AN IDENTITY CONSOLIDATION VIEW OF SOCIAL PHENOMENA: THEORY AND RESEARCH

by

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Dedication

This thesis is gratefully dedicated to my mother and father, Rev. Isobel Sinclair McGregor and Dr. Duncan Colin McGregor, whose humility and integrity continue to inspire me.

Abstract

This thesis provides a theoretical rationale and empirical support for identity consolidation theory. The main contention of identity consolidation theory is that a powerful motivator, that drives a diverse array of enigmatic social phenomena, is the need for individuals to quell the intrapsychic conflict that arises from the unique human predicament of choice. Choice can be problematic for humans because the capacity for abstract, future oriented thought creates the potential for primary conflict among the imagined action alternatives, and secondary conflict among the priorities, values, and "possible selves" that individuals use as arbiters for choosing among the action alternatives. As such, the adaptive advantage of planned action comes at the price of potentially paralyzing psychic conflict (Lewin, 1935) and dissonance (Festinger, 1957).

According to identity consolidation theory, some of the most passionate and often irrational social behaviors derive their incentive value from their ability to quell the potential for psychic conflict inherent in the human condition. Religions, relationships, and success strivings, for example, each can be seen as providing multifaceted solutions to the fundamental predicament of choice. The dissonance-reduction mechanisms by which these, and other phenomena, contribute to eight identity consolidation strategies are explicated

As well as providing an overarching explanatory theory for understanding social phenomena, identity consolidation theory also holds promise for integrating a number of prominent social psychological theories, from a perspective that is rooted in Festinger's seminal theory of cognitive dissonance. In particular, the present thesis proposes, and provides some evidence for the contention, that need for belongingness (Baumeister & Leary, 1995), "terror management" in response to mortality salience (Greenberg, Solomon, & Pyszczynski, 1997), self-affirmation (Steele, 1988), distress arising from "deliberative mindset" (Taylor & Gollwitzer, 1995), authoritarianism (Altemeyer, 1994), closed-mindedness (Rokeach, 1960), the quest for meaningfulness in one's goal pursuits and life (Baumeister, 1991b; McGregor & Little, 1998), and personality integration (Kasser &

Ryan, 1993, 1996; Sheldon & Kasser, 1995; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997) at least in part represent identity consolidation strategies.

In five experiments, dissonance was induced via three identity confrontation manipulations that expose self-relevant inconsistencies — temporal extension, mortality salience, and dilemma deliberation. In Experiment 1, the temporal extension manipulation of identity confrontation caused dissonance and more punitive reactions toward a social-deviant/ outgroup member. In Experiment 2, the temporal extension and mortality salience identity confrontation manipulations caused dissonance and intergroup bias. Experiment 3 shows that the results of the first two experiments can not be accounted for by terror management theory (Greenberg, Solomon, & Pyszczynski, 1997) because the temporal extension manipulation did not prime death thoughts.

In Experiment 4, the dilemma deliberation identity confrontation manipulation caused dissonance and hardening of attitudes about social issues (i.e., more conviction, more perceived social consensus, and less ambivalence). Furthermore, hardening of the attitudes effectively reduced dissonance to baseline levels. Also, providing participants with an identity-repair exercise after the dilemma deliberation exercise reduced their dissonance to baseline levels, and eliminated attitude hardening. The identity-repair exercise involved depicting one's past actions and future plans as being consistent with an important personal value. The identity-repair finding suggests that the identity consolidation strategy of integration can reduce dissonance and preempt more rigid identity consolidation strategies.

In Experiment 5, temporal extension and mortality salience identity confrontation manipulations caused changes in the personal goals that participants intended on pursuing over the next few weeks, and the way they framed their identities. After identity confrontation, participants intended on engaging in personal projects that were more important, self-defining, and consistent with their core values (exemplifying the identity consolidation strategy of integration). Their identities also became more communal in theme (exemplifying the identity consolidation strategies of relationships and integration). This finding suggests that participants will use whatever identity consolidation strategy is most readily available to them. It also suggests that one way to reduce potentially maladaptive over reliance on rigid identity consolidation strategies (such as the Experiments 1, 2, and 4 extremism) might be to make integration opportunities available and accessible.

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General Introduction

The identity consolidation theory and supporting research presented in this thesis was conceived in an attempt to illuminate a common theme underlying a variety of enigmatic human social phenomena, such as religious zeal, romantic ecstasy, depression, jealous rage, fanatical extremism, narcissism, prejudice, psychotherapy, ethnic hatred, having children, war, conformity, fear of death, alcohol abuse, national pride, workaholism, and suicide. The central premise of this thesis is that many human social behaviors can be, at least in part, motivated by the need for individuals to feel like they know who they are — in other words, to feel like their identities are consolidated.

Two modules comprise this thesis. Both modules stand on their own, and can be read without the other. The first module, titled, An Identity Consolidation View of Social Phenomena, is a theoretical explication of identity consolidation theory and its cognitive dissonance theory roots (Festinger, 1957). The second module, titled, Rigid and Integrative Responses to Identity Confrontation, presents five experiments that empirically test identity consolidation theory.

An Identity Consolidation View of Social Phenomena

Introduction

My family used to have a dog, Hector, who had a very simple life. The two high points in his day that elicited vigorous tail-wagging were eating his kibble, and going for a walk. One day I accidentally rattled his leash by the door before he had finished eating his kibble. Panicked, he ran from his kibble to the door, but when he realized he'd left his dinner he ran back to his bowl, then back to the door, and back and forth several times, until finally, with a pathetic flash of dog-logic, he bounded to the door with his bowl in his mouth.

The identity consolidation theory (ICT) introduced in this thesis is based on the observation that, whereas goal conflicts are limited by immediate and salient alternatives for other animals, the human ability for abstract thought and imagining alternative futures presents the potential, at every choice point, for paralyzing multiple approach/avoidance conflicts among imagined alternatives. In contrast to Hector's relatively simple conflict, a human contemplating a choice between dinner alone vs. a walk with a friend could quickly conjure up hundreds of alternative plans, most more plausible than the canine bowl-in-mouth option (e.g., skip a meal, stand-up the friend, have a snack first, go for a quick run instead, talk to the friend on the phone while eating dinner, etc.). Approaching one alternative often means forgoing the others.

But not only do the imagined action alternatives themselves present the potential for primary conflict, even worse, more abstract secondary conflict, among alternative values, priorities, and possible selves associated with the action alternatives, can potentially persist even after the initiating primary conflict has passed. The dinner alone vs. walk with a friend decision could easily prime a cacophony of higher order considerations (e.g., keeping physically fit, staying on a routine, making quality time for the people one cares about, not ending up like my Uncle Ned, having a balanced life, enjoying nature, supporting others, living in the moment, listening to my body, being a Buddhist), which if simultaneously considered, could cause paralyzing ambivalence and discomfort.

ICT proposes that a fundamental human predicament arises from choice and the associated primary and secondary conflict, and that much of human social behavior is motivated by the need to cope with this unique predicament. Conflict between alternatives may arise when there are a number of highly attractive alternatives or when there seem to be no attractive alternatives. In both cases, one is vulnerable to being caught between alternatives because no course of action is clearly indicated. Eight identity consolidation strategies are relied upon that, in different ways, reduce primary and secondary conflict by helping individuals feel like they have an unequivocal identity to use as an arbiter for choice.

The first module of this thesis will begin with a brief overview of how the predicament of choice figures prominently in several non-psychological disciplines. ICT is then introduced, followed by an explanation of the basic dissonance reduction strategies that are theorized to underlie eight identity consolidation strategies used for coping with choice and conflict. The eight strategies are explicated and relevant personality and social psychological theory and research is reviewed. A discussion follows that focuses on how the eight strategies might combine to motivate a variety of important social behaviors.

The Predicament of Choice as Highlighted in Non-Psychological Disciplines

Before explicating identity consolidation theory and the specific identity consolidation strategies used to cope with choice, the following section provides a brief overview of the cross-disciplinary centrality of the human predicament of choice. The concept of choice is prominently featured in religion, sociology, and existential philosophy.

Religion. The assertion that much of human social behavior is motivated by the need to cope with choice is supported by the observation that most cultures throughout history have developed religions that help guide the choices of individuals. Buddhism promotes an eight-fold path to enlightenment, the Judeo-Christian tradition provides ten commandments, Christian writings promise "the way, the truth, and the light," and the word "Islam" literally means "submitting oneself or one's person to God" (Gibb, 1970).

A common theme in the evolution of most religions also suggests a choice-guiding function. The evolution of most religious systems is punctuated by bursts of activity that occur during periods of intense inter-cultural ferment, when the behavioral prescriptions of each system are thrown in question. During such periods, new systems emerge to transcend or unify the differences among the competing systems.[1] Islam provides a case study of religious evolution. Mohammed began his career as a commercial arbitrator in Mecca, the key trade link between the East and the Mediterranean. The influences impinging on Mohammed that required arbitration included Persian Zorastrianism, Byzantine Christianity, Judaism, Arabian Bedouin codes of conduct, and Indian philosophy. Mohammed's early experience as a cultural arbitrator culminated in his "revelation" of the Koran, which provides the basis for Islam's exhaustive reference material for guiding correct behavior for Muslims in specific circumstances. For early Muslims there was little distinction between the legal and religious (Donohue & Esposito, 1982; Gibb, 1970).

Although most religious traditions provide external guidelines for regulating behavior, most religious traditions have a mystic tradition as well, that emphasizes introspection, self-knowledge, and the bliss associated with self-discovery and acting in accordance with one's inner truth (Armstrong, 1993). Thus, with religions supporting both internal and external guides for choice, it is not surprising that accounts of conversion and peak religious experiences often tend to describe feelings of having a heightened sense of clarity, direction, and purpose, and use metaphors of light and vision (e.g., James, 1958/1902). Confusion, despair, and blindness give way to conviction, peace, and clarity.

[1]Early Hindu scriptures (the Vedas) arose in response to the merger of three cultures with incompatible deities and rituals, and Jainist and Buddhist offshoots of Hinduism corresponded to subsequent struggles between competing political hierarchies (Embree, 1972; Zimmer, 1946). Judaic monotheism was similarly forged in a crucible of cultural conflict, and was formatively shaped by Semitic Asians' experience of oppressive Egyptian rule. Christianity also arose against the backdrop of cultural exile and Roman occupation.

Sociology. The nature of religious experience and the history of the evolution of religions, considered in light of the legacy of holy wars, crusades and religious warfare, attests to the powerful human desire for a non-equivocal guide for behavior. This theme is also emphasized in sociology. In one of the first comprehensive applications of social science, Durkheim (1897/1952) found the absence or breakdown of cultural or communal constraints on behavior to be associated with "anomic" and "egoistic" suicide. According to Durkheim, without commitment to cultural norms or other people, one is vulnerable to being immobilized by choice in the face of the overwhelming array of possibilities. Durkheim found that across cultures, suicide rates were highest during periods of cultural, political, and familial instability. Along these lines, anomie has continued to be a fundamental construct in sociology, and is held responsible for a number of social as well as personal ills (Merton, 1964; Seeman, 1991).

Existential philosophy. In a similar vein, discomfort associated with freedom and choice is a central theme in existential philosophy. Based on the premise that the world provides no a priori conditions for how one should live life, a common credo for existential philosophy is that "existence precedes essence." From this perspective, one must decide how to live, without the benefit of any valid objective standard. Sartre (cited in Barnes, 1973) refers to the uncomfortable awareness of such radical choice as "nauseating," and outlines several coping strategies commonly used.

According to Sartre "hell is others" because self-awareness and contradictory behavioral prescriptions are heightened by the "gaze" of others. Seeing oneself through the eyes of others makes one aware of other perspectives on how one should act. Strategies for coping with this uncomfortable awareness include the attempt to "be god," trumping the behavioral prescriptions implicit in the gaze of others with one's own superiority and dominance. The other common strategy is to live in "bad faith," that is, to relinquish responsibility for choice by submitting to the authority of superior others, gods, or cultural norms (Barnes, 1973). Fromm (1941) and early theorizing on the authoritarian personality

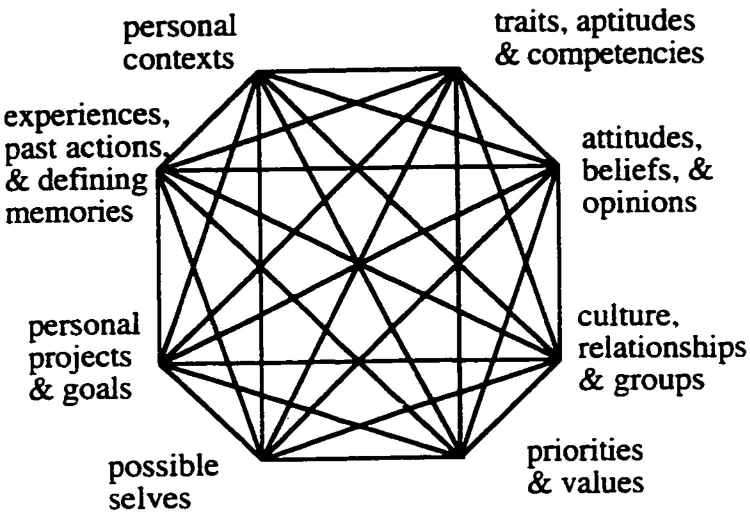
(Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950) contended that these existentially motivated drives for supremacy and conformity jointly contribute to antisocial tendencies and atrocities including the rise of Nazism. From this perspective, egotism and conformity are both compensatory orientations in the face of uncertainty about how to live.

Identity Consolidation Theory

Overview

ICT contends that in order to make and justify a particular behavioral commitment (providing that the decision is not guided by habit or an external agency), one needs some referent to serve as an arbiter for selecting among competing action alternatives. Otherwise one would remain mired in conflict. For this purpose, as choices arise, one refers to self-relevant knowledge structures that provide information about what to prioritize, and how to best orient oneself to others and the world. For example, to inform choice, one could refer to cognitive representations of role models one wanted to emulate, roles, personality dispositions, competencies, goals, theories, possible selves, ideal selves, ought selves, life-tasks, defining memories, cultural or group identifications, relationship partner expectations, contextual affordances, past behaviors, personal myths, introjects, attitudes, values, beliefs — all of which are referred to as "self-elements" in the present article (see Figure 1).

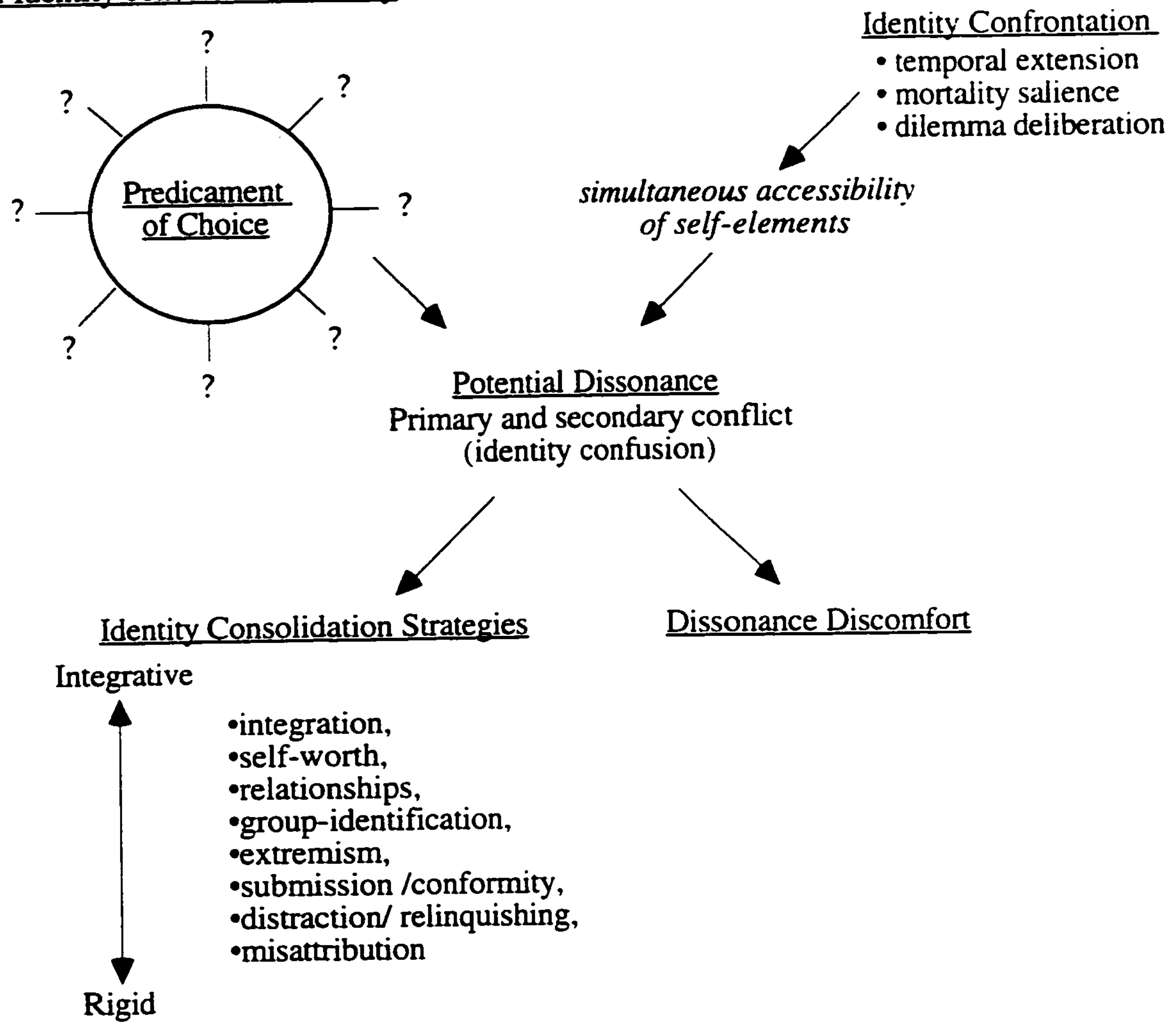
Figure 1. Identity as a network of diverse self-elements.



Self-elements are multifarious, however, and may be mutually incompatible because they accumulate across diverse temporal and social contexts. Also, different sets of self-elements are cognitively accessible at different times, depending on which have been recently primed (Higgins, 1996; Markus & Wurf, 1987). The variable accessibility, and temporal and contextual diversity of self-elements makes contradictions probable. Thus, the use of self-elements as a means of regulating choice raises the potential for exacerbating the primary conflict (among incompatible action alternatives) with secondary conflict among inconsistent self-elements (see Figure 2). Furthermore, conflicting self-elements can remain salient even after the eliciting choice point is past, creating the potential for chronic and accumulated intrapsychic conflict. This predicament can be further inflamed when situational factors (the identity confrontation phenomena depicted in Figure 2) induce reflection on a wide range of potentially inconsistent self-elements.

To cope with this predicament, individuals turn to a variety of identity consolidation strategies (see Figure 2), aimed at reducing the perception of conflict among self-elements. Some strategies, such as identity integration, involve efforts at changing self-elements and relations among self-elements to render them more internally consistent. Others, such as extremism, are more rigid, and rely upon bolstering a particular set of elements and trivializing others. Other strategies, such as distraction, rely upon escaping from awareness of inconsistent elements. (These and other identity consolidation strategies are discussed in more detail in a later section.)

Figure 2. Identity consolidation theory.



An assumption of the theory is that awareness of secondary conflict signals the danger of potential self-regulatory collapse (i.e., not being able to decide among alternatives), and to protect against such a collapse, identity consolidation strategies are spontaneously activated without the necessity of conscious thought. The consolidation strategies are not mutually exclusive and several can be activated simultaneously. It is presumed that there is an hydraulic relation between integration and the various other strategies, such that integration reduces the need to rely on the other, more rigid[2] strategies.

As depicted in Figure 2, secondary conflict may also induce dissonance discomfort, depending on the degree of exposure to the self-element inconsistencies, and depending on how automatically the various identity consolidation strategies are activated (the identity consolidation strategies may preempt the experience of dissonance). In other words, sometimes identity consolidation strategies can be activated upon awareness of inconsistency, and without the experience of psychological discomfort (much in the same way that sometimes one does not need to actually get wet in order to put on a raincoat). According to ICT, a number of important social behaviors are at least partly motivated by such protective identity consolidation efforts.

Basic Processes

Conflict. In the opening example, it was probably adaptive that Hector experienced discomfort over his double approach/avoidance conflict. Otherwise, like the famous jackass in Aesop's fables who starved between two bales of hay, he might have continued his ambivalent hedge back and forth between the door and the bowl while I changed my mind about the walk, or the opportunistic cats ate the rest of his food, or both. Discomfort associated with conflict among alternatives likely serves the basic adaptive function of motivating some kind of resolution, (whether it be choosing between one of the response alternatives or simply fleeing the field), and very likely is hardwired in us and in most animals.

Now, consider the human condition, in which the ability for abstract thought liberates us from concrete and immediate action alternatives and allows us to simultaneously entertain multiple possible courses of action (and their hypothetical rewards

[2]The term "rigid" is used to describe identity consolidation strategies in which self-elements are not changed, as opposed to integration, which involves adjusting self-elements and their meanings.

and drawbacks). The cognitive representations of the alternatives, and the alternative values and priorities that the alternatives prime, provide the substrate for an extremely complex multiple approach/avoidance conflict. Any decision potentially means foregoing the whole array of alternative possibilities. Thus, the pre-decision state is aversive because one is caught in a multiple approach-avoidance conflict (ambivalence), and deciding is aversive because one is faced with the loss of all other attractive alternatives (regret). Essentially then, choice can quite easily configure itself as a multiple approach-avoidance conflict (caught between the pros and cons of the imagined alternatives), complicated by an anticipatory avoidance-avoidance conflict (caught between ambivalence and regret). As such, the unique human ability for abstract associative thought is a mixed blessing. It provides the immense instrumental advantage of enabling creative solutions and planned action (Sedikides & Skowronski, 1997), but it carries the potential for a heavy emotional and self-regulatory cost in terms of conflict (e.g., Miller, 1944).

Cognitive dissonance. The above discussion provides a conflict-based rationale for Festinger's (1957) cognitive dissonance theory (CDT). Several theorists have noted the similarity between Lewin's (1931, 1935) conflict situations and Festinger's cognitive dissonance construct[3] (e.g., Brehm & Cohen, 1962, p. 232-244; Jones & Gerard, 1967, pp. 186-226). Indeed, Festinger was a student of Lewin.[4] According to Lewin, when action alternatives are in conflict, a state of "psychical tension" results, and persists until the conflict is somehow resolved. This is typically (and not surprisingly, because Lewin studied children) accomplished by rather childish and unsophisticated coping strategies such as physically fleeing the field of the conflict (by attempting to leave home, or covering one's eyes), by flights into unreality (imagining a more ideal situation or excessively

[3]Aronson (1968, p. 13-14) emphatically insists that "whatever else dissonance theory might be, it is *not* 'nothing but conflict theory'" because conflict pertains to the pre-decisional phase and dissonance pertains to the post-decisional phase. The present author agrees with the Brehm & Cohen perspective, however, that the pre-decisional phase resembles the post-decisional phase in that it involves simulated commitment to the various possible decision options to "try them on."
[4]Lewin (1931) introduced the concept of approach/approach, approach/avoidance, and avoidance/avoidance conflicts in his description of his studies on childrens' reactions to incompatible goals.

deferring to the authority of others as if the others' wishes were one's own), or by becoming restless and distracting oneself with superficial play, or rage. Lewin acknowledged that the psychological environment includes "planes of unreality" including hopes, dreams, and more abstract representations, but does not devote theoretical or empirical attention to conflict in these areas. CDT gets closer to conflict on planes of unreality with its focus on conflict among cognitive elements instead of action alternatives. In essence, CDT could be considered a theory about conflict on Lewin's planes of unreality rather than among action alternatives.

Festinger's (1957) original explication of CDT proposed that when cognitive elements are in conflict (i.e., when they imply the negation of each other), an aversive state of cognitive dissonance results that motivates individuals to adjust the elements to reduce the conflict. This premise was shared by a number of related consistency theories at the time (see Abelson et al., 1968). What set CDT apart from the others was the clever demonstrations of how cognitive dissonance could motivate people to behave socially in surprising ways. In the most commonly researched CDT paradigm, hundreds of experiments over the past 40 years have demonstrated that when individuals are subtly induced to perform counterattitudinal behaviors, their attitudes shift in the direction of the behaviors.[5]

Early dissonance studies cleverly demonstrated participants' tendency to justify their counterattitudinal behaviors, but in most experiments inconsistent cognitions were <u>assumed</u> to follow from behaviors that <u>implied</u> an inconsistent position, and psychological discomfort was <u>inferred</u> from attitude change. Festinger's core proposition, that inconsistent cognitions cause psychological discomfort, was not directly tested. Reliance

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[5]This challenged the relatively bland version of reinforcement theory that was popular at the time (Aronson, 1992, p. 303), and lent scientific support to the notion of motivated cognition that had been percolating in other disciplines for many years. In philosophy, Schopenhauer (1818/1883, p. 421) claimed that desire "is the strong blind man who carries on his shoulders the lame man (reason) who can see." In psychoanalytic psychology, "rationalization" was presented as a prevalent defense mechanism. The outcomes of the first dissonance studies lent vivid empirical support to the hypothesis that people sometimes act first and justify later.

on behavioral induction and indirect assessment of dissonance opened the door for a challenge to the main cognitive consistency premise of the theory.

Self-perception theory (Bem, 1967) argued that attributional processes could explain attitude change in conventional dissonance paradigms, and that no aversive motivational state need exist. According to Bem, participants noticed themselves behaving in a particular way, and because no external reason for their behavior was apparent, they inferred that their behavior must have arisen from internal factors (i.e., attitudes consistent with the behavior). The cognitive dissonance interpretation was eventually salvaged from the self-perception challenge by the finding that if participants have an opportunity to misattribute dissonance arousal to an external source, such as a pill (Zanna & Cooper, 1974) or an unpleasant environment (Fazio, Zanna & Cooper, 1977), attitude change does not occur. This indirect support for the aversiveness of cognitive inconsistency has recently been corroborated by research in which dissonance discomfort is measured directly by physiological measures (Elkin & Lieppe, 1986; Losch & Cacioppo, 1990) and self-report measures (Elliot & Devine, 1994; Harmon-Jones, Brehm, Greenberg, Simon, & Nelson, 1996). Thus, just as goal conflicts arouse unpleasant affect (Lewin, 1935; Emmons & King, 1988; Miller, 1944), Festinger's contention that cognitive conflict is unpleasant is now well supported empirically.

Identity Consolidation Strategies

The following section provides an explanation of how eight phenomena can be interpreted as identity consolidation strategies for coping with choice. In response to the basic and chronic dissonance associated with making choices and setting priorities in life, individuals may attempt to: (a) integrate their self-elements, (b) bolster self-worth, (c) turn to relationships or (d) group-identifications, (e) adhere to a subset of self-elements with conviction and extremity, (f) submit to external authority, (g) distract themselves from the inconsistent self-elements, or (h) misattribute the discomfort associated with inconsistent self-elements.

Identity Integration

According to ICT, an integrated identity relieves dissonance among self-elements because it provides a consistent and ready source of important cognitions for guiding and bolstering decisions. According to Festinger (1957, pp. 28-29) dissonance can be reduced by "adding more and more cognitions that are consonant with [it]." The self-elements of integrated, internally consistent identities unequivocally orient individuals toward particular action alternatives, and also present less potential for secondary conflict. So, for example, when attempting to make a decision, a less integrated person might bring to bear self-elements with contradictory implications, such as, his defining memory of relaxed leisure at the family cottage, his desired future-self as a high-powered executive, his introverted disposition, and his current enrollment as a dramatic arts major. A more integrated person on the other hand, might have more consistent self-elements come to mind when making a career decision, such as, her defining memory of winning a highschool poetry contest, her desired future-self as a writer, her self-perception of being creative and articulate, and her enrollment as a journalism major.

This functional interpretation of identity as an essential arbiter of choice, suggests a reason for <u>why</u> identities are so important, a point on which theorists have tended to be rather vague. From the perspective of ICT, self-element inconsistency is aversive because it signals the potential for self-regulatory failure. One integration mechanism involves deleting self-elements that are inconsistent with others and replacing them with more consistent ones, akin to the common dissonance reduction strategy of attitude change. Another integration mechanism involves making dissonant cognitions consonant by reconstruing their meanings, akin to the dissonance reduction strategies of reconciling (Festinger, 1957, p. 22) and "transcendence" (Abelson, 1959, p. 346).

In the following section, past theorizing on identity integrity will be reviewed, followed by a review of relevant research linking integrity to well-being. The limitations of over reliance on integration as an identity consolidation strategy will then be discussed.

Classic theories. In keeping with the Greek injunctions, "know thyself" and "to thine own self be true," psychological theorists have long advocated personal integrity, almost to the point of it having become a truism. According to Freud, failure of the ego to integrate the basic drives of the id with the social requirements of the super-ego can result in antisocial behavior and neurotic or psychotic symptoms. Jung advanced a related position, that the desirable process of "individuation" refers to the "bridging of the split in the personality caused by the instincts striving apart in different and mutually contradictory directions" (Read, Fordham, & Adler, 1959/1950, p. 40). Jung can be seen as a precursor to the various stage theories of identity (described below). He viewed the individuation process as a life-long struggle to integrate contradictory intrapsychic impulses such as public persona and private self, masculine (animus) and feminine (anima), and opposing personality tendencies such as extroversion and introversion. According to Jung, individuation moves one closer to the ideal of realization of the "fullness of being" (Read, Fordham, & Adler, 1964/1934, p. 179). Continuing the emphasis on personality wholeness, G. Allport claimed that the mature personality was characterized by acting in accordance with a "unifying philosophy of life" (Allport, 1949/1937, p. 225-231). Allport's colleague at Harvard, Murray, developed a personology with a similar emphasis on personality integration, and emphasized the temporal aspect of integration, as captured by the phrase, "the history of the organism *is* the organism" (1938, p. 39). According to Murray (who dedicated his book, Explorations in Personality, to Freud and Jung), acting in accord with one's personal past and future expectancies (what he called "time binding") provided life with continuity and purpose (p. 49).

Erikson's thought (1960, 1982) was influenced by Freudian and neo-Freudian theory in the time he spent studying at the psychoanalytic institute in Vienna, and later by Murray and Allport at Harvard. His seminal theory of identity development posits that identity helps to give direction, purpose, and meaning to one's life. With the proper psychosocial milieu in childhood, the basic foundation is set for the critical fifth stage of identity development in adolescence, "ego identity vs. ego diffusion." Ego identity involves committing oneself to a set of core values and attitudes that can integrate the various roles one adopts. In later adulthood, the final stage in Erikson's model, "integrity vs. despair," involves reviewing one's life and integrating all aspects of one's personal history into a meaningful whole.

Humanistic theories. Perhaps the most eloquent of the humanistic theorists is Fromm, who describes the human condition as being faced by the "the worst of all pains," the "torture of doubt" — doubt about what decisions to make and also "doubt of what the meaning of his life is or who 'he' is" (1941, p. 155). According to Fromm, two general responses to this freedom are common. One response is the attempt to escape from freedom by distraction and compulsive activity, power and dominance, and conformity and submission to others. Relinquishing choice in these ways creates a cycle in which decisions increasingly require external support as the multifarious collection of self-elements become more and more chaotic. In contrast, the recommended response to freedom is to become an integrated individual who "unites himself ... with the world — with man, nature, and himself" (p. 260).

Echoing the major themes of Fromm, Rogers (1951; 1961) claimed that the most basic human striving was toward wholeness and that optimal psychological health was associated with nurturing an assumed intrinsic actualizing tendency in all humans. Similarly, the essence of Maslow's (1968) final stage of human development, self-actualization, involves the ability to "be oneself," and having an accepting attitude toward oneself, others and nature. Maslow estimated that fewer than one percent of people reach this stage of development.

