administration, 11(4), 389-393.

Vleeming, R.G. (1979). Machiavellianism: A preliminary review. Psychological Reports, 44(1), 295-310.

Vleeming, R.G. (1984). The nomothetical network of a machiavellianism scale. Psychological Reports, 54, 617-618.

Watkins, P.L., Ward, C.H., Southard, D.R. & Fisher, E.B. (1992). The type A belief system: Relationship to hostility, social support, and life stress. Behavioral Medicine, 18(1), 27-32.

Webster's New Universal Unabridged Dictionary. (1996). New York: Barnes and Noble.

Williams, R.B. (1984). Type A behavior and coronary heart disease: Something old and something new. Behavioral Medicine Update, 6(3), 29-33.

Williams, R.B. (1987). Psychological factors in coronary heart disease: Epidemiological evidence. In Carstensen, L.L. & Neale, J.M. (Eds.), Mechanisms of Psychological Influence on Physical Health: With Special Attention to the Elderly. New York: Plenum Press.

Wober, M. & Gunter, B. (1986). Television and beliefs about health care and medical treatment. Current Psychological Research & Reviews, Winter 1985-86, 291-304.

Wolf, T.M., Balson, M., Faucett, J.M. & Randall H.M. (1989). A retrospective study of attitude change during medical education. Medical Education, 23, 19-23.

Wolf, T.M., Randall, H.M., Von Almen, K. & Tynes, L.L. (1991). Perceived mistreatment and attitude change by graduating medical students: a retrospective study. Medical Education, 25(3), 182-190.

Wright, T.L. & Arbuthnot, J. (1974). Interpersonal trust, political preference, and perceptions of the Watergate affair. Personality and Social Psychology Bulletin, 1(1), 168-170.

Wrightsman, L.S. (1974). Assumptions about human nature: A social-psychological analysis. Monterey, CA: Brooks/Cole.

Yedidia, M.J., Berry, C.A. & Barr, J.K. (1996). Changes in physicians' attitudes toward AIDS during residency training: A longitudinal study of medical school graduates. Journal of Health and Social Behavior, 37, 179-191.

APPENDICES

APPENDIX A

BIOGRAPHIC SHEET

AGE_____ GENDER_____ HEIGHT_____ WEIGHT_____ YOUR GPA _____

ETHNICITY ___Caucasian ___African American Other_____

EDUCATIONAL LEVEL ___High School ___Some College ___College Degree
___Some Graduate Study ___Advanced Degree _____Other

ARE YOU IN A ROMANTIC RELATIONSHIP? _____

PARTNER GENDER Male___ Female___

RELATIONSHIP STATUS ___Casually Dating ___Seriously Dating ___Engaged
___Married ___Divorced ___Other

HOW LONG HAVE YOU BEEN IN THIS RELATIONSHIP? _____

HOW MANY TIMES HAVE YOU BEEN MARRIED? _____

DO YOU HAVE CHILDREN? _____Yes _____No

HAVE YOU EVER EXPERIENCED A PAINFUL RELATIONSHIP BREAKUP? _____

IF SO, DID THIS BREAKUP END THE RELATIONSHIP, OR DID YOU REMAIN FRIENDS?
_____Ended relationship _____Remained Friends

DID YOU OR YOUR PARTNER INITIATE THE BREAKUP? ___I did ___Partner did

HOW WOULD YOU DESCRIBE YOUR RELATIONSHIP WITH YOUR MOTHER FIGURE?
(circle) Very Poor Poor Fair Good Very Good

HOW WOULD YOU DESCRIBE YOUR RELATIONSHIP WITH YOUR FATHER FIGURE?
(circle) Very Poor Poor Fair Good Very Good

HOW MANY TIMES PER YEAR DO YOU ATTEND CHURCH OR SYNAGOGUE?_____

HOW MANY TIMES HAVE YOU ENTERED INTO A ROMANCE FEELING THAT YOU MIGHT HURT THE OTHER PERSON? (circle):
Never 1-2 times 3-4 times 5 or more times

