The Hong Kong Polytechnic University

Department of Applied Social Sciences

How Do Worldviews Shape Self-views?

An Examination of the Causality between Cynicism and Self-Esteem

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CERTIFICATE OF ORIGINALITY

I hereby declare that this thesis is my own work and that, to the best of my knowledge

and belief, it reproduces no material previously published or written, nor material that

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Abstract

The negative association between cynicism, a negative view about human nature, and

self-esteem, a global evaluation of the self, has been consistently documented in the

literature. However, the causal mechanisms underlying this association have not yet

been examined to illuminate how worldviews and self-views are linked, while previous

research has presented equivocal findings regarding the causal direction. In two studies,

I tested how cynical worldview influences self-esteem using multiple designs, and hence

provided empirical evidence to this open question. In Study 1, a cross-lagged panel

analysis revealed that cynicism significantly predicted decreased self-esteem four

months later, but the reverse was not found. In Study 2, I experimentally manipulated

cynicism, and found that participants primed with a cynical worldview were more likely

to report lower self-esteem, compared to participants in the control condition. I also

examined the mediating role of perceived connectedness with others and the society in

this linkage, and the results showed that social connectedness mediated the influence of

cynicism on self-esteem. This research therefore laid important groundwork for

understanding the causal relations among our perceptions of the social world,

interpersonal relationships, and the self.

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We don't see things as they are, we see them as we are.

Anaïs Nin

We do not see life and the universe as what they are, but each of us has our own

way to perceive the world, like the use of different color filters in photography. These

filters are our worldviews, sets of propositions that people adopt to view and describe

the world (Koltko-Rivera, 2004). Some examples are locus of control (Rotter, 1966),

just world belief (Lerner, 1980), and cynicism (Kanter & Mirvis, 1989; Leung & Bond,

2004). Once formed, we perceive objects and events through these filters and they can

significantly influence our behaviors.

Apart from our worldviews, we also see ourselves differently, and these self-

conceptions constitute a distinct construct, termed self-views. The study of self has

gained a long-standing and continuing interest in the literature, and concepts such as

self-esteem (Rosenberg, 1965), self-efficacy (Bandura, 1997), and self-construal

(Markus & Kitayama, 1991) are still widely investigated.

Considerable amount of research has been conducted to show that self-views and

worldviews are critical and separate psychological constructs in the prediction of human

behaviors. Indeed, worldviews and self-views are intertwined and complement each other to explain a wide range of psychological outcomes (e.g., Chen, Cheung, Bond, & Leung, 2006; Chen, Wu, & Bond, 2009). However, research specifically testing the causal relationships between worldviews and self-views is scarce.

In fact, examining the causal mechanisms underlying these two constructs has both theoretical and practical implications. On the theoretical side, questions on how our sense of selfhood is developed and managed in the hub of social relationships, and linked to the complex, coordinated construction of the subjective world of other people constitute enduring puzzles in psychological research. On the practical side, while both worldviews and self-views are important domains for therapeutic intervention, it is informative for practitioners to identify maladaptive perceptions about the self and others during their assessment of distressed clients, and facilitate the development of relevant and suitable treatment strategies. For instance, practitioners may want to know whether their clients' negative views and reactions toward other people are consequences or antecedents of their low self-worth. In this paper, I intend to study the nature of the associations between the ways we view the world and the ways we see ourselves.

Self-views and Worldviews: The Causality Question

Previous work has been equivocal, with mixed findings regarding the direction of causality between self-views and worldviews. It has been suggested that self-views mainly determine how we evaluate other individuals, anticipate their behaviors, and perceive their evaluations of social constructs. Studies showed that self-perceptions have considerable effects on evaluations of in-group and out-group members (Crocker, Thompson, McGraw, & Ingerman, 1987), and discriminative behaviors (Oakes & Turner, 1980). In a related vein, people who have positive feelings about the self are more likely to perceive others as trustworthy (Ellison & Firestone, 1974) and their partners' evaluations of them as affirmative (Murray, Holmes, MacDonald, & Ellsworth, 1998). Our self-image may be projected to the perceptions of relationships, and hence influence the ways we interact with our partners (Murray, Holmes, & Griffin, 2000). Self-views are therefore described as determinants of our perceptions and reactions to the social world. It is thus arguable that worldviews may be merely a generalization of our views about the self.

On the other hand, some scholars have proposed that worldviews are adaptive to human functioning, and exert fundamental influences on personal outcomes and social interactions (Lerner & Miller, 1978; Leung & Bond, 2004). For instance, the belief that

the world is just and in order can encourage people to pursue long-term goals and aid

their interpretation and adaption of traumatic life events (Lerner & Miller, 1978). In a

cultural context, cultural worldviews not only shape our thinking styles and judgments

about others (e.g., Chaturvedi, Chiu, & Viswanathan, 2009; Chen, Chiu, & Chan, 2009),

but also construct our self-concepts in relation to different cultural environments

(Oyserman, Coon, & Kemmelmeier, 2002). Leung and Bond (2004) proposed a model

of worldviews, namely social axioms, which links general beliefs to adaptive human

functioning and guides survival of an individual by means of deception detection,

problem-solving and meaning-seeking, each function focused on our interactions with

the external environment. From the perspectives mentioned, it is asserted that the ways

we perceive the social world significantly shape our conceptualizations of the self.