These humanistic perspectives converge on the importance of some kind of personality integration, but they are characterized by vague descriptions and faddish language. Stock phrases such as "fullness of being," "self-actualization," and "individuation" do not make it clear exactly what integration is or how it should be accomplished. Indeed, Yalom (1980, p. 19) contends that the reason humanistic psychology has always been regarded with caution by empirical psychologists is because of an anti-intellectualism that characterized its "carnival atmosphere" in the 60s. Also, humanistic theorists often alluded to a great, mysterious "unlimited potential" within each person that was waiting to be discovered. Thus, the idea of integrity became conflated with expectations of personal grandeur, that seemed to lend a distasteful air of self-absorption to the cause. Moreover, grandiose expectations may have significant aversive personal and cultural consequences (Baumeister, 1991a, 1997; Cushman, 1990).

Developmental theories. Reminiscent of G. Allport's contention that maturity involves the development of a unifying philosophy of life, and Erikson's claim that ego-identity requires commitment to core values, Kohlberg's (1981) pinnacle of moral development is characterized by judgments that are guided by individual principles of conscience.[6] Another scheme for measuring identity development was developed by Marcia (1980). Based on Erikson's theorizing, Marcia operationalized four identity statuses: achievement, foreclosure, diffusion, and moratorium. Identity achievement resembles Kohlberg's final stage of moral development in that achievers have passed through a period of crisis (which characterizes the moratorium stage) and are attempting to live by their own individually formulated moral code. Foreclosure is similarly characterized by commitment to definite roles and ideologies, but the commitments are introjects determined by authority figures rather than being arrived at after a period of personal grappling and searching. Diffusion is the stage without the direction provided by an identity, but not characterized by the crises of moratorium or the certainty of foreclosure. Research on the four statuses indicates that diffusion and moratorium stages are characterized by negative affect, especially fear and anxiety. Foreclosed individuals are relatively free from anxiety, but are more likely to exhibit authoritarian values and conformity (Archer, 1985; Marcia, 1980).

[6]Kohlberg's conclusions have come under a great deal of criticism (e.g., Gilligan, 1982), but his vignette-based moral judgment technique for classifying individuals along stages in moral development represents a pioneering attempt at empirical classification of identity development.

Marcia describes the benefits of each status, but the achievement status is usually portrayed as the most desirable because it is associated with greater emotional balance and self-esteem than the other statuses.

Loevinger (1976) has identified seven stages of ego development. The "conscientious" fifth stage, characterized by self-imposed standards and self-criticism. resembles Marcia's status of identity achievement and Kohlberg's final stage of moral reasoning. The final, autonomous and integrated stages six and seven, involve the recognition and integration of one's own inner conflicts, with a concomitant integration of the autonomy of others and limits and demands imposed by the social environment. Loevinger's final stages of ego-development closely resemble Maslow's description of the self-actualizing individual,[7] and like Maslow, Loevinger claims that the final stages of ego-development are rarely attained (p. 26).

Recent theory and research on identity integration. Consistent with the inclusion of interpersonal and contextual considerations in Loevinger's final stages of ego-development, newer approaches to identity are increasingly recognizing the multifarious nature of self-elements (e.g., dispositional, conative, affective, interpersonal, collective, and contextual as well as cognitive), and their distribution across time and context (Little, 1993). For example, in his newly elaborated framework for conceptualizing personality, McAdams (1996) refers to three kinds of self-elements. The first kind includes dispositional tendencies such as extroversion and conscientiousness. The second includes characteristic adaptations such as personal goals and roles. The third includes integrative constructions, or life-stories about the self which provide purpose and meaning to one's life. In another recent conceptualization, Singer and Salovey (1993) contend that life gains unity and purpose, and well-being is enhanced, when one's defining memories from the past and personal strivings for the future are woven into a coherent identity by personal

[7]Loevinger acknowledges this similarity (p. 26).

narratives. Indeed, they propose that the goal of therapy should be to help individuals construct temporally integrated life stories.

These new conceptualizations of personality help to bring into focus a new way of conceptualizing the self, useful for understanding recent empirical research on identity integrity. The related conceptualization I propose in this thesis involves three categories with fuzzy boundaries. One category (c1) of self-elements might be thought of as raw materials. This category includes relatively stable elements such as personality traits, abilities, historical elements (such as peak and rock-bottom experiences, past behaviors, defining memories), and contextual and interpersonal constraints and affordances. The next category (c2) could be conceptualized as means — that is, how people characteristically orient themselves in the world, cognitively, socially, conatively. Elements such as attitudes, personal goals, roles, group memberships, and public personas can be included in this category. A third category (c3) includes ends, that is, what people are using their means to mobilize their raw materials in the service of. This category includes incentives, values, priorities, worldviews, ideal and ought selves, role models, future possible selves, ideological commitments, personal philosophies, group and cultural norms that one identifies with, and life stories. Identity integrity can be thought of as the degree to which self-elements (between and within categories) are subjectively perceived as being internally consistent.

Recent research linking personality integrity with psychological well-being can be organized with reference to the above self-element categorization scheme. Various researchers have targeted sub-samples of intrapersonal consistency within and among (c1), (c2), and (c3) self-elements. With respect to within-category inconsistency, uncertainty and confusion about one's own personality traits (c1) is associated with depression and low self-esteem (Campbell, 1990; Campbell et al., 1996).[8] Conflict among personal goals (c2)

[8]Campbell refers to the presence or absence of self-concept "clarity." Presumably, in the absence of clarity, inconsistent alternatives would seem equally likely. Indeed, lack of clarity is operationalized by Campbell as temporal instability in self-defining trait terms, less confidence on trait ratings of self, longer reaction-times and lower internal consistency for me/not-me judgments of trait terms.

is associated with negative affect, depression, neuroticism, more frequent health-centre visits and illnesses, psychosomatic complaints, and procrastination (Emmons & King, 1998). Conflict among ideal and ought selves (c3) is associated with feelings of confusion and ambivalence (Van Hook & Higgins, 1988). Narrative incoherence (c3) is associated with decreased well-being and generativity (Baerger & McAdams, 1998).

Conflict between levels has also been linked to decreased well-being. Consistent with Klinger's (1977) contention that meaning arises when people's goals (c2) are in service of reliable incentives (c3), Deci and Ryan's theory of intrinsic motivation and self-determination (1985, 1991) has stimulated a large body of research on the benefits of pursuing goals that are personally rewarding and not introjected. According to Deci and Ryan (1985), "behaviors that either are intrinsically motivated or stem from well-integrated personal values and regulatory processes can ... be described as self-determined ... whereas behaviors that emanate from non-integrated processes such as internal pressures and socially acquired introjects cannot." Effectiveness and well-being are enhanced when one has the sense that one has freely chosen one's personal goals.

From the perspective of ICT, goals (c2) that are intrinsically motivated and self-determined are rewarding because they are more likely than introjected or extrinsically motivated goals to be compatible with other self-elements such as dispositional preferences (c1), and personal values and desired ends (c3), and to be sensitive to the limitations of personal contexts (c1). As such, they are less likely to cause intrapsychic conflict.

A growing body of evidence confirms that self-determined goals are associated with greater well-being than are those that are dictated by external or introjected incentives. Kasser and Ryan (1993, 1996) found that well-being was higher for participants who endorsed the importance of intrinsic incentives such as affiliation, community feeling, physical health and self-acceptance. On the other hand, well-being was lower for those who endorsed the importance of extrinsic incentives such as financial success, good looks, and fame. Similarly, Sheldon and Kasser (1995) found that well-being was enhanced for participants with intrinsically motivated personal goals, and was also enhanced to the extent that participants' personal goals were coherent with value priorities.[9]

In related studies, well-being has been found to be associated with self-consistency between roles (c2) and big five personality traits (c1), and with congruence between one's role characteristic (c2) and one's personal priorities (c3) (Sheldon et al., 1997). Also, McGregor and Little (1998) found that well-being was enhanced for participants who rated their personal goals (c2) as important, value-congruent, and self-prototypical (c3). The aspects of well-being most affected were those that loaded onto a "meaning" factor comprised of integrity related constructs such as, personal growth, purpose in life, generativity, relationship satisfaction, and autonomy (cf. Ryff, 1989).

This research corroborates ICT insofar as it demonstrates that self-relevant inconsistencies are associated with negative affect. But dissonance discomfort per se, was not measured in any of these experiments. Furthermore, the research reviewed above was all correlational, and so it is possible that third variables may account for the inconsistency/ discomfort relation. Future research is needed to test the ICT hypothesis that dissonance is the primary affect caused by self-element inconsistencies (see the second module of the present thesis).

Possible limitations of integration as an identity consolidation strategy. If integrity among self-elements is associated with increased well-being, why then, as Loevinger and Maslow claim, do so few people manage to achieve identity integrity? Perhaps a basic reason is that self-elements accumulate over time and diverse contexts, and so their natural state is rather incoherent. Given such a tendency toward disorganization, and given the absence of cultural supports for identity (Baumeister, 1987) or a technology or language for identity development, it may be relatively difficult to integrate self-elements.

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[9]A precursor to research on self-determination was research indicating that extrinsic rewards can undermine intrinsic motivation. If extrinsic rewards were given to participants for completing intrinsically rewarding tasks, the participants typically would lose interest in the task (e.g., Deci, 1971; Kruglanski, Friedman, & Zeevi, 1971; Lepper, Green, & Nisbett, 1975; Ross, 1975). Similarly, a longitudinal study by Lydon and Zanna (1990) demonstrated that task persistence in the face of adversity is higher when the tasks are seen as value congruent.

Another reason may be that the concrete and immediate demands of everyday life keep one immersed in a level of action identification (Vallacher & Wegner, 1985) that does not facilitate integrative efforts. Along the lines of the logic of Maslow's hierarchy of needs, earning a living may preclude "navel-gazing:" Preoccupation with the basic concerns of living might preclude the more reflective stance necessary for attempting to integrate one's identity. Most people, however, have likely made at least some attempt to "get their priorities straight," to "figure themselves out," or to "find themselves." It is possible that the dissonance discomfort associated with such attempts may discourage future forays into identity building.

Research in a number of domains seems to corroborate the paraphrase of the maxim, "the truth will set you free [but first it will make you damned miserable]." In order to construct an integrated identity, some deliberation is required to reflect on the fit among self-elements. But self-focus is associated with decreased well-being (Duval & Wicklund, 1972; Taylor & Gollwitzer, 1995) and ruminating is associated with depression (Nolen-Hoecksma, 1991; Greenberg & Pyszczynski, 1986). In addition, confronting "big questions" and making choices about what kind of person to be is likely an ego-depleting task (Baumeister, Bratslavsky, Muraven, & Tice, 1998) for which resources may not be available if one's social ecology is already ego-depleting. For these reasons, there may be a reflexive tendency to attempt to "escape the self" (Baumeister, 1991a; Dixon & Baumeister, 1991; Fromm, 1941), relying instead on identity consolidation strategies that do not require so much self-focus (a discussion of such strategies follows below).

Another possibility is that integrity may be inconvenient or impractical, and may present immediate social costs. There may be a tradeoff between meaning and manageability that people are not willing to make (see Little, 1987, 1989, for a discussion of the meaning/manageability tradeoff). Effectiveness in attaining one's goals is associated with happiness (Bandura, 1977; Locke & Latham, 1990; McGregor & Little, 1998; Palys & Little, 1983; Scheier & Carver, 1988). Insisting on acting with integrity, instead of doing what is required, may compromise one's ability to get ahead, and may thereby reduce feelings of happiness. And the immediate deleterious effects of integrity on happiness may be more salient than meaningful long-term benefits of integrity, especially for young people (McGregor & Little, 1998). Finally, being preoccupied with personal integrity may discourage social support because taking principled stands may make one appear rigid and humorless; because the negative affect associated with the required deliberation might make one less pleasant to be around; and because the reflection required to construct an integrated identity might make one appear self-absorbed and to be taking oneself too seriously. It may be more socially acceptable to laugh at oneself and "just do it" instead of earnestly seeking integrity.

Given these possible challenges, sole reliance on identity integrity may not be a viable strategy for coping with the discomfort associated with psychic conflict. Other identity consolidation strategies may be required to augment the only partial integrity that most people are capable of achieving.[10]

Self-Worth

According to ICT, another prevalent strategy for consolidating one's identity is to bolster self-worth. In the following section I briefly review theories that link self-consistency and self-worth, and then provide an ICT account of how self-worth might directly and indirectly consolidate identity. Potential drawbacks of over-reliance on self-esteem are then discussed.

[10]Excessive integrity may also be associated with decreased well-being, especially if the integrity is monothematic. Indeed, McAdams (1985, 1993) contends that the healthiest life-stories contain diversity. Similarly, Deci and Ryan (1985) acknowledge that there is a tension between organismic needs for coherence and unity and organismic needs for differentiation. Along these lines, Linville (1985) found that differentiation is associated with well-being, and McGregor and Little, (1998) found that identity-compensatory goals were associated with well-being. Differentiation and coherence are not necessarily mutually exclusive, however. A differentiated identity could be integrated if, for example, one realized that agentic and communal elements were not necessarily contradictory because they operate in different domains. Similarly, potential conflict between agentic and communal priorities could be reconciled by thinking of the agentic ones as being in service of the communal ones, e.g., "I'm working hard now so I'll be able to give my family the things that I never had when I was growing up."

Theories linking self-consistency and self-worth. Several prominent theories of human motivation portray esteem and consistency as being closely related. In Erikson's (1960) theory of identity development, industry (feeling competent and able) immediately precedes identity achievement. In Maslow's (1968) hierarchy of needs, esteem needs precede actualization needs. Similarly, according to Rogers (1951), personal growth and authenticity require an atmosphere of unconditional positive regard. More recently, Deci and Ryan's (1985, 1991) self-determination theory proposes that competence and autonomy are fundamental needs (along with relatedness which, as will be discussed, has value for supporting both esteem and consistency). Baumeister (1991b) proposes four needs for meaning; three relate to consistency (having a purpose, knowing what to value, and being able to justify your purpose and values), the fourth is self-worth. Similarly, Steele (1988, p. 262) proposes that people are highly motivated to affirm the "integrity of the self," that is "to maintain a phenomenal experience of the self — self-conceptions and images — as adaptively and morally adequate, that is, as competent, good, coherent, unitary, stable, capable of free choice, capable of controlling important outcomes, and so on."

The relation between esteem and consistency has a long history in dissonance theory and research as well. Aronson (1968) proposed that inconsistent cognitions are only uncomfortable when they are related to the self. For example, most people believe that they are competent and good. Thus, when they are tricked by a dissonance researcher into doing something stupid or bad (e.g., writing a counterattitudinal essay), they experience discomfort. According to Aronson, discomfort arises not because, for example, a counterattitudinal essay is inconsistent with a prior attitude, but because the negative behavior of writing in support of the wrong cause is inconsistent with a positive self-concept.

A subsequent revision took Aronson's focus on stupid or bad actions even further, and contended that inconsistency is not what drives the discomfort and attitude change in dissonance experiments. Steele (1988, p. 277) claimed that the "sting-to-the-self" in dissonance experiments arises from a threat to global "self-integrity." In an impressive series of experiments, Steele and his colleagues demonstrated that when people express their values, or have their self-worth bolstered in other domains, they become immune to dissonance. These findings are held up as evidence for the conclusion that dissonance discomfort is essentially the perception of threatened global self-integrity.[11]

From the perspective of ICT, Aronson's reminder that inconsistency is only uncomfortable when it is related to the self could be seen as a reminder of the Lewinian roots of dissonance theory. For Lewin, conflict arises from tension between opposing personal goal orientations (a very self-relevant tension). From an ICT perspective, Aronson's revision emphasizes that dissonance is strongest when it involves secondary conflict among self-elements. Steele's perspective can also be interpreted in ICT terms. Rather than disproving the contention that cognitive inconsistency per se is aversive, the findings of Steele and colleagues, that a) value expression and b) bolstered self-worth can reduce attitude change in dissonance experiments (Steele, 1988; Steele & Liu, 1983; Steele, Spencer & Lynch, 1993), directs attention to important dissonance reduction processes that are central to ICT — trivialization and accessibility.

According to Festinger's (1957) cognitive dissonance theory, the most consequential contributor to dissonance, after the number of discrepant cognitions, is the importance of the discrepant cognitions. Recent research demonstrates that trivializing the importance of inconsistent cognitions can indeed reduce dissonance (Simon et al., 1995, Experiments 1 & 2). Furthermore, expressing important personal values (in a domain unrelated to the dissonance) effectively trivializes the importance of inconsistent cognitions (Simon et al., Experiment 3). Thus, value-expression in Steele's (1988) experiments may be reducing dissonance by effectively trivializing the dissonant elements.

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[11]Cooper and Fazio (1984) also proposed a "New Look" for dissonance theory, arguing that psychological discomfort in dissonance experiments arises not because of inconsistency but because people feel personally responsible and guilty for the production of aversive consequences (e.g., leading people astray with their counterattitudinal essay).

Steele's other finding, that bolstered self-worth can reduce attitude change in conventional dissonance experiments (Steele, Spencer, & Lynch, 1993), might also be interpreted in trivialization terms. Simon et al. (1995, Experiment 4) found that after participants wrote an essay about <u>any</u> important issue, they rated their dissonant cognitions as less important. In the same way, bolstering someone's self-worth may trivialize dissonant cognitions in comparison to the importance of the worthy self.

Self-worth manipulations may also distract people from dissonant elements (distraction as a dissonance reduction strategy is discussed below). Bolstering or reminding participants of their self-worth likely improves mood and reduces self-focus (Wood, Saltzberg, Goldsamt, 1990; Wood, Saltzberg, Neale, Stone, Rachmiel, 1990; Greenberg & Pyszczynski, 1986). After positive feedback, one may be preoccupied by savouring the good news, and unpleasant dissonant cognitions may become less accessible.[12]

Thus, rather than seeing Steele's self-affirmation theory as a reformulation of dissonance theory, ICT proposes that the two kinds of self-affirmation manipulations point to two important and discrete dissonance reduction strategies — value expression and self-worth. According to ICT, value expression and self-worth are the basis of the identity consolidation strategies of self-worth and extremism. Self-worth is discussed below and extremism is discussed in a later section.

<u>Self-worth as an identity consolidation strategy</u>. Given the broad range of converging evidence from the humanities and social sciences, and from within psychology attesting to the discomfort associated with conflicting intrapersonal goals and cognitions relating to the self, it is interesting to speculate as to whether one important function of self-esteem might be to help anaesthetize individuals from the chronic basal level of cognitive dissonance associated with living. In North American, information age, melting-pot/mosaic culture with its potentially overwhelming array of alternatives about how to live one's life,

[12]Steele and Liu (1983) provide evidence that the dissonance reducing effects of value expression are not mediated by distraction, but the effects of boosted esteem on distraction have not been investigated.

bolstering self-esteem may be the strategy of choice for quelling psychic conflict. One reason for the ubiquitous appeal of self-esteem may be its ability to make people's identities feel consolidated, either by trivializing the importance of inconsistent self-elements or by making them less accessible.

Self-worth as a facilitator of integrity. If self-worth does help to reduce dissonance discomfort, the role of self-worth in the developmental theories of Erikson (1960), Maslow (1968) and Rogers (1951) might be accounted for by the explanation that in order to achieve an integrated, authentic, actualized identity, primary and secondary conflict must first be at least partially anaesthetized by esteem. Otherwise, the discomfort associated with the self-reflection and deliberation required for integration would be too intense, and would discourage integrity strivings.

Corroborating this interpretation, McGregor and Dodgson (1996) found that participants were most able to accurately reflect on themselves and resist "sweet lies" when they had first received a boost to their self-worth. At the beginning of the term, all participants estimated their expected course grade and completed a personality inventory. After the mid-term examination, participants were sorted into two groups; a self-esteem boost group who had outperformed their expected grade, and a self-esteem threat group who had underperformed relative to their expectations. While students were looking over their just-returned exam papers (and were presumably experiencing either a boost or threat to their self-worth), the experimenter arrived with the promised personality feedback. A random half of the feedback paragraphs within each esteem condition were accurate, and described participants' actual personality profile. The other half of the feedback paragraphs were inaccurate but flattering; that is, they described personality profiles that were diametrically opposed to the participants' actual profiles, but included a flattering sentence at the end. The flattering "sweet lie" read, "over the course of their lifetime, individuals exhibiting this profile tend to be well-liked and admired by their peers, possess the rare qualities necessary for maintaining meaningful, satisfying relationships, and even tend to enjoy better physical health." As a dependent measure, participants were asked how accurate the feedback was.

A "fan" interaction resulted. In the esteem-threat condition, participants rated the accurate and inaccurate/flattering feedback as equally accurate. In the esteem-boost condition however, participants rated the inaccurate/flattering feedback as significantly less accurate than the accurate feedback. This result suggests that self-worth can facilitate accurate self-reflection, which is presumably a necessary condition for successful identity integration. It is also consistent with past research linking threatened self-worth to defensive enhancement of self-views (Baumeister & Jones, 1978; Greenberg & Pyszczynski, 1985).[13]

Thus, one contribution of self-worth to identity consolidation may be its ability to facilitate identity integration by taking the sting out of dissonance and making critical self-analysis bearable. The ability of self-worth to relieve identity-related discomfort may also reduce maladaptive over-reliance on other identity consolidation strategies such as distraction, extremism, or conformity (discussed below).

Potential drawbacks of relying on self-worth. A potential drawback of reliance on self-worth as an identity consolidation strategy may be that its potent dissonance-analgesic value removes the motivation to cultivate an integrated identity and encourages a narcissistic dependence on self-worth. The more one relies on success and esteem, the less necessary an integrated identity might seem, which could progressively make one increasingly dependent on success and esteem as an identity consolidation strategy. Such a cycle could potentially result in a morbid concern with receiving external praise in the absence of a stable identity to guide behavior, and in interpersonal and self-regulatory problems (Kohut, 1971; Kernberg1975).[14]

[13]In the research by Baumeister and Jones, and by Greenberg and Pyszczynski, enhancement only occurred when responses were public. The public/private variable was not manipulated in the present study, but participants knew that one of the researchers (who was also their course instructor) would be reading their responses, so it is likely that some degree of self-presentation was occurring.

[14]In keeping with this perspective, injunctions against hubris are featured in two of the earliest known written records, from about 3,700 years ago. In the Atrahasis epic, human attempts to sound like the gods

According to Baumeister (1989, 1997), and Baumeister, Boden, and Smart (1996), threatened high self-esteem promotes the willful harming of others. Bushman and Baumeister (1998) found that when high self-esteem individuals were given negative feedback on an essay they had written, they were more likely than their low self-esteem counterparts to aggress against the person who had administered the feedback (by administering longer and more intense noise blasts in a bogus learning paradigm). Similarly, Rhodewalt and Morf (1993) found that participants with narcissistically high self-esteem were more likely to derogate people who ostensibly outperformed them. Narcissism is also associated with affective volatility and interpersonal conflict, presumably because of the difficulty in garnering validation for overgrown self-views (Rhodewalt, Madrian & Cheney, 1998). The heightened defensiveness of high self-esteem individuals suggests the intriguing speculation that reliance on self-worth leaves one more vulnerable when confronted with identity inconsistencies.

Another potential drawback of over-reliance on self-worth is that it may be associated with attempts to increase one's own esteem by invidiously comparing oneself to others. According to Wills (1981), people turn to downward social comparisons to shore up threatened self-esteem. More recently, Wood and Taylor (1991) have proposed that self-enhancing downward social comparisons are common ways to maintain a positive self-evaluation regardless of whether threat is present. Although comparisons in themselves may not be problematic, behavioral and cognitive adjustments one might make to render comparisons personally beneficial might be. Tesser (1988) has found that in order to maintain a positive self-image, people will distance themselves from others who succeed in relevant domains. Furthermore, there is increasing evidence that people will discriminate against, stereotype, and derogate other people and outgroups to create self-serving

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are punished with a terrible flood, and in the Gilgamesh epic, the protagonist's mighty accomplishments are exposed as meaningless (Fisher, 1970; Guirand, 1977). Similarly, in Genesis, Adam and Eve were expelled from the Eden for eating fruit that was, according to the serpent, supposed to make them become Godlike; in the Genesis Tower of Babel story hubris is punished by confusion; and in Ecclesiastes, strivings for greatness are discouraged as folly.

comparisons to enhance and preserve their own feelings of worth (Crocker & Luhtanen. 1990; Crocker, Thompson, McGraw, & Ingerman, 1987; Lemyre & Smith. 1985; Fein & Spencer, 1997). These recent findings are consistent with research by Sales and Friend (1973) and by Sales (1973) indicating that people and societies become more authoritarian when self-worth is under threat.

In addition to having potential interpersonal drawbacks, there is reason to believe that bolstering self-worth as a primary identity consolidation strategy might not be particularly effective over the long term. According to Klinger (1977), success is not an advisable incentive to rely upon because it is vulnerable to disillusionment and habituation. Bellah, Madsen, Sullivan, Swidler, and Tipton (1985) described a malaise that pervades Western culture, in which people who are surrounded by success feel disconnected and lacking in meaningful links with society. The authors propose that preoccupation with success distracts from integration into society. Along these lines, Kasser and Ryan (1993, 1996) found that success as a central life aspiration is associated with poorer mental health and more behavioral disorders, and Sheldon and Kasser (1995) found that success/fame goal orientations were associated with depressed well-being and elevated consumption of alcohol, tobacco, and increased television watching.

The possible short-sightedness of esteem and success as a central life aspiration is highlighted by the finding that goal success is a strong predictor of well-being for university students, but not for middle-aged senior managers (McGregor & Little, 1998). For senior managers, goal integrity (i.e., pursuit of value-congruent and self-defining goals) predicted well-being. This "integrity shift" suggests that sole reliance on success might not be a viable strategy for well-being. Perhaps as the life story demands more meaning in its concluding chapters, success is habituated to and becomes supplanted by integrity as the more poignant developmental concern (Erikson, 1982). For example, in Arthur Miller's "Death of a Salesman," the protagonist neglects integrity in favor of being well-liked and successful. But as his life progresses, his dissonant self begins to protrude from beneath his thinning veneer of accomplishments, causing him confusion and despair. Using success as a surrogate for integrity early on in life might leave one vulnerable to despair later on in life.

Relationships

It is difficult to deny the claim that there is likely an intrinsic and biologically determined appeal of relationships. At the very least, some level of attraction between members of a species is required to ensure procreation and maternal nurturance. And even though adults of our closest genetic ancestors, chimps and orangutans, do not regularly form long-term, intimate, dyadic relationships, at least some attachment incentives surely persist from childhood to adulthood.

Bowlby's attachment theory (1988) posits that the communal needs of adults derive from the infant-mother bond. Several other theorists similarly claim that close relationships are a basic and fundamental need with evolutionary roots. Klinger (1977) proposes that communal incentives are hard-wired. Deci and Ryan (1991, 1995) contend that relatedness is the third basic human need along with competence and autonomy. Baumeister and Leary (1995) propose that belongingness, characterized by frequent interaction and persistent caring, is a fundamental human need. But as compelling (and difficult to argue with) as sociobiological arguments are, there is a long history of theory and research supporting the position taken in this article, that intimate others can serve a potent identity consolidation function independent of biologically based attachment instincts.

Dissonance reduction function of relationships. Lewin (1935, p.174) proposed that children sometimes seek to escape from psychical tension by relinquishing their own personal goals and submitting to the "social field of force," largely determined by their parents. Festinger (1957, p.177) also recognized the importance of social factors in the induction and reduction of cognitive dissonance.

> The social group is at once a major source of cognitive dissonance for the individual and a major vehicle for eliminating and reducing the dissonance which may exist in

him. On the one hand, information and opinions which are communicated to him by others may introduce new elements which are dissonant with already existing cognitions. On the other hand, one of the most effective ways of eliminating dissonance is to discard one set of cognitive elements in favor of another. something which can sometimes only be accomplished if one can find others who agree with the cognitions one wishes to retain and maintain.

Festinger (1954) proposed that just knowing someone holds a contradictory opinion creates dissonance, particularly if one's opinion is not easily tested by physical reality, and if it is not commonly held. On the other hand, he contends that others are turned to for much needed consensual validation of beliefs about the world. From a cognitive dissonance perspective, finding others to agree with one's position serves the same bolstering function as adding new cognitions to support an existing cognition. Perceived consensus about one's belief serves the purpose of adding multiple consonant cognitions in support of one's position. Consistent with this perspective, Goethals (1986) found that dissonance can be reduced by imaging the consensual agreement of others.

Similar expositions of the cognitive implications of other people's beliefs were developed in a number of balance theories contending that a psychologically optimal state of balance exists when two people like each other and agree about some topic. On the other hand, an aversive state of imbalance exists when two people who like each other disagree about something. To relieve the associated discomfort, one can change one's own attitude, attempt to change the offending attitude of the other person, or derogate the other person (Festinger, 1957, p. 8; see also, Osgood & Tannenbaum, 1955; Heider, 1958; Newcomb, 1961; Schachter, 1951).[15]

[15]An example of how social support can help to reduce dissonance is provided by the Festinger et al. (1956) infiltration of a religious cult. The cult member predicted a cataclysmic flood but then had to cope with the dissonant information that nothing happened on the predicted day. On the night of the expected flood some of the members were together, and others were isolated and dispersed among disbelievers. When midnight came and nothing happened, the group spent the morning hours tearfully searching for an explanation until they "realized" that their faith had saved the world from the flood. With this realization, they then enthusiastically increased their efforts at proselytizing with renewed conviction about their beliefs. The isolates on the other hand, were more likely to give up their beliefs after the disconfirming

Relationships and identity consolidation. Symbolic interactionist perspectives (Shrauger & Schoeneman, 1979) depict the self as at least partially reflected or mediated by the perceptions of others (i.e., you are who you think others think you are). Following in the symbolic interactionist tradition, symbolic self-completion theory (Wicklund & Gollwitzer, 1982) contends that self construction requires that desired self-conceptions be reified on the social plane — that is, they must be perceived as being recognized and validated by others before they can be assimilated by the self. Baumeister (1982, p.4) proposed that a wide range of social behaviors are motivated by the desire to maintain a public self that is congruent with one's ideal self because "if others perceive one as having a particular trait, this may help one to believe that one does indeed have that trait." Similarly, Backman (1988, p. 253) argues that the "relationships persons have with kin, friends, and lovers are their strongest identity props." Aron, Aron, Tudor, and Nelson (1991) maintain that the "life space" of relationship partners often overlaps and that partners actually include each others' attributes in their own self-definition. Hermans (1996) proposes that identity is situated in interpersonal dialogue, rather than being a formal and abstracted construct.

The idea that intimates can insulate their partners from contradictory self-perceptions was tested by Swann and Predmore (1985). Targets received bogus personality feedback that was discrepant from their self-perceptions. Targets subsequently interacting with intimates who agreed with the targets' self-perceptions did not change their self-perceptions in the direction of the bogus feedback. Targets subsequently interacting with intimates who did not agree with the targets' self-perceptions, and targets who interacted with strangers, did change their self-perceptions in the direction of the bogus feedback. A subsequent study showed that relationship intimacy was associated with the tendency for partners to verify each others self-views (Swann, DeLaronde, & Hixon, 1995).

information. Without the social support of the group, they were unable to maintain their beliefs in the face of contrary evidence. Although limited by the possibility that the residential cult-members were more committed than the isolated ones in the first place, this study provides a compelling illustration of the role that others can play in maintaining consistency among important identity-relevant cognitions.

As well as stabilizing self-perceptions in the face of immediate contradictions. relationships may serve as a temporal splint for a potentially fragmented personal history. In the same way that it usually feels more meaningful to flip through an old photo album with someone who knows the people and places and can share in the reminiscence. long term relationships likely provide corroboration for one's defining memories. personal symbols, metaphors, and stories.