HOW MANY TIMES HAVE YOU ENTERED INTO A ROMANCE FEELING THAT THE OTHER PERSON MIGHT HURT YOU? (circle):
Never 1-2 times 3-4 times 5 or more times

AS A CHILD DID YOU GO THROUGH A PERIOD OF HATING THE OPPOSITE SEX?
_____Yes _____No

APPENDIX B

ORIGINAL ITEM POOL FOR THE SCALE OF INTERPERSONAL CYNICISM

1._____ I don't know if I would want to bring a child into this world.

2._____ Sometimes people will help you and not want anything in return. (R)

3._____ Gullible people deserve to be taken advantage of.

4._____ If you give people an inch they will take a mile.

5._____ People only give things to get things in return.

6._____ No one is completely honest with their relationship partners.

7._____ I have a lot of faith in human nature. (R)

8._____ Its a fact of life...someone's going to get hurt in a relationship.

9._____ People will try to get you back if you do them wrong.

10._____ Everyone lies occasionally.

11._____ People are basically selfish.

12._____ Most people would break laws if they could be sure they wouldn't be caught.

13._____ I believe people are primarily motivated by self-interest.

14._____ People basically want to do the right thing most of the time. (R)

15._____ People know what there doing when they betray you.

16._____ Most people aren't very naive. (R)

17._____ People can't be trusted.

18._____ Sometimes I am afraid I'll end up hurting my partner.

19._____ When it comes to relationships, nice people finish last.

20._____ People will tell you what you want to hear if it will get them somewhere.

21._____ Relationship partners are usually after something.

22._____ Sometimes you have to dump your partner before they dump you first.

23._____ I believe that most people look at what is "on the inside" of their partner. (R)

24._____ Only the good die young.

25._____ Everyone else takes what they can get in life, why shouldn't I?

26._____ Sometimes you have to step on some toes to get ahead.

27._____ Sometimes you have to even the score with people.

28._____ Nobody really trusts anyone.

29._____ Basically I am a cynical person.

30._____ Most people watch out for "number one" and little else.

31._____ I know I should do what is right, regardless of what other people do. (R)

32._____ Its easy to get used by someone you are dating.

33._____ We're here for a while then we die, its just the way it is.

34._____ It seems that just when you think you're getting ahead someone knocks you down.

35._____ When you least expect it people come through for you.

37._____ People don't care about each other anymore.

38._____ Someone is almost always after your partner in relationships.

39._____ I have very little faith in relationships.

40._____ I guess some people are destined to be alone.

41._____ I believe that true love really exists. (R)

42._____ There is someone out there for everyone. (R)

43._____ Sooner or later most relationships end.

44._____ No one ever seems to pay attention to me.

45._____ Relationships get better with time. (R)

46._____ For most people, good looks is more important than what's "on the inside".

47._____ Not even family members can be trusted all the time.

48._____ True love is a myth.

49._____ The truth is...no one wants to spend a lifetime with another person.

50._____ Things always seem to work out for the best. (R)

51._____ Sometimes you have to get people before they get you.

52._____ I would rather be alone most of the time rather than let people run over me.

53._____ You can't be too careful with people.

54._____ You have to watch your back in this world.

55._____ You have to be really careful when you deal with strangers.

56._____ Sometimes I am a suspicious person.

57._____ Never trust anyone who wont look you in the eye.

58._____ Only a fool would trust most people.

59._____ If my partner is too nice, they must be up to something.

60._____ Most people would have an affair if they knew

they would not get caught.

61._____ Sometimes I am afraid my partner will hurt me.

62._____ I take care of myself first, because no one else will.

63._____ Its best to take what you can today, because tomorrow the opportunity might be gone.

64._____ I do what I want because everyone else does whatever they want.