A few studies have made an attempt to address the causality question but with

limitations. For instance, Dalbert (2002) discussed the possible explanations of the

causality issue involving just world belief and self-esteem. She argued that it can be

either people believing in a just world adapt better and hence feel better about

themselves, or that people feeling positive about themselves think that the world they

live in is a fair place. Nevertheless, the causal relationship could not be established in

her study because of the lack of experimental manipulation on just world belief (Dalbert,

2002, Study 3). Similarly, Lai, Bond, and Hui (2007) tested the causal relationship

between cynicism, a negative and biased view of the world, and self-esteem in a

longitudinal study. Their argument that cynicism leads to lower levels of self-esteem

was inconclusive, as their study design did not address the possible effects of

unmeasured third variables. Therefore, more rigorous designs are needed to fill in this

gap in the current literature.

The focus of the current research is the linkage between cynicism, a generalized

negative worldview, and global self-esteem, a general evaluation of the self, because

their correlation has consistently been reported in previous studies, albeit no test of

causality has been conducted. So studies were run to examine the cause and effect

relationship between individuals' cynical perception of the world and their perception of

the self.

Linkage between Cynicism and Self-esteem

Global Self-esteem as a General Self-evaluation

Self-esteem is probably one of the most popular and widely investigated aspects of

self-views in the literature. It is defined as the positive or negative attitude and

evaluation toward oneself (Rosenberg, 1965), tapping both cognitive and affective

dimensions of the self. Furthermore, these evaluations can be made in a global sense or

for a particular domain, such as school performance or friendship. Many previous

studies have posited self-esteem as a positive indicator of success in every aspect of life

as well as a buffer against dysfunctional behaviors and problems. Despite challenges to

this claim (Baumeister, Campbell, Krueger, & Vohs, 2003), the concept of self-esteem

has been extensively applied in therapeutic interventions (Barrett, Webster, & Wallis,

1999), applied research (Mendelson, Mendelson, & White, 2001), and even public

policy (California Task Force to Promote Self-Esteem and Personal and Social

Responsibility, 1990). I aimed at testing global self-esteem in the present study in order

to provide a more general picture on the self-view and worldview linkage.

Cynicism as a Generalized Worldview

The origins of cynicism as a philosophical school of thought and an outlook on life

can be traced back to ancient Greece (Dean, Brandes, & Dharwadkar, 1998).

Contemporary scholars in diverse fields have observed cynicism through various

theoretical lenses. For instance, the construct of cynicism could be identified from the

folk perspective and has been shown to be distinct from other well-known personality

dimensions (Haas, 2002). The development of cynicism was suggested to start from

early childhood (Mills & Keli, 2005), probably through socialization in one's family or

origin (Boehnke, 2009). A national telephone survey conducted by Kanter and Mirvis

(1989) in the United States reported a widespread of cynicism among organizational

members. Subsequently, a large-scale cross-cultural survey revealed cynicism to be a

meaningful worldview dimension, capturing commonalities and differences within and

between cultures (Cheung, Leung, & Au, 2006; Leung & Bond, 2004).

Cynicism is a broad, multifaceted concept, and hence measures of cynicism from

different approaches have been proposed in the literature. One of the widely used

measures of cynicism is Cook and Medley's (1954) Cynicism Hostility Scale in the

Minnesota Multiphasic Personality Inventory (MMPI). From a personality approach,

cynicism hostility denotes a trait of negative perceptions of, and hostility toward, others.

Conversely, some measures focus on the malleability of cynicism and capture a cynical

orientation toward or belief about the world, suggesting that one's degree of cynicism

can be changed (Dean et al., 1998); for instance, the Trustworthiness and Altruism

subscales from Wrightsman's (1974) Philosophies of Human Nature Scale (PHN), the

Cynicism Scale in Kanter and Mirvis's (1989) survey, as well as the Social Cynicism

scale from the Social Axioms Survey (SAS) developed by Leung and colleagues (Leung

et al., 2002; Leung & Bond, 2004).

In general, cynicism is defined as a negative and suspicious view of human nature

and general others, for example, "Most people will tell a lie if they can gain by it,"

"Most people are not really honest by nature," and "Kind-hearted people are easily

bullied" (Kanter & Mirvis, 1989; Leung & Bond, 2004, 2009). People who endorse a

cynical worldview tend to see the darkness of the social world and the negativity in

human beings, interpersonal exchanges, and social institutions. They are also portrayed

as individuals who disbelieve the sincerity and goodness of human motives and actions

when conflict of interest is present (Mills & Keli, 2005).

Despite the use of various operationalizations and instruments, cynicism was found

to relate to a wide range of negative social and life adjustments. For instance, cynicism

is associated with many poor health outcomes, even the prediction of mortality (Almada

et al., 1991; Barefoot, Dodge, Peterson, Dahlstrom, & Williams, 1989; Houston &

Vavak, 1991). In addition, studies have converged to show that people scoring high on

cynicism have pessimistic evaluations about themselves, poor psychological well-being,

and negative emotional responses. They tend to report lower satisfaction with life across

various domains (Chen, Cheung et al., 2006; Dincă & Iliescu, 2009; Lai et al., 2007),

higher perceived stress and suicidal ideation (Chen et al., 2009; Kuo, Kwantes, Towson,

& Nanson, 2006; Lam, Bond, Chen, & Wu, 2010), as well as anxious and hostile

reactions (Chen, Cheung, Bond, & Leung, 2005; Dincă & Iliescu, 2009; Houston &

Vavak, 1991).