Relationships may also facilitate personal growth and identity development. Lewin (1935, pp. 174-179) proposed that parents should encourage children to frame their own goals in terms of their own needs in order to nurture the ability to cope with freedom and responsibility in later life. Bowlby (1988) contends that a stable attachment relationship provides a safe base for exploration and discovery. The theme that healthy relating involves supporting the other's personal growth and discovery is featured in a number of humanistic and psychodynamic perspectives on identity development (Adorno et al., 1950; Fromm. 1970; Rogers, 1951) which portray loving relationships as providing the fertile soil for vulnerability, self-acceptance and personal growth. Relationship resources give people the courage to experiment with authenticity, as opposed to fearfully selling out to authoritarian expediency.

As discussed in the above section on esteem, relationships may also encourage self-worth which may also facilitate identity integrity. Along these lines, Murray. Holmes. and Griffin (1996) found that satisfying intimate relationships characterized by trust and reciprocal positive regard, facilitated personal growth. Individuals whose partners initially saw them as more favourable than they saw themselves, over time, grew into the reflected appraisals provided by their partners.

The above perspectives depict relationships as positive contributors to identity consolidation, and they support Durkheim's (1897/1952) contention that interpersonal commitment reduces suicide by alleviating uncertainty and confusion about how to act. "The more the family and community become foreign to the individual, so much the more does he become a mystery to himself, unable to escape the exasperating and agonizing question: to what purpose?" (Durkheim, p. 212). From the perspective of ICT, the often passionate yearning for love and relationships is at least partially fueled by the multifaceted role of one's beloved in the identity consolidation project.

Potential limitations of over-reliance on relationship validation. The desperate need for relational identity-support that Durkheim proposes, is suggested by some of the extremes that people go to when their relationships are threatened or terminated. Killing an unfaithful partner in a jealous rage is inconsistent with evolutionary explanations for the need for belongingness, but makes more sense from the present perspective.[16] From an identity consolidation perspective, partners who cease to validate and praise their partner's identity (that they are intimately familiar with) and instead turn their endorsement toward a different target, may instantly become a powerfully aversive source of invalidation. The contention that such intense invalidation could incite hostility has theoretical and empirical precedent. Kelly (1955) defined hostility as the attempt to "extort validation" for threatened personal constructs, and several studies have found people are more willing to derogate and aggress against others with presumably different attitudes and values (e.g., Schachter, 1951; H. McGregor et al., 1998; Greenberg, Solomon, & Pyszczynski, 1997). If individuals will derogate and aggress against strangers who contradict their attitudes and values, perceived identity invalidation by intimates should be even more inflammatory. (Derogation of value-dissimilar others will be discussed in more detail later in the section on group-identification.)

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[16]One evolutionary explanation (for males) for jealous rage is that it is an evolved mechanism for ensuring the female's fidelity and decreasing the likelihood of wasting one's resources on an interloper's genetic success, and (for females) for decreasing the likelihood of the withdrawal of offspring support by the male (Buss, 1997, pp. 13-14) This argument is weakened by two observations. First, it is almost always the spouse, rather than the interloper, who is killed in fits of jealousy (White & Mullen, 1989, pp. 218-227). From an evolutionary perspective, the interloper should be the target of the rage at least as often as the spouse. Second, hurting someone might not have been a particularly adaptive strategy for ensuring that a partner stays close by. It seems equally likely that jealous rage would push the unfaithful partner closer to the interloper.

Another powerful phenomenon attesting to the strong need for intimate relationships is the impulse to preserve bad relationships. One instance of this is the reluctance to leave physically or emotionally abusive relationships (Strube, 1988). Similarly, although there are usually compelling reasons for a couple getting a divorce (and it might seem that individuals would feel better off on their own), divorce is still a powerful predictor of physical and emotional illness, and is associated with a number of self-regulatory problems from alcohol abuse to suicide (Brehm, 1992, p.13). Although these responses are surely multidetermined by a number of factors (e.g., economic, counterfactual, sunk costs, familial), they may at least in part stem from fear of the prospect of losing a vital source of identity support.

Finally, over reliance on a relationship partner for identity support may lead to an overly submissive and self-neglecting orientation (e.g., Fritz & Helgeson, 1998) or to a hostile, controlling orientation toward one's partner that involves applying rigid constraints on the activities and development of partners in an attempt to shape them into someone who supports one's own identity.

<u>Group-Identification</u>

Just as relationships may help reduce dissonance among self-elements by providing consensual validation for a consistent subset of self-elements, the identity consolidation function of groups may also be largely driven by the dissonance reduction mechanism of consensus. Group-identifications can provide sets of value and behavioral norms, as well as links with the past (e.g., ancestors, historical struggles) and projections into the future (e.g., having a rightful homeland, a new world order). Thus, they can provide "off the rack" identities that people can wear without the difficulty of tailoring their own (cf., Marcia, 1980). Furthermore, group-related self-elements are bolstered (validated) by their consensual endorsement by other members, and groups usually confer the identity consolidation benefits of self-worth as well.[17] Indeed, attempting to form a completely individualistic identity from scratch may be an impossible task (C. Taylor, 1989), which might leave one feeling isolated and unhappy (Bellah et al., 1985; Cushman, 1990), and even suicidal (Durkheim, 1897/1952). The identity consolidation function of groups may partially explain why, in general, people prefer similar others and ingroup members, and dislike dissimilar others, deviants and outgroups (Byrne, 1971; Rokeach, 1968; Tajfel & Turner, 1986). Indeed, according to Greenberg et al. (1997) "the fundamental reason that people respond with hostility toward those who are different is that such individuals undermine the social consensus for central beliefs that is necessary to maintain the integrity of those beliefs as buffers against anxiety."[18]

Consolidating one's identity with the group-identification strategy resembles Marcia's (1980) identity foreclosure strategy, in which adolescents internalize predefined roles and ideologies suggested by authority figures. As compared to identity moratorium and identity diffusion, identity foreclosure individuals have less anxiety and negative affect. If increased well-being and a relatively innocent preference for one's own groups vs. rival groups were the only associated outcomes, foreclosure/group-identification would be a relatively benign strategy. There is evidence, however, that foreclosed individuals tend to have greater disdain for outgroups (Archer, 1985) and that authoritarians are more punitive toward outgroups (Greenberg et al., 1990).

Drawbacks of group-identification. Throughout history, religious, national, and ethnic fervor has been matched by the intensity of conflict between groups. The Christian crusades provide a prototypical example, but the tendency for dissimilar religious groups to reject one another is ubiquitous (Rokeach, 1960, pp. 293-331). Similarly national and ethnic conflict and genocide have been a persistent blight on human history. Although

[17]This combination of value and esteem might explain why new converts to religious groups and cults use language of feeling saved and of having new found direction and purpose in life. Their identities feel newly consolidated, and they feel free from dissonance among self-elements. Conflict between alternative ways of living life is replaced by certainty that one has found enlightenment, the way, the true path.
[18]According to Greenberg et al., the primary source of anxiety is fear of death, and not psychic conflict.

economic and political factors surely fuel such conflicts, the present thesis highlights the possible contribution of identity consolidation factors. According to ICT, the benefit conveyed by group-identification is that conflict about how to live and what to value is eliminated by adherence to group norms and values that are consensually validated by group members. As such, choice and behavior is comfortably corralled within the boundaries of the group norms. Awareness that other groups with inconsistent norms are thriving, however, highlights choice and inconsistent self-elements once again, by suggesting other possible orientations and identities.

According to Rokeach (1968), prejudice toward members of other ethnic groups is mediated by belief incongruence. Similarly, the theory of symbolic racism (Kinder & Sears, 1981; Sears, 1988) contends that racism is animated by the perception of conflict between the abstract values and standards of one's own group and the target's outgroup. In keeping with these theories, ICT proposes that an important cause of intergroup conflict is the identity uncertainty that the existence of different groups provokes.

This hypothesis has recently been corroborated empirically by the finding that derogatory prejudicial attitudes toward disliked ethnic groups are mediated by symbolic beliefs about what values the disliked groups stand for (Esses, Haddock & Zanna, 1993). The role of symbolic beliefs was especially pronounced for the most authoritarian individuals. A conceptual replication found that derogatory attitudes toward male homosexuals were similarly mediated by symbolic beliefs, again, particularly among authoritarian individuals (Haddock, Zanna, & Esses, 1993).

Extremism

Classic studies in the belief disconfirmation dissonance paradigm have shown that people sometimes respond to evidence that undermines their beliefs by intensifying their initial beliefs. Batson (1975) found that when devout Christians were confronted with bogus but believable and ostensibly authoritative evidence that contradicted the divinity of Jesus, they intensified their belief in the divinity of Jesus. Similarly, Festinger, Reicken and Schacter (1956) found that when some doomsday cult members realized the world did not end on the predicted day, they intensified their beliefs, concluded that their faith had saved the world, and increased their proselytizing efforts. In both studies, belief disconfirmation resulted in participants having more conviction about the belief than they originally had.

In theories derived from clinical experience, both Rogers (1951) and Kelly (1955) proposed that inconsistency induces systemic compensatory rigidity, not just heightened conviction about the particular threatened belief. According to Rogers (p. 515) "an experience which is inconsistent with the organization or structure of the self may be perceived as a threat and the more of these there are the more rigidly the self-structure is organized to maintain itself." Kelly (1955) similarly proposed that individuals respond to threats to the organization of the self (i.e., their personal constructs) with the tendency to "harden their categories" — that is, when a personal construct is invalidated, one's whole set of constructs is more insistently adhered to.

According to the compensatory theories of Rogers (1951) and Kelly (1955), extremism and attitudinal rigidity may help people feel like they know who they are and what they stand for. From an ICT perspective, just as the salience of an important social issue can attenuate dissonance by trivializing the importance of the dissonant cognitions in comparison (Simon et. al, 1995), exaggerating conviction about specific attitudes and values may help individuals trivialize the importance of other inconsistent self-elements, thereby reducing dissonance.

Submission

A hallmark of the authoritarian personality is submission to authority. The classic developmental theory of authoritarianism (Adorno et al., 1950) was formulated in an attempt to understand how so many citizens could have submitted to the authority of the Nazi regime and participated in the atrocities of the holocaust. According to the theory, children who grow up in overly punitive and hostile environments (that do not allow them to explore and discover their authentic feelings and preferences) learn to use external authority to regulate their behavior. Authority becomes a surrogate for an identity.

Although Adorno et al. (1950) do not reference Lewin, their theory resembles Lewin's (1935, p. 178) portrayal of the development of freedom and responsibility. Children require free life-space, not dominated by adult authority, to learn how to make responsible decisions. If a child becomes too dependent on parental authority as a "crutch of his existence," as an adult he may continue to depend on authority for decision-making because his atrophied will is too easily overwhelmed by the wills of others and objective barriers.

Lewin noticed that conflict situations were associated with vacillation and lack of commitment, and with impulsive action, all of which signal difficulty taking responsibility for choosing among the alternatives. Festinger (1957, p.31) similarly proposed that fear of dissonance can lead to a reluctance to commit to or take action. Corroborating the importance of responsibility for choice, dissonance research has found that in the forced compliance paradigm, dissonance discomfort is moderated by perceived choice. When participants do not feel like they freely choose their counterattitudinal behaviors (i.e., when it appears to them as though they are "submitting" to the instructions of the authoritative experimenter), dissonance is reduced and in some cases eliminated (Baumeister & Tice, 1984; Linder, Cooper, & Jones, 1967; Zanna & Cooper, 1974).[19] The theories of Lewin and Festinger, together with subsequent dissonance research, suggest that the discomfort associated with choice can be alleviated by submitting to the will of an authoritative other.

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[19]High perceived choice is usually manipulated by having the researcher request the counterattitudinal behavior and then add something like, "but this is completely up to you and I'd like to emphasize that it is your own free choice whether or not you are willing to participate." Participants almost always do participate because of their desire to cooperate and to please the experimenter. The implication of the "freely chosen" counterattitudinal behavior for the participants however, is that they must agree with it (otherwise why would they have done it). Based on this implication, the pre-existing attitude is changed to make it consistent with this implication. In the low choice conditions, participants are told explicitly that they do not have any choice over whether or not they complete the counterattitudinal behavior. For them, there is no inconsistency and therefore no attitude change.

Submission as an identity consolidation strategy. From the perspective of ICT, people want identities because identities ameliorate primary and secondary conflict. But constructing an integrated identity is difficult and has its own set of pitfalls (see above section on drawbacks of identity integration). Consistent with the theories of Adorno et al. (1950) and Lewin (1935), and the moderating role of perceived choice in cognitive dissonance research, as an alternative to the rigors of formulating an internal guide for decision making (an identity), submission to the will of another can serve as a surrogate identity. Instead of having to develop a personalized set of criteria for regulating behavior, an external will can be relied upon to transcend the vicissitudes of one's own criteria for choosing. Thus, submission allows one to "relinquish responsibility" (Sartre, cited in Barnes, 1973) and "escape from freedom" (Fromm, 1941), in order to avoid the rigors of free choice. According to Fromm (p. 133), "the principal social avenues of escape in our time are the submission to a leader, as has happened in Fascist countries, and the compulsive conforming as is prevalent in our own democracy." Feeling as though one's goals and behaviors are dictated by another person, a nation, or a religion alleviates the psychic conflict associated with choice.

Presumably, submission as an identity consolidation strategy is most problematic at its authoritarian extremes where the call of one's own conscience can no longer be heard over the voice of authority. In such cases, the individual depends on the other for self-regulation, and is vulnerable to being coopted to participate in antisocial activities. The classic Milgram (1963) shock experiments demonstrate, however, that the tendency to submit to authority is capable of making most normal people somewhat antisocial. Also, there is evidence that relationships characterized by submission and dependence may ultimately be unsatisfying. Dependence and lack of autonomy are associated with depression, heightened defensiveness, possessiveness, and poorer quality relationships with others (Hodgins, Koestner, & Duncan, 1996; Thompson & Zuroff, 1998; Fritz & Helgeson, 1998; Pincus & Boekman, 1995).

Benefits of submission. Submission and conformity have bad reputations in Western culture where the ideal of the "rugged individualist" still presides (Bellah et al.. 1985). This may explain why in response to the classic Asch, line-length experiments (1956), most of the commentary implied that people should not ignore their own standards and should resist going along with the group. From another perspective, however, it is arguably very sensible, if faced with the unanimous contradictory opinion of one's peers, to carefully consider the possibility that they may be correct and that somehow one's own perspective might be wrong. A person who never to some degree "submitted" to the will and judgment of others would be at risk for sociopathy. Furthermore, a degree of submission, as well as adherence to group-related identity consolidation strategies, might help prevent one from being overwhelmed with the potentially incapacitating burden of identity integrity. Indeed, "post-formalist" perspectives on identity increasingly suggest that others' "voices" be included with one's own in an identity that is "dialogical" (Hermans, 1996). As such, responsibility is shared as identity is negotiated with close others. The dialogical nature of identity may be one reason why people of all ages list close personal relationships as the most meaningful aspect of their lives (DeVogler & Ebersole, 1981, 1983). Relationship others help to shoulder the burdensome responsibility for deciding what kind of person to be.

Distraction

Dissonance and distraction. Lewin (1935, p. 94) noticed that when children feel hopelessly caught in a conflict, one response is the attempt to hide from the conflict, e.g., by crouching into a ball and covering their eyes, like the mythical ostrich with its head in the sand. Alternatively, they sometimes respond to psychical conflict by engaging in superficial play, or by physically or psychologically "going out of the field" of the conflict. Lewin (1935, p. 140) further proposes that suicide might be considered an extreme example of "going out of the field" (cf. Baumeister, 1990). Festinger, Riecken and Schachter (1956, p. 26) proposed a related but more subtle, cognitive strategy for escaping from conflict. They proposed that "forgetting" about cognitions that are dissonant might be a common way to reduce dissonance. Similarly, Hardyck and Kardush (1968) proposed "stopping thinking" and Pallak, Brock and Keisler (1967) proposed "throwing oneself into one's work" might be preferred strategies for coping with dissonance. Assuming that attitude change and cognitive re-organization take some cognitive work, such distraction strategies would seem to fit with the "principle of least effort" — that people will reduce dissonance in the easiest way possible (Rosenberg & Abelson, 1960).

Indeed, Elkin and Lieppe (1986) found that in dissonance experiments, when participants are not given the opportunity to reduce their discomfort with attitude change, their arousal dissipates quickly anyway, presumably because participants forget about the inconsistent cognitions. Several early dissonance experiments demonstrated that dissonance reduction via attitude change depends upon whether participants are distracted from, or have their "noses rubbed" in the dissonant cognitions. Brock (1962) found that after being induced to "freely" write an essay about why they would like to become Catholic, non-Catholics' attitudes became more favorable towards Catholicism if they focused on essay convincingness as opposed to grammatical structure in the interval between the essay-writing and attitude assessment. Thus, extra attention to inconsistent elements apparently increased dissonance. On the other hand, one of the first distraction experiments (Allen, 1965) found that when participants engaged in a distracting technical task after dissonance induction manipulation, dissonance after the distraction task was reduced as compared to participants who were not given the opportunity to distract themselves (see also Zanna & Aziza, 1976; Zanna, Lepper, & Abelson, 1973).

Ambivalence and simultaneous accessibility. More recent research on ambivalence corroborates these early dissonance findings, by emphasizing that inconsistent cognitive elements must be accessible in order to cause discomfort. McGregor, Newby-Clark, and Zanna (1998) measured simultaneous accessibility of attitude components to see whether psychological discomfort might be influenced not just by the existence of discrepant cognitions, but also by the simultaneous accessibility of those cognitions. An index of intra-attitudinal inconsistency (potential ambivalence) was computed based on the degree to which participants appreciated both pros and cons of important social issues (capital punishment and abortion). Also, an index of simultaneous accessibility was computed based on how long it took participants to respond to the questions about the pros and cons of the attitude issues. It was predicted that participants would feel most ambivalent about the attitude issues when intra-attitudinal inconsistencies were not only existent but when they were also simultaneously accessible. Results indicated that for participants high in simultaneous accessibility the correlation between intra-attitudinal inconsistency and felt ambivalence was significantly higher than for those low in simultaneous accessibility. Taken in conjunction with distraction/attention findings from dissonance paradigms, this finding highlights the role of awareness of inconsistent cognitions in determining how much dissonance discomfort will be experienced.

Action as a mode of distraction from self-relevant inconsistencies. According to Fromm (1941, p. 133), a prevalent mode of escape from free choice is immersion in daily routine and activities. Likewise, Becker (1973, p. 179) commented on the pervasive tendency for people to "tranquilize themselves with the trivial" as a solution to existential angst. These existential perspectives (see also Yalom's discussion of compulsivity, 1980, p. 225) are entirely consistent with the dissonance and ambivalence perspectives discussed above, indicating that inconsistent cognitions are only psychologically aversive when they are simultaneously salient or accessible. If one's attention can be diverted away from dissonant elements, discomfort is reduced.

Several social psychological theories propose that one of the functions of action is to terminate possible discomfort associated with self-awareness. Nolen-Hoecksma (1991) argues that distracting activities such as playing sports can be adaptive because they help protect people from depressive rumination. Similarly, drawing on the theory of action identification (Vallacher & Wegner, 1985), Baumeister (1991a) proposed that when the self becomes a problem, individuals seek to "escape the self" by engaging in and identifying with concrete and immediate experiences such as binge eating, alcohol consumption, masochism, and even suicide.[20] Along these lines, recent research indicates that the negative affect associated with inconsistency among self-elements is associated with greater frequency of distracting activities such as watching television, smoking, and drinking alcohol (Sheldon & Kasser, 1995).

Alcohol myopia. Alcohol should be a particularly good way for people to escape from the discomfort associated with inconsistencies among self-elements because there is evidence that alcohol can suppress simultaneous accessibility of inconsistent cognitions. Banaji and Steele (1989) and Steele and Josephs (1990) have found that when intoxicated, individuals are only able to focus on the most salient of internal or external cues, a state they call "alcohol induced myopia." More specifically, Steele, Southwick and Critchlow (1981) found that alcohol relieved dissonance in a classic dissonance paradigm, presumably because alcohol permits awareness of only one element (the most salient one) of the inconsistency. (For example, for dissonance to occur, participants would have to be aware of both their prior attitude, and the counterattitudinal expression.) Although as of yet, no direct evidence indicates that people spontaneously use alcohol to quell dissonance associated with self-relevant inconsistencies, it seems plausible given the prevalence of alcohol use, and the effectiveness of alcohol and distraction for reducing dissonance.[21]

Misattribution

Another way to reduce discomfort associated with inconsistencies among self-elements, that does not require adjusting the self-elements, may be to misattribute identity

[20]Baumeister usually equates problematic selfhood with difficulty maintaining an embellished sense of self-worth. People with inflated self-views are vulnerable to experiencing unpleasant affect when reality and others expose an actual self that is discrepant from the embellished version. Consistent with this perspective, Higgins (1987) found that perceived discrepancies between one's actual self and how one would like to be or thinks one ought to be are associated with dejection and agitation. The focus in the present paper is on distraction from the discomfort associated with inconsistency per se (e.g., Van Hook & Higgins, 1988) as opposed to discomfort associated with failure to live up to one's hopes and expectations.
[21]It is interesting to speculate as to whether the heightened vividness of sensual experience associated with cannabis use may serve a similar "myopia" function.

related discomfort to more mundane, concrete domains such as one's job, spouse, or circumstances. Consistent with this possibility, Lewin (1935, pp. 61, 243) proposed that in some cases, tension states can extend into neighboring areas, and can be reduced by completing substitute goals in those other areas. Lewin's intuitions are supported by research indicating that negative emotional states can quite easily be misattributed to a domain different from the one in which it was aroused (e.g., Schachter & Singer, 1962), especially if the actual source of the arousal is unclear or ambiguous and if the misattribution domain is made salient (Olson & Ross, 1988). Indeed, experiments in the forced compliance paradigm indicate that dissonance discomfort can be reduced by misattributing the dissonance discomfort to external sources such as a placebo pill (Zanna & Cooper, 1974) or a novel physical environment (Fazio, Zanna & Cooper, 1977). These experiments demonstrate that when the misattribution domain is more mundane than the arousal domain, distress can be diminished (Nisbett & Schachter, 1966; Olson, 1988). Thus, discomfort associated with conflict among self-elements may be a prime candidate for misattribution because of its absence of concrete and observable referents.

Drawbacks of misattribution. Although misattribution may provide relief from discomfort, it, like distraction, is a stop-gap strategy that might help prevent one from becoming overwhelmed with discomfort, but might also reduce the motivation to engage in integration. Furthermore, if extensively relied upon, it could result in a negative and blaming orientation toward other people and one's environment, and in ineffective strategies for making oneself feel better. For example, media and advertising depict extrinsic rewards such as food, beer, cars, vacations, houses, wealth, and beauty, as being associated with well-being. When someone experiencing negative affect associated with identity inconsistencies stops to wonder why she is feeling bad, the absence of the above incentives may be a more salient attribution than the actual source which is relatively invisible. Thus, even though having consumerist, "American dream" priorities as a central aspiration is associated with depressed well-being (Kasser & Ryan, 1993, 1996), such aspirations may continue in popularity because they provide a concrete and salient misattribution source for vague identity yearnings. Compulsive preoccupations with body image, food, buying new possessions, or seeking more perfect relationship partners might at least partially arise from the combination of pervasive identity related discomfort and the ubiquity of concrete misattribution cues in the media. Such a combination might lead to maladaptive self-regulation attempts that ultimately leave individuals with the same vague yearnings and feelings of dissatisfaction that they started with.

Discussion: Combination Identity Consolidation Strategies

The identity consolidation strategies discussed above are not mutually exclusive. and it is difficult to come up with a pure exemplar of any one strategy. A variety of social phenomena may be viewed as combining the identity consolidation benefits of several strategies simultaneously. The multifaceted identity consolidation functions of relationships, children, authoritarianism, success, fanaticism, war, and religions are discussed below. The intent of the following section is not to cynically imply that the only motive, or even the primary motive, for wanting relationships, children, success, or for participating in religious activities is identity consolidation. Neither is the intent to imply that the only reason, or even the main reason, for devotion to a cause or going to war is always identity consolidation. Such powerful social phenomena are surely multidetermined, and guided by different motives for different people and at different times. The intent of the following section is rather to demonstrate how for some people, in some circumstances, identity consolidation concerns may drive important social behaviors.

Relationships

Relationships may help people achieve identity integrity in a number of ways. Falling in love may involve feelings of being understood, accepted and validated, and partners may co-construct shared narratives that help them to organize their various temporal and interpersonal self-elements. Thus, the consensual validation that relationships provide may help partners bolster the importance of a consistent set of self-elements. As such, relationships likely confer some of the benefits of groups, in that the dyad represents an in-group with dyadic norms and a shared worldview. Relationships may also provide the identity-facilitating benefits of self-worth. By making each other "number one" and reflecting positive illusions for one another, partners may effectively leverage their own feelings of self-worth. Alternatively, one may derive self-worth from a relationship by dominating or controlling one's partner, and obliterating any competing identity claims within the confines of the dyad.

Relationships also seem to provide a socially acceptable outlet for extremism. Popular and religious media abound with maxims such as "love is the answer," "follow your heart," "you mean everything to me," "all you need is love," and "God is love," which could support fanatical adherence to romantic or relational priorities (e.g., in the words of a recent hit song "I'd die for you ... anything I do, I do it for you"). Such an extreme emphasis on relationships may also provide a convenient misattribution target. Identity malaise can be blamed on being without a soulmate, having the wrong partner, or not being able to have the desired partner.

Becket's play Waiting for Godot provides a vivid illustration of the possible submission, distraction, and misattribution function of relationships. In the play, two wretched transients are waiting to be told what to "go do" by an absent authority figure (Mr. Godot), and they are lamenting their uncomfortable situation of not knowing what they should do in the meantime. The characters intensely dislike one-another, but their relationship is indispensable because it provides three avenues of relief from their plight. First, they take turns submitting to each other, thereby transferring the burden of responsibility for deciding what to do. Second, their relationship provides a salient interpersonal source for misattribution of their distress. The characters' constant conflict serves as a lightening rod for their existential angst. Finally, their relationship provides a number of avenues for distraction by immersion in concrete and immediate experiences such as conflict, sex,[22] and inane antics.

<u>Children</u>

Although there are many reasons for having children (and often they arrive without a reason), the desire to have children and a family may be at least partially motivated by identity consolidation concerns. Being a parent may facilitate integrity by priming the self-actualizing values of compassion, humility, forgiveness, and generativity as opposed to narcissistic self-absorption. Being a parent may also affirm one's self-worth by making one feel admired and needed by one's children. Devoting oneself to one's children may also boost self worth by contributing to a sense of nobly suffering for a worthy cause (one's children). This single-minded devotion may also confer the benefits of extremism — all other concerns pale in comparison to the priority of caring for one's family. One may also be able to bask in the reflected glory (Cialdini et al., 1976) of the successes of one's children.

Being a parent may also provides another vocational role to consider oneself a success at — and unlike most other vocational roles in which evaluation is external, as a parent, one is usually free to set self-serving evaluation criteria. Some parents may essentially use children as an opportunity to relinquish choice, gladly submitting themselves to supporting and providing for children. Children may also provide a common purpose to help stabilize a flagging relationship, and may thereby indirectly facilitate the identity consolidation benefits of relationships. Being a family person may also provide a

[22]Although sexual passion is surely multidetermined, it is interesting to speculate whether identity consolidation processes might account for some of the passionate intensity that characterizes sexuality in humans, and some of the intense (and apparently irrational) responses to sexual infidelity. Our closest primate ancestors are rather laissez-faire about sex, which appears to have about the same incentive value as being groomed, or finding a juicy grub to eat. Human sexuality may serve a number of identity consolidation functions. Human courtship usually involves affirmation and expressions of positive regard, and feeling sexually desirable may boost feelings of self-worth. Expressions of appreciation and pleasure during sex may be overgeneralized (with the other's help) as being validation for one's identity (although this is quite likely not always foremost on either lover's mind at the time). "Losing oneself" in the other's arms may constitute a combination of distraction and submission, and the interpersonal harmony may be overgeneralized and misattributed to existential concerns (e.g., "my whole world makes sense when I'm with you").

set of predefined roles to foreclose on, that are readily endorsed by society, placing one in the ingroup of people who endorse family values. Children also provide, at least for the first few years, an ideal source of distraction. The early years of child rearing can help parents "never get a moment to themselves." Finally, parenthood may provide a handy source of misattribution. Parents can misattribute their identity discomfort to the sacrifices they have made for their children (e.g., "I couldn't go to medical school because of my children").

Authoritarianism

The cluster of attributes that are typically included in the definition of authoritarianism can also be interpreted from an identity consolidation perspective. One characteristic of authoritarianism is rigid adherence to group norms and identification with the dominant ingroup, and derogation and intolerance of minority or outgroup members. Identifying with the dominant group may allow individuals to bask in the reflected glory of the dominant group and thereby elevate their self-worth (Cialdini et al., 1976). Similarly, derogating minority groups might help them feel better about themselves (Fein & Spencer, 1997). Group identification may also help authoritarians foreclose an identity by introjecting a consensually validated set of group norms and values. Authoritarian extremism and black and white thinking could also be interpreted as an attempt to eliminate ambiguity and dissonance among self-elements. The relationships of authoritarians are characterized by sadistic and masochistic patterns of relating, which could represent alternative strategies for coping with self-element alternatives suggested by others — obliterate them or internalize them. Finally, the derogation of outgroups and deviants could represent a misattribution of one's own identity dissonance to more circumscribed targets (e.g., "it's those dirty foreigners and 'bad apples' that are ruining everything").

Success

Finding something to be successful at — a calling — may be a keystone of an integrated identity. Recognizing one's particular talents and success in a particular domain may help to rule out vocational alternatives, a potentially important source of identity conflict. The self-worth implied by success may also have a more general dissonance-analgesic function that operates by making inconsistent self-elements less accessible and seem trivial. Success may also increase interpersonal success, or perceptions of likely interpersonal success (Leary, Tambor, Terdal, & Downs, 1995), which could indirectly confer the identity consolidation benefits of relationships and groups. Success and workaholism may also allow people to consolidate their identities by providing an avenue for extreme identification with role-based self-elements (e.g., being a "company man" and internalizing corporate values). Being a workaholic may also allow one to relinquish choice by submitting to the requirements of the job. "Having to" go to work may reflect a flight from choice, and may partially account for the depression sometimes accompanying retirement. "Throwing oneself into one's work" may also be a reliable distraction from a problematic identity. Finally, disliked jobs, bosses, and coworkers may be ideal targets for misattribution of dissonance arousal. The promise of more success on the horizon may also hold up hope for happiness in the future. If identity discomfort were misattributed to intolerable personal circumstances (small house, poor neighborhood, old car, boring vacations), success would promise to solve all of one's problems.

Fanaticism

Religious, national, and social issue fanaticism may also be driven by identity consolidation processes. The fanatic may derive self-worth from seeing oneself as a noble hero fighting for an important cause. Also, fanatics often belong to groups which convey group-related identity consolidation benefits, and relational benefits derived from solidarity among compatriots. Fanaticism is the most obvious outlet of the extremism identity consolidation strategy. All other causes and issues pale in comparison to the mission of the fanatic. Fanaticism also usually furnishes the benefits of belonging to a righteous ingroup that is battling against an evil outgroup (e.g., sinners, civil servants, academics, abortionists, the evil empire, communists, Protestants, or the visiting team in the case of the fanatical sports fan). Fanaticism also comes with many distraction opportunities. Martyring oneself for a cause, e.g., suicide bombers, is an extreme example. More typically, however, fanaticism may simply involve complete devotion and immersion in the cause, e.g., " I won't rest until there is justice" or as the motto of TSN proclaims, "eat, drink, sleep, sports!" Finally, fanaticism provides a misattribution source for identity discomfort. Everything would be fine if the cause could be forwarded and the enemy beaten.