65._____ I hold back with people until I can figure out what they want from me.

66._____ I don't know if I can trust my judgement in relationships.

67._____ Eventually relationships end...its only a matter of time.

68._____ Most people would have an affair...its a matter of the right person, the right place and the right time.

Note: (R) denotes reverse scoring

APPENDIX C

THE SCALE OF INTERPERSONAL CYNICISM (WITH SCORING KEY)

The Scale of Interpersonal Cynicism

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ Sometimes people will help you and not want anything in return.

2.___ If you give people an inch they will take a mile.

3.___ People only give things to get things in return.

4.___ No one is completely honest with their relationship partners.

5.___ Its a fact of life...someone's going to get hurt in a relationship.

6.___ People are basically selfish.

7.___ I believe people are primarily motivated by self-interest.

8.___ People can't be trusted.

9.___ Everyone else takes what they can get in life, why shouldn't I?

10.___ Sometimes you have to step on some toes to get ahead.

11.___ Sometimes you have to even the score with people.

12.___ Basically I am a cynical person.

13.___ Most people watch out for "number one" and little else.

14.___ Its easy to get used by someone you are dating.

15.___ It seems that just when you think you're getting ahead someone knocks you down.

16.___ Self-interest is all most people care about.

17.___ Someone is almost always after your partner in relationships.

18.___ For most people, good looks is more important than what's "on the inside".

19.___ True love is a myth.

20.___ The truth is...no one wants to spend a lifetime with another person.

21.___ Sometimes you have to get people before they get you.

22.___ You can't be too careful with people.

23.___ You have to watch your back in this world.

24.___ Only a fool would trust most people.

25.___ If my partner is too nice, they must be up to something.

26.___ Most people would have an affair if they knew they wouldn't get caught.

27.___ I take care of myself first, because no one else will.

28.___ I hold back with people until I can figure out what they want from me.

29.___ I don't know if I can trust my judgement in relationships.

30.___ Most people would have an affair...its a matter of the right person, the right place and the right time.

31.___ Sometimes I am afraid my partner will hurt me.

32.___ People need love like they need a hole in the head.

33.___ Its a dog-eat-dog world out there.

34.___ In most relationships people do things they must hide from their partners.

35.___ In relationships, its "out of sight, out of mind."

36.___ When it comes to relationships, heartaches are just a fact of life.

SCORING KEY

Cynical Behavior Justification
Sum 9, 10, 11, 15, 17, 21, 22, 23, 24, 27, 28, 33

Cynicism Toward Relationships
Sum 4, 5, 18, 26, 30, 31, 34, 36

Cynicism Toward Human Nature
Sum 2, 3, 6, 7, 8, 13, 14, 16

Cynicism Toward Love
Sum 1, 12, 19, 20, 25, 29, 32, 35

Reverse Score only item number 1

Item 12 is also a criterion item

APPENDIX D

VALIDATION MEASURES

Cook-Medley Inventory Items

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ I have often had to take orders from someone who did not know as much as I did.

2.___ I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.

3.___ It takes a lot of argument to convince most people of the truth.

4.___ I think most people would lie to get ahead.

5.___ Most people are honest chiefly because they are afraid of being caught.

6.___ Most people will use somewhat unfair means to gain profit or an advantage, rather than to lose it.

7.___ No one cares much what happens to you.

8.___ It is safer to trust nobody.

9.___ Most people make friends because friends are likely to be useful to them.

10.___ Most people inwardly dislike putting themselves out to help other people.

11.___ People generally demand more respect for their own rights than they are willing to allow for others.

12.___ I have often met people who were supposed to be experts, who were no better than I.

13.___ A large number of people are guilty of bad sexual conduct.

Couch et al. Trust Scale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ My partner makes me feel safe.

2.___ I tend to be accepting of others.

3.___ My partner sometimes makes me uncomfortable.

4.___ My relationships with others are characterized by trust and acceptance.