Research also suggested that cynical individuals are disengaged from the social

world, and cynicism is related to various isolated interpersonal circumstances. For

example, cynicism is correlated with interpersonal mistrust (Kurman, in press; Singelis,

Hubbard, Her, & An, 2003), loneliness (Neto, 2006), and reduced likelihood to seek help

(Hart, 1996; Kuo et al., 2006). In work settings, cynicism is negatively related to

individual well-being (Leung, Ip, & Leung, 2010; Li, Zhou, & Leung, in press), as well

as work-related attitudes and behaviors (Fu et al., 2004; Guastello, Rieke, Guastello, &

Billings, 1992). Therefore, examining the correlates of cynicism has important

implications for the promotion of mental health in diverse settings.

One intriguing finding about the linkages between cynicism and well-being

indicators is its negative relation with self-esteem. Although previous cross-sectional

studies have consistently reported a negative correlation, their causality can only be

inferred from correlational results. Is that the negative view of the self being projected to

other human beings in the world, or is the negative view of the social world being

channeled to the evaluation of oneself (Hui & Hui, 2009)? A recent study with cross-

lagged panel design provided empirical evidence that cynicism leads to lower job

satisfaction across time (Leung et al., 2010). Nevertheless, the mechanisms underlying

the relation between cynical worldview and negative self-evaluation are still worth

exploring. In the following, I summarize these prior findings with an emphasis on the

interpretations provided by different researchers.

Guastello and colleagues (1992) found that cynicism and self-esteem were

negatively linked (r = -.37), but cynicism was not strongly related to personality traits.

This finding was contrary to their hypothesis that cynicism works through personality

traits, such as anxiety and introversion, to affect self-esteem. Indeed, the results are in

line with some recent findings demonstrating that cynicism and the Big Five personality

traits are only weakly related (Chen, Fok, Bond, & Matsumoto, 2006; Leung et al., in

press). Houston and Vavak (1991) argued that cynically hostile individuals have

insecure feelings about themselves when they are being challenged; these overlearned

reactions probably have a family and parenting basis. On the other hand, Neto (2006)

and Lai et al. (2007) discussed the strategies which cynical individuals adopt to cope

with the world, based on the findings that cynicism predicted self-esteem concurrently (r

= -.25) and prospectively (average r = -.30). Briefly, although the linkage between

cynicism and self-esteem was well-established, the causal direction is often hinted in the

proposed model of researchers' interest, and they seldom examined the explanations

suggested.

Social Connectedness as a Potential Mediator

It is well-documented in the literature that the self is influenced not only by our

own reflection and insight, but also by our social experiences. Extensive evidence has

highlighted the interpersonal, relational aspects of the self: we evaluate our self-worth

through social comparisons (Aspinwall & Taylor, 1993; Morse & Gergen, 1970) as well

as others' appraisals (Felson, 1993; Harter, 1993; Shraugher & Schoeneman, 1979).

Along the lines of this argument, Leary and colleagues (Leary, 1999; Leary, Tambor,

Terdal, & Downs, 1995; Leary & Baumeister, 2000) proposed the Sociometer Theory to

explain why people need self-esteem, and suggested that the major function of the self-

esteem system is to monitor and calibrate our responses toward others' evaluations and

acceptance of us. Our self-worth is therefore sensitive to interpersonal events such as

criticism, ignorance, and rejection by others, and we are motivated to counteract these

threats to our need to belong (Leary et al., 1995; Molden, Lucas, Gardner, Dean, &

Knowles, 2009). Based on this theory, I proposed that our general perceptions of social

experiences with others and the larger society, i.e., perceptions of social connectedness,

can link up a cynical worldview and a poor evaluation about oneself.

Social connectedness represents an individual's subjective awareness of being in

close relationship with other people and the social world (Lee & Robbins, 1995). This

overall sense of connectedness enables a person to retain the feelings of belonging or

being included. Previous studies showed that social connectedness is correlated with a

variety of psychological outcomes, such as psychological distress, dysfunctional

interpersonal behaviors, and most importantly, self-esteem (Lee & Robins, 1998; Lee,

Draper, & Lee, 2001; Williams & Galliher, 2006). Although there was no study directly

testing the linkage between cynicism and social connectedness, it can be implied from

previous findings that cynical individuals are more likely to perceive others in a

negative and biased way (Kurman, in press; Singelis et al., 2003). Consequently, cynical

individuals tend to perceive a disconnection from their social world. Moreover, Lee,

Dean, and Jung (2008) found that social connectedness could mediate the effect of

extraversion on life satisfaction and affect, which suggested a mediating process

involving one's perception of social relationships on self-perceptions. Therefore, the

potential mediating role of social connectedness between cynicism and self-esteem was

empirically tested in the current studies.

    To recapitulate, I predicted that people who endorse a cynical worldview would be

more likely to feel disconnected from others and the social world, since they incline to

attend to the negativity of human nature and social exchanges. Consequently, their self-

evaluations are affected due to the awareness of such negative social experiences. In

other words, social connectedness can mediate the negative relationship between cynicism and self-esteem. However, the reverse causal linkage that lower self-esteem leads to higher cynicism will also be empirically tested.