War

Historically, war might be considered the ultimate arena for supremacy strivings. Victory in war can bolster self-worth by generalizing to the superiority of all characteristics of the ingroup (e.g., moral, economic, religious, cultural) over the defeated outgroup. The single-minded devotion to the war-effort may also proffer the benefits of extremism — all other priorities fade to irrelevance in the face of the crucial life-and death struggle of war. Group identification and jingoism proliferate during war, with the outgroup often being reduced to subhuman proportions. War also legitimizes submission to the authority of leaders, most explicitly in the armed forces where obedience to authority is enforced, but also in terms of the willingness to die for one's country or one's cause. Authoritarian manipulation of public opinion is also commonplace, and the propaganda machine interacts symbiotically with the heightened willingness of individuals to submit. War also likely provides a powerful distraction from identity issues, with its physical dangers, concrete hardships, and requirement for continual vigilance and effort. Finally, the horrors of war provide a broad and compelling target for misattribution of any psychic pangs of discomfort, effectively redirecting them away from the self and toward the intolerable external circumstances.

Religion

Although religions are often criticized as hotbeds of closed-mindedness, superstition, chauvinism, and authoritarianism, the negative elements seem to be accretions on the original, core intent. Hallmarks of formative religious figures include honesty, truth, humility, wisdom, self-reflection, meditation, contemplation, compassion, generativity, and courage — all markers of integration. Moreover, most religions provide technologies for the cultivation of integrity. Common religious practices such as meditative and contemplative prayer, self-reflection, honesty, confession, humility and avoidance of self-inflation, and the exercise of compassion and forgiveness could be seen as rudiments of moral hygiene — prerequisites for integration. To ensure that the self-focus is not too painful, religions also provide a solid foundation of self-worth and a varied repertoire of other identity consolidation strategies as well. The benevolence of God is a major theme in most religions, and the personal interest of a loving God is a primary tenet of the great monotheistic religions. Believing that one was intensely loved and valued by the creator of the universe would surely provide a safe base for the exploration and vulnerability that integration requires. Furthermore, this love is often portrayed as unconditional and available by grace to anyone.

Religions may also provide powerful group-identification resources for consolidating identities, and rituals for emphasizing the group-identification benefits. Worship often involves groups, participating in shared rituals, hymns, creeds, liturgy, dogma, narratives, and other activities that implicitly and explicitly provide consensual validation for a shared set of self-elements such as myths, role-models, ancestors, values, norms, beliefs, goals, desired possible selves, etc. Clear lines are also usually drawn between the ingroup and the outgroup that has not been enlightened, saved, or heard the "good news." This may provide a self-worth bolstering downward comparison, as well as an opportunity to bolster one's own views by proselytizing to (or crusading against) the outgroup.

Most religions also promote the importance of relationships and communal priorities. The last six of the 10 commandments refer to ethical treatment of others. Rabbi Hillel's golden rule to "not do unto others as you would not have done unto you" is featured in all three monotheistic religions (cited in Armstrong, 1993, p. 72). In Buddhism, once the Buddha became personally enlightened he devoted his life to social action. The relationships that this communal emphasis likely facilitates, may indirectly support identity consolidation. Furthermore, in every major religion, there is a tendency to personalize God as a friend or parent that one can have a personal relationship with. The identity consolidation benefits of relationships are likely even more pronounced when the relationship partner is The Almighty God.

Religions may also provide a wide array of opportunities for extremism. Indeed, the term "religious extremist" is often considered the rule rather than the exception. Many religions explicitly encourage single-minded devotion. In the evolution of religions, this may have been an adaptive advantage of the great monotheistic religions — Judaism, Christianity, and Islam (Armstrong, 1993). The first four of the 10 commandments (that all three monotheistic religions observe) refer to single-minded devotion to one God, e.g., "You shall have no other gods before me." In all religious traditions, those who martyr themselves, suffer, or forego other worldly concerns for the sake of God, are exalted as sages, prophets, and saints. Although this kind of extremism may confer powerful identity consolidation benefits, it also comes dangerously close to legitimizing seemingly fanatical practices (cults, militant leftist and rightist regimes, suicide bombing, the crusades, self-castration and celibacy, and morbid self-denial). The religious emphasis on extreme devotion also promotes submission to the authority of God and religious leaders. Such submission may effectively relieve the burden of maintaining an identity, but may also have been responsible for some of the atrocities committed in the name of religion, and the persistence of questionable and sometimes seemingly bizarre beliefs.

Religions also provide powerful distraction opportunities. Worship and rituals such as repeating prayers, mantras, and observances, are often accompanied by poignant stimuli and experiences such as stories, incense, bells, fasting, music, icons, stained glass, and beautiful buildings. Salience of such poignant and novel stimuli may help to limit the range of potentially inconsistent self-elements that are simultaneously accessible. Furthermore, preoccupation with religious matters in general may serve the same function as Lewin's "planes of unreality" in helping distract devotees from their this-worldly psychic conflict.

Finally, religions provide consensual targets for misattribution of psychic discomfort —most clearly in the case of demon possession or being separated from God. Similarly, any peak experience can be explained as being close to God. Such attributions may help devotees gain a sense of interpretive control in their lives (Rothbaum, Weis, & Snyder, 1982).

Bridge

The first module of this thesis has introduced ICT and eight identity consolidation strategies, and discussed how a number of important social phenomena might be interpreted from an identity consolidation perspective. The second module of this thesis (that follows), begins with a brief introduction to ICT, and then presents five experiments that empirically investigate some ICT claims. The thesis concludes with a general discussion of both modules.

Rigid and Integrative Responses to Identity Confrontation

Introduction

In one of the first systematic empirical investigations in the social sciences. Durkheim (1897/1952) concluded that family and culture were important because they limited choice by enforcing norms and commitments. According to Durkheim, the discomfort that arises from unconstrained choice is unbearable and increases the probability of suicide. Similarly, existentialist philosophers, such as Sartre and Fromm contend that one of the primary tasks people face is to cope with their own subjectivity and choice, a dizzying prospect that Sartre labels with the term "nausea" (Barnes, 1973). Fromm (1941, p. 155) similarly refers to the "torture of doubt" — "doubt of what the meaning of [one's] life is or who [one] is," — as "the worst of all pains." People are faced with potentially overwhelming ambivalence when making choices about how to live life, but also face regret and existential guilt if they relinquish choice or do not choose wisely.

The human predicament of choice is further highlighted by the observation that throughout history, most cultures have developed religions that help guide choices of individuals. Buddhism promotes a eight-fold path to enlightenment, Judaism is guided by ten commandments, Christian writings promise "the way, the truth, and the light," and the word "Islam" literally means "submission" (to the authority of God). The present article introduces and tests the contention of Identity Consolidation Theory (ICT), that the need to cope with the predicament of choice is a potent motivator of both potentially antisocial and prosocial outcomes.

Identity Consolidation Theory

The predicament of choice. Whereas for most other animals, choice is limited by programmed instincts or the physical salience of alternatives, the unique human ability for abstract and future-oriented thought liberates one from concrete and immediate action alternatives, allowing for simultaneous consideration of multiple alternative goals, and the alternative values, priorities, and possible selves associated with the alternative goals (which will all be referred to as self-elements in this article) (see Figure 1 on p. 8). This ability to consider alternatives enables the important instrumental advantage of planned action, but also creates the basis for extremely complex and aversive approach/avoidance conflict. Approaching commitment to any one set of desirable self-elements can conflict with the desire to avoid foregoing other potentially favorable alternatives. Conflict between alternatives may arise when there are a number of highly attractive alternatives or when there seem to be no attractive alternatives. In both cases, one is vulnerable to being caught between alternatives because no course of action is clearly indicated. According to ICT, when action alternatives are salient, the question "how shall I act?" needs some authoritative referent. An arbiter of choice is required to circumvent "tension" from primary conflict among competing action alternatives (Lewin, 1935), and dissonance from secondary conflict among the alternative self-elements associated with the action alternatives.

Self-elements as arbiters of choice. According to ICT, in order to answer the "how shall I act" question, people often ask themselves "who am I?" When George is faced with a decision about how to act, George reflexively asks himself, "what kind of person is George?" and "what would be a Georgian thing to do?" Thus, the reflexive referent in response to choice is one's self-elements. A premise of ICT, however, is that only a subset of self-elements is accessible at one time (often-times only those that are somehow related to the primary conflict in question), and because self-elements accumulate over time and in diverse contexts, they are not necessarily compatible and may often be contradictory and inconsistent.

The present research is guided by a model of the self as an associative network of diverse elements that orient the individual to other people and the world (see Figure 1 on p. 8).[23] Because only localized regions of the network are accessible at any one time

[23]Self-elements can be roughly classified into three overlapping categories: raw materials, means, and ends (see McAdams, 1996 for a related three-level characterization of personality). The raw materials category contains relatively stable elements such as personality traits, aptitudes, environmental constraints and affordances, past experiences and important personal memories. The means category includes elements that

(Higgins, 1996; Markus & Wurf, 1987), one has a sense of identity to the extent that there is a coherent pattern of linkages among accessible elements. A sense of identity mitigates primary conflict among action alternatives because it provides a non-equivocal guide for choice. Similarly, a sense of identity minimizes secondary conflict because one's self-elements seem mutually compatible. As will be discussed below, the three main mechanisms for consolidating a sense of identity involve either minimizing the number of accessible elements, promoting or trivializing the importance of certain elements, or directly changing self-elements or their meanings to make them more internally consistent. According to ICT, a number of important social phenomena (e.g., relationships, religious practices, authoritarianism) can be at least partially understood as manifestations of these three mechanisms.

Classic cognitive dissonance research has found that relatively peripheral and experimentally implanted cognitive inconsistencies, about consumer items for example, can cause psychological discomfort.[24] ICT proposes that the network of connections among diverse and potentially inconsistent self-elements creates the potential for an even more aversive experience of dissonance for two reasons. First, Aronson (1968) proposed that dissonance discomfort is greatest when inconsistencies are self relevant, and second, self-elements may be chronically accessible because they are primed whenever one needs an arbiter of choice. A number of experiments demonstrate that dissonance discomfort is moderated by the accessibility of the dissonant elements (reviewed in McGregor et al., 1998).

According to ICT, in order to cope with this potential for discomfort, people turn to the identity consolidation strategies of identity integration, self-worth, relationships, group-

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orient the individual toward desired ends such as attitudes, personal goals, and social groups that one belongs to. The ends category is comprised of elements that the raw materials and means are mobilized in the service of, such as values, priorities, and desired possible selves. This model of identity locates diverse elements (e.g., past, present, and future oriented; dispositional and contextual; idiosyncratic and collective; cognitive and social) from the three categories on the same footing and proposes that they are interconnected by a network of parallel constraint linkages.

[24]See Shultz and Lepper (1998) for a parallel constraints interpretation of cognitive dissonance phenomena.

identification, extremism, submission, distraction and misattribution (see Figure 2 on p. 9). The strategies are not mutually exclusive, and vary in the extent to which they are integrative vs. rigid. The more integrative strategies involve attempts to directly resolve the inconsistencies by adjusting the self-elements and their meanings. More rigid strategies, on the other hand, involve attempts to deny or ignore the inconsistencies among self-elements. Each strategy is briefly described below, along with a cognitive dissonance theory-based rationale for why it should be effective.

Identity consolidation strategies. Identity integration involves changing or adjusting inconsistent self-elements to reduce systemic inconsistency. This can be accomplished either by substituting more systemically consistent elements for inconsistent ones (a strategy akin to the dissonance reduction strategy of attitude change), or by adding superordinate elements or themes that change the meaning of subordinate elements (cf. Thagard & Kunda, 1998). Reconstrual of self-element meanings according to a superordinate theme resembles the proposed dissonance reduction strategies of "reconciling" (Festinger, 1957, p. 22) and "transcendence" (Abelson, 1959, p. 346), both of which involve the resolution of inconsistencies by adding superordinate cognitions.

A less integrative identity consolidation strategy, but one that nonetheless involves direct adjustment of self-elements, is bolstering one's self-worth. From the perspective of ICT, one motive for success and self-worth is self-definitional, that is, being good at something helps people feel like they know who they are. Research in the cognitive dissonance tradition suggests several reasons for why self-worth might help to reduce the discomfort associated with self-element inconsistencies. Self-affirmation manipulations make people feel less uncomfortable after conventional dissonance inductions (Steele, 1988; Steele, Spencer & Lynch, 1993). Heightened self-worth may also make inconsistent cognitions seem trivial relative to the bolstered importance of a worthy self (cf. Festinger, 1957, p. 264; Simon et al., 1995). Furthermore, success and self-worth may help to reduce self-focus and rumination, thereby making inconsistent self-elements relatively inaccessible (Pyszczynski & Greenberg, 1987; Wood & Dodgson, 1996). Finally, according to the sociometer hypothesis (Leary, et al., 1995), self-worth may help people feel like they are more likely to be accepted in social groups and relationships.

People may turn to their relationships and social groups for identity consolidation purposes. Festinger (1954) proposed that just knowing someone holds a contradictory opinion can create discomfort, and that others are turned to for consensual validation of beliefs about oneself and the world. From a cognitive dissonance theory perspective, finding others to agree with one's position serves the same bolstering function as adding new consonant cognitions to support a desired cognition. Several early balance theories emphasized a related theme, that others' views play an important role in the maintenance of cognitive consistency (Festinger, 1954; 1957, p. 8; Heider, 1958; Newcomb, 1961; Osgood & Tannenbaum, 1955; Schachter, 1951). As well as the consensual validation of self-elements that relationships and groups provide, group membership often implies endorsement of the norms and values promoted by the group. Thus, identifying with a group may infuse some prepackaged coherence into otherwise confused identities. A number of diverse social psychological theories highlight the influence that others have over one's self-definition (Aron et al., 1991; Baumeister, 1982; Backman, 1988; Hermans, 1996; Swann & Predmore, 1985; Swann et al., 1995; Murray et al., 1996; Wicklund & Gollwitzer, 1982).

The identity consolidation strategy of extremism is characterized by exaggerated conviction and zeal for a subset of one's self-elements. Several classic humanistic and personality theories contend that extremism and rigidity are compensatory responses to uncertain or threatened self-understanding (Adorno et al., 1950; Fromm, 1941; Kelly, 1955; Rogers, 1951). Expressing strong and extreme views may help people feel like they know who they are because it may allow them some measure of epistemic solace in a domain more circumscribed than their chaotic identity. From a dissonance perspective, emphasizing important values has been shown to reduce dissonance discomfort (Steele &

Liu, 1983), and there is evidence suggesting that the mediating mechanism may be trivialization of the importance of the inconsistent cognitions (Simon et al., 1995). Furthermore, dissonance experiments in the belief disconfirmation paradigm have shown that dissonance is sometimes reduced by intensifying conviction for threatened beliefs (e.g., Batson, 1975; Festinger et al., 1956).

In addition to the mechanisms suggested, the success of the identity consolidation strategies above may also be driven by the creation of a public self, which may provide added leverage for identity consolidation (Baumeister, 1982; Wicklund & Gollwitzer, 1982). Public demonstrations of integrity and success, relationships, and group memberships, and public expressions of zeal may all help people to feel like they know who they are through the reflected appraisals of others. Indeed, public expression has more impact than private expression on one's subsequent attitudes in dissonance experiments (Baumeister & Tice, 1984).

Finally, the least integrative identity consolidation strategies of submission, distraction, and misattribution do not focus on self-elements at all. Rather, they allow individuals to ignore the inconsistent elements. Submission involves relinquishing choice and the necessity for an identity altogether by adhering to the authority of another's will. In counterattitudinal behavior dissonance experiments, when participants feel like their behaviors are dictated by the researcher rather than being freely chosen, dissonance is reduced and in some cases eliminated (e.g., Baumeister & Tice, 1984; Linder et al., 1967; Zanna & Cooper, 1974).

The distraction strategy similarly involves attempts to avoid awareness of inconsistencies. Immersion in absorbing, concrete and immediate activities may help to keep abstract self-elements inaccessible (Baumeister, 1991a; Vallacher & Wegner, 1985). Along these lines, dissonance and ambivalence research demonstrates that psychological discomfort associated with cognitive inconsistency is heightened to the extent that inconsistent elements are simultaneously salient or accessible (McGregor et al., 1998).

The misattribution strategy involves the attribution of the tension and dissonance associated with inconsistent self-elements to external sources. For example, misattributing identity confusion to external, circumscribed sources such as one's job, spouse, or a disliked ethnic group may help divert attention from one's inconsistent self-elements. Several studies have demonstrated that dissonance discomfort is reduced when the discomfort can be attributed to an external source (e.g., Zanna & Cooper, 1974).

Identity confrontation. Through some combination of the above strategies, most people manage to keep primary and secondary conflict at bay. However, according to ICT, there are situations that make a wider range of (potentially inconsistent) self-elements more accessible than usual, increasing the likelihood that self-element inconsistencies will be noticed, thereby increasing the need for identity consolidation. According to Yalom (1980) there are three phenomena that reliably confront individuals with their identities and make them ask "who am I?" questions: temporal extension, mortality salience, and dilemma deliberation. Temporal extension refers to thinking about oneself from the perspective of the past and future, mortality salience refers to thinking about one's own inevitable death, and dilemma deliberation refers to grappling over an important personal decision.

With respect to temporal extension and mortality salience for example, treasured memories from one's childhood and priorities on one's deathbed may be discrepant with concerns and goals characterizing one's daily routine, but such discrepancies may normally be masked by more immediate preoccupations and concerns.

As an analogy, when reading a book, one may be immersed in the plot twists, imagery, and development of characters. Upon nearing the concluding chapters (mortality salience), however, or when stopping to think about the book as a whole (temporal extension), one begins to expect meaning to emerge (What is this book about? What is the author's perspective?). According to ICT, mortality salience and temporal extension both induce a similar kind of wider, more abstract perspective on one's life.

The third identity confrontation phenomenon, dilemma deliberation, more directly influences the simultaneous accessibility of inconsistent self-elements. Deliberating about a difficult and important personal decision involves immersing oneself in the pros and cons of the often incompatible goals, priorities, values, and possible selves associated with each action alternative.

Past Research on the Effects of Mortality Salience

There is a rich history of theorizing in the humanities about the psychological impact of mortality salience. Indeed, the main theme of the Gilgamesh Epic, one of the earliest known written records from about 3,700 years ago, is the hero's anguish and despair upon the death of his best friend (Guirand, 1977, pp. 49-72). Recently, "terror management" theorists have developed an impressive research program that uses experimental social psychological methods to test the considerable accumulation of existential and psychoanalytically oriented ideas about the psychological impact of mortality salience (see Greenberg et al., 1997 for a review of terror management theory and research). They have found that mortality salience increases; liking of ingroup members and disliking of outgroup members; suggested rewards for ingroup members and punishments for outgroup members; avoidance, derogation and hostility toward outgroup members; disliking of people with dissimilar attitudes; and liking of people with similar attitudes. Terror management theory proposes that mortality salience is a necessary condition for such effects, and that terror management outcomes represent the desire to attain symbolic immortality by adhering to consensual cultural values that transcend death.

ICT proposes a modification to the explanation for the mortality salience effects proposed by terror management researchers. According to ICT, mortality salience is a potent identity confrontation phenomenon that increases the desire for a consistent identity. Mortality salience effects in terror management research are thus viewed as identity consolidation efforts. To test this hypothesis, the strategy in the present series of experiments is to demonstrate that mortality salience is not a necessary condition for terror management types of outcomes reviewed above. The present series of experiments show that other identity confrontation manipulations, adapted from the mortality salience materials but with no obvious link to mortality, can stimulate the same kind of responding. In addition, the present series of experiments investigates whether, in addition to causing conventional terror management outcomes, identity confrontation manipulations will cause outcomes related to ICT but not reflective of consensual cultural values that transcend death.

Overview

In sum, ICT proposes that the human capacity for abstract, future-oriented thought creates the potential for intense psychological discomfort arising from primary conflict among action alternatives and secondary conflict among self-element alternatives. Secondary conflict can also persist in the absence of the eliciting primary conflict. To reduce discomfort, people turn to their self-elements as arbiters of choice among alternatives. In other words, the "what shall I do?" question primes the "who am I?" question. But because self-elements accumulate over time and in diverse contexts, they are not necessarily compatible, and identities are often somewhat inconsistent internally. Thus, as opposed to resolving conflict, the "who am I?" question potentially introduces even more discomfort by highlighting identity confusion, especially if a wide range of self-elements are accessible. To cope with this predicament, people turn to a variety of identity consolidation strategies to make themselves feel like they know, unequivocally, who they are. Some of these strategies involve changing self-elements, whereas others simply involve avoiding awareness of identity inconsistencies.

The experimental strategy in the present research is based on the finding in dissonance and ambivalence paradigms that inconsistent cognitive elements are most uncomfortable when they are simultaneously accessible (McGregor et al., 1998). To test the ICT hypothesis that the identity consolidation strategies discussed above are used for coping with inconsistencies among self-elements, the experimental strategy in the present research was to manipulate the simultaneous accessibility of inconsistent self-elements and see if identity consolidation efforts would increase. Three diverse identity confrontation manipulations — temporal extension, mortality salience, and dilemma deliberation — were used to induce the simultaneous accessibility of inconsistent self-elements. The identity consolidation strategies of extremism, group identification, and integration were assessed.

Whereas Experiments 1, 2, and 4 assess whether participants will respond to identity confrontation with relatively rigid and potentially maladaptive identity consolidation strategies, Experiment 5 assesses whether participants will use more integrative strategies if given the opportunity. Experiment 1 assesses the effect of temporal extension on a commonly used terror management outcome measure that reflects the relatively rigid identity consolidation strategies of group identification and extremism. Experiment 2 focuses more specifically on group identification. Experiment 3 attempts to rule out the possibility that temporal extension is simply a subtle manipulation of mortality salience. Experiment 4 assesses the effect of dilemma deliberation on the identity consolidation strategy of extremism. Experiment 5 assesses the effects of the temporal extension and mortality salience manipulations on integrative identity consolidation strategies.

Experiment 1

The purpose of Experiment 1 was to test whether temporal extension, an identity confrontation manipulation with no obvious link to mortality salience, would cause elevation on a common dependent measure used in terror management research — suggested punishment for a prostitute. According to the present view, this dependent measure reflects the identity consolidation strategies of extremism and group identification. Broadening participants' frame of temporal reference was expected to act as an identity confrontation by highlighting a wider range of potentially inconsistent self-elements than is usually accessible. For example, consider a student whose daily concerns are bounded by a circumscribed set of university contexts, and who is busily immersed in her immediate set of academic and social goals. Reminding her about an important defining memory from the past, and then asking her to reflect on that memory from the perspective of herself as an older adult might juxtapose several different, potentially inconsistent self-elements. Her defining memory of relaxed summer evenings fishing with her father at the family cottage might seem inconsistent with her current set of concerns and projects that frantically revolve around the life tasks of proving her worth academically and socially. Also, past and present self-elements may seem inconsistent with her imagined future self as a confident and established professional.

The hypothesis of Experiment 1 is that participants will try to consolidate their identities in response to identity confrontation (instigated by temporal extension) by allocating more extreme punishments toward an outgroup member. According to ICT, extremism reduces the discomfort associated with inconsistent self-elements because emphasizing one set of elements can trivialize the importance of the dissonant ones in comparison. Identifying with ingroups (and disidentifying with and derogating outgroups) helps to consolidate identity because groups provide consensually validated set of norms and values. Finally, both extremism and group membership may contribute to the construction of a public self which may help to stabilize self-perceptions.

Participants and Procedures

Eighteen university students voluntarily completed the materials while waiting in a long line-up outside the campus bookstore. Thirty-three more students from an introductory psychology course were brought into the lab one at a time and given academic credit for completing the experimental materials. Five of the participants recruited from the line-up were dropped from the study because they did not fully complete the materials. Thus, a total of 17 males and 30 females were included in the analyses. Experimental and control packets were randomly shuffled, and assigned to participants by an experimenter who was blind to condition. Participants were assured that the anonymity of their responses would be protected. On average, the materials took participants 20 minutes to complete.

The study was advertised as being on "attitudes and personality." To corroborate this cover story, participants first completed a short five-item questionnaires on attitudes toward prostitution and social welfare. They were then exposed to either temporal extension or control materials. Following exposure to the independent variable participants completed a mood scale that served as a filler, and then the dependent measure. The general procedure was adapted from that used by Greenberg and his colleagues to produce mortality salience effects (Greenberg et al., 1997).

(Materials for Experiment 1 are presented in Appendix A.)

Materials

Temporal extension. After participants completed the filler prostitution and welfare scales, temporal extension or control condition materials were introduced as innovative projective personality assessment devices, diagnostic of a respondent's personality (instructions adapted from Greenberg, personal communication, 1995). In the temporal extension condition participants were given nine lines for answering each of the following two questions: 1. "Please briefly describe the events, people and location associated with an important, vivid memory from your childhood or adolescence." 2. "Jot down how you imagine the scene of this above memory might be changed if you revisited it in the year 2035 (be as specific as possible). How does it make you feel to imagine this?" Emphasis was placed on the physical scene of the memory to try to anchor participants in vivid memories from their past. This was emphasized to mirror the concrete nature of the mortality salience manipulations used in terror management research, which Simon et al. (1997) found worked better than more abstract and cognitive ones. In the control condition (materials adapted from Greenberg, 1995, personal communication) participants were given nine lines to answer each of two questions: 1. "Please jot down, as specifically as you can, what you think happens to you physically as you watch television." 2. "Please briefly describe the emotions that the thought of watching television arouses in you."

Mood scale. Immediately after answering the temporal extension or control questions, all participants rated 60 positive and negative mood adjectives (Zevon & Tellegen, 1982) on the "extent you feel this way right now" from 1 (very slightly or not at all) to 5 (extremely). Twenty seven of the adjectives refer to pleasant mood states and 33 refer to unpleasant mood states. This measure is the typical filler used between mortality salience and the assessment of the dependent variable in terror management research.[25] It is usually unaffected by mortality salience (Greenberg et al., 1997). Four of the items on the scale (irritable, nervous, jittery, dissatisfied with self) were theoretically related to dissonance among self-elements and so they were summed to form an index of dissonance discomfort.[26] This four-item dissonance index was used as a manipulation check on whether the temporal extension manipulation caused dissonance-related discomfort as proposed by ICT.

Dependent measure. The dependent measure, one of the first used in terror management research, assessed severity of punishment that participants would recommend for a prostitute (adapted from Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). Participants read a summary of a pretrial case-brief for a defendant accused of prostitution. It included a few details about the defendant (e.g., her name was Candace Thompson and her occupation was an exotic dancer) and the offense (e.g., that the defendant had been caught engaging in sex acts with a client in the men's washroom of a fast food restaurant). Participants were asked to recommend a bond amount for the defendant between 0 and 1000 Canadian dollars. Rosenblatt et al. have found that mortality salience increased bond recommendations for prostitutes. The terror management interpretation of this finding is that people become more punitive toward prostitutes after mortality salience because prostitutes deviate from, and thereby threaten, the consensual

[25]Past research has shown that mortality salience effects are heightened if there is a delay between the mortality salience induction and the assessment of the dependent variable. This apparently occurs because there is an initial suppression of death thoughts, followed by a rebound hyperaccessibility (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994).

[26] Elliot and Devine (1994) found that induced compliance in a conventional dissonance experiment caused participants to feel "bothered," "uneasy," and "uncomfortable."

cultural values that underlie individuals' sense of security (symbolic immortality) in the face of death. This explanation emphasizes the group-related properties of the dependent measure. From the perspective of ICT, in addition to reflecting a group-related identity-consolidation strategy, the dependent measure also taps into the identity consolidation strategy of extremism — the desire to express more rigid and extreme values and attitudes about anything important.

Results and Discussion

Preliminary analyses. As has been found in past research on mortality salience, positive, negative, and overall mood did not differ between the temporal extension and control conditions, ts < 1 (see Appendixes G and I for examples of responses in the temporal extension and control conditions). Of the memories described on the temporal extension measure, 11 were affectively positive and 11 were affectively negative in tone. There were no apparent differences in length or vividness of the positive and negative memories. There was no difference in the amount of bond recommended by participants who described positive memories as compared to those who described negative memories, $t < 1$. Almost all of the memories included reference to close friends or family members. Male and female participants did not differ in the amount of bond recommended, $t < 1$.

As a manipulation check of the ICT contention that identity confrontation can cause dissonance discomfort, the effect of condition on the four-item dissonance index was assessed. Participants scored significantly higher on the 4-item dissonance index (Cronbach alpha = .70) in the temporal extension condition ($M = 7.7$) than in the control condition ($M = 5.8$), $F(1,43) = 4.12$, $p < .05$.

Main analyses. As expected, the 22 participants in the temporal extension condition recommended higher punishments for the prostitute (M = \$536) than did the 24 participants in the control condition (M = \$390), $t(45) = 1.86$, $p = .07$. The effect of condition did not interact with gender, $F(1,43) < 1$. A possible reason for the only marginally significant effect of temporal extension on bond recommendations may have been that attitudes toward prostitutes were more permissive than expected. Indeed, on the five-item anti-prostitution attitudes scale (Cronbach alpha = .81) administered at the beginning of the package, the average score was only $\underline{M} = 9.0$ on a scale with possible values from -25 to 25 (items: "prostitution is wrong," "prostitution is degrading to women," "prostitution is a serious social problem," reverse scored "prostitution should be legalized," and reverse scored "exchanging sex for money is a completely legitimate business transaction"). When analyses were repeated for the subset of participants who held clearly anti-prostitution attitudes (those who scored in the upper quartile of possible scale values), the hypothesis was more clearly supported. Participants in the temporal extension condition recommended higher punishments for the prostitute ($\underline{M}$ = \$708) than did participants in the control condition ($\underline{M}$ = \$430), $\underline{t}(18) = 2.72$, $\underline{p} = .01$.[27]

In summary, temporal extension appears to make participants more moralistic and punitive toward prostitutes, just as mortality salience does (Greenberg et al., 1997). The finding that two diverse manipulations with theoretical links to identity confrontation are both capable of causing a more rigid evaluative stance toward outgroups, provides preliminary support for the contention that identity confrontation causes identity consolidation efforts via extremism and intergroup bias. It is not clear from the present experiment, however, whether the effect is primarily driven by extremism or intergroup bias. Experiments 2 and 4 investigate this question in more detail.

The finding that temporal extension caused an increase in dissonance related discomfort further corroborates the theory that temporal extension is an identity confrontation phenomenon that induces the simultaneous accessibility of inconsistent self-elements. Reminding participants about an important memory from the past, and then asking them to imagine revisiting the scene of that memory 40 years later did not affect

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[27]For participants below the upper quartile in anti-prostitution attitudes, there was no effect of the temporal extension manipulation on prostitute bond recommendations, $\underline{t}(24) < 1$. Rosenblatt et al. (1989) also found greater bond recommendations for prostitutes after mortality salience only for participants with anti-prostitution attitudes. An ANCOVA for the whole sample with attitude toward prostitution as the covariate resulted in a significance level, $\underline{F}(1,43) = 2.85$, $\underline{p} = .10$, in the same range as that from the ANOVA, likely because some of the participants became more extreme in the permissive direction.

standard measures of positive and negative affect, but did make them feel nervous, jittery, irritable, and dissatisfied with self.[28] The lack of mediation of identity consolidation by the dissonance index (see Footnote 27) may be due to lack of statistical power and relatively low reliability of the four-item dissonance index and the one-item dependent measure. It is also possible that different people respond to identity confrontation with different strategies — some may rely exclusively on defensive, rigid strategies such as extremism and intergroup bias that help preempt the experience of dissonance discomfort, some others may eschew rigid strategies and endure the dissonance discomfort while attempting more self-focused, integrative strategies, and still others may use both strategies simultaneously. Thus, identity confrontation may cause both dissonance discomfort and extremism/intergroup bias, but the two outcomes may be somewhat orthogonal. Experiments 2 and 4 investigate this mediation question in more detail.