5.___ I do not worry that my partner will leave me.

6.___ Basically I am a trusting person.

7.___ It is better to trust people until they prove otherwise than to be suspicious of others until they prove otherwise.

8.___ I accept others at "face value."

9.___ I am skeptical that relationships ever work out.

10.___ Most people are trustworthy.

11.___ I believe in my partner.

12.___ In relationships, I tend to be alert for the possibility of rejection or betrayal.

13.___ It is better to be suspicious of people you have just met, until you know them better.

14.___ I make friends easily.

15.___ I am sure about how my partner feels about me.

16.___ Only a fool would trust most people.

17.___ I am doubtful that my partner will always be there for me if I need him/her.

18.___ I tell my partner that I trust him/her completely.

19.___ I find it better to accept others for what they say and what they appear to be.

20.___ I would admit to being more than a little paranoid about people I meet.

21.___ Relationships will only lead to heartache.

22.___ I have few difficulties trusting people.

23.___ I am rarely ever suspicious of people with whom I have a relationship.

24.___ Basically, I tend to be distrustful of others.

25.___ I am afraid my partner will hurt me emotionally.

26.___ I am afraid my partner will betray me.

27.___ Experience has taught me to be doubtful of others until I know they can be trusted.

28.___ I generally believe what my partner tells me.

29.___ I never believe my partner when he/she tells me how he/she feels about me.

30.___ I have a lot of faith in the people I know.

31.___ Even during the "bad times," I tend to think that things will work out in the end.

32.___ I feel that I can be myself in the presence of my partner.

33.___ I am uncertain about how my partner feels about me.

34.___ I tend to take others at their word.

35.___ When it comes to people I know, I am believing and accepting.

36.___ It is dangerous to "let your guard down" with your partner.

37.___ I feel I can depend on most people I know.

38.___ I am sometimes doubtful of my partner's intentions.

39.___ When my partner is with others, I worry that he/she will not be faithful.

40.___ I almost always believe what people tell me.

Snyder Hope Scale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ I can think of many ways to get out of a jam.

2.___ I energetically pursue my goals.

3.___ I feel tired most of the time.

4.___ There are lots of ways around any problem.

5.___ I am easily downed in an argument.

6.___ I can think of many ways to get the things in life that are most important to me.

7.___ I worry about my health.

8.___ Even when others get discouraged, I know I can find a way to solve the problem.

9.___ My past experiences have prepared me well for my future.

10.___ I've been pretty successful in life.

11.___ I usually find myself worrying about something.

12.___ I meet the goals that I set for myself.

Rubin & Peplau Just World Scale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ I've found that a person rarely deserves the reputation he has.

2.___ Basically, the world is a just place.

3.___ People who get "lucky breaks" have usually earned their good fortune.

4.___ Careful drivers are just as likely to get hurt in traffic accidents as careless ones.

5.___ It is a common occurrence for a guilty person to get off free in American courts.

6.___ Students almost always deserve the grades they receive in school.

7.___ Men who keep in shape have little chance of suffering a heart attack.

8.___ The political candidate who sticks up for his principles rarely gets elected.

9.___ It is rare for an innocent man to be wrongly sent to jail.

10.___ In professional sports, many fouls and infractions never get called by the referee.

11.___ By and large, people deserve what they get.

12.___ When parents punish their children, it is almost always for good reasons.

13.___ Good deeds often go unnoticed and unrewarded.

14.___ Although evil men may hold political power for a while, in the general course of history good wins out.

15.___ In almost any business or profession, people who do their job well rise to the top.

16.___ American parents tend to overlook the things most to be admired in their children.

17.___ It is often impossible for a person to receive a fair trial in the USA.

18.___ People who meet with misfortune have often brought it on themselves.

19.___ Crime doesn't pay.

20.___ Many people suffer through absolutely no fault of their own.