Overview of the Present Studies

The aim of my studies was two-fold: (1) to test the hypothesis that cynical worldview influences evaluation of the self using both longitudinal and experimental designs, and (2) to explain how cynicism and self-esteem are interrelated by testing the mediating effect of social connectedness. In Study 1, I tested the causal direction of cynicism and self-esteem using a cross-lagged panel design. In Study 2, I replicated the results by manipulating cynicism in an experimental study, and proposed social connectedness as a mediator to explain this association.

Study 1: A Longitudinal Panel Study

The major goal of Study 1 is to test two competing causal hypotheses: whether cynicism causes the decrease in self-esteem or the other way round. Although Lai et al. (2007) provided initial evidence that cynicism could predict self-esteem prospectively, a cross-lagged panel analysis is needed to rule out the third-variable effects (i.e., the causal effects are due to the operation of an unmeasured third variable), and to demonstrate causal predominance (i.e., one variable is a greater cause of the other).

Three aspects of this analysis are noteworthy when one tests the hypothesis that X causes Y (Duncan, 1969; Kenny, 1975; Kenny & Harackiewicz, 1979; Pelz & Andrews, 1964). First, data with panel design requires the same variables to be measured simultaneously and at different time points. Second, in order to reduce or nullify any effects from third variables, both Y at Time t (the auto-regressive effect of Y) and X at Time t+1 (the concurrent effect of X) are controlled for in the prediction of Y at Time t+1, thereby assessing the change in Y and taking into account common variance due to administration of measures at the same time point. Third, comparing the relative size of the lagged effects may indicate causal direction.

I therefore conducted a longitudinal study with two time points and employed the cross-lagged panel analysis to examine the causality question involving the linkage between cynicism and self-esteem, using a time lag of four months. Furthermore, two personality traits, extraversion and neuroticism, were controlled for in the analysis because they were shown to be relevant correlates of self-esteem across different nations (Schmitt & Allik, 2005).

Method

Participants and Procedure

A total of 118 college students were recruited for a longitudinal study with mass-

mails posted on the campus network. In the initial session (*T1*), participants were asked

to fill out a battery of questionnaires. In the second session (*T2*) four months later, they

were asked to fill out the questionnaires again with additional inventories including the

personality scales. Seven participants failed to attend the second session, which resulted

in a final sample of 111 participants (59 females; M_{age} = 20.43, *SD* = 1.16).

Measures

Cynicism. To assess cynicism, participants completed the 18-item Social Cynicism

scale, developed by Leung and Bond (2004), using 5-point Likert scales ranging from 1

(*strongly disbelieve*) to 5 (*strongly believe*). Sample items include, "Kind-hearted people

are easily bullied," "Powerful people tend to exploit others," and "People will stop

working hard if they secure a comfortable job." Unlike the widely used MMPI Cynicism

scale, this measure does not contain statements tapping personal characteristics and self-

perceptions, so that its use may result in a purer measure of the belief-about-the-world

facet of cynicism (Kurman, in press). Further, the scale has been shown to be reliable

and valid across multiple studies (see Leung & Bond, 2009 for a review). The measure

in the current study was reliable at both *T1* and *T2* (both αs = .83).

Self-esteem. Global self-evaluation was measured by the 10-item Rosenberg's

Self-Esteem Scale (Rosenberg, 1965). Items such as, "I feel that I am a person of worth,

at least on an equal plane with others" and "I take a positive attitude toward myself"

were rated on 4-point scales from 1 (*strongly agree*) to 4 (*strongly disagree*). The self-

esteem measure was reliable at both *T1* and *T2* (αs = .86 and .85).

Extraversion and neuroticism. Participants also completed a well-established

personality inventory (NEO-FFI; Costa & McCrae, 1992) with end points labeled as 1

(*strongly disagree*) and 5 (*strongly agree*) at *T2*. Extraversion and neuroticism were each

measured by 12 items with adequate internal consistency, αs = .78 and .86, respectively.

Results and Discussion

Descriptive statistics and bivariate correlations of the measures used across two

waves are summarized in Table 1. It is worthy of notice that despite the high test-retest

reliability of the cynicism and self-esteem measures across the four-month period,

$r(109)$ = .77 and .79, *ps* < .001, respectively, the scores did not completely overlap.

About 40% of the variances were not accounted for, which makes it possible to predict

their change over time.

A cross-lagged panel analysis on *T2* self-esteem was performed by means of

multiple regression. I entered the control variables extraversion and neuroticism into

Block 1, *T1* self-esteem and *T1*, *T2* cynicism into Block 2[1]. Results from the regression

analysis showed that *T2* self-esteem was predicted by extraversion, β = .33, $t(108)$ =

3.82, $p < .001$, and neuroticism, $\beta = -.33$, $t(108) = -5.12$, $p < .001$. More importantly, the

hypothesis was supported by the finding that *T2* self-esteem was predicted by *T1*

cynicism, $\beta = -.18$, $t(105) = -2.16$, $p < .05$, after controlling for the preceding *T1* self-

esteem, $\beta = -.61$, $t(105) = 8.60$, $p < .001$, and concurrent *T2* cynicism, $\beta = .13$, $t(105) =$

1.39, $p = .17$.

A similar regression analysis was performed to test if the causal relationship worked

in the opposite direction (i.e., low self-esteem caused cynicism). However, the analysis

showed that *T1* self-esteem did not significantly predict *T2* cynicism, $\beta = -.04$, $t(105) = -$

.37, $p = .$ 72, after controlling for extraversion and neuroticism. Results of the regression

analysis are summarized in Tables 2 and 3 (see Figure 1 for graphical representation).