Experiment 2

The present experiment was designed to replicate the temporal extension findings from Experiment 1, and to directly compare the identity consolidation effects of temporal extension and mortality salience manipulations. Similar effects would further support ICT. Also, because it is unclear whether the dependent measure in Experiment 1 reflects both extremism and intergroup bias, the dependent measure in the present experiment is amenable to analyses that compare the two strategies. The mediating role of dissonance discomfort is also re-examined in the present experiment with an a priori measure. Finally, possible moderating roles of self-esteem and personal need for structure were assessed.

Identity Consolidation and Terror Management Explanations of Mortality Salience Effects

According to ICT, mortality salience causes identity consolidation efforts because it confronts participants with inconsistencies among self elements. One's habitual pre-occupations and priorities may seem discrepant with the priorities and concerns primed

[28]The dissonance effect did not mediate the effect of condition on bond. When the dissonance index was included as a covariate in an ANCOVA for the anti-prostitution participants, the effect of condition on bond remained statistically significant, $F(1,17) = 4.35$, $p = .05$.

when considering weighty issues of life and death. Mortality salience may also have the same effect as temporal extension in inducing a broader perspective on one's life and thereby highlighting a wider range of potentially inconsistent self-elements.

According to terror management theorists, mortality salience is a necessary condition for the induction of extremism and intergroup bias effects like those investigated in Experiment 1 (Greenberg et al., 1997). Mortality salience elicits such outcomes because it increases motivation to attain "symbolic immortality" by adhering to a "cultural anxiety buffer" (group norms) that transcends death. As support for their position, Greenberg et al. point out that other manipulations, such as thinking about an upcoming exam, worrying about life after college, thinking about intense dental pain, thinking about having to give a speech, reading someone else's lament about existential absurdity,[29] insignificance, and meaninglessness, or failing on a bogus intelligence test, do not cause mortality salience effects. These (null) findings are used to support the conclusion that mortality salience effects are specific to the problem of death, and that coming up with a rival theory should pose a "daunting challenge" (Greenberg et al., p. 99).

These null findings are not surprising, however, from the perspective of ICT. Most of the manipulations mentioned above that have failed to elicit terror management outcomes likely focus individuals away from their identities. According to ICT, thinking about discrete unpleasant events may actually help participants to escape the self by narrowing their awareness to the level of concrete and immediate concerns (Baumeister, 1991a). In sum, from the perspective of ICT mortality salience is sufficient but not necessary for causing terror management outcomes. Any identity confrontation manipulation that

[29]The manipulation of meaninglessness in this research (Baldwin & Wesley, 1996) would seem on the surface to be an identity confrontation manipulation, but may have failed to cause terror management outcomes for two reasons. First, it involved reading about someone else's abject meaninglessness rather than confronting participants with their own identity confusion. This downward comparison may have actually made participants feel relatively consolidated in comparison. Furthermore, Greenberg et al. (1994) found that thinking about the death of another person does not cause mortality salience effects. It may be that meaninglessness manipulations must similarly be self-focused. Second, the manipulation was quite abstract and was not vivid or experientially presented. Past terror management research has found that mortality salience effects are most pronounced when the manipulations are experientially rather than cognitively framed (Simon et al., 1997).

threatens participants with identity confusion should stimulate identity consolidation efforts.[30]

Possible moderator variables

Self-esteem. The possible moderating role of self-esteem was assessed. Baldwin and Wesley (1996) found that terror management outcomes were more pronounced for individuals with dispositionally high self-esteem than for those with low self-esteem. Higher defensiveness (i.e., intergroup bias and extremism) among high self-esteem individuals makes sense from the perspective of recent theory and research on the "dark side" of self-esteem (Baumeister et al., 1996). According to this theory, high and unstable self-esteem is a cause of defensiveness because one is continually preoccupied with convincing oneself and others of the inflated self-view. In support of this theory, high self-esteem individuals and narcissists (e.g., those with high and unstable self-esteem) are particularly prone to aggress against (Bushman & Baumeister, 1998) or derogate (Morf & Rhodewalt, 1993) others who threaten their self-views. High self-esteem has also been associated with more intergroup bias after a self-threat (Crocker & Luhtanen, 1990; Crocker et al., 1987).

According to the Baumeister et al. (1996) "darkside of self-esteem" perspective, defensiveness arises from unstable and high self-esteem. It is not the high self-esteem per-se that causes the defensiveness, but rather the combination of instability and high self-esteem. In any case, to have the combination, one must be high in self-esteem. Thus, in the

[30]Support for the ICT interpretation comes from an analysis of a recent scale that has been found to moderate terror management outcomes (Florian & Mikulincer, 1998). People with high scores on the moderator variable did not respond to mortality salience with exaggerated punishment recommendations for a prostitute whereas people with low scores did. Although the scale is (mis)labeled the Symbolic Immortality scale, for the most part, items on the scale simply reflect the extent to which people have a strong sense of knowing what they stand for (i.e., an identity). Items on the scale refer to concern for one's children, creative passion, having religious beliefs, having a sense of peace and tranquillity in nature and life, and having a zest for experience – all things that people live for. Thus, these findings demonstrate that those who have a strong sense of identity have a lesser need to consolidate their identities by adhering to group norms.

present experiment, it was expected that self-esteem would be associated with more defensive responding on the outcome measure.[31]

Preference for cognitive structure. Two scales measuring preference for clear and unambiguous cognitive structure were included as possible moderators of identity consolidation efforts. The expectation was that participants with preferences for structure and consistency might have a lower threshold for tolerating inconsistency and may be particularly prone to intergroup bias. Individuals high in need for structure for example, are more likely to form stereotypes (Schaller, Boyd, Yohannes, & O'Brien, 1995) and use them (Neuberg & Newsom, 1993, Experiment 4). Similarly, individuals high in preference for consistency are particularly prone to defensive attitude change in conventional dissonance induction experiments (Cialdini, Trost, & Newsom, 1995).

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[31] Terror management theory predicts that mortality salience effects should be highest for low self-esteem individuals. According to terror management theory, there are two components of the cultural anxiety buffer that protect people from the animal terror associated with awareness of mortality. One is adhering to a culturally consensual world view. World view adherence has been operationalized with measures of punishment, hostility, derogation and disliking of those who disagree with one's values and reward and liking of people who agree with one's values (Greenberg et al., 1997). The other is earning self-esteem according to the dictates of that world view. According to terror management theory, the reason people need self-worth is that it helps to quell death anxiety. According to the theory, both components of the anxiety buffer help people feel symbolically immortal because they allow people to identify with cultural values that transcend death (i.e., culture pre-exists individuals and outlasts them).

From the perspective of ICT, mortality salience effects are driven by dissonance-related discomfort, so just as self-worth can attenuate attitude change (and presumably dissonance) in dissonance experiments (Steele, Spencer, & Lynch, 1993), it seems quite plausible that it should also attenuate mortality salience effects in terror management paradigms. Indeed, according to ICT, self-worth is a prominent identity consolidation strategy for that very reason – because of its ability to take the sting out of dissonance.

In support of this perspective on self-esteem, past terror management research has shown that experimentally induced self-worth and extremely high and stable dispositional self-esteem do indeed attenuate mortality salience effects (Harmon-Jones et al., 1997). It is important to note the considerable differences between the way self-esteem was operationalized by Harmon-Jones et al., and by Baldwin and Wesley (1996). Harmon-Jones et al. either manipulated self-worth with bogus positive personality feedback, or pre-selected participants who scored in the top quartile of the self-esteem distribution on two consecutive occasions ($\underline{M}$ = 38.4 on a scale with possible values ranging from 10 to 40; Harmon-Jones, personal communication, July, 1998). Thus, the Harmon-Jones et al. participants in the high self-esteem groups had either just received very good news about themselves, or were extremely high and stable in self-esteem. In contrast to the Harmon-Jones et al. operationalization of self-esteem, Baldwin and Wesley simply measured self-esteem at the beginning of their experiment. In the present experiment, self-esteem was simply measured rather than being manipulated or preselected for. It seemed more likely, therefore, that results similar to Baldwin and Wesley might emerge.

Participants and Procedures

Experiment 2 followed the same general procedure as Experiment 1, except the effects of mortality salience were assessed as well as temporal extension. Fifty-eight male and 59 female university students (age, M = 19) were given academic credit toward their introductory psychology course for participation. Materials for the three conditions in the experiment were randomly shuffled and handed out from the top of the pile (by an experimenter who was blind to condition) to participants as they arrived. Participants were assured that the anonymity of their responses would be protected. Materials were administered in the lab, in groups averaging four participants in size (ranging between one and six). On average participants took 20 minutes to complete the materials in all conditions. Materials were embedded in a larger packet of personality questionnaires from an unrelated study, which bolstered the cover story that the study was pilot-testing some questionnaires for a study on "attitudes and personality."[32] Three participants in the mortality salience condition and one in the control condition did not complete the materials correctly, leaving a total of 24 control, 43 mortality salience, and 46 temporal extension condition participants for the analyses. Roughly double the number of participants were included in the mortality salience and temporal extension conditions in order to support separate comparisons with the control for two levels of a counterbalanced factor (described below) in the temporal extension and control conditions (which it did not seem necessary to counterbalance in the control condition).

Participants first completed the self-esteem scale, then two cognitive style scales, and then either the mortality salience materials (from Rosenblatt et al., 1989), the temporal extension materials (from Experiment 1), or control materials (from Rosenblatt et al.: also used in Experiment 1). After either a distraction manipulation or no distraction, participants then completed the measure of intergroup bias, which was an adaptation of another

[32]Greenberg et al., 1997 also routinely use this practice to disguise their purpose.

dependent measure frequently used by terror management researchers (Greenberg et al., 1997).

All participants in the control condition received the distraction. Participants in the temporal extension and mortality salience conditions were randomly assigned within each condition to receive either the distraction or not. The distraction factor was included to assess whether temporal extension and mortality salience effects might occur according to different temporal patterns. The rationale for the distraction period in terror management research is that immediately after exposure to death related stimuli, no mortality salience effects will occur because participants actively suppress the death thoughts. After a short delay however, the death thoughts rebound and become hyperaccessible, at which point mortality salience effects emerge (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997; Greenberg et al., 1994).

The expectation in the present experiment therefore, was that for mortality salience participants, identity consolidation efforts would emerge only in the distraction condition. Temporal extension participants on the other hand, would not need to suppress an obviously unpleasant topic and so immediate identity consolidation effects would emerge.

(Materials for Experiment 2 are presented in Appendix B.)

Materials

Moderator variables. Self-esteem was assessed with Rosenberg's (1965) ten-item scale. Items (e.g., "On the whole I am satisfied with myself" and reverse scored "At times I think I am no good at all") were rated on a scale from -4 (very strongly disagree) to 4 (very strongly agree).

Cognitive style was assessed with two measures. First, participants completed the Personal Need for Structure scale (PNS) (Neuberg & Newsom, 1993; Thompson, Naccarato, & Parker, 1989) by rating their agreement from 1 (strongly disagree) to 6 (strongly agree), on 12 items (e.g., "I become uncomfortable when the rules in a situation are not clear" and "I don't like situations that are uncertain."). Using the same response options, participants then completed the short version of Cialdini's (1995) Preference for Consistency scale (PFC) (e.g., "I make an effort to appear consistent to others." and reverse scored, "It doesn't bother me much if my actions are inconsistent.").

Mortality salience, temporal extension, and control materials. Temporal extension and control materials were identical to those used in Experiment 1. Using the most common mortality salience induction technique in terror management research (Greenberg et al., 1997), in the mortality salience condition, participants were given nine lines to answer each of two questions: 1. "Please briefly describe the emotions that the thought of your own death arouses in you." 2. "Please jot down, as specifically as you can, what you think will happen to your body as you physically die and once you are physically dead."

Distraction. The distraction materials, administered between the independent and dependent variable in the distraction condition, included 41 items from three personality scales, followed by a 21-item mood measure. The scale items that comprised the first part of the distraction manipulation were taken from the Thompson et al. (1989) Personal Fear of Invalidity scale (e.g., "I tend to struggle with most decisions" and "Decisions weigh heavily on my shoulders."); the private and public modules of Feningstein, Scheier, and Buss (1975) Private and Public Self Consciousness scales (e.g., "I'm always trying to figure myself out" and "I'm concerned about what other people think of me."); and Campbell's (1990) Self-Concept Clarity scale (e.g., "In general, I have a clear sense of who I am and what I am" and reverse scored "My beliefs about myself seem to change very frequently"). In the no-distraction condition, participants completed the distraction materials after the dependent variable.

The distraction factor served three purposes. First, assessing the effect of distraction allowed for investigation of the proposed differential time course of temporal extension and mortality salience effects. Second, the personality scales in the distraction manipulation were expected to maintain self-focus and thereby maintain the influence of the identity confrontation manipulations over time. The third purpose of the distraction was to provide a check on the ICT premise that manipulations of temporal extension and mortality salience induce dissonance related discomfort (with the mood scale that was the second part of the distraction).

A short and reliable 18-item measure of positive and negative affect (Deiner & Emmons, 1985) was used because it included three items with direct links to dissonance arousal (aroused, anxious, excited). Positive and negative mood adjectives included "happy," "joyful," "bored," and "angry." To complement the three dissonance items in the Deiner and Emmons scale, the three adjectives that have been associated with dissonance discomfort in self-report dissonance experiments, "bothered," "uneasy," and "uncomfortable," were also included (Elliot & Devine, 1994). Thus, in addition to providing reliable indices of positive and negative affect, this measure also included a six-item dissonance index. Participants rated the extent to which they felt each of the 21 affect adjectives "right now" on a scale from 1 (not at all) to 7 (extremely much). As was the case in Experiment 1 (with a different dissonance index), identity confrontation was expected to cause dissonance-related discomfort, but not conventional positive or negative affect.

Intergroup bias. After the temporal extension and mortality salience manipulations, participants were expected to attempt to consolidate their identities by adhering to their group identifications more zealously, as evidenced by enhanced intergroup bias. The operationalization of intergroup bias was adapted from the Greenberg et al. (1990) assessment of the polarization of American students' evaluations of essays that either criticized or praised the United States. Greenberg et al. have found that after mortality salience, participants exaggerate their preference for pro-American authors over anti-American authors. In the present study it was assumed that most participants would identify with the "being a Waterloo student" ingroup because all were in their first month of their first semester at the University of Waterloo, and "Frosh Week" activities designed to build school spirit had just concluded.[33]

All participants read the same two 200 word essays in counterbalanced order. One essay was highly supportive, and one was highly critical, of the University of Waterloo. other Waterloo students, and the university experience in general. Participants answered five questions at the end of each essay that evaluated the author and opinions expressed, on a scale from 0 (not at all) to 10 (very much). The questions were: 1) How much do you think you would like this person? 2) How intelligent do you think this person is? 3) How knowledgeable do you think this person is? 4) How much do you agree with this person's opinion of university? 5) From your perspective, how true do you think this person's opinion of university is? An overall measure of intergroup bias was assessed by taking the difference between participants' evaluations of the outgroup author and opinion, and their evaluation of the ingroup author and opinion. The relative contribution of intergroup bias per se, and opinion extremism, were assessed by computing separate sub-indices of bias toward the authors (from the first three questions about each essay) and bias toward the opinions (from the last two questions about each essay).

<u>Results and Discussion</u>

<u>Preliminary analyses</u>. Responses in the temporal extension and control conditions were similar to those given in Experiment 1. They were balanced in terms of valence of the memories, and most of the memories made some reference to family members or close friends. Responses on the mortality salience manipulation emphasized the physical process of death and decomposition (see Appendix H for examples). The five questions evaluating the <u>ingroup</u> author and opinion had a Cronbach alpha reliability of .83. The five questions evaluating the <u>outgroup</u> author and opinion had a Cronbach alpha reliability of .85. The effect of condition on any of the indices of intergroup bias was not moderated by sex, self-

[33]The ingroup of "being a Canadian" was not used because a large proportion of students at the University of Waterloo are foreign students and because of the reputation that Canadians have for being less nationalistic than Americans.

esteem, PNS, PFC, or the order of the essays — all interactions were non-significant, $p > .10$. There were main effects for sex, self-esteem, and condition, however. Women ($M = 5.2$) showed more intergroup bias than men ($M = 4.0$), $t = 2.78$, $p < .01$. Higher self-esteem was also associated with more intergroup bias, $t = 2.31$, $p < .05$. The main analyses below (of the effects of condition on intergroup bias) were conducted with sex, self-esteem, PNS,[34] and essay order as covariates to decrease the error variance and increase power.

Main analyses. An ANCOVA with sex, self-esteem, PNS, and essay order as covariates revealed that intergroup bias differed among the experimental conditions, $F(2,106) = 3.43$, $p < .05$. As shown in Table 1, planned comparisons revealed that there was more total intergroup bias in the mortality salience condition, $t = 2.60$, $p = .01$, and the temporal extension condition, $t = 1.96$, $p = .05$, than in the control condition. Further analyses revealed that the increased intergroup bias after identity confrontation was more pronounced for opinion bias than author bias. The overall effect of condition on opinion bias was significant, $F(2, 106) = 4.47$, $p = .01$, with the mortality salience and temporal extension conditions each differing significantly from the control condition $t = 2.96$, $p = .01$ and $t = 2.28$, $p < .05$ respectively. Author bias, however, differed only marginally, $F(2, 106) = 1.94$, $p = .07$ (one-tailed).

Separate analyses of participants' evaluations of the ingroup author and essay, and evaluation of the outgroup author and essay suggest that the marginal author bias effect may have occurred because participants in the temporal extension condition were relatively reluctant to evaluate the outgroup authors negatively. Evaluations of the ingroup author were significantly higher in both the mortality salience $t = 1.93$, $p < .05$ (one-tailed) and temporal extension conditions $t = 2.17$, $p < .05$ than the control condition. Evaluations of the outgroup author, however, were only marginally higher in the mortality salience

[34] Only PNS was included as a covariate because PFC and PNS were highly correlated, $r = .61$.

condition $t = -1.29$, $p < .10$ (one-tailed) than the control condition, and not higher in the temporal extension condition $t < 1$.

One possible reason for the reluctance of temporal extension participants to derogate the outgroup author may be that the manipulation primed communal private audiences (Baldwin & Holmes, 1987), which made participants more sympathetic toward the outgroup author who was critical of agentic university pursuits. As was the case in Experiment 1, most of the responses on the temporal extension materials described situations involving family members or very good friends.[35]

Table 1.

Intergroup Bias as a Function of Mortality Salience and Temporal Extension

	Condition		
Intergroup Bias	Control	Mortality Salience	Temporal Extension
total bias	3.7_a	5.2_b	4.9_b
distraction	3.8_a	5.5_b	$4.7_b^{\dagger\dagger}$
no-distraction	3.7_a	5.0_b	5.1_b
opinion bias	4.7_a	6.7_b	6.2_b
ingroup opinion	7.3_a	8.4_b	8.3_b
outgroup opinion	2.6_a	1.6_b	$2.0_b^{\dagger\dagger}$
author bias	3.1_a	4.2_b	$3.9_b^{\dagger\dagger}$
ingroup author	7.1_a	$7.7_b^{\dagger}$	7.7_b
outgroup author	4.1_a	3.5_b	3.8_{ab}

Note. Means in each row that do not share a common subscript differ at $p < .05$ (two-tailed). †Signifies one-tailed significance at $p < .05$. ††Signifies one-tailed significance at $p < .10$.

[35]Temporal extension condition participants may have been more willing to be harsh toward the prostitute in Experiment 1 because prostitution is at odds with communal family values.

Analyses of the effect of distraction revealed no discernible difference in the time course of temporal extension and mortality salience effects. ANCOVAs (with the same covariates as in the above analyses) revealed significant between-condition differences in intergroup bias after distraction, $\underline{F}(2,61) = 2.40$, $\underline{p} < .05$ (one-tailed) and after no distraction $\underline{F}(2,62) = 3.37$, $\underline{p} < .05$ (means are displayed in Table 1). One explanation for the lack of a distraction effect might be that even though there was no formal distraction in the no-distraction condition, there was still a delay of a few minutes after the independent variable during which time participants waited for the slowest person in the group to complete their initial materials, the second set of materials (including the dependent measure) were handed out, and oral instructions were given about how to complete the materials. This interval may have served as sufficient distraction between the independent variable and dependent variable to allow for death thoughts to be suppressed and then to rebound.

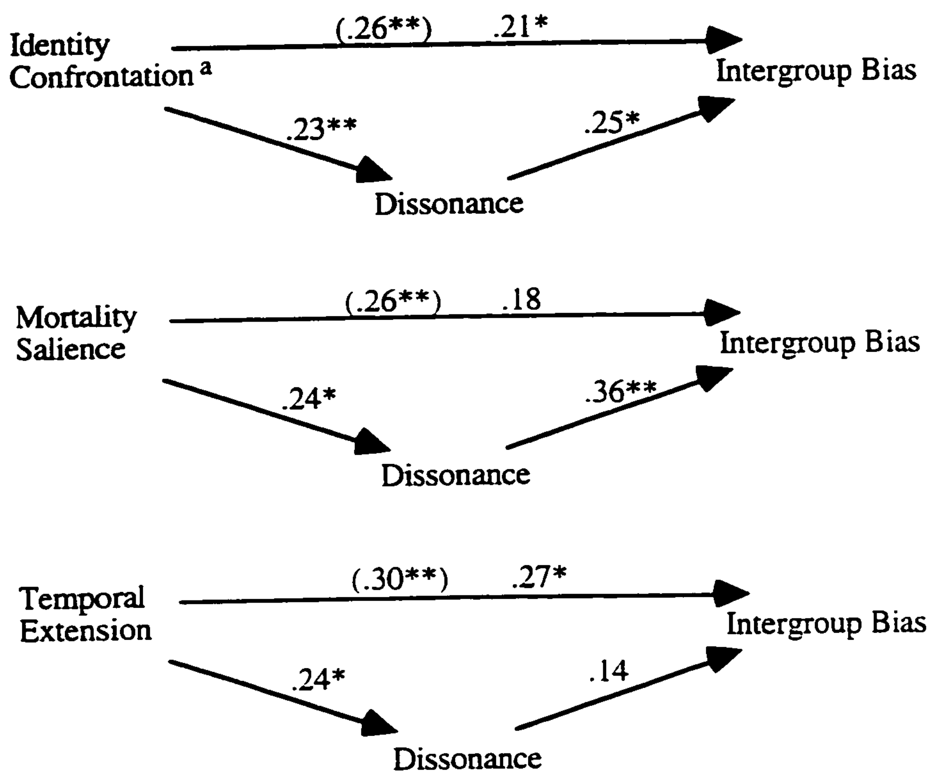
The distraction materials also provided a manipulation check on whether the identity confrontation materials induced dissonance related discomfort, and if so, if the discomfort mediated the intergroup bias. The six-item dissonance index had a Cronbach alpha reliability of .73. As shown in Figure 3, both identity confrontation manipulations caused dissonance discomfort, and overall (with the temporal extension and mortality salience participants merged into one identity confrontation condition), the discomfort was related to intergroup bias, satisfying Baron and Kenny's criteria for partial mediation.[36] Separate analyses for mortality salience effects and temporal extension effects revealed that the partial dissonance mediation held only for mortality salience effects. Identity confrontation caused dissonance discomfort in mortality salience and temporal extension conditions, but dissonance discomfort was not related to intergroup bias in the temporal extension

[36]According to the Sobel equation for determining the significance of an indirect path (cited in Baron & Kenny, 1986), the indirect effect of identity confrontation on intergroup bias via dissonance discomfort did not reach significance. This is likely because the mediator had a fair degree of measurement error, which tends to produce underestimates of the mediator and overestimates of the effect of the independent variable on the dependent variable (Baron & Kenny, p.1177).

condition. This may also be because of the temporal extension participants' reluctance to negatively evaluate the outgroup author. It is difficult to determine whether the weak mediation effects reflect largely orthogonal affective and defensive responses to identity confrontation, or whether the limited reliability of the mediator attenuated the effects. This question is returned to in Experiment 4 with a more reliable measure of dissonance discomfort.

In any case, both mortality salience and temporal extension caused intergroup bias and elevated dissonance discomfort. Moreover, as was found in Experiment 1 with temporal extension, neither mortality salience nor temporal extension caused elevations in conventional positive or negative affect indices (all F's <1). These null results occurred despite the superior reliability of the positive and negative mood indices (both alphas = .89) as compared to the dissonance index (alpha = .73).

Figure 3. Mediation of intergroup bias by dissonance discomfort.



Note. [a]Identity confrontation refers to a combination mortality salience and temporal extension condition. Path coefficients are regression coefficients from analyses with sex, self-esteem, and PNS covaried. Path coefficients in parentheses are regression coefficients of intergroup bias regressed on temporal extension and the covariates without dissonance in the equation.
* $p < .05$ (one-tailed) ** $p < .05$ (two-tailed)

In summary, Experiment 2 replicated the Experiment 1 finding that temporal extension can cause outcomes that, according to terror management theory should only be caused by mortality salience. Both manipulations caused similarly polarized evaluation of ingroup and outgroup essays and the authors of the essays. In addition to challenging the terror management theory contention that mortality salience is a necessary condition for such outcomes, these results support the ICT position that both temporal extension and mortality salience are identity confrontation manipulations that can cause dissonance discomfort and identity consolidation efforts of extremism (polarized attitudes toward the opinions in the essays) and intergroup bias (polarized attitudes toward the authors of the essays).

Experiment 3

There is a possibility that even though the temporal extension manipulation only asked participants to imagine themselves in the year 2035 (when most would be about 57 years old), that it served as a subtle reminder of impending death — after all, it is over time that people grow old and die (Greenberg, personal communication, 1995). If the temporal extension manipulation is indeed a subtle induction of morality salience, then Experiments 1 and 2 could simply be seen as more evidence for terror management theory. Experiment 3 investigated whether the temporal extension manipulation primed death thoughts.

The most direct evidence that mortality salience effects are mediated by hyperaccessibility of death thoughts is that the temporal pattern of mortality salience effects is mirrored by death-word hyperaccessibility, as assessed by a word stem completion procedure. Greenberg et al. (1994) found that immediately after mortality salience, when participants do not show exaggerated intergroup bias, they are also no more likely than controls to complete the word stems coff_ _, sku_ _, gra_ _, cor_ _ _, de_ _, or sti_ _ as coffin, skull, grave, corpse, dead and stiff. After a delay, however, mortality salience effects and deathword hyperaccessibility co-emerge. Greenberg et al. account for this pattern with the explanation that initially, death thoughts are unconsciously suppressed, but that this suppression is followed by a rebound hyperaccessibility (e.g., Wegner, 1994). This explanation is supported by more recent experiments using cognitive load manipulations (Arndt et al, 1997).

The research by Greenberg et al. (1994) and Arndt et al. (1997) attests to the sensitivity of the word stem completion task for picking up hyperaccessibility of death-related words. Thus, the same procedure (Greenberg et al., 1994, Study 4) was used in the present experiment to assess whether the temporal extension manipulation from Experiments 1 and 2 would make death thoughts hyperaccessible. After completing either the mortality salience, temporal extension, or control materials, participants read a short distractor passage and then completed the word stem completion exercise. Death-word hyperaccessibility (i.e., more accessible than in the control condition) only in the mortality salience condition would support the ICT interpretation of Experiments 1 and 2. Death-word hyperaccessibility in both the mortality salience and temporal extension conditions would support the terror management theory interpretation.

Participants and Procedures

Twenty-nine male and 19 female participants (age, M = 19) were given academic credit toward their introductory psychology course for participation in what was advertised as a "personality and memory study." Materials for the three conditions in the experiment were randomly shuffled and handed out from the top of the pile (by an experimenter who was blind to condition) to participants as they arrived. Participants were assured that the anonymity of their responses would be protected. Materials were administered in the lab, in groups ranging between eight and 15 in size. On average participants took 20 minutes to complete the materials.

Participants first completed temporal extension, mortality salience, or control materials, the same as those used in the first two experiments. Next, for the distracting passage, participants were given five minutes to read seven paperback pages of Plato's Allegory of the Cave.[37] In order to ensure their attentiveness, and to support the cover story, they were told that they would be required to answer five memory questions about the passage immediately after reading it. After answering the five questions, participants were instructed to complete 18 word stems with "the first word that comes to your mind." The six death-related word-stems listed above were embedded among 12 other neutral word-stems.

(Materials for Experiment 3 are presented in Appendix C.)

[37]This passage was chosen because it mirrored the length and philosophical tone of the passage used by Greenberg, but also provided some educational benefit to participants.

Results and Discussion

There were no main effects of gender or interaction effects of gender and condition on death-word completions, Fs < 1.

There was a significant effect of condition on death-word completions, $F(2, 45) = 2.50$, $p < .05$ (one-tailed). A planned comparison revealed that together, the temporal extension ($M = .88$) and control condition ($M = .75$) conditions differed significantly from the mortality salience condition ($M = 1.44$) in average number of death-word completions, $t(45) = 2.20$, $p < .05$. Further planned comparisons revealed more death-word completions in the mortality salience condition than in the control condition, $t(30) = 2.10$, $p < .05$, but not more death-word completions in the temporal extension condition than in the control condition, $t(30) < 1$.

Thus, this experiment replicates the terror management finding (Arndt et al., 1997; Greenberg et al., 1994) that mortality salience causes death-word hyperaccessibility, but find no such hyperaccessibility of death-words after temporal extension. This result contradicts the suggestion that the outcomes resulting from temporal extension in Experiments 1 and 2 were mediated by death thoughts. There is no doubt that mortality salience is a potent instigator of such effects, and the present experiments do not contradict the terror management finding that death thoughts are first suppressed and then become hyperaccessible. The present findings do, however, suggest that death is sufficient but not necessary to cause the intergroup bias and extremism outcomes that have been assessed in past terror management research.

Experiment 4

Decision, especially an irreversible decision, is a boundary situation in the same way that awareness of "my death" is a boundary situation. Both act as a catalyst to shift one from the everyday attitude to the "ontological" attitude — that is, to a mode of being in which one is mindful of being. Yalom, 1980, p. 319

Experiments 1-3 demonstrate that two phenomena that are theoretically linked to identity confrontation — temporal extension and mortality salience — can initiate identity consolidation strategies of extremism and group identification. Experiment 4 investigates whether the third identity confrontation manipulation proposed by ICT, deliberation about an important personal dilemma, can similarly cause identity consolidation efforts. A new hardening of the attitudes measure was used, as a relatively pure operationalization of the extremism strategy of identity consolidation. The hypothesis in the present experiment was that deliberating about a personal dilemma (a process that highlights inconsistent possible selves), would make participants harden their attitudes about important social issues in a compensatory attempt to make themselves feel like they know who they are and what they stand for.

Whereas the manipulation checks in Experiments 1 and 2 provide some evidence that the identity confrontation manipulations actually highlight inconsistent self-elements (i.e., the dissonance aroused), the independent variable in Experiment 4 directly manipulates simultaneous accessibility of inconsistent self-elements. A more reliable dissonance scale is also used to assess the extent to which extremism is effective in reducing dissonance discomfort.

A further contention of ICT is that more integrated and internally consistent identities should be more immune to identity confrontation, and should therefore be less inclined toward rigid identity consolidation responses. In the present experiment, some participants were given the opportunity to complete a prophylactic identity repair exercise before the dependent measure was assessed. The exercise was designed to make participants feel like their main values in life, their past behaviors, and their future plans were coherently integrated. It was expected that such an identity repair exercise would attenuate identity consolidation responses after identity confrontation because it would make people feel like their identities were already consolidated.