Maddi Alienation Test

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ Everyone is out to manipulate you toward his own ends.

2.___ I am better off when I keep to myself.

3.___ Most people are happy not to know that what they call love is really self interest.

4.___ Big parties are very exciting to me.

5.___ Often when I interact with others, I feel insecure over the outcome.

6.___ There is no point in socializing-it goes nowhere and is nothing.

7.___ Why bother to try to love or care for people; they'll only hurt you in the end.

8.___ What really turns me on about socializing is the challenge of a groups of people disagreeing and arguing.

9.___ I try to avoid close relationships with people so that I will not be obligated to them.

10.___ Most social relationships are meaningless.

11.___ People who believe that "Love makes the world go around" are fooling themselves.

12.___ The best reason for getting involved with other people is participation in some action that can catch everybody up.

Rosenberg Faith in People Scale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please circle one of the short statements after each question or longer statement.

1. Some people say that most people can be trusted. Others say you can't be too careful in your dealings with people. How do you feel about it?

CIRCLE ONE

Most people can be trusted. | You can't be too careful.

2. Would you say that most people are more inclined to help others, or more inclined to look out for number one?

CIRCLE ONE

To help others. | To look out for themselves.

3. If you don't watch yourself, people will take advantage of you.

CIRCLE ONE

I agree. | I disagree.

4. No one is going to care much what happens to you, when you get right down to it.

CIRCLE ONE

I agree. | I disagree.

5. Human nature is fundamentally cooperative.

CIRCLE ONE

I agree. | I disagree.

Srole Anomia Scale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ There's little use in writing public officials because they often aren't really interested in the problems of the average man.

2.___ Nowadays a person has to live pretty much for today and let tomorrow take care of itself.

3.___ In spite of what some people say, the lot of the average person is getting worse, not better.

4.___ It's hardly fair to bring children into the world with the way things look for the future.

5.___ These days a person doesn't really know whom he [or she] can count on.

6.___ Most people really don't care what happens to the next fellow [to others].

7.___ Next to health, money is the most important thing in life.

8.___ You sometimes can't help wondering whether anything is worthwhile.

9.___ To make money there are no right and wrong ways anymore, only easy and hard ways.

Buss-Durkee Suspicion Subscale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ I know that people tend to talk about me behind my back.

2.___ I tend to be on my guard with people who are somewhat more friendly than I expected.

3.___ There are a number of people who seem to dislike me very much.

4.___ There are a number of people who seem to be jealous of me.

5.___ I sometimes have the feeling that others are laughing at me.

6.___ My motto is "Never trust strangers."

7.___ I commonly wonder what hidden reason another person may have for doing something nice for me.

8.___ I used to think that most people told the truth but now I know otherwise.

9.___ I have no enemies who really wish to harm me.

10.___ I seldom feel that people are trying to anger or insult me.

Diener Satisfaction With Life Scale

Instructions: Below are five statements with which you may agree or disagree. Using the 1-5 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree 4=Agree 5=Strongly Agree

1.____ In most ways my life is close to my ideal.

2.____ The conditions of my life are excellent.

3.____ I am satisfied with my life.

4.____ So far I have gotten the important things I want in life.

5.____ If I could live my life over, I would change almost nothing.

Wrightsman Human Nature Scale

Instructions: The following questions concern your relationships with other people. There are no right or wrong answers. Please indicate the degree to which you agree or disagree with the following items by placing the appropriate number in the space provided where:

1=Strongly Disagree 2=Disagree 3=Neither Agree or Disagree

4=Agree 5=Strongly Agree

1.___ If most people could get into a movie without paying and be sure that they would not be seen, they would do it.

2.___ The average person is conceited.

3.___ The typical student will cheat on a test when everyone else does, even though he has a set of ethical standards.

4.___ Most people would tell a lie if they could gain by it.

5.___ It's pathetic to see an unselfish person in today's world, because so many people take advantage of him.