To sum up, results from the cross-lagged panel analysis revealed that cynicism may

cause the decrease in self-esteem over time, but that the causal relationship does not

work in reverse. However, to draw a more robust conclusion, I designed an experiment

by randomly assigning people into a cynicism-primed condition versus a control

condition, and then observed the impact of priming cynicism on self-esteem in Study 2.

Study 2: An Experimental Study

While Study 1 showed a probable causal effect of cynicism on negative self-esteem

by a longitudinal design, it did not address the underlying mechanisms of this

relationship. Therefore, in Study 2, I tested the mediating role of social connectedness

using an experimental design.

I hypothesized that experimental manipulation of cynicism would decrease

participants' ratings of self-esteem and social connectedness, while social connectedness

would fully mediate this effect. In other words, people who are primed to think in

cynical ways experience a lower sense of connection with others, which in turn threatens

their evaluations of the self.

As no prior study has tested the linkage between social connectedness and

cynicism, and its mediating role, I divided Study 2 into two parts. An independent

survey study was first conducted to test the hypothesized relationships among these

variables (Study 2a), before the experimental manipulation of cynicism was

implemented (Study 2b).

Study 2a

Method

Participants and Procedure

Fifty-one university students (24 females; $M_{age} = 20.71$, $SD = 1.22$) who responded

to a recruitment mass e-mail participated in this study and filled out a questionnaire

packet with the scales on cynicism, self-esteem and social connectedness. They received

a monetary reward for their participation.

Measures

    Cynicism. In this study, an abbreviated version of the Social Cynicism scale

reported in Leung and Bond (2004) was employed. This 11-item measure showed

adequate reliability in this study ($\alpha = .79$).

    Self-esteem. The Rosenberg's Self-Esteem Scale (Rosenberg, 1965) was used as in

Study 1. Satisfactory reliability was achieved in the present study ($\alpha = .87$).

    Social connectedness. I used a modified version of Lee and Robin's (1995) Social

Connectedness Scale (Yoon, Lee, & Goh, 2008) to assess social connectedness[2]. This

five-item scale captures the extent to which individuals feel connected with general

others and the society. Sample items are, "I feel a sense of closeness with others" and "I

feel like I fit into the society." The items were rated on 7-point scales anchored with 1

(*strongly disagree*) and 7 (*strongly agree*). The scale demonstrated acceptable reliability

in the present study ($\alpha = .87$).

Results and Discussion

    The three measures: cynicism, self-esteem, and social connectedness, were

significantly correlated with each other. Social cynicism was negatively related to both

self-esteem, $r(49) = -.36$, $p < .01$, and social connectedness, $r(49) = -.41$, $p < .01$, while

social connectedness was positively associated with self-esteem, $r(49) = .49$, $p < .001$. A

mediation analysis revealed that cynicism no longer predicted self-esteem, $\beta = -.19$,

$t(48) = -1.43$, $p = .16$, when social connectedness was entered. Conversely, social

connectedness was still a significant predictor of self-esteem, $\beta = .42$, $t(48) = 3.08$, $p <$

.01. The mediation was significant according to the Sobel test, $z = -2.48$, $p < .01$.

Therefore, findings from the current cross-sectional study provided initial support to the

hypothesis about the mediating role of social connectedness. In the next study, the

change in self-esteem and social connectedness ratings were observed after a cynical

worldview was primed.

Study 2b

Method

Participants

A total of 41 university students (24 females; $M_{age} = 20.07$, $SD = 1.13$) who

responded to a recruitment mass e-mail participated in this experiment and received a

monetary reward for their participation.

Procedure

Participants were invited to a psychology laboratory and randomly assigned to two

experimental conditions: cynicism or neutral prime. Participants were then asked to

complete the priming task. To avoid participants guessing the research hypothesis, they

were told that the experimenter was evaluating a test for future use and therefore would

like to receive some feedback. They were asked to answer some questions on whether

they find any difficulty in completing the priming task afterwards.

After completing the priming task, they reported on the measures of self-esteem

and social connectedness. No participant linked up the priming task with the subsequent

measures of self-esteem and social connectedness when they were directly probed to

speculate the hypothesis at the end of the experiment. They were then paid, debriefed,

and thanked for their participation.

Follow-up emails were sent to the participants to provide detailed descriptions of

the study as well as a list of contact information on counseling service, if they

experience discomfort or distress resulting from the experiment.

Materials

Priming cynicism. Accessibility of cynical worldview was manipulated by

presenting belief statements related to cynicism. These statements were embedded in a

scrambled sentences task (Srull & Wyer, 1979), and it was introduced to participants as

a test to understand people's comprehension of words. The instruction was to arrange

the scrambled phrases into a complete sentence.

In the cynicism-primed condition, I first selected 13 items from the revised Social Cynicism scale according to the order of factor loadings generated from a pan-cultural factor analysis of 11 cultural groups (Leung et al., in press), for example, "Opportunities for people to get wealthy promote dishonesty." Each of these statements was then divided into four to five phrases, separated by slashes, and arranged in random order. In the control condition, I generated 13 belief statements similar in structure and length to the cynicism items but with a focus on general knowledge, such as "Going to bed early and getting up early make people healthy."