The possible moderating role of self-esteem was also assessed again (using the Rosenberg scale as in Experiment 2) with the expectation that it would be positively related to hardening of the attitudes after identity confrontation. Experiment 2 explored the possibility that self-esteem might moderate the relation between identity confrontation and identity consolidation, but found only a main effect. Across conditions, higher self-esteem was associated with more intergroup bias. It is possible that the interaction effect of self-esteem and identity confrontation on defensive identity consolidation strategies in Experiment 2 was obscured by the reliance on a dependent measure pertaining to attitudes about a single issue.

The direction of the main effect in Experiment 2 suggests the defensive interpretation of self-esteem. It is possible, however, that the high self-esteem participants simply had clearer opinions and values than their low self-esteem counterparts, and these were reflected in their evaluations of the essays and authors. Still, it is intriguing that those high in self-esteem have clear opinions that are more jingoistic. In contrast to the favorable view of self-esteem (e.g., Taylor & Brown, 1988), this finding suggests that self-esteem may have a dark side (Baumeister, et al., 1996; Bushman & Baumeister, 1998), or at least that self-esteem and jingoism may be independent manifestations of underlying defensiveness (see Experiment 2 for a full discussion of the defensive interpretation of self-esteem).

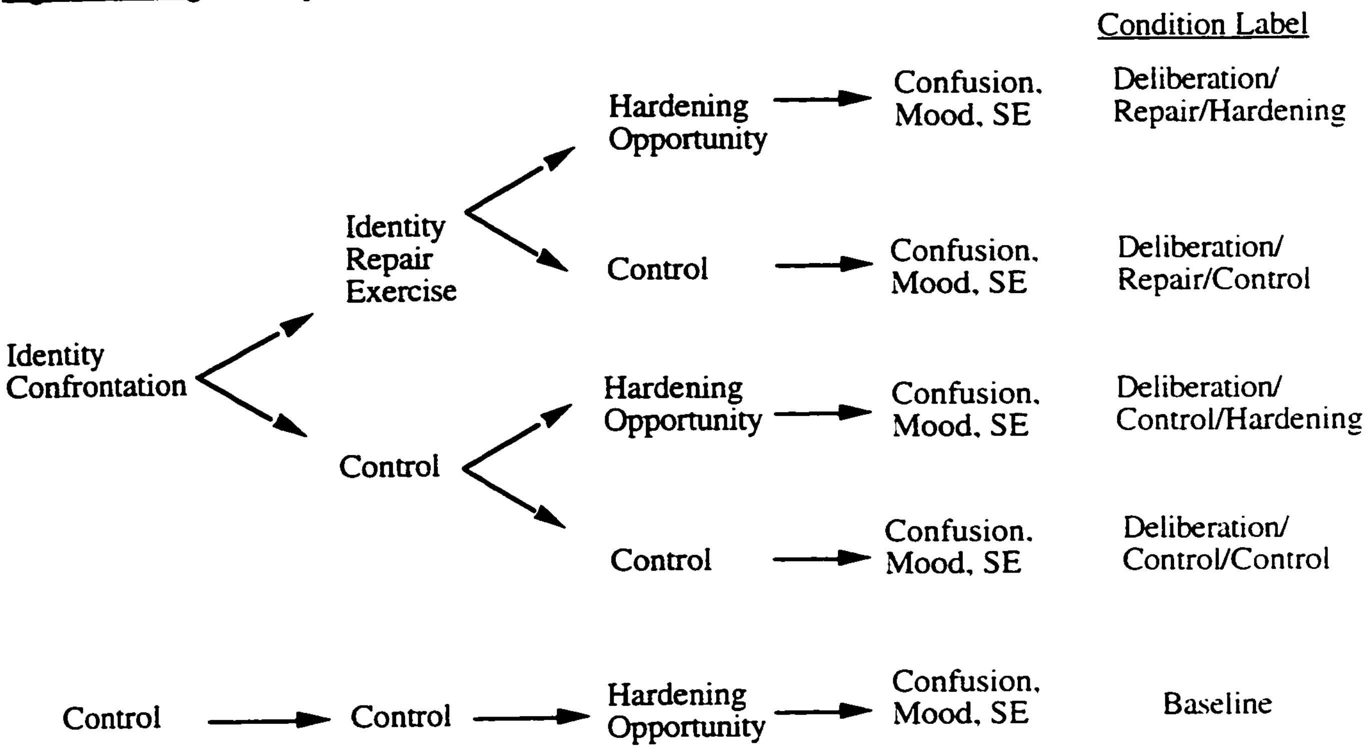
The possible moderating role of the need for clear cognitive structure was also assessed once again in the present experiment for the same reason. As in Experiment 2, the PNS scale was used.

<u>Participants and procedures</u>

Twenty six male and 61 female undergraduates (age, <u>M</u> = 19) were given academic credit toward their introductory psychology course for participation in what was advertised as a study on "personality, attitudes, and decisions." Materials for the three conditions in the experiment were randomly shuffled and handed out from the top of the pile (by an experimenter who was blind to condition) to participants as they arrived. Participants were assured that the anonymity of their responses would be protected. Data were collected in sessions ranging in size from five to 27 participants. It took an average of 45 minutes for participants to complete the materials. Participants first completed personality measures assessing self-esteem and need for structure. They then completed either identity confrontation materials (deliberation about an important personal dilemma) or control materials (deliberation about a friend's dilemma). They then completed an identity repair exercise or parallel control materials. Next, the hardening of social policy attitudes was assessed. It was expected that participants in the identity confrontation condition who did not have a chance to consolidate their identities with the identity repair exercise would harden their attitudes.

Finally, all participants completed a composite mood scale that assessed dissonance and conventional positive and negative affect, and then completed a state self-esteem scale. Only the participants in the identity confrontation condition who did not have a chance to consolidate their identities with the identity repair exercise, or by hardening their attitudes, or both, were expected to have elevated dissonance. Only dissonance discomfort, and not positive or negative affect, was expected to be influenced by the identity confrontation manipulation because past terror management research, and Experiments 1 and 2, have shown that conventional affect measures are not influenced. To provide further discriminant validity for the dissonance measure, a state self-esteem measure was also included with the expectation that it would not be influenced by identity confrontation. Figure 4 depicts the order of materials for the five conditions in this experiment.

Figure 4. Design of Experiment 4



Identity confrontation. In experiments 1-3, mortality salience and temporal extension manipulations were used to confront participants with their identities. In the present experiment, the third phenomenon that Yalom (1980) suggests confronts participants with "who am I" questions — deliberation about an important personal dilemma — was used as the identity confrontation manipulation. Taylor and Gollwitzer's (1995) deliberative mindset materials were adapted for this purpose. Participants were asked to think of a personal dilemma that was not easy to solve and that they had not already made a decision about. The dilemma was to be a complex one about whether to leave a personal state of affairs the way it was, or to strike out in a new direction that involved changing the status quo. After writing a short description of the dilemma, participants summarized the primary general value to them associated with each pole of the dilemma. A series of questions then led participants to deliberate over the advantages and disadvantages of both alternatives, and to imagine the alternative possible selves associated with each alternative. Thus, it was a direct manipulation of identity confrontation that directly instructed participants to simultaneously consider inconsistent self-elements. In the control condition, participants completed identical materials except that they deliberated about a dilemma faced by a friend in which they thought they knew what the friend should do. This very conservative control ensured that the complexity of the process of completing the materials was equivalent between conditions and that only the salience of self-relevant inconsistencies varied. Finally, after completing the deliberation or control materials, all participants were made to focus on their identities by ratings seven items that were adapted from Campbell's (1990) Self Concept Clarity scale. Items included, "I have a clear sense of the kind of person I am" and reverse scored, "My beliefs about myself conflict with one another," "I wonder about what kind of person I really am," and "The different aspects of my personality are in conflict." Participants rated their agreement with each statement using a scale from 1 (very slightly or not at all) to 5 (extremely).

Identity repair exercise. A random half of the participants in the identity confrontation condition had the opportunity to construct short narratives that depicted themselves as having internally consistent identities. In contrast to the preceding identity confrontation manipulation that was intended to make participants feel confused about their identities, this exercise was designed to impart a feeling of self-consistency and identity consolidation. Participants first selected a value cluster that was most important to them from a list of six options: business/economics/money-making, art/music/theatre, science/pursuit of knowledge, social-life/relationships, social action/helping others, and religion/spirituality. They were then instructed to "write a paragraph that describes why this value is important to you, and how you have acted consistently with this value in the past and plan to act consistently with it in the future."[38] As such, participants in this condition constructed short, thematically and temporally coherent identity summaries. Participants in

[38]This was an adaptation of the Fein and Spencer (1997) self-affirmation manipulation that requires participants to describe why their primary value is important to them.

the control condition completed parallel materials that asked them to select the value that was least important to them, and then describe how the value could be important for other people.[39]

Hardening of the attitudes opportunity. Participants reviewed a list of 15 statements about the issue of capital punishment, e.g., "Capital punishment is absolutely never justified" and "A murderer deserves to die," and circled the attitudinal position that they agreed with most. They then answered four questions about their conviction for the position they selected, two consensus questions about their estimates of the extent to which they thought other people would agree with their position, and four questions assessing their ambivalence toward their position.

The conviction questions, rated on a scale from 0 (not at all) to 10 (very) were: "How firmly do you believe in this position?" "How willing would you be to defend this position in an argument?" "How strong is your conviction about this position?" "How certain do you feel about this position?" The consensus questions were: "What percentage of the population do you think would agree most with the statement that you circled?" "What percentage of the population do you think would agree with the statement that you circled?" The ambivalence questions rated on a scale from -5 (extremely uncharacteristic of my attitude) to 5 (extremely characteristic of my attitude) were taken from Jamieson's felt ambivalence scale (1993). Items were, "I find myself feeling 'torn' between the two sides of the issue of capital punishment; my feelings go in both directions," "My head and my heart seem to be in disagreement on the issue of capital punishment," "I have strong mixed emotions both for and against capital punishment, all at the same time," and reverse scored "My gut feeling about capital punishment lines up perfectly with what my rational intellect tells me to do."

After completing the materials for the issue of capital punishment, parallel materials assessed hardening of attitudes toward the issue of abortion.

[39]Also adapted from Fein and Spencer (1997).

I expected that if participants felt confused about their identities, they would attempt to compensate by claiming that they had conviction about their attitudes, that other people agreed with them, and that they felt no ambivalence about their attitudes. For each social issue, sub-indexes of conviction, consensus and ambivalence were computed and converted to z-scores. The z-scores were then averaged to yield the overall hardening of the attitudes dependent measure. The three components of the hardening of the attitudes measure can be seen as three facets of extremism — having exaggerated conviction that one is right, imagining that others should agree, and inability to see both sides of an issue.

As well as serving as the first dependent variable in this experiment, the hardening materials also served as an independent variable. For a parallel control manipulation, some participants, instead of having the opportunity to harden their attitudes, responded to an identical set of materials except that they answered the 10 questions (about conviction, consensus, and ambivalence) from the perspective of how they thought most politicians would feel about capital punishment and abortion.[40] Thus, participants in the experimental condition had the opportunity to consolidate their identities by hardening their attitudes but control participants did not. The hypothesis was that participants with the opportunity to harden their attitudes would subsequently feel less confused than would the control participants. This would indicate that attitude extremism can effectively reduce identity related dissonance discomfort.

Positive affect, negative affect, dissonance discomfort, and state self-esteem. On a "current feelings" inventory, participants rated the extent to which they felt in accord with 39 adjectives or phrases that related to positive affect, negative affect and confusion "right now, that is, at the present moment," on a scale from 1 (very slightly or not at all) to 5 (extremely). The ten positive affect items (e.g., proud, enthusiastic, inspired) and the ten negative affect items (e.g., upset, scared, ashamed) comprised the short version of the

[40] Politicians were chosen because it seemed unlikely that they would represent a consensual ingroup or outgroup for the student participants, who likely would have had little experience with them.

PANAS (Watson, Clark, & Tellegen, 1988). The 19 dissonance-related items were gleaned from several literatures relating to cognitive inconsistency such as dissonance (Elliot & Devine, 1994), ambivalence (Cacioppo, Gardner, & Berntson, 1997; Priester & Petty, 1996; Jamieson, 1993) and contradictory self-guides (Van Hook & Higgins, 1988). Other thematically consistent items such as distractible and chaotic were also added. The 19 items were: mixed, uneasy, torn, bothered, preoccupied, confused, unsure of self or goals, contradictory, distractible, unclear, of two minds, muddled, restless, confused about identity, jumbled, uncomfortable, conflicted, indecisive, chaotic.

Following the mood scale, participants completed Heatherton and Polivy's (1991) 20-item state self-esteem scale which includes items such as "I feel confident about my abilities," "I feel good about myself," and reverse scored "I feel inferior to others at this moment." Items were rated according to "what you feel is true for yourself at this moment" on a scale from 5 (extremely) to 1 (very slightly or not at all).

(Materials for Experiment 4 are presented in Appendix D.)

Results and Discussion

Preliminary analyses. All scales were internally consistent. The self-esteem, need for structure, and self-concept clarity scales had Cronbach alpha reliability coefficients of .83, .86, and .87, respectively. The positive affect and negative affect modules of the PANAS had Cronbach alpha reliability coefficients of .90 and .86, respectively. The dissonance scale and the state self-esteem scale both had Cronbach alphas of .91. The three subscales of the hardening of the attitudes measure were also reliable. Aggregated across attitudes toward capital punishment and abortion, the conviction alpha was .80, consensus alpha .82, and ambivalence alpha .78. Although the three attitude hardening subscales were not significantly correlated with one-another, results were generally stronger with the composite hardening scale than with the individual subscales, suggesting that the three subscales represent alternative and relatively orthogonal extremism strategies. The correlations between the subscales were: conviction and consensus, $r = .07$, ns; conviction and reverse scored ambivalence, $r = .39$, $p < .01$; consensus and reverse scored ambivalence, $r = .07$, ns.

Zero-order correlations among all measured variables are reported in Table 2. Of particular note, hardening of the attitudes was marginally correlated with sex, replicating the Experiment 2 finding of greater intergroup bias for women. Dissonance was positively correlated with need for structure, self-concept confusion, and negative affect, and was negatively correlated with trait and state self-esteem, and positive affect.

Responses on the deliberation materials and identity repair exercise. On the deliberation materials, most participants deliberated about academic or relationship concerns. Forty percent deliberated about changing courses, academic majors, or career directions, 36% deliberated about whether or not to terminate, begin, or change close personal relationships. Another 10% deliberated about a conflict that took the form of "work vs. relationship." The other 14% deliberated about a variety of concerns, e.g., "my hair dilemma" and "should I stop smoking the Ganja." (Examples of responses are presented in Appendix J.) The dilemmas in the friends-dilemma condition were similar in topic and tone. (Examples of responses are presented in Appendix K.)

Table 2.

Correlations Among Measured Variables

	Sex	RSE	PNS	SCC	Hard.	PAff.	NAff.	Diss.
Sex								
RSE	-.17							
PNS	.10	-.43**						
SCC	.08	.49**	-.23*					
Hard.	.26†	-.10	-.07	.14				
PAff.	-.17	.43**	-.12	.35**	.31*			
NAff.	-.03	-.32**	.36**	-.48**	.00	-.20†		
Diss.	-.03	-.35**	.40**	-.60**	-.19	-.24*	.81**	
SSE	-.06	.72**	-.56**	.60**	-.01	-.37**	-.58**	-.61**

Note. Rosenberg Self-Esteem scale (RSE); Personal Need for Structure (PNS); Self Concept Clarity (SCC); Hardening of the Attitudes (Hard.); Positive Affect (PAff.); Negative Affect (NAff.); Dissonance Discomfort (Diss.); State Self-Esteem (SSE).
* $p < .05$ (one-tailed), ** $p < .05$ (two tailed).

On the identity repair materials, most participants chose communal values as their most important. Thirty five percent selected social life/ relationships as their most important value and 21% selected social action/ helping others, 18% selected religion/ spirituality, 18% selected science/ pursuit of knowledge, 9% chose business/ economics/ making money, and none selected art/ music/ theatre. (Examples of responses are presented in Appendix L.) Control participants who wrote about why their least important value could be important to others most often wrote about art/ music/ theatre or business/ economics/ making money. (Examples of responses are presented in Appendix M.)

Manipulation check. The design of this experiment was based on the expectation that the deliberative mindset manipulation would confront participants with inconsistent self-elements (e.g., values and possible selves) and induce feelings of dissonance discomfort. A manipulation check indicated that participants in the deliberation/ control/ control condition did indeed feel more dissonant (M = 2.3) than participants in the baseline condition (M = 1.8), $t(32) = 2.22$, $p < .05$.[41] Importantly, as predicted this finding was unique for dissonance, and did not approach statistical significance for state self-esteem. positive affect or negative affect. Moreover, even when the esteem and affect measures were held statistically constant in an ANCOVA, the confusion effect still held $F(1, 29) = 6.9$, $p = .01$. This important finding demonstrates that despite the high correlations between identity confusion and state self-esteem and negative affect, the identity confusion scale has discriminant predictive validity.[42]

Attitude hardening. There were three conditions in which participants had the opportunity to harden their attitudes (see Figure 4). The hypothesis was that participants who had been exposed to the identity confrontation manipulation would harden their attitudes about important social issues (relative to the baseline condition) in order to help consolidate their identities by making themselves feel like they stood for something and knew who they were. Participants who had completed the identity repair exercise. however, would already feel identity consolidated, and so would not need to harden their attitudes. Participants in the baseline condition did not complete the deliberation materials and so their motivation to harden their attitudes was expected to be low.

As anticipated, an ANCOVA with sex and PNS as covariates[43] revealed the most hardened of attitudes about capital punishment and abortion in the deliberation-only condition (adjusted M = .28) and least in the deliberation/ repair condition (adjusted M = -.20). Hardening in the baseline condition lay between these two extremes (adjusted M =

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[41]Participants in the baseline condition had the order of the hardening opportunity and affect measures counterbalanced. No differences emerged between counterbalance conditions and so they were collapsed into one group.
[42]Past research by Taylor and Gollwitzer has found decreases in self-esteem and mood after deliberative mindset manipulations but their N per condition (about 32) was almost twice that in the present experiment (17). It is possible that more statistical power in our analyses would have revealed similar effects. For the purposes of the present research however, the differential effects are quite informative and theoretically interesting.
[43]Neither covariate interacted with condition. Both F's < 1.

-.10).[44] The overall ANCOVA was significant, $F(2,47) = 3.37$, $p < .05$. Planned comparisons revealed that there was significantly more hardening in the deliberation-only condition than in either the baseline condition, $t = 1.91$, $p = .06$ or the deliberation/ repair condition $t = 2.30$, $p < .05$. Thus, when confronted with identity inconsistencies, participants apparently compensated by claiming heightened conviction, consensus, and less ambivalence about important social issues, that is, they hardened their attitudes. When they had a chance to consolidate their identities beforehand with the identity repair exercise however, they apparently felt no need to harden their attitudes. Adjusted means for the three subscales and the planned orthogonal contrasts comparing the combined means of the baseline and deliberation/ repair conditions to the deliberation-only condition are presented in Table 3. The pattern of means is the same for all three subscales. The most statistically significant subscale is consensus, suggesting that imagining consensus of others is a powerful way to shore up a sense of consistency (cf. Goethals, 1986). This finding provides a clue as to why identity consolidation strategies are so often socially based (e.g., the outgroup derogation and intergroup bias characteristic of terror management outcomes). Even motivated and imagined agreement of others appears to help people cope with identity confrontation. (The question of whether attitude hardening is actually successful at reducing discomfort is addressed below.)

[44]Units are average z-scores of the three attitude hardening sub-indices.

Table 3.

Hardening of the Attitudes as a Function of Condition

Attitude Hardening Scale	(1) Baseline	(2) Deliberation/ Repair	(3) Deliberation/ Only	Orthogonal Contrast (1 and 2) vs. 3
	Condition			
Total (z-scores)	-.10	-.20	.28	$t = 2.53$, $p = .01$
Conviction	8.2	8.0	8.5	$t = 1.00$, ns
Consensus	51	47	59	$t = 1.95$, $p = .06$
Ambivalence	-.09	-.11	-.20	$t = -1.58$, $p = .12$

Attitude hardening moderated by self-esteem. A further ANOVA revealed that the main effect of condition (baseline, deliberation only, deliberation/ repair) on attitude hardening was moderated by a marginal self-esteem by condition interaction, $F(2,46) = 2.70$, $p = .08$.[45] Planned orthogonal comparisons revealed that the combined simple slope of attitude hardening regressed on self-esteem, for participants in the baseline and deliberation/ repair conditions, was significantly different from the simple slope in the deliberation-only condition, $t = 2.26$, $p < .05$. Another comparison revealed that simple slopes in the baseline and deliberation-only conditions were significantly different, $t = 2.30$, $p < .05$. The simple slope in the deliberation/ repair condition did not differ significantly from the other two conditions.

As can be seen in Figure 5, the interaction between self-esteem and condition is driven by the different simple slopes in the baseline and deliberation-only conditions. In the baseline condition, the self-esteem Beta = -.54, $t = -1.99$, $p = .05$. In the deliberation-only condition, however, the valence flips and the self-esteem Beta = .57, $t = 2.26$, $p < .05$.

[45]A simpler ANOVA assessing the interaction between self-esteem and condition for only the baseline and deliberation-only conditions was significant $F(1,47) = 5.42$, $p < .05$.

Apparently, under normal circumstances (i.e., in the baseline condition), self-esteem allows participants some degree of magnanimity to non-defensively face their uncertainty. This finding supports the more benign perspective on self-esteem that sees it as a valuable resource which promotes well-being and optimal functioning (Taylor & Brown, 1988; Greenberg et al., 1997) and even personal growth (Maslow, 1968; Rogers, 1961).

After being confronted with their identities, however, the magnanimity of high self-esteem participants disappears, and they become even more rigid than their low self-esteem counterparts. This result is consistent with a darker view of self-esteem, that is, that high self-esteem participants are inclined to engage in defensive tactics when their egotism is threatened (Baumeister et al., 1996). This interaction with self-esteem then, provides some promise for helping to understand the mixed findings in the literature about self-esteem and defensiveness.

It appears that under normal circumstances, self-esteem does preempt defensive responding. Self-esteem could be seen as providing a usually effective first line of defense against psychological and interpersonal threats. It can serve as a resource which allows individuals to be less defensive as long as challenges do not breach the ambient level of self-esteem protection. When a more serious threat is present, however (e.g., identity confrontation), individuals high in self-esteem appear to become even more defensive than individuals low in self-esteem. People with high self-esteem may be more likely to become panicked and uncomfortable when identity confrontations penetrate their first line of defense because they have less experience with alternative coping mechanisms such as integration.[46] In contrast, low self-esteem individuals may have more experience with, and be more inoculated against, identity threats that breach the barrier of self-esteem because their barrier is weaker. Alternatively, the significant overall negative correlation between

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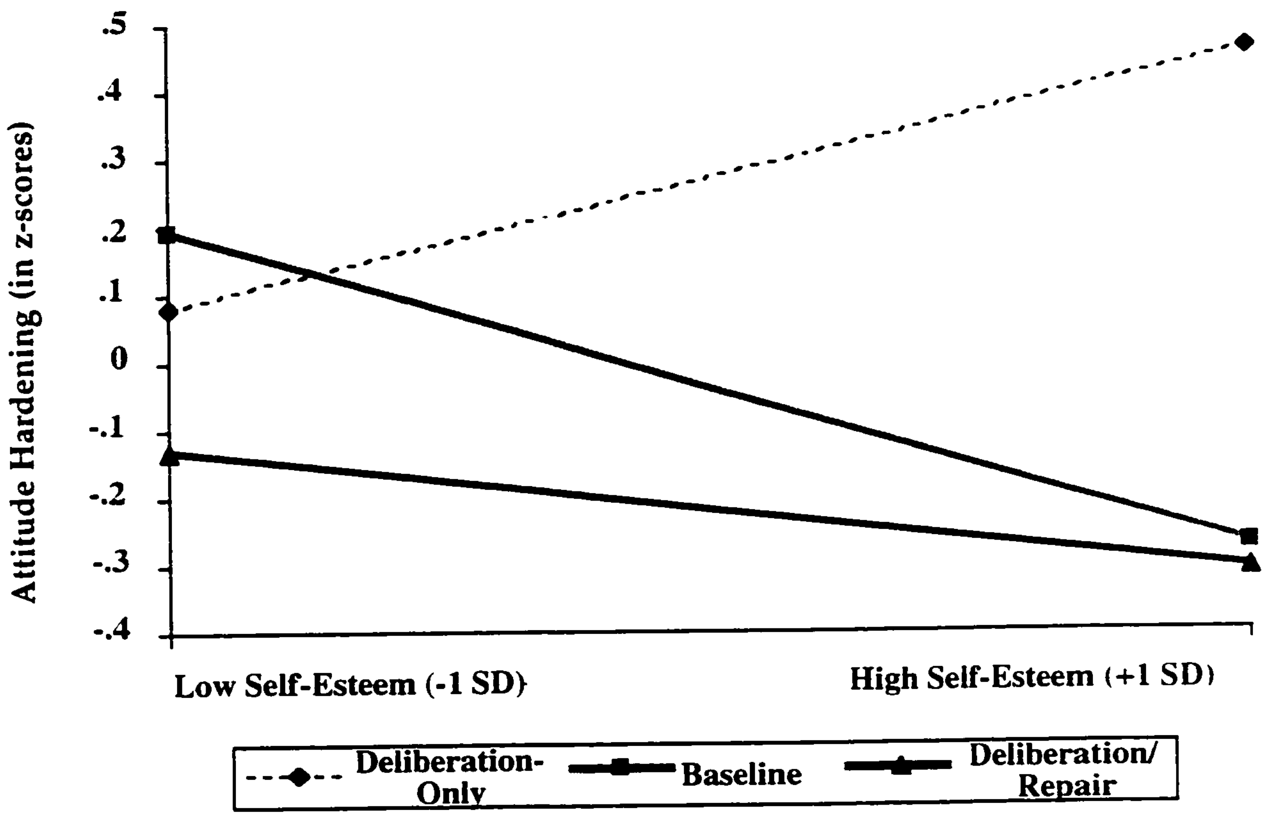
[46]This interpretation is consistent with the portrait of a defensive narcissist who has an extremely high sense of self-worth but no coherent identity (Kohut, Kernberg). There may be a different mechanism operating for people high and stable in self-esteem. Harmon-Jones found that participants with stable high self-esteem (Rosenberg M = 38.4 on a 10 to 40 scale) were less defensive, i.e., they did not exhibit mortality salience effects.

self-esteem and dissonance ($r = -.35$, $p < .01$) suggests that low self-esteem individuals may simply be more resigned and less reactive to dissonance because they experience it more often.[47] Finally, participants in the identity repair condition may be immune to the identity confrontation regardless of self-esteem level because for them, the first line of defense is no longer required — there is nothing to defend against. After identity repair, the identity confrontation manipulation does not "sting" because it exposes self-elements that are consistent. The irrelevance of state self-esteem in the deliberation/repair condition is evidence by the simple slope Beta = -.06, $t > -1$.

Figure 5. Attitude hardening as a function of self-esteem.



[47] This interpretation is consistent with Campbell's (1990) finding that self-concept confusion is associated with low self-esteem. It is also consistent with the overall finding in the present research that Campbell's SCC scale is positively correlated with self-esteem and negatively correlated with dissonance (see Table 2).

Dissonance reduction. The manipulation check demonstrates that identity confrontation makes participants feel dissonant, and the above results show that if given the chance, they will attempt to compensate by hardening their attitudes about social issues. The question remains, if the attitude hardening is a defensive response to dissonance, is it an effective one, i.e., does it lead to reduced dissonance? Also, participants did not harden their attitudes in the deliberation/ repair/ hardening condition. Is this because identity repair neutralizes the dissonance associated with identity confrontation, thereby eliminating the need to respond defensively? To answer these questions, dissonance was assessed in the five experimental conditions with the expectation that participants would feel dissonant only in the deliberation/ control/ control condition (in which they had no opportunity to reduce confusion by hardening their attitudes or by completing the identity repair exercise).

As shown in Table 4, attitude hardening did indeed reduce participants' feelings of dissonance to baseline levels. The overall ANCOVA (with sex and PNS as covariates) was significant $F(4,70) = 2.33$, $p = .06$, and planned comparisons revealed that dissonance was significantly higher, $p < .05$ in the deliberation/ control/ control condition than in any of the other four conditions (which did not differ from each other). As compared to the deliberation/control/control condition, the mean dissonance was lower in the baseline condition, $t = 2.24$, $p < .05$; in the deliberation/ control/ hardening condition, $t = 2.30$, $p < .05$; in the deliberation/ repair/ control condition, $t = 2.10$, $p < .05$; and in the deliberation/ repair/ hardening condition, $t = 2.64$, $p = .01$.

Further evidence that attitude hardening effectively quells dissonance comes from the highly significant within-cell correlation between attitude hardening and dissonance in the deliberation/ control/ hardening condition ($r = -.61$, $p < .01$), which differed significantly from the correlation in the baseline condition ($r = .40$, ns), $z = 3.09$, $p < .005$. The conclusion suggested by this result is that attitude hardening is an effective strategy, at least in the short term, for reducing the dissonance that arises from identity confrontation.

Attitude rigidity appears to be a defensive response that can help to compensate for identity related dissonance.

Another conclusion that can be drawn from these findings is that identity confusion can be ameliorated by constructing a relatively simple account that depicts oneself as knowing what one's values are and as acting in accord with those values. The identity repair exercise reduced dissonance (as shown in Table 4) and the need for compensatory attitude hardening (as shown in Table 3). Reminiscent of the Shakespearean notion of "protesting too much," this finding suggests the intriguing possibility that inner uncertainty causes professed certainty, and that when people feel like they know who they are and what they stand for, they can be less closed-minded.

It is important to note that there were no significant between condition differences in conventional positive and negative affect, or in self-esteem. This suggests that the affective consequences of identity confrontation and consolidation are specific for dissonance.

Table 4.

Dissonance as a Function Of Dilemma Deliberation, Identity Repair, and Attitude Hardening

	Condition				
	Baseline	Deliberation/ Control/ Control	Deliberation/ Control/ Hardening	Deliberation/ Repair/ Control	Deliberation/ Repair/ Hardening
Confusion	1.8 a	2.3 b	1.8 a	1.8 a	1.7 a

Note. Table entries that do not share a common subscript differ at the $p < .05$ level of significance. N/cell (from left to right) = 17, 17, 18, 12, 13.[48] Adjusted means are presented from an ANCOVA with sex and PNS as covariates.

[48] In a preliminary analysis with the full sample, the overall ANCOVA was significant, $F(4, 79) = 2.5$, $p = .10$, the pattern of means was the same (from left to right it the table above, 1.8, 2.3, 1.8, 2.1, 1.8 respectively), and all means similarly differed from the baseline but one. The mean of the deliberation/

Experiment 5

In experiments 1, 2, and 4, three diverse identity confrontation manipulations caused rigid identity consolidation responses involving hardening of the attitudes and heightened intergroup bias. When confronted with identity inconsistencies, it is as if participants wanted to reply with emphatic identity claims such as, "I am against prostitution!," "It is great being a University of Waterloo student!," and "I know where I stand on important social issues!"

Experiment 5 was designed to test whether participants might make other, more integrative responses to identity confrontation if given the opportunity. According to ICT, defensive attitude hardening and heightened group identification are not the only way that individuals attempt to consolidate their identities. They may also attempt to integrate their various self-elements by reconstruing them as consistent with a theme, or by deleting self-elements that are inconsistent with the rest, and substituting new, more internally consistent ones. Experiment 4 demonstrated that for the most part, people seemed to find it quite easy to construct integrative accounts of their identities when asked to do so (e.g., in the identity repair conditions), and that doing so eliminated the feelings of dissonance that arose from an identity confrontation manipulation. Furthermore, the integration exercise reduced subsequent attitudinal rigidity.