6.___ People claim that they have ethical standards regarding honesty and morality, but few people stick to them when the chips are down.

7.___ People pretend to care more about one another than they really do.

8.___ Most people inwardly dislike putting themselves out to help other people.

9.___ Most people would cheat on their income tax if they had the chance.

10.___ Most people are not really honest for a desirable reason; they're afraid of getting caught.

Christie and Geis Machiavellianism Scale

You will find 20 groups of statements listed below. Each group is composed of three statements. Each statement refers to a way of thinking about people or things in general. They reflect opinions and not matters of fact-there are no "right" or "wrong" answers and different people have been found to agree with different statements.

Please read each of the three statements in each group. Then decide first which of the statements is most true or comes the closest to describing your own beliefs. Circle a plus (+) in the space provided.

Just decide which of the remaining two statements is most false or is the farthest from your own belief. Circle the minus (-) in the space provided.

Here is an example:

	Most True	Most False
A. It is easy to persuade people but hard to keep them persuaded.	+	-
B. Theories that run counter to common sense are a waste of time.	+	-
C. It is only common sense to go along with what other people are doing and not be too different.	+	-

In this case, statement B would be the one you believe in most strongly and A and C would be the ones that are not as characteristic of your opinion. Statement C would be the one you believe in least strongly and is least characteristic of you beliefs.

You will find some of the choices easy to make; others will be quite difficult. Do not fail to make a choice no matter how hard it may be. You will mark two statements in each group of three-the one that comes the closest to your own beliefs with a + and the one farthest from your beliefs with a -. The remaining statement should be left unmarked.

DO NOT OMIT ANY GROUPS OF STATEMENTS

	Most True	Most False
1. A. It takes more imagination to be a successful criminal than a successful business man. ---->	+	-
B. The phrase "the road to hell is paved with good intentions" contains a lot of truth. --->	+	-
C. Most men forget more easily the death of their father than the loss of their property. ---------->	+	-

	Most True	Most False
2. A. Men are more concerned with the car they drive than with the clothes their wives wear. ---------->	+	-
B. It is very important that imagination and creativity in children be cultivated. ------->	+	-
C. People suffering from incurable diseases should have the choice of being painlessly put to death. ---------->	+	-

	Most True	Most False
3. A. Never tell anyone the real reason you did something unless it is useful to do so. ----->	+	-
B. The well-being of the individual is the goal that should be worked for before anything else. ---------->	+	-
C. Once a truly intelligent person makes up his mind about the answer to a problem he rarely continues to think about it. --------->	+	-
4. A. People are getting so lazy and self-indulgent that it is bad for our country. --->	+	-
B. The best way to handle people is to tell them what they want to hear. ---------->	+	-
C. It would be a good thing if people were kinder to others less fortunate than themselves. ---------->	+	-
5. A. Most people are basically good and kind. ---->	+	-
B. The best criterion for a wife or husband is compatibility-other characteristics are nice but not essential. ---------->	+	-
C. Only after a man has gotten what he wants from life should he concern himself with the injustices in the world. ---------->	+	-
6. A. Most people who get ahead in the world lead clean, moral lives. ---------->	+	-
B. Any man worth his salt shouldn't be blamed for putting his career above his family. ---->	+	-
C. People would be better off if they were concerned less with how to do things and more with what to do. ---------->	+	-
7. A. A good teacher is one who points out unanswered questions rather than gives explicit answers. ---------->	+	-
B. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight. ---------->	+	-
C. A person's job is the best single guide as to the sort of person he is. ---------->	+	-
8. A. The construction of such monumental works as the Egyptian pyramids was worth the enslavement of the workers who built them. -->	+	-
B. Once a way of handling problems has been worked out it is best to stick to it. ------->	+	-
C. One should take action only when sure that it is morally right. ---------->	+	-