A study for manipulation check was conducted in a separate sample of 48 university students. Based on cynicism's general definition: a negative view about human nature (Leung & Bond, 2004), I devised a task to understand people's perception of human nature by randomly presenting negative and positive traits and then asking them to rate each trait regarding the extent to which it characterizes human nature. It was found that participants in the cynicism-primed condition significantly attributed higher levels of negative traits (e.g., selfishness, laziness, hypocrisy) – but not positive traits – to human nature ($M = 4.33$, $SD = 0.98$), compared to those in the control condition ($M = 3.53$, $SD = 0.77$), $t(46) = -3.13$, $p < .01$, $d = 0.92$. Thus, the newly

developed prime of cynicism significantly activated a negative and cynical view of

human nature.

Difficulty, complexity, and understandability. Right after the priming task,

participants were asked to rate the following statements using end-points of 1 (*not at all*)

and 7 (*very much*): "To what extent do you think the test is difficult for you?", "To what

extent do you think the structure alignment of the word phrases is complex?", and "To

what extent do you think these sentences are difficult to understand?".

Positive and negative affect. The International Positive and Negative Affect

Schedule Short Form (I-PANAS-SF; Thompson, 2007) was used to assess participants'

current mood state after the priming task. Ten adjectives describing positive and

negative affect were rated by participants on 7-point scales, anchored with 1 (*not at all*)

and 7 (*a lot of*). The reliabilities for positive and negative affect were acceptable, αs =

.62 and .88, respectively.

Self-esteem. The measure of self-esteem was identical to the one used in Study 1

and Study 2a while each item was rated on a 7-point scale ranging from 1 (*strongly*

disagree) to 7 (*strongly agree*). The measure showed satisfactory reliability in the

present study (α = .89).

Social connectedness. The same measure as in Study 2a was used to assess

perceived social connectedness. The items were rated on 7-point scales ranging from 1

(*strongly disagree*) and 7 (*strongly agree*). The scale was reliable in the current study (α

= .85).

Results and Discussion

I first examined whether participants' ratings on difficulty, complexity, and

understandability of the priming task differed across conditions to rule out the

possibility that it is the sentence structure and not the content of these statements that is

affecting the results. No significant differences on these ratings were found, $ps > .05$. In

addition, there were no significant differences on positive and negative affect observed

across conditions, $ps > .05$. The priming effects of cynicism were probably not due to

the manipulation of mood state.

The priming effect of cynicism on self-esteem was significant, $t(39) = 2.81, p <$

$.01, d = 0.90$. Individuals in the cynicism-primed condition ($M = 4.25, SD = 0.95$)

significantly rated themselves less positively compared to individuals in the control

condition ($M = 4.96, SD = 0.63$). Likewise, the priming effect on social connectedness

was significant, $t(39) = 2.59, p < .05, d = 0.83$. Individuals in the cynicism-primed

condition ($M = 4.16; SD = 1.02$) significantly reported lower levels of social

connectedness compared to their counterparts in the control condition ($M = 4.92, SD =$

0.84); see Figure 2.

I then conducted a hierarchical regression analysis to test the mediation effect by entering dummy-coded experimental condition (1 = cynicism-primed condition, 0 = control condition) into Block 1 and adding social connectedness into Block 2. The priming of cynicism significantly predicted self-esteem in Block 1, $\beta = -.41$, $t(39) = -2.81$, $p < .01$, but the effect was not significant in Block 2 after entering social connectedness, $\beta = -.26$, $t(38) = -1.76$, $p = .09$. However, social connectedness significantly predicted self-esteem, $\beta = .40$, $t(38) = 2.73$, $p < .05$. The Sobel test confirmed the significance of the mediation effect, $z = -2.13$, $p < .05$.

In brief, the results of Study 2b supported the hypothesis that experimental manipulation of cynicism had substantial impact on self-esteem. Moreover, social connectedness fully mediated the priming effect of cynicism on self-esteem.

General Discussion

Results from the longitudinal and experimental studies provide support to the claim that cynicism leads to the change in self-esteem, with perceived social connectedness as one of the possible pathways. While plenty of studies using diverse samples have found that cynicism is negatively associated with self-esteem (e.g., Guastello et al., 1992; Lai et al., 2007; Neto, 2006), the current findings pinpointed a causal mechanism underlying

how they affect each other. Individuals who filter their social and personal experiences

with a cynical worldview tend to evaluate both their relationships and their selves in a

negative light.

Theoretical and Practical Implications

I started with an open question about whether self-views influence worldviews or

whether worldviews shape self-views. My study provides empirical evidence to

showcase how worldviews can affect self-views through the structuring of our

subjective perceptions of things in our social lives. People may assume that how we see

ourselves is fundamental and all other aspects of our perceptions are derived from this

basic apprehension, through a process of projecting ourselves onto other objects, events,

and situations. However, the self is only part of the world. The present results showed

that perceptions about the world determine how we construe self-worth. While

researchers have long been interested in investigating the role of self-views in

explaining and predicting behaviors, worldviews receive relatively less attention in the

literature (Koltko-Rivera, 2004). In a recent presentation, Funder (2011, January) noted

jokingly about the overwhelming use of "self-" as a prefix to name psychological

constructs. This study hence calls for more scientific inquiries about the role of

worldviews in shaping individual and social experiences – worldviews are not merely

generalizations, projections or extensions of one's self-views. Further, the current

findings lent support to the Sociometer Theory in the explanation of the role of self-

esteem. Our self-esteem system appears to be largely shaped by our social experiences,

and hence it is sensitive to our subjective perceptions of interpersonal relatedness (Leary

& Baumeister, 2000).