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repair/ control condition (M = 2.1) did not differ significantly from the mean of the deliberation/ control/ control condition (M = 2.3). To assess whether this unexpectedly elevated dissonance in the deliberation/ repair/ control condition may have arisen because some participants in that condition were not able to complete the identity repair exercise according to instructions (which may have intensified their feelings of dissonance rather than relieved them), two blind raters read the identity repair paragraphs and identified those that were either incomplete or inconsistent. Six were found in the deliberative/ repair/ control condition and three were found in the deliberative/ repair/ hardening condition. (Only those nominated by both raters were included.) When these participants were removed from the analyses, the results reported in Table 4 emerged. To check for possible personality correlates of failure to complete the identity repair, the coded quality of the identity repair discourses was regressed on sex, RSE, PNS, and SCC. The discourses of participants low in SCC were significantly more likely to be incomplete or inconsistent, Beta = .40, $t = 2.14$, $p < .05$. Sex, RSE, and PNS were not significantly related to discourse quality on the identity repair exercise. The finding that SCC but not RSE was related to successful completion of the repair exercise suggests that, as intended, the exercise was primarily a manipulation of identity consistency and not self-worth.

The present experiment investigates whether people might spontaneously engage in such integrative responses to identity confrontation if given the chance. Personal goals were selected as the unit of analysis in this experiment because past research has demonstrated that they are important vehicles for identity and meaning in life. People who report that their goals are consistent with their personal values (and other defining self-elements) are more likely to report that their lives feel meaningful (McGregor & Little, 1998). The expectation in the present experiment was that, if after identity confrontation participants could be made to self-reflect on their personal goals, they would spontaneously attempt to integrate in two ways. Integration could be accomplished by deleting identity-inconsistent goals and substituting more identity-consistent ones (substitution). It could also be accomplished by reconstruing goals to be consistent with a superordinate identity theme (reconstrual).

One reason that participants may respond to identity confrontation with apparently defensive and compensatory strategies such as extremism and intergroup bias is that the attributional source of the dissonance discomfort may seem elusive and nebulous. More circumscribed and salient attributional candidates, such as prostitution, outgroup members, and social issues may seem like compelling sources of discomfort. Cognitive dissonance research has found that participants will quite readily misattribute dissonance discomfort to whatever external source is made salient (e.g., Zanna & Cooper, 1974). Thus, the apparently malevolent identity consolidation strategies discussed above and in terror management research may actually result from relatively banal attributional errors and a type of misdirected concern. The present experiment investigated whether participants would spontaneously engage in integration strategies of substitution and reconstrual if the correct attributional source for their discomfort (self-elements) was made salient.

Integration strategies

Substitution. One obvious way to reduce inconsistency among self-elements would be to delete elements that are most inconsistent with the set of other elements, and to add new elements that are highly consistent. This strategy would be akin to what happens in the New Years resolution ritual. For example, upon reviewing his life over the past year. Jim might recognize that being a smoker is inconsistent with his other self-elements, such as being an athlete, a good role-model to his children and someone who is in control. By resolving to quit smoking and to use the money saved to join a fitness club, Jim would be deleting a dissonant self-element (smoker) and substituting a more consonant one (fitness buff). The fitness buff self-element would resonate with his sense of being an athlete, would be consistent with his desire to be a good role model to his children, and would substantiate his belief that he was in control of himself. Thus, integrity among self-elements would be increased and his identity would feel relatively more consolidated. Along these lines, when confronted with their identities, participants in the present experiment were expected to replace inconsistent self-elements with more consistent ones.

Reconstrual. Another way to increase integrity among self-elements, according to ICT, is to reconstrue the meaning of the various self-elements in a way that renders them consistent with a unifying theme. For example, if Jim from the above example could not quit smoking, he could perhaps use his smoking to bolster his sense of being an athlete by telling himself that his current prowess, although faded from his glory days, is still quite remarkable given his smoking handicap. He might also bolster his sense of being in control in the face of his addiction by reminding himself that it was his own free choice to start smoking in the first place. He might then use his addiction as a way to teach his children about the vicissitudes of free will. Thus, these ostensibly inconsistent self-elements could become unified under a communal "ex-jock learns lesson and tries to help others by communicating it to the next generation" theme.

Communal identity themes. There are several reasons to expect that when participants are confronted with their identities, they will turn to communal themes as a basis for reconstruing their self-elements. It is a media cliché now, that the locus of meaning is other people and relationships. Countless Hollywood films (e.g., "A Christmas

Story" and most recently, "Good Will Hunting" and "Titanic") depict communion as the most advisable source of meaning in life, especially in contrast to blind ambition. Also, most people have some degree of exposure to the communal lifestyle, because most people have personal experience with family life. Thus, in a pinch for an identity theme, the communal theme might be a relatively accessible option. Indeed, research on folk concepts has found that the most frequently mentioned criterion for admirable lives is service to others (Napa & King, 1998).

There are also several reasons to expect that communal themes might be especially effective at helping to consolidate identities. Baumeister and Leary (1995) propose that belongingness is a fundamental human need. According to the symbolic interactionism tradition, identity is socially mediated, that is, identity claims must be negotiated and validated socially (Wicklund & Gollwitzer, 1982). People might turn to communal identities because at some level, they recognize that communal themes are more likely than more self-centered agentic or hedonistic themes to be validated by others. In other words, few people will argue with an identity premised on helping others.

Another benefit of communal identities may be that bonds of commitment to particular others delimit one's options and thereby protect one from the dizzying array of alternatives. According to Durkheim (1897/1952), without commitment to others one is vulnerable to being immobilized by choice in the face of infinite possibility, a condition that can cause egoistic suicide. Furthermore, communal identities might be especially effective at orienting individuals toward reliable, intrinsically satisfying incentives (Deci & Ryan, 1991). Klinger (1977) and later Brickman (1987) emphasized that a meaningful identity must be built on the pursuit of incentives that one does not habituate to or become disillusioned with. As opposed to the hedonic treadmill which keeps people grasping for new incentives that have not been habituated to, or the pursuit of success which can be disillusioning once attained, Klinger (like Bowlby, 1988) proposes that there are reliable, hard-wired rewards associated with communal incentives.

In light of these considerations, and based on the finding in Experiment 4 that participants overwhelmingly selected communal values as their most important, it was expected that when confronted with their identities, participants would attempt to reconstrue their identities as more communal.

Participants and Procedures

Twenty nine participants received academic credit toward their introductory psychology course for participation. Another ten were approached and recruited in the lounge at the Student Life Center on campus. In total, 26 male and 13 female participants (age, $\underline{M} = 20$) participated. Materials for the three conditions in the experiment were randomly shuffled and handed out from the top of the pile (by an experimenter who was blind to condition) to participants as they arrived. Participants were assured that the anonymity of their responses would be protected. Participants recruited at the Student Life Center lounge were simply handed the materials and instructed individually on how to proceed. Participants recruited from the psychology class were brought into the lab and completed the materials in groups averaging three participants in size (ranging between one and five). On average participants took 45 minutes to complete the materials. Participants first completed the experimental manipulation involving mortality salience, temporal extension, or control materials (the same as in Experiments 1-3). They then completed the filler mood scale used in Experiment 1 that included four dissonance-related items. Next, they completed the PNS scale (the same as that used in Experiments 2 and 4), followed by an Identity-Seeking scale measuring the desire to consolidate a stable and meaningful identity. Finally, all participants completed a personal goals exercise that was an adaptation of Little's (1983) Personal Projects Analysis methodology. Participants' responses on this exercise were used as the basis for the assessment of the integrative identity consolidation strategies of self-element substitution and reconstrual.

Identity-seeking scale. Crumbaugh's (1977) 13-item Seeking of Noetic Goals scale is based on Frankl's (1963) concept of noogenic neurosis, and measures the desire to find a stable purpose and direction in life. Some items refer to the awareness of uncertainty regarding how to live life, e.g., "I seem to change my main objective in life," and " I have experienced the feeling that while I am destined to accomplish something important, I cannot quite put my finger on just what it is." Some items referred to the wish to find a unifying purpose and meaning, e.g., "Over my lifetime I have felt a strong urge to find myself," "I feel myself in need of a new lease on life," and "I daydream of finding a new place for my life and a new identity." Other items refer to both, e.g., "I feel the lack of, and a need to find a real meaning and purpose in my life." Participants rated their agreement with each item on a scale from 1 (strongly agree) to 6 (strongly disagree).

Personal goals. Participants were given the following instructions: "We are interested in the personal projects that characterize your life. Most of us have a number of these projects at any given time that we think about, plan for, and try to attain or accomplish. They may be positive or negative, that is, they may be about something that is typically approached or sought after or about something that is avoided." Participants were then given 12 examples of personal projects, e.g., "get an A in all my courses," and "try to stop fighting in my relationship" that referred to a variety of individualistic, communal, hedonistic, and administrative concerns. They then took ten minutes to write down as many of their personal projects as they could think of with the further instruction that the projects "need not be formal or important ones — although they may be. We are interested in any of the kinds of projects you anticipate trying to accomplish in the future, regardless of what they may be."

Each participant was then instructed to select ten projects from the list produced, that "as a set, are most representative of the kind of person that you are." Each participant then rated each project on a scale from 0 (not at all) to 10 (extremely) on each of the following ten rating dimensions: value congruence, self-identity, importance, big picture (meaningfulness), togetherness, others' benefit, self-benefit, self-worth, fun, and pleasure (see Appendix E for the descriptions explaining each dimensions that participants received).

Self-element substitution. Past research has found that participants' ratings on the value-congruence, self-identity, importance, and big picture dimensions load together on a common factor (McGregor & Little, 1998). Each participant's 40 ratings on these dimensions (4 dimensions x 10 projects) were averaged to yield an index of the degree to which the personal projects generated were consistent with other important self-elements. Higher scores were expected in the temporal extension and mortality salience conditions than in the control condition because, according to ICT, the identity confrontation should make participants want to replace self-inconsistent projects with self-consistent ones in an attempt to consolidate their identities.

Self-element reconstrual. In addition to substituting more self-consistent projects in response to identity confrontation, participants were expected to also try to consolidate their identities by reconstruing their projects in a manner that was consistent with a communal theme. In other words, after the time and death manipulations, they were expected to reconstrue their more communal projects as more self-defining.

As a basis for assessing reconstrual, within-person correlations were computed for each participant between how identity consistent projects were rated as being, and how communal they were rated as being. First, average project-self-consistency scores were computed for each project for each person. Project-self-consistency scores were computed by averaging the value congruence, self-identity, importance, and big picture ratings for each project. This yielded ten project-self-consistency scores per participant (one for each project). An average communion score for each project for each person was similarly computed by averaging the togetherness and others' benefit ratings. This yielded ten project-communion scores per person (one for each project). As an index of the degree to which participants' identities were communal in theme, within-person correlations between each participant's ten project-self-consistency scores and ten project-communion scores were computed. Thus, one correlation per participant resulted, representing the extent to which participants identified with their more communal projects. This correlation was then

Fisher r-z transformed to normalize the distribution. The hypothesis was that these correlations would be higher for participants in the time and death conditions than for participants in the control condition.[49]

The same procedure was followed to compute average agency and hedonism scores and correlations representing the extent to which participants identified with their agentic projects (assessed by the self-benefit and self-worth dimensions) and hedonistic projects (assessed by the fun and pleasure dimensions). Past research has found that the agency, communion, and hedonism dimensions load onto separate agency, communion, and hedonism factors (McGregor, 1992; 1994; McGregor & Little, 1998).

(Materials for Experiment 5 are presented in Appendix E.)

Results and Discussion

Manipulation check. As in the previous experiments, positive and negative mood did not differ between the temporal extension and control conditions, ts < 1. The reliability of the four-item dissonance scale (Cronbach alpha = .67) was similar to that found in Experiment 1. As found in Experiment 1, there were significant differences among groups on the 4-item dissonance scale, overall $F(2,36) = 2.53$, $p < .05$ (one-tailed). Planned comparisons revealed that dissonance was higher in the mortality salience condition (M = 7.1) than in the control condition (M = 5.5), $t = 2.21$, $p < .05$. Surprisingly, and in contrast to the results of Experiment 1 and 2, however, dissonance in the temporal extension condition (M = 5.1) did not differ from the control condition, $t < 1$.

To assess the possibility that failed random assignment may have been responsible for this discrepant finding, differences in PNS between conditions was assessed. Experiment 2 found no relation between identity confrontation and subsequent PNS scores, so differences in the present experiment, if found, would support the failed random assignment explanation. There was a significant between condition difference in PNS, F(2,

[49] For a full discussion of this technique for the assessment of identity themes, see McGregor and Little (1998).

36) = 4.12, $p < .05$. Planned comparisons revealed that the temporal extension condition ($M = 2.9$) differed significantly from the control condition ($M = 3.6$), $t = 1.96$, $p = .06$ and the mortality salience condition ($M = 3.9$), $t = 2.77$, $p < .01$. The mortality salience and control conditions did not differ significantly, $t < 1$. This finding, together with the highly significant correlation between PNS and dissonance ($r = .40$, $p < .01$, in Experiment 4)[50] suggests that the failure of the manipulation check in the temporal extension condition may have been due to a random assignment failure. Because in Experiments 1, 2, and 4 dissonance only partially mediated identity consolidation efforts, the temporal extension condition was retained in the present experiment. In all analyses to follow, PNS is covaried.[51] It was not significantly associated with any of the dependent measures.

Identity-seeking scale. An ANCOVA with sex and PNS as covariates revealed a significant effect of condition on identity seeking, $F(2, 34) = 4.41$, $p < .05$. (The effects of sex and PNS on the identity-seeking scale were non-significant, ts < 1.) As shown in Table 5, planned comparisons revealed that identity-seeking (Cronbach alpha = .85) was significantly higher in the mortality salience condition than in the control condition, $t = 2.30$, $p = .005$. Identity seeking was also higher in the temporal extension condition than in the control condition, but not significantly so, $t = 1.38$, $p = .18$. The difference between the temporal extension and mortality salience conditions was similarly not significant, $t = 1.46$, $p = .15$. The finding that a five or ten minute mortality salience exercise could have such a strong influence on a trait (not state) measure seems remarkable, especially given the low power in the present study.

Substitution. On average participants generated 17 projects in the initial stage of the personal projects exercise. One person in each of the control and mortality salience

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[50]The overall correlation between PNS and the dissonance index in Experiment 5 was $r = .19$, p = ns. The correlation in Experiment 4 is likely closer to the true relation between constructs because the dissonance scale in Experiment 4 was more reliable (alpha = .91) than the dissonance index used in Experiment 5 (alpha = .67), and because the Experiment 4 correlation is based on more than double the N.
[51]This is a conservative approach, as PNS was measured after the independent variable.

conditions failed to complete the PPA materials and so their data were not included in the personal projects analyses.

The number of projects generated did not vary as a function of condition. $F < 1$. The Cronbach alpha reliability of the identity-consistency index was .77 (value-congruency, self-identity, importance, and big picture).[52] The projects of females (M = 8.2) were significantly more identity-consistent than those of males (M = 7.4), t = 2.31, $p < .05$. This gender effect replicates past research with senior managers indicating that women rate their personal projects as more identity-consistent than men do (McGregor, 1992). It is also consistent with the higher overall identity consolidation effects found for women in Experiments 2 and 4. There were no other significant effects of gender on the personal project derived dependent variables.

An ANCOVA with sex and PNS as covariates revealed a significant substitution effect, $F(2, 32) = 5.26$, $p = .01$. Planned comparisons revealed that participants in the mortality salience condition intended on engaging in personal projects that were more identity-consistent than did participants in the control condition, $t = 2.87$, $p < .01$. A similar difference was present in the temporal extension condition, $t = 2.56$, $p < .05$. (Means are presented in Table 5.) These differences suggest that not only do identity confrontation manipulations influence ratings about social issues and hypothetical targets (as found in Experiments 1, 2, and 4), they also influence the kinds of goals participants frame for themselves in their everyday lives.[53]

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[52]For each participant, the 10 project ratings for each dimension were averaged yielding four dimensional scores. The reliability analysis was conducted on these 4 scores.

[53]The apparent substitution effect could also reflect a reconstrual of the meaning of projects such that the same, previously mundane projects, are now viewed in a more profound light. To address this question, a follow-up study was conducted in which participants' personal projects were generated and rated in a mass testing session at the beginning of the term. A month later, participants were asked to re-rate two of the moderately important projects (that they had previously generated and rated in the mass testing session) after identity confrontation (temporal extension and mortality salience) or control manipulations. The rating dimensions at time-two were, "How personally meaningful is this project?" and "How important is this project to you at the present time?" Both dimensions were rated on a scale from 0 (not at all) to 10 (extremely). The four ratings (two projects X two dimensions) were averaged to form a project-self-consistency index. An ANCOVA with the time-one project-self-consistency index, sex, PNS, and RSE covaried revealed a non-significant trend toward higher project-self-consistency ratings in the identity confrontation conditions (adjusted M = 7.3) than in the control condition (adjusted M = 6.5), $F(1,101)$ =

Reconstrual. The correlation between participants' average ratings on the two agency dimensions (self-benefit and self-worth) was $r = .20$; between the two communion dimensions (togetherness and others'-benefit) $r = .71$; and between the two hedonism dimensions (fun and pleasure) $r = .51$. Average project agency, communion, and hedonism ratings did not differ between conditions (means are presented in Table 6).

An ANCOVA with sex and PNS as covariates revealed a significant reconstrual effect, however, $F(2, 31) = 4.44$, $p < .01$.[54] (The sex and PNS covariates were not associated with the strength of participants communal identity theme, $ts < 1$.) Planned comparisons revealed that participants construed their identities as more communal in the mortality salience condition $t = 1.95$, $p = .06$ and in the temporal extension condition, $t = 2.88$, $p < .01$. (Mean within-person correlations are presented in Table 5). In contrast and as expected, there were no significant differences in hedonistic or agentic identity themes across the three conditions. It is important to point out that the mean communal content, that is, average project communion ratings, did not differ significantly across the three conditions. It was only the within-person correlations between participants' communion scores and self-consistency scores that changed.[55] This result indicates that participants reconstrued their more communal projects as more consistent with self (and less communal projects as less consistent with self) in an attempt to consolidate their identities in response to the identity confrontation manipulations. It may be that communal themes are turned to as a template for identity reconstrual because they are culturally accessible, or because participants see them as more viable than other possible themes such as agentic or hedonistic ones.

2.46, $p = .12$. The statistical non-significance of this effect is consistent with the substitution interpretation of the effect in Experiment 5. The trend toward significance, however, suggests that some degree of reconstrual may also partially account for the substitution effect. (Materials for this follow-up experiment are presented in Appendix F.)

[54]One participant had no variance in her project-identity-consistency ratings and so her communal identity correlation could not be calculated.

[55]Participants' communal identity theme scores were correlated ($r = .31$, $p = .07$) with their average project communion rating, but even with project communion entered as a covariate, the effect of condition on communal identity theme still remained significant at $F(2,31) = 3.16$, $p = .06$.

The findings in the present experiment provide vivid evidence that not only are identity confrontation manipulations capable of inducing rigid consolidation strategies such as extremism and intergroup bias, but that they are also capable of causing integrative efforts if participants are pointed in that direction. Mortality salience caused higher scores on a trait identity-seeking scale, and both identity confrontation manipulations caused changed personal plans for the future and reorganized values and priorities in life. Changed intentions and identities were both in the direction of greater consistency, providing clear evidence for the identity consolidation strategy of integration.

Table 5.

Integration as a Function of Mortality Salience and Temporal Extension

	Condition		
Integration Measure	Control	Mortality Salience	Temporal Extension
Identity-Seeking	35_a	49_b	42_{ab}
Project Substitution	7.0_a	8.1_b	8.0_b
Project Reconstrual	$-.05_a$	$.27_b$	$.40_b$

Note. Means in each row not sharing a common subscript differ, $p < .05$.

Table 6.

Project Characteristics as a Function of Mortality Salience and Temporal Extension

	Condition		
Project Characteristic	Control	Mortality Salience	Temporal Extension
Agency	7.8_a	8.1_a	7.9_a
Communion	5.2_a	5.2_a	6.1_a
Hedonism	7.1_a	6.8_a	7.0_a

Note. Means in each row not sharing a common subscript differ, $p < .05$.

General Discussion

Summary of Main Findings

Five experiments support ICT by demonstrating that three diverse but theoretically related identity confrontation manipulations — temporal extension, mortality salience, and dilemma deliberation — can cause dissonance related discomfort and a variety of rigid and integrative identity consolidation strategies. Experiments 1, 2, and 4 demonstrated that identity confrontation causes heightened extremism and intergroup-bias/group-identification. Experiment 5 demonstrated that identity confrontation causes integration.

In Experiment 1, temporal extension caused dissonance discomfort and more extreme punishment recommendations for a social deviant. In Experiment 2, temporal extension and mortality salience caused dissonance discomfort, and more polarized evaluations of essays and authors expressing ingroup and outgroup opinions. Experiment 3 used the logic of terror management theory to rule out the possibility that temporal extension effects are mediated by hyperaccessibility of death thoughts. Together with Experiments 1 and 2, Experiment 3 poses a serious challenge to the terror management theory contention that mortality salience is a necessary condition for causing the outcomes investigated in terror management research (e.g., extremism, and intergroup bias).

Experiment 4 further generalizes ICT with the finding that the third identity confrontation manipulation, dilemma deliberation, caused dissonance discomfort, and also hardening of the attitudes about social issues (extremism). Moreover, Experiment 4 showed that extremism is an effective identity consolidation strategy. At least in the short term, extremism reduces the dissonance discomfort arising from identity confrontation, to baseline levels. Thus, although rigid identity consolidation strategies such as group-identification and extremism may contribute to jingoism, prejudice, discrimination, intolerance, and closed-mindedness, they appear to provide some immediate relief for the individual.

In contrast to the emphasis in Experiments 1, 2, and 4 on how identity confrontation can cause rigid and potentially antisocial outcomes, Experiment 5 demonstrated that temporal extension and mortality salience cause integrative changes in intentions and identities. Temporal extension and mortality salience both caused heightened intentions to engage in personal projects that are consistent with personal values and priorities. Both identity confrontation manipulations also caused participants to define themselves more in terms of, and to place more value on, their interpersonally oriented personal projects. It seems quite remarkable that such brief interventions could affect the actual goals participants intend to pursue and the way that they frame their identities.

Self-esteem moderation. The finding that higher self-esteem was associated with more identity consolidation in Experiment 4 is consistent with past findings with mortality salience as the identity confrontation manipulation (Baldwin & Wesley, 1996).[56] The apparent contradiction of this result with the terror management research finding that esteem decreases mortality salience effects (Harmon-Jones et al., 1997) can be explained by the fact that Harmon-Jones et al. either manipulated self-esteem or preselected participants with extremely high and stable self-esteem. On the other hand, in Baldwin and Wesley and in the present research, self-esteem was simply measured at the beginning of the experimental sessions. The contrast in self-esteem effects depending on how it is operationalized is quite informative. It suggests that bolstered and stable self-esteem can provide a resource for reducing the discomfort associated with cognitive inconsistency, much like bolstered self-worth can reduce dissonance in self-affirmation research (Steele et al., 1993). It also suggests, however, that ordinary, measured self-esteem can reflect a defensive posture (Baumeister et al., 1996), and that participants with high self-esteem may be even more vulnerable in the face of identity confrontation, perhaps because they are used to relying on

[56]In Experiment 2, there was a main effect such that higher self-esteem was associated with more identity consolidation. The interaction may not have been significant in Experiment 2 because defensiveness about only one issue was assessed (expressed attitudes about the University of Waterloo).

self-worth as an identity consolidation strategy, or perhaps because low-self-esteem individuals are more habituated to identity confusion.

Dissonance mediation. In all the experiments in which dissonance was measured. identity confrontation caused dissonance discomfort. Mediational results are somewhat equivocal, however. Experiment 1 failed to show mediation for the temporal extension manipulation. Experiment 2 showed partial mediation when the temporal extension and mortality salience participants were combined, and the mediation appeared stronger in the mortality salience condition than in the temporal extension condition. Experiment 4 demonstrated that identity confrontation causes dissonance and also causes extremism. and that identity consolidation efforts can reduce dissonance. Experiment 5 failed to find mediation. At this point it appears as though identity consolidation efforts and the experience of dissonance discomfort may represent somewhat independent responses to identity confrontation. Future research with more power (larger N) and using the highly reliable 19-item dissonance scale (from Experiment 4) placed between the independent and dependent variables (as opposed to the only marginally reliable four and six-item scales used in the present research) might help to further illuminate this question.

Relevance to Other Theories

Cognitive dissonance theory. Over the past 40 years, cognitive dissonance theory and research has tended to focus on direct mechanisms for reducing dissonance discomfort induced in counterattitudinal behavior experiments. Typically, participants are somehow subtly tricked into committing a behavior that implies a cognition that is inconsistent with their pre-existent attitude. As such, an inconsistent cognition is behaviorally implanted. Because the behavior (and therefore the implied cognition) is difficult to deny, participants restore cognitive consistency by changing their initial attitude. Almost sole reliance on the counterattitudinal behavior paradigm opened the door for challenges to the epistemic basis of cognitive dissonance theory. Cooper and Fazio (1984) propose a "New Look" for dissonance theory, arguing that psychological discomfort in dissonance experiments occurs because people feel personally responsible for the production of aversive consequences. Similarly, Steele's (1988) self-affirmation revision posits that it is not inconsistency but threat to global self-worth that causes the discomfort in dissonance experiments. According to New Look and affirmation perspectives, people rationalize behaviors that imply their incompetence or immorality. Both revisions contradict the epistemic roots of Festinger's (1957) original theory.

The strategy for inducing dissonance in the present experiment provides a more direct way to investigate the consequences of native and self-relevant inconsistencies. Rather than having inconsistent cognitions experimentally implanted, pre-existent inconsistencies among cognitions (self-elements) are made simultaneously accessible by identity confrontation manipulations. Self-relevant inconsistency may ultimately make people feel bad about themselves, but the present approach demonstrates the primacy of dissonance discomfort. Experiments 1, 2, 4, and 5, found that identity confrontation caused dissonance discomfort but not positive or negative affect. The finding in Experiment 4, that identity confrontation caused dissonance discomfort but not reductions in state self-esteem, provides further evidence that the primary experience resulting from induced simultaneous accessibility of self-elements is epistemic discomfort.

One of the most intriguing aspects of the present research is that it suggests an important new dissonance reduction technique — epistemic compensation. The present series of experiments suggest that being a "know it all," zealot, or bigot may provide epistemic solace in the face of identity confusion. Just as Lewin (1935) proposed that psychical tension could be reduced by engaging in substitute activities, and Freud contended that conflicts between id and superego could be resolved by sublimation of the id instincts, the present results suggest that dissonance discomfort aroused in one domain can be reduced by emphasizing cognitive consistency in another domain. This epistemic compensation effect is most clearly illustrated in Experiment 4. After having dissonance discomfort aroused by an identity confrontation manipulation, participants reduced the discomfort by hardening their attitudes about capital punishment and abortion.

There are two mechanisms most likely responsible for the effectiveness of epistemic compensation. First, research on dissonance and ambivalence has demonstrated that inconsistent cognitive elements must be simultaneously accessible in order to cause discomfort (McGregor et al., 1998). Turning one's attention to consistent, consensual cognitions in another domain may reduce the accessibility of the inconsistent cognitions. Furthermore, there is evidence from a number of dissonance experiments that the source of dissonance discomfort is typically obscure to participants and that the discomfort is readily misattributed to whatever plausible source is made salient (e.g., Zanna & Cooper, 1974). If the discomfort can be so easily dissociated from the source, then it is plausible that expressing consonance in any salient domain could attenuate the free floating dissonance discomfort. A second possible explanation for how epistemic compensation works may be that emphasizing conviction and consensus about important social issues may help to trivialize the importance of the inconsistent cognitions in other domains (Simon et al., 1995).[57] Future research will need to sort out the relative contributions of these two possible mechanisms — reduced simultaneous accessibility and trivialization.

Terror management theory. The present program of research is built on the pioneering efforts of terror management researchers who have conducted over 40 experiments demonstrating that reminding people about their mortality makes them more rigid and extreme in their social judgments and behaviors relating to attitudinally consistent and inconsistent others (Greenberg et al., 1997). Three categories of new findings in the present research provide the basis for a revised perspective on terror management theory.

First, two manipulations with theoretical links to identity confrontation, but no connection to mortality salience, caused identical and related outcomes to those induced by

[57]It may also be possible that the dissonance reducing effects of trivialization (Simon et al., 1995) are mediated by accessibility of the inconsistent cognitions (McGregor et al., 1998).

mortality salience in terror management research. This finding contradicts the terror management theory claim that mortality salience is a necessary condition for the outcomes to occur. Second, the present research replicated the terror management finding that mortality salience does not influence conventional positive and negative affect measures. All identity confrontation manipulations (including mortality salience), however, did cause elevations in dissonance discomfort. This suggests that the "terror" associated with mortality salience may not be of creaturely annihilation per se, but instead may be of cognitive inconsistency and meaninglessness.[58] Third, Experiments 4 and 5 in the present research found that mortality salience and the other identity confrontation manipulations are capable of causing a variety of outcome measures not necessarily linked to consensual cultural values (e.g., hardening of the attitudes and the intention to engage in self-prototypical personal projects) but related to consistency among self-elements. This finding challenges the terror management theory contention that mortality salience outcomes represent an attempt to attain symbolic immortality by adhering to a consensual cultural world view that transcends death, and supports a (simpler) identity consolidation interpretation.

Deliberative mindset. The present results also illuminate research on the psychological effects of deliberative mindset. Past research has shown that deliberative mindset (deliberating about the pro's and cons of a personal dilemma) causes dampened mood and lowered self-esteem (Taylor & Gollwitzer, 1995). Taylor and Gollwitzer suggest that this is one reason why people keep themselves "implemental," that is, immersed in the particulars of ongoing goals as opposed to thinking carefully about what goals to pursue. According to Taylor and Gollwitzer, deliberative mindset provides a window of realism for planning and making decisions, but at the cost of feeling bad about oneself (e.g., Alloy & Abramson, 1979).

[58] Indeed, the contention that death-terror is an innate animal fear seems unlikely. The adaptive mechanism that steers animals away from deadly situations is more likely aversion to pain and uncertainty, or other species-specific aversions to concrete threats. The concept of death is an idea, and there is no evidence that ideas can be genetically propagated.

From the perspective of ICT, the desire to remain implemental reflects the identity consolidation strategies of self-worth and distraction. Implemental mindset is associated with elevated self-esteem and mood,[59] probably because it induces "tunnel vision, such that people think about their likely success" (Taylor & Gollwitzer, 1995, p. 225). Priming thoughts of competence and efficacy likely affect self-esteem directly, and perceived goal efficacy is associated with feelings of happiness (McGregor & Little, 1998). Furthermore, along the lines of Baumeister's (1991a) notion of "escaping the self," immersion in the vicissitudes of goal pursuit may also help limit the range of potentially inconsistent self-elements accessible, which could reduce feelings of dissonance. Indeed, Pallak et al. (1967) suggest that "throwing oneself into one's work" may be a common form of dissonance reduction.

The present research suggests that depressed mood and self-esteem may not be the only undesirable outcomes associated with deliberative mindset. The deliberative "window of realism" suggested by Taylor and Gollwitzer may be smeared with defensiveness. In Experiment 4, after completing deliberative mindset materials, participants hardened their attitudes about social issues. Experiment 4 also suggests that if participants had more integrated identities, the discomfort and defensiveness associated with deliberative mindset might be ameliorated. After deliberative mindset manipulations, participants in Experiment 4 who completed a short identity repair exercise no longer experienced dissonance discomfort or defensively hardened their attitudes. This suggests that integration may afford wider windows of benign realism, and perhaps reduce the need for compulsive implementation and its associated positive illusions (Gollwitzer & Kinney, 1989; Taylor & Gollwitzer, 1995).