	Most True	Most False
9. A. The world would be a much better place to live in if people would let the future take care of itself and concern themselves only with enjoying the present. ---------->	+	-
B. It is wise to flatter important people. ----->	+	-
C. Once a decision has been made, it is best to keep changing it as new circumstances arise. ---------->	+	-
10. A. It is a good policy to act as if you are doing the things you do because you have no other choice. ---------->	+	-
B. The biggest difference between most criminals and other people is that criminals are stupid enough to get caught. ->	+	-
C. Even the most hardened and vicious criminal has a spark of decency somewhere within him. ---------->	+	-
11. A. All in all, it is better to be humble and honest than to be important and dishonest. ->	+	-
B. A man who is able and willing to work hard has a good chance of succeeding in whatever he wants to do. ---------->	+	-
C. If a thing does not help us in our daily lives, it isn't very important. ---------->	+	-
12. A. A person shouldn't be punished for breaking a law which he thinks is unreasonable. ----->	+	-
B. Too many criminals are not punished for their crime. ---------->	+	-
C. There is no excuse for lying to someone else. ---------->	+	-
13. A. Generally speaking, men won't work hard unless they're forced to do so. ---------->	+	-
B. Every person is entitled to a second chance, even after he commits a serious mistake. --->	+	-
C. People who can't make up their minds aren't worth bothering about. ---------->	+	-
14. A. A man's first responsibility is to his wife, not is mother. ---------->	+	-
B. Most men are brave. ---------->	+	-
C. It's best to pick friends that are intellectually stimulating rather than ones it is comfortable to be around. ------->	+	-
15. A. There are very few people in the world worth concerning oneself about. ---------->	+	-
B. It is hard to get ahead without cutting corners here an there. ---------->	+	-
C. A capable person motivated for his own gain is more useful to society than a well-meaning but ineffective one. ---------->	+	-

	Most True	Most False
16. A. It is best to give others the impression that you can change your mind easily. ------>	+	-
B. Its a good working policy to keep on good terms with everyone. ---------->	+	-
C. Honesty is the best policy in all cases. --->	+	-
17. A. It is possible to be good in all respects. ->	+	-
B. To help oneself is good; to help others even better. ---------->	+	-
C. War and threats of war are unchangeable facts of human life. ---------->	+	-
18. A. Barnum was probably right when he said that there's at least one sucker born every minute. ---------->	+	-
B. Life is pretty dull unless one deliberately stirs up some excitement. ----->	+	-
C. Most people would be better off if they controlled their emotions. ---------->	+	-
19. A. Sensitivity to the feelings of others is worth more than poise in social situations. ---------->	+	-
B. The ideal society is one where everybody knows his place and accepts it. ---------->	+	-
C. It is safest to assume that all people have a vicious steak and it will come out when they are given a chance. ---------->	+	-
20. A. People who talk about abstract problems usually don't know what they are talking about. ---------->	+	-
B. Anyone who completely trusts anyone else is asking for trouble. ---------->	+	-
C. It is essential for the function of a democracy that everyone votes. ---------->	+	-

VITA

Danny Moore was born in Shelby North Carolina, and shortly thereafter moved to the mountain city of Asheville. He soon moved again, and attended public schools in a nearby community. He graduated from East Henderson High School in 1971, and worked for thirteen years in a local General Electric factory. Eventually he moved back to his mountain home of Asheville, and while continuing employment at General Electric, attended the University of North Carolina at Asheville. At UNCA he earned a Bachelor of Arts degree in Psychology, with Departmental Distinction, graduating cum laude, with Distinction as a University Scholar, and with Distinction as a University Research Scholar. He now attends the University of Tennessee, in a doctoral program for experimental psychology, earning a Master of Arts degree in Psychology in 1997. Primary research interests include personality and relationships, and gender issues. He is also presently a graduate research assistant for the Office of Evaluation Services at the University of Tennessee-Knoxville, and an Associate Mentor for the University's GTA Mentoring Program.