The current results also suggested that the causal effect of cynicism on self-esteem

does not necessarily involve affective components or mood-congruent self-perceptions.

It was observed that the effects held when personality traits that are linked to emotional

processes (McNiel & Fleeson, 2006), such as extraversion and neuroticism, were

controlled for (Study 1), and when the belief components of worldviews, not affect,

were primed (Study 2b). In fact, past research found that mood-congruent self-judgment

was eliminated when an other-focused compared to a self-focused decision framework

was manipulated (Detweiler-Bedell & Detweiler-Bedell, 2006). Mood has limited

impact on people's perceptions of their success and failure when their focus is on other

individuals' achievement. As cynical worldview focuses on general others in the social

world, it influences self-esteem by cognitively constructing social information and

experiences rather than inducing negative mood.

Answers to the above questions are not only theoretically meaningful, but are also

of practical value. The present findings imply that considering the role of worldviews during assessments and interventions with distressed clients can be valuable and useful (Lam et al., 2010). Experimental results from Study 2 in fact demonstrated that worldviews such as cynicism –at least its cognitive component – are relatively malleable, suggesting that worldviews can be modified and interventions on worldviews may be effective in changing one's evaluations of social and personal experiences.

This conclusion is indeed in line with the Rational Emotive Behavior Therapy (REBT) developed by Albert Ellis which proposed that one's emotional problems including low self-esteem are caused by his or her irrational views, beliefs, and interpretations of the situations and events, and only by disputing them can a therapist help a client get over the problems (Ellis, 1957). Ellis (2005) thought that our belief system (B) filters and makes meaning of adversity (A) and hence influences whether we accept or disapprove of ourselves, others, and life (C): the ABCs of REBT. Cognitive Behavior Therapy (CBT; Beck, 1975) also shares a similar approach of cognitively reconstructing one's dysfunctional worldviews, even though self-concepts are more commonly stressed in practice. In a similar vein, many researchers also emphasize working on clients' worldviews in counseling contexts (e.g., Ibrahim, 1991; Ibrahim, Roysircar-Sodowsky, & Ohnishi, 2001).

My study presents practical implications for interventions with worldviews, and yet it remains an open question whether worldviews are still malleable in an older population and more importantly whether the causal direction remains in more mature groups.

Limitations and Future Directions

First, the effects found in the present study are relatively short-term, and hence the causal mechanism should be interpreted with caution for long-term linkages among the variables. For example, cynicism may be developed by low self-esteem at an earlier age through socialization processes. Additionally, mutual, reciprocal, and synergic effects may be observed, if data with a longer period and more waves are collected. For example, Rueter and Conger (1998) found that using different measurement intervals may reveal different interaction patterns among variables in their study of the linkage between parenting and children's behaviors. Therefore, the currently observed causal effects should be explored and verified in future studies with multiples waves of data collected across a longer period of time or even across the lifespan.

Second, in the current study cynicism was depicted as a dysfunctional worldview, as many studies have shown its link with poor psychological functioning. However, recent studies have started to realize the beneficial functioning of a cynical worldview

and test the buffering hypothesis that cynicism indeed can attenuate the impact of

negative outcomes (Deng, Guan, Bond, & Zhang, 2011; Li et al., in press) and show

adaptive functions, dependent on the context (Safdar, Lewis, & Daneshpour, 2006).

More relevant to the present research, a study found that cynicism can buffer the

negative impact of low body-esteem on global self-evaluation (Lam, Mak, & Gordon,

2010). Further research can explore how cynicism interacts with various aspects of the

self and examine the symbolic representations of the self and others as a dynamic

system created to facilitate human functioning.

Moreover, since the present research is an initial attempt to experimentally

manipulate cynicism in the literature, questions remain for the priming method itself.

For instance, can a positive and beneficent worldview be primed; whether the prime

exerts similar effects on all individuals; and what kind of traits and personality factors

can strengthen or weaken the activation of cynical belief? These questions are important

for future research to verify the validity of the cynicism priming technique and broaden

our understanding of its boundaries and limitations.

Last but not least, I only tested one of the mechanisms in the linkages between self-

views and worldviews; perhaps there are other underlying mechanisms involving

different types of worldview and self-view combinations. Future studies should enlarge

the scope of investigation on these linkages. For instance, does a belief about the effort-

reward contingency orient people to focus on their competence and capabilities, and

hence predict their academic motivation and achievement (Leung, Chen, & Lam, 2010;

Leung, Lun, & Lam, 2011)? Besides, studies showed that self-esteem consists of

different sources or components (Kwan, Kuang, & Hui, 2009; Tafarodi & Swann, 1995),

future research may benefit from clarifying their distinctive relations with cynicism.

Conclusion

To conclude, this paper examined the causal linkage between cynicism and self-

esteem in two studies. Findings from these studies provided potential support that

cynicism has a causal effect on self-esteem through perceived social connectedness.

These consistent results underscored the importance of worldviews in future research

directions and clinical applications.

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Footnotes

[1]I checked the multicollinearity assumption of regression analysis using the

Variance Inflation Factor (VIF) – a cutoff of 10 indicates potential multicollinearlity

problem. No variables in the regression equations exceed the VIF cutoff of 10

suggesting no serious multicollinearity concern.

[2]I conducted an explorative factor analysis with scree plot on this five-item

measure. Results suggested a single factor solution with higher scores indicating a

stronger sense of social connectedness.

Table 1

Means, Standard Deviations, and Bivariate Correlations among Measures, Study 1

Variable	Mean	*SD*	1	2	3	4	5	6
1. *T1* Cynicism	3.11	0.49	–					
2. *T1* Self-esteem	2.72	0.46	-.19*	–				
3. *T2* Cynicism	3.21	0.46	.77***	-.25**	–			
4. *T2* Self-esteem	2.81	0.45	-.30**	.79***	-.30**	–		
5. Extraversion	3.06	0.57	-.27**	.55***	-.37***	.57***	–	
6. Neuroticism	3.33	0.67	.32**	-.58***	.44***	-.62***	-.55***	–

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 2

Hierarchical Regression Model Predicting T2 Self-esteem

Variable	Block 1 β	Block 2 β
Extraversion	0.33***	0.12
Neuroticism	-0.44***	-0.19*
T1 Self-esteem		0.61***
T2 Cynicism		0.13
T1 Cynicism		-0.18*
R^2	0.45	0.69
F change	44.83***	26.55***
d.f.	2/108	3/105

*p < .05. **p < .01. ***p < .001.

Table 3

Hierarchical Regression Model Predicting Cynicism T2

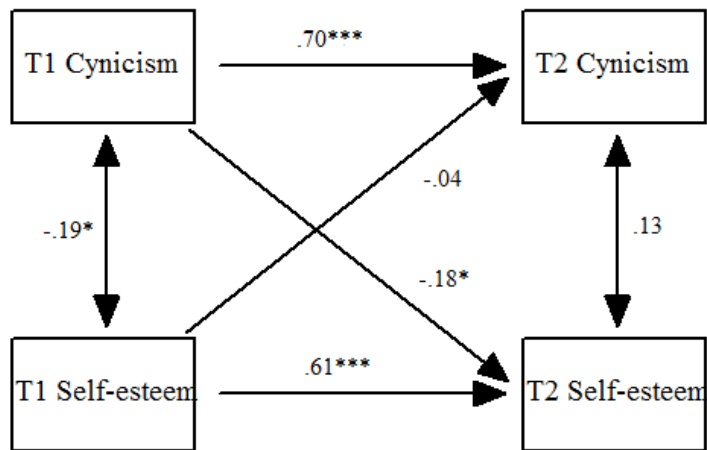| Variable	Block 1 β	Block 2 β
Extraversion	-0.19	-0.13
Neuroticism	0.34**	0.21**
T1 Cynicism		0.70***
T2 Self-esteem		0.14
T2 Self-esteem		-0.04
R^2	0.22	0.65
F change	15.01***	42.66**
d.f.	2/108	3/105

*p < .05. **p < .01. ***p < .001.

Figure 1. Summary of standardized regression coefficients in cross-lagged panel

regression analysis for Study 1

Note. Results were controlled for extraversion and neuroticism.
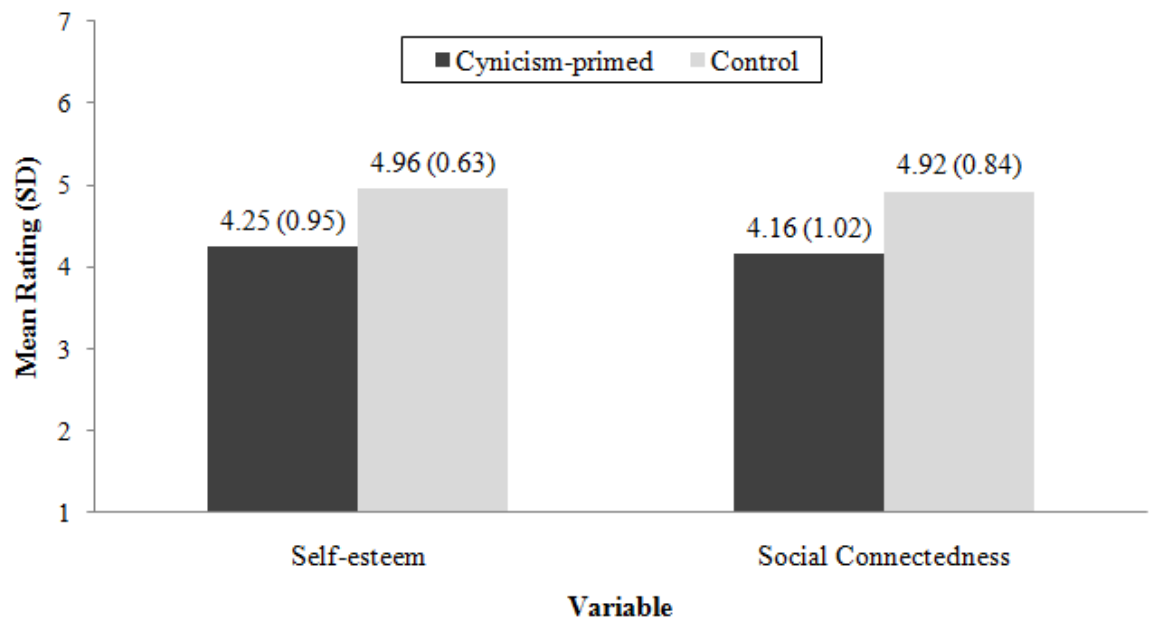
p < .05. **p* < .01. ***p* < .001.

Figure 2. Mean ratings and standard deviations of self-esteem and social connectedness across experimental conditions.