[59]Taylor and Gollwitzer used a general seven-item mood measure. In the present research, there was typically a significant positive correlation between dissonance and negative affect, and a significant negative correlation between dissonance and positive affect and self-esteem. Deliberative mindset in the present research may have primarily caused dissonance not positive and negative affect or self esteem because the cell sizes in the present research were about half that used by Taylor and Gollwitzer. Thus, their mood and self-esteem findings may be secondary effects arising from the primary influence of deliberative mindset on dissonance (not measured in their research).

Time perspective. The inability or unwillingness to consider long term implications of one's actions and one's future is associated with a wide range of self-regulatory problems and antisocial behaviors (Keough, Zimbardo, & Boyd, in press). Constricted temporal perspective is also associated with depression and the experience of meaninglessness in life (Black, 1973). The present research suggests reasons why individuals might be resistant to broadening their temporal perspective, and hints at a possible therapeutic approach for facilitating temporal extension.

In Experiments 1 and 2, temporal extension caused increased feelings of dissonance discomfort. According to ICT, this occurs because a broader range of potentially inconsistent self-elements than usual is made accessible. This explanation is corroborated by recent research on temporal perspective indicating that long term thinking raises consideration of alternative possible courses of action as opposed to short term thinking which focuses individuals on the specifics of a single course of action (Gilovich & Medvec, 1994; Liberman & Trope, 1998). Based on this interpretation, it is conceivable that interventions aimed at helping individuals construct integrated identities may facilitate willingness to consider a broader time frame.

Authoritarianism. *For the fascist potential to change, or even to be held in check, there must be an increase in people's capacity to see themselves and to be themselves (Adorno et al., 1950, p. 975).*

In his 1941 book, Escape from Freedom, Fromm developed a theory about why Nazism was thriving in Germany, and why fascism was gaining popularity in Europe. The essence of Fromm's theory was that when people have confused identities, choice is unbearable, and so people are forced to turn to rigid, conformist, and often cruel patterns of thinking and acting. In lieu of knowing what to value, people simply value authority, and therefore hate and derogate minority and disadvantaged groups. This theme also predominated in the Adorno et. al classic on the authoritarian personality.

According to Adorno et al., authoritarianism emerges when children are raised in strict, rule-bound environments that do not allow for the vulnerable process of self-discovery. In lieu of a budding identity to guide one's behavior, one relies on black and white thinking and the rigid dictates of authority figures and dominant social groups. According to Fromm, and Adorno et al, authoritarianism is the antithesis of identity integration.

These developmental assumptions are difficult to assess empirically. Even given the link between authoritarian parents and authoritarian children (Rohan & Zanna, 1996) it is possible that the association is guided by a genetic personality disposition shared by the parents and the child, such as Personal Need for Structure (Schaller et al., 1995). The present series of experiments provides some evidence for the situational assumptions about the development of authoritarian personality (Adorno et al., 1950).

In Experiment 1, the highlighting of participants' identity inconsistencies led to more severe punishment recommendations for a social deviant; in Experiment 2 it led to extremism and intergroup bias; and in Experiment 4 it led to closed mindedness. All of these outcomes are central to the definition of authoritarianism (Altemeyer, 1994). Indeed, past research has found that mortality salience effects are most pronounced for authoritarian individuals (Greenberg et al., 1990). The contention that identity integration is the antithesis of authoritarianism is further supported in the present research by the Experiment 4 finding that after completing an identity repair exercise that made their identities seem consolidated, participants no longer responded to the identity confrontation manipulation with defensive closed-mindedness.

<u>Clinical Implications</u>

The present research indicates that depending on what is made salient after identity confrontation interventions, participants are capable of responding with increased defensiveness and rigidity, or with integration efforts. Experiments 1, 2, and 4 highlight the potential for identity confrontation to cause rigid, defensive (and potentially antisocial) responses that would appear to move participants away from, rather than toward, identity integration. Presumably, repeatedly responding to identity confrontations with authoritarian expressions could influence one's self-perceptions, and perhaps decrease the likelihood of subsequent integration attempts (Koehler, 1991).

On the other hand, the results of Experiment 5 suggest that identity confrontation interventions, in conjunction with subsequent focus on personal goals, may facilitate spontaneous efforts toward construction of more integrated identities. According to a number of theorists (e.g., McAdams, 1993; Read et al., 1964; Ryff, 1989; Fromm, 1941; Rogers, 1961; Erikson, 1960), identity integration is a hallmark of positive functioning. This position is supported by recent research linking intrapersonal consistency to subjective well-being (McGregor & Little, 1998; Sheldon & Kasser, 1995; Sheldon et al., 1997). The finding in Experiment 4, that identity repair decreased defensive responses, suggests that repeated integration efforts might ultimately eliminate the need to respond defensively to identity confrontations. Given that dissonance discomfort can be so easily misattributed, these results suggest the importance of context in determining whether individuals will respond to identity-confrontations with rigidity or integration.

According to ICT, a number of maladaptive syndromes may be manifestations of over-reliance on a particular identity consolidation strategy. Over-reliance on integration may be associated with ruminative depression (Nolen-Hoecksma, 1991), and may be associated with the desire to foreclose on a rigid and oversimplified identity. An oversimplified identity may be difficult to maintain in the face of multifaceted reality, and could ultimately lead to the same kinds of defensiveness characterized by individuals with positive self-views that are out of touch with reality (Baumeister et al., 1996). Also, though they may help support a feeling of meaning, simplistic and unithematic identities may compromise happiness by impeding attunement to efficacy opportunities in identity-irrelevant domains (McGregor & Little, 1998). Finally, simplistic foreclosed identities may leave individuals vulnerable after failure because "all their eggs are in one basket" (Linville, 1985). Healthy integration likely proceeds according to a steady habit of "moral hygiene" that involves telling the truth, and regular, but not obsessive personal reflection and deliberation.

Narcissism may reflect an over-reliance on the identity consolidation strategy of self-worth. Although some degree of self-esteem may take the sting out of dissonance and facilitate accurate self-reflection and integration (Rogers, 1951; Maslow, 1968; McGregor & Dodgson, 1996), over-reliance on self-worth for identity consolidation may be associated with a number of narcissistic problems including derogation and hostility toward others (e.g., Bushman & Baumeister, 1998; Morf & Rhodewalt, 1994), and compromised personal relationships (Kohut, 1971; Kernberg, 1975).

Closed-mindedness, prejudice, jingoism, and discrimination may represent the identity consolidation strategy of extremism taken too far. Similarly, dependency, inability to leave abusive relationships, and joining gangs and cults may reflect excessive reliance on the identity consolidation strategies of group-identification, relationships, or submission. Xenophobia, and obsessive fears and annoyances may be fueled by misattribution of the discomfort associated with identity confusion. Finally, addiction to food, alcohol, sex, work, or television may be motivated by the desire to escape from a dissonant identity by immersing oneself in concrete and immediate experience (cf. Baumeister, 1991a; Vallacher & Wegner, 1985).

Concluding Comments

According to ICT, the ability for abstract, future oriented thought presents a unique predicament for humans. It supports the adaptive, instrumental advantage of planned action, but presents the potential for paralyzing intrapsychic conflict/ dissonance among imagined action alternatives and among the alternative self-elements that the action alternatives prime or imply. The present article describes eight identity consolidation strategies that individuals might draw upon for the important task of coping with the dissonance inherent in the human condition. The eight strategies are well illustrated by the following analogy of ways that one might work up the courage to walk through unknown woods at night.

One might walk or run fearfully while whistling or singing to distract oneself from the boogie monster (distraction). One might attempt to find someone presumably more powerful, knowledgeable, and authoritative about the ways of the woods to hold one's hand during the trip (submission). One might decide that it is too dangerous a prospect given the prevalence of wild animals, criminals, deviants, and "bad apples" likely to be inhabiting the woods (misattribution). Alternatively, one might remember a path that one took once, and insist that is the only safe way to get through the woods. Any suggestion that there might be other ways would be quite disturbing and would elicit vigorous opposition (extremism). Another approach might be to try to find a group of people with whom to make the trip. Just being with others might help one feel like one was on the right path (group-identification; relationships). Another approach might be to psych oneself up in an attempt to convince oneself of one's invincibility and invulnerability and then to barrel into the darkness with bravado (self-worth). Finally, one might begin by studying the woods to find out that there were no lethal boogeymen or predators there. One might also explore the woods in the daytime, and gradually become familiar with the terrain, how the various paths connected, the pros and cons of the various routes, and the relations among landmarks and features. Gradually one might become quite fond of, and feel quite at home in the woods. Regardless of where one was, and even if one could only see a few feet ahead, one would have one's bearings and know that one could safely reach the desired destination if necessary. Such familiarity would enable a person to peacefully saunter through the woods (integration).

The present thesis provides a theoretical account of how some of the most passionate and perennial human concerns may be seen as instantiations of the above identity consolidation strategies. It is important to acknowledge that at this point, identity consolidation theory is only partially supported empirically, and much future research will be required to substantiate parts of the theory. In particular, as of yet there is no evidence for the link between primary conflict and secondary conflict — that is, there is no evidence that concrete choices necessarily prime self-elements. Even if future research determines that concrete choices prime self-elements, it may not be because the presence of inconsistent alternatives threatens the individual with paralyzing ambivalence or the threat of self-regulatory collapse. Choice may prime self-elements simply because making choices takes work and is ego-depleting (Baumeister et al., 1998). Future research investigating the link between choice and secondary conflict would help to illuminate these questions.

The part of the model with the most empirical support is the link between identity confrontation and identity consolidation strategies. Five experiments provided evidence that the extremism, group-identification, and integration strategies are spontaneously activated when identity confrontation manipulations expose inconsistent self-elements. Four lines of future research would seem particularly useful for further explicating the link between identity confrontation and identity consolidation.

First, the theory could be further tested by assessing the effect of identity confrontation on the other identity consolidation strategies. The use of behavioral outcomes such as alcohol consumption, gambling, affiliative behavior, conformity, or success strivings would help to establish the external validity of the present findings. In addition to using the identity confrontation manipulation, perceived self-element inconsistency could also be directly manipulated via false-feedback.

Second, the effects of the identity confrontation manipulations could be investigated with implicit measures of self-concept clarity such as confidence and latencies for "me/ not me" judgments of trait adjectives (Campbell, 1990). Such implicit assessments of identity confusion could complement the finding from the present research that identity confrontation manipulations cause dissonance discomfort.

Another potentially fruitful avenue for future research would be to assess the impact of identity consolidation interventions on maladaptive and antisocial responses to identity confrontation in the lab and in the field. For example, according to ICT, if individuals could be helped to construct an integrated identity, they would be less prone to the problems associated with the more rigid identity consolidation strategies. The defensiveness reducing effect of the identity-repair exercise in Experiment 4 provides some provisional support for this prediction. Future research could also address whether, if made to feel like their identities were integrated and consistent, participants would be less likely to self-enhance or distract themselves? Or, if relationships or groups were primed, whether participants would be less inclined to submit to authority or endorse extreme positions about social issues? Also, future research needs to determine whether identity consolidation interventions can have a significant influence on well-being via a reduction in ambient dissonance discomfort. There is recent correlational evidence that life-story coherence is associated with well-being (Baerger & McAdams, 1998).

Fourth, field research would help to determine the applicability of the theory to real-world phenomena. The influence of cultural and naturalistic identity confrontation (e.g., highschool reunions) or consolidation (e.g., writing memoirs, self-help group participation) phenomena could be assessed, on the prevalence of interpersonal and social maladies (such as addiction and prejudice) that have theoretical links to over-reliance on particular identity consolidation strategies.

Identity consolidation theory holds promise for providing an interpretive framework for understanding a variety of social phenomena. It also organizes research in personality and social psychology with an integrative theoretical perspective that is rooted in cognitive dissonance theory and research. It could also be potentially useful for clinical psychologists. Understanding of a number of maladies such as anxiety, depression, hostility, narcissism, dependency, relationship conflict, authoritarian rigidity, closed-mindedness, and addictions could potentially be enlightened by considering the possibility that they are, at least in part, caused or exacerbated by identity consolidation processes.

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Appendix A

Experiment 1 Materials

Attitudes Questionnaire

Please rate each of the following statements. A score of 5 means that you "strongly agree" with the statement. A score of -5 means that you "strongly disagree" with the statement. Please circle one number for each statement.

1. Prostitution is wrong

5 4 3 2 1 0 -1 -2 -3 -4 -5

Strongly Agree ... Strongly Disagree

2. Prostitution is degrading to women.

5 4 3 2 1 0 -1 -2 -3 -4 -5

Strongly Agree ... Strongly Disagree

3. Prostitution is a serious social problem.

5 4 3 2 1 0 -1 -2 -3 -4 -5

Strongly Agree ... Strongly Disagree

4. Prostitution should be legalized.

5 4 3 2 1 0 -1 -2 -3 -4 -5

Strongly Agree ... Strongly Disagree

5. Exchanging sex for money is a completely legitimate business transaction.

5 4 3 2 1 0 -1 -2 -3 -4 -5

Strongly Agree ... Strongly Disagree

6. Most people who don't get ahead just don't have enough willpower.

5 4 3 2 1 0 -1 -2 -3 -4 -5

Strongly Agree ... Strongly Disagree

7. The policy of mandatory work for welfare recipients is a good idea.

5	4	3	2	1	0	-1	-2	-3	-4	-5
Strongly Agree										Strongly Disagree

8. Helping poor people only teaches them to be dependent and lazy.

5	4	3	2	1	0	-1	-2	-3	-4	-5
Strongly Agree										Strongly Disagree

9. Wealthy and gifted people should help less fortunate people.

5	4	3	2	1	0	-1	-2	-3	-4	-5
Strongly Agree										Strongly Disagree

10. I am proud of the Canadian reputation for caring about poor people.

5	4	3	2	1	0	-1	-2	-3	-4	-5
Strongly Agree										Strongly Disagree

The Projective Life Attitudes Assessment (a)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK HAPPENS TO YOU PHYSICALLY AS YOU WATCH TELEVISION.

2. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF WATCHING TELEVISION AROUSES IN YOU.

The Projective Life Attitudes Assessment (b)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EVENTS, PEOPLE AND SCENE (location, sounds, smells etc.) ASSOCIATED WITH AN IMPORTANT, VIVID MEMORY FROM YOUR CHILDHOOD OR ADOLESCENCE.

____

2. JOT DOWN HOW YOU IMAGINE THE PHYSICAL SCENE OF THIS ABOVE MEMORY MIGHT BE DIFFERENT IF YOU REVISITED IT IN THE YEAR 2035 A.D. (please be as specific as possible). HOW DOES IT MAKE YOU FEEL TO IMAGINE THIS?

____

Feelings and Emotions

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now. Use the following scale to record your answers:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____cheerful
_____disgusted
_____attentive
_____bashful
_____sluggish
_____daring
_____surprised
_____strong
_____scornful
_____relaxed
_____irritable
_____delighted
_____inspired
_____fearless
_____amazed
_____sad
_____calm
_____afraid
_____tired
_____disgusted with self

_____shaky
_____happy
_____timid
_____alone
_____alert
_____upset
_____angry
_____bold
_____blue
_____shy
_____active
_____guilty
_____joyful
_____nervous
_____lonely
_____sleepy
_____excited
_____hostile
_____proud
_____jittery

_____lively
_____ashamed
_____at ease
_____scared
_____drowsy
_____angry at self
_____enthusiastic
_____downhearted
_____sheepish
_____distressed
_____blameworthy
_____determined
_____frightened
_____astonished
_____interested
_____loathing
_____confident
_____energetic
_____concentrating
_____dissatisfied with self

Social Judgment Survey

Provided below are details of a pretrial case-brief for a defendant accused of prostitution. This kind of information is used by judges to make decisions about how much bond money accused criminals are required to deposit with the court as insurance that they will appear on their trial date. Often, trial dates are set for several months after the pretrial. If the defendant appears on the set trial date, the bond money is returned to the defendant. If the defendant fails to appear in court on the trial date, the bond is kept by the court as a fine. **Bond money is the court's way of insuring that accused criminals appear in court for their trials.**

Based on the following information, please make a judgment about the amount of bond money the accused should be required to deposit.

Pretrial Information

Arresting Officer: Constable Craig Daly
Arresting Offense: Prostitution
Location Of Crime: Dalhousie St.
Date Of Crime: 11:25 PM, July 3, 1995
Defendant's Name: Candace L. Thompson
Defendant's Occupation: Exotic Dancer
Employment Record: Intermittent
Defendant's Address: 5-77 Crosby St., Ottawa, Ontario
Length Of Residency: Five months
Prior Conviction Record: Prostitution, January 5, 1995
Previous Failures To Appear In Court: None
Comments: Defendant was caught engaging in sex acts in a men's washroom of a fast-food restaurant. Restaurant patrons had reported suspicious sounds to an employee. Three witnesses claimed to have seen the defendant accept money from her client just before entering the washroom.

Bond for prostitution offenses usually ranges from 0 - 999$. Please assign a bond amount for this defendant. $______________.

Appendix B

Experiment 2 Materials

For the following 10 questions, please respond by circling one of the numbers from -4 to +4 below each statement. There are no right or wrong answers. If you're not sure, just give your best guess.

Here is what the numbers mean:

-4	-3	-2	-1	0	1	2	3	4
very strongly disagree	strongly disagree	moderately disagree	slightly disagree	neutral	slightly agree	moderately agree	strongly agree	very strongly agree

1. I feel that I'm a person of worth, at least on an equal basis with others.
   -4 -3 -2 -1 0 1 2 3 4

2. I feel that I have a number of good qualities.
   -4 -3 -2 -1 0 1 2 3 4

3. All in all, I am inclined to feel that I am a failure.
   -4 -3 -2 -1 0 1 2 3 4

4. I am able to do things as well as most other people.
   -4 -3 -2 -1 0 1 2 3 4

5. I feel I do not have much to be proud of.
   -4 -3 -2 -1 0 1 2 3 4

6. I take a positive attitude toward myself.
   -4 -3 -2 -1 0 1 2 3 4

7. On the whole, I am satisfied with myself.
   -4 -3 -2 -1 0 1 2 3 4

8. I wish I could have more respect for myself.
   -4 -3 -2 -1 0 1 2 3 4

9. I certainly feel useless at times.
   -4 -3 -2 -1 0 1 2 3 4

10. At times I think I am no good at all.
    -4 -3 -2 -1 0 1 2 3 4

CSI

Please read the statements below and decide how much you agree with each according to your attitudes, beliefs, & experiences. It is important for you to realize that there are no "right" or "wrong" answers to these questions. People are different, and we are interested in how you feel. Please respond according to the following 6-point scale:

1	2	3	4	5	6
strongly disagree	moderately disagree	slightly disagree	slightly agree	moderately agree	strongly agree

____1. It upsets me to go into a situation without knowing what I can expect from it.

____2. I'm not bothered by things that interrupt my daily routine.

____3. I enjoy having a clear and structured mode of life.

____4 I like to have a place for everything and everything in its place.

____5. I enjoy being spontaneous.

____6. I find that a well-ordered life with regular hours makes my life tedious.

____7. I don't like situations that are uncertain.

____8. I hate to change my plans at the last minute.

____9. I hate to be with people who are unpredictable.

____10. I find that a consistent routine enables me to enjoy life more.

____11. I enjoy the exhilaration of being in unpredictable situations.

____12. I become uncomfortable when the rules in a situation are not clear.

____13. It is important to me that those who know me can predict what I will do.

____14I want to be described by others as a stable, predictable person.

____15. The appearance of consistency is an important part of the image I present to the world.

____16. An important requirement for any friend of mine is personal consistency.

____17. I typically prefer to do things the same way.

____18. I want my close friends to be predictable.

____19. It is important to me that others view me as a stable person.

____20. I make an effort to appear consistent to others.

____21. It doesn't bother me much if my actions are inconsistent.

The Projective Life Attitudes Assessment (1)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK HAPPENS TO YOU PHYSICALLY AS YOU WATCH TELEVISION.

2. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF WATCHING TELEVISION AROUSES IN YOU.

The Projective Life Attitudes Assessment (2)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

2. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO <u>YOUR BODY</u> AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

The Projective Life Attitudes Assessment (3)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EVENTS, PEOPLE AND SCENE (i.e., location, sounds, smells etc.) ASSOCIATED WITH AN IMPORTANT, VIVID MEMORY FROM YOUR CHILDHOOD OR ADOLESCENCE.

2. JOT DOWN HOW YOU IMAGINE THE PHYSICAL SCENE OF THIS ABOVE MEMORY MIGHT BE DIFFERENT IF YOU REVISITED IT IN THE YEAR 2035 A.D. (please be specific). HOW DOES IT MAKE YOU FEEL TO IMAGINE THIS?

SSI

Please read the statements below and decide how much you agree with each according to your attitudes, beliefs, & experiences. It is important for you to realize that there are no "right" or "wrong" answers to these questions. People are different, and we are interested in how you feel. Please respond according to the following 6-point scale:

1	2	3	4	5	6
strongly disagree	moderately disagree	slightly disagree	slightly agree	moderately agree	strongly agree

____ 1. I may struggle with a few decisions, but not very often.

____ 2. Sometimes I become impatient over my indecisiveness.

____ 3. Sometimes I see so many options to a situation that it is really confusing.

____ 4. I can be reluctant to commit myself to something because of the possibility that I might be wrong.

____ 5. I tend to struggle with most decisions.

____ 6. Even after making an important decision, I continue to think about pros and cons to make sure I am not wrong.

____ 7. I prefer situations where I don't have to decide immediately.

____ 8. I rarely doubt that the course of action I have selected will be correct.

____ 9. I tend to continue to evaluate recently made decisions.

____ 10. I wish I didn't worry so much about making errors.

____ 11. Decisions rarely weigh heavily on my shoulders.

____ 12. I find myself reluctant to commit to new ideas but find little comfort in remaining with the tried and true.

____ 13. I'm always trying to figure myself out.

____ 14. Generally , I'm not very aware of myself.

____ 15. I reflect about myself a lot.

____ 16. I'm often the subject of my own fantasies.

____ 17. I never scrutinize myself.

____ 18. I'm generally attentive to my inner feelings.

____ 19. I'm constantly examining my motives.

____ 20. I sometimes have the feeling that I'm off somewhere watching myself.

____ 21. I'm alert to changes in my mood.

____ 22. I'm aware of the way my mind works when I work through a problem.

____ 23. I'm concerned about my style of doing things.

____ 24. I'm concerned about the way I present myself.

____ 25. I'm self conscious about the way I look.

____ 26. I usually worry about making a good impression.

____ 27. One of the last things I do before I leave my house is look in the mirror.

____ 28. I'm concerned about what other people think of me.

____ 29. I'm usually aware of my appearance.

____ 30. My beliefs about myself often conflict with one another.

____ 31. On one day I might have one opinion of myself and on another day I might have a different opinion.

____ 32. I spend a lot of time wondering about what kind of person I really am.

____ 33. Sometimes I feel that I am not really the person that I appear to be.

____ 34. When I think about the kind of person I have been in the past, I'm not sure what I was really like.

____ 35. I seldom experience conflict between the different aspects of my personality.

____ 36. Sometimes I think I know other people better than I know myself.

____ 37. My beliefs about myself seem to change very frequently.

____ 38. If I were asked to describe my personality, my description might be different from one day to another.

____ 39. Even if I wanted to, I don't think I could tell someone what I'm really like.

____ 40. In general, I have a clear sense of who I am and what I am.

____ 41. It is often hard for me to make up my mind about things because I don't really know what I want.

Please circle a number for each adjective to rate how much you feel each emotion right now:

1	2	3	4	5	6	7
not at all	very slight	somewhat	moderate	much	very much	extremely much

1 2 3 4 5 6 7	Bothered		
1 2 3 4 5 6 7	Uneasy	1 2 3 4 5 6 7	Uncomfortable
1 2 3 4 5 6 7	Happy	1 2 3 4 5 6 7	Enjoyment/Fun
1 2 3 4 5 6 7	Depressed/Blue	1 2 3 4 5 6 7	Frustrated
1 2 3 4 5 6 7	Joyful	1 2 3 4 5 6 7	Satisfied
1 2 3 4 5 6 7	Unhappy	1 2 3 4 5 6 7	Worried/Anxious
1 2 3 4 5 6 7	Pleased	1 2 3 4 5 6 7	Anticipating
1 2 3 4 5 6 7	Aroused/Active	1 2 3 4 5 6 7	Angry/Hostile
1 2 3 4 5 6 7	Sociable/Friendly	1 2 3 4 5 6 7	Self-confident
1 2 3 4 5 6 7	Bored	1 2 3 4 5 6 7	Excited
1 2 3 4 5 6 7	Tired	1 2 3 4 5 6 7	Calm

ESSAY EVALUATIONS

On the following pages are two essays written on the topic of University, by two University of Waterloo students. Please read each essay carefully, and then answer the questions immediately following them to evaluate them.

The first thing I noticed when I came to the University of Waterloo, was the incredible richness of opportunity for learning. I'm surrounded by opportunities to meet interesting people, do interesting events, take interesting courses. I have the sense that I will remember my experiences here at University for the rest of my life, and that the skills I learn will make me a much better person. When I look at my friends who didn't go to University, it seems that most of them are just hanging around in their home town, doing dead-end jobs, and complaining that they are bored. With the university resources I have at my disposal, I feel like I can pretty much do anything I choose with my life. My options are limitless. Although my time so far definitely hasn't been easy here at Waterloo, I think that University life, and especially at the University of Waterloo, is truly a great experience, and I don't regret my decision to come here at all.

1. How much do you think you would like this person?

10	9	8	7	6	5	4	3	2	1	0
very much										not at all

2. How intelligent do you think this person is?

10	9	8	7	6	5	4	3	2	1	0
extremely intelligent										not at all intelligent

3. How knowledgeable do you think this person is?

10	9	8	7	6	5	4	3	2	1	0
extremely knowledgeable										not at all knowledgeable

4. How much do you agree with this person's opinion of University?

10	9	8	7	6	5	4	3	2	1	0
agreed very much										didn't agree at all

5. From your perspective, how true do you think this person's opinion of University is?

extremely true — not at all true

When I first came to the University of Waterloo, I thought it was going to be a chance for me to learn a lot of important skills and grow as a person. But I soon realized that it isn't like this at all, and that I made a stupid decision to come here. I think now that University is a waste of time, and that I'd learn more and earn more success if I just started working right away to get experienced in the real world. University makes people to believe what they are told and to memorize useless information. It actually makes people less able to do good work in their jobs eventually. The only reason people think University is a good idea, is because rich people can afford to go to University and rich people also get better jobs, because they have money and connections. University students in fact are spoiled and lazy and want everything handed to them. University is an "old boys club" and "ivory tower" that is completely out of touch with reality and what young people really need to be successful in life. People think University is a good idea, but its really a big waste of time.

1. How much do you think you would like this person?

10	9	8	7	6	5	4	3	2	1	0
very much										not at all

2. How intelligent do you think this person is?

10	9	8	7	6	5	4	3	2	1	0
extremely intelligent										not at all intelligent

3. How knowledgeable do you think this person is?

10	9	8	7	6	5	4	3	2	1	0
extremely knowledgeable										not at all knowledgeable

4. How much do you agree with this person's opinion of University?

10	9	8	7	6	5	4	3	2	1	0
agreed very much										didn't agree at all

5. From your perspective, how true do you think this person's opinion of University is?

10	9	8	7	6	5	4	3	2	1	0
extremely true										not at all true

Appendix C

Experiment 3 Materials

The Projective Life Attitudes Assessment (1)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK HAPPENS TO YOU PHYSICALLY AS YOU WATCH TELEVISION.

____

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2. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF WATCHING TELEVISION AROUSES IN YOU.

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The Projective Life Attitudes Assessment (2)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

2. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO YOUR BODY AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

The Projective Life Attitudes Assessment (3)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EVENTS, PEOPLE AND SCENE (i.e., location, sounds, smells etc.) ASSOCIATED WITH AN IMPORTANT, VIVID MEMORY FROM YOUR CHILDHOOD OR ADOLESCENCE.

____

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____

2. JOT DOWN HOW YOU IMAGINE THE <u>PHYSICAL SCENE</u> OF THIS ABOVE MEMORY MIGHT BE DIFFERENT IF YOU REVISITED IT IN THE YEAR 2035 A.D. (please be specific). HOW DOES IT MAKE YOU FEEL TO IMAGINE THIS?

____

____

____

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____

READING COMPREHENSION TEST

Please read the following passage — you'll be asked five questions to test your comprehension after you are finished.

1. What was the name of the person Plato was talking to ? ________________

2. What are causing the shadows on the cave wall? ________________________
____

3. Why are inhabitants of the cave unable to turn their heads? ______________
____

4. What happens to people who venture outside the cave for the first time?
____

5. What happens to people who return to the cave after looking at the sun?
____

6. Did you read the whole passage? ______________________________

7. Were you too rushed to read it well? ____________________________

Word Completion Exercise

USING THE SPACES PROVIDED, PLEASE COMPLETE THE FOLLOWING WORD FRAGMENTS WITH THE FIRST WORD THAT COMES TO YOUR MIND.

TI __ __	SHI __ __	COR__ __ __
STI __ __	CLO__ __	DRI__ __
TR __ __	SK U__ __	CHAN __ __
YE __ __	BE__ __	GRA__ __
COFF __ __	LI __ __	TR __ __
FO __ __	DE __ __	DA __ __

Appendix D

Experiment 4 Materials

RSE

For the following 10 questions, please respond by circling one of the numbers from -4 to +4 below each statement. There are no right or wrong answers. If you're not sure, just give your best guess.

Here is what the numbers mean:

- 4	- 3	- 2	- 1	0	1	2	3	4
very strongly disagree	strongly disagree	moderately disagree	slightly disagree	neutral	slightly agree	moderately agree	strongly agree	very strongly agree

1. I feel that I'm a person of worth, at least on an equal basis with others.
   -4 -3 -2 -1 0 1 2 3 4

2. I feel that I have a number of good qualities.
   -4 -3 -2 -1 0 1 2 3 4

3. All in all, I am inclined to feel that I am a failure.
   -4 -3 -2 -1 0 1 2 3 4

4. I am able to do things as well as most other people.
   -4 -3 -2 -1 0 1 2 3 4

5. I feel I do not have much to be proud of.
   -4 -3 -2 -1 0 1 2 3 4

6. I take a positive attitude toward myself.
   -4 -3 -2 -1 0 1 2 3 4

7. On the whole, I am satisfied with myself.
   -4 -3 -2 -1 0 1 2 3 4

8. I wish I could have more respect for myself.
   -4 -3 -2 -1 0 1 2 3 4

9. I certainly feel useless at times.
   -4 -3 -2 -1 0 1 2 3 4

10. At times I think I am no good at all.
    -4 -3 -2 -1 0 1 2 3 4

CSI

Please read the statements below and decide how much you agree with each according to your attitudes, beliefs, & experiences. It is important for you to realize that there are no "right" or "wrong" answers to these questions. People are different, and we are interested in how you feel. Please respond according to the following 6-point scale:

1	2	3	4	5	6
strongly disagree	moderately disagree	slightly disagree	slightly agree	moderately agree	strongly agree

____1. It upsets me to go into a situation without knowing what I can expect from it.

____2. I'm not bothered by things that interrupt my daily routine.

____3. I enjoy having a clear and structured mode of life.

____4 I like to have a place for everything and everything in its place.

____5. I enjoy being spontaneous.

____6. I find that a well-ordered life with regular hours makes my life tedious.

____7. I don't like situations that are uncertain.

____8. I hate to change my plans at the last minute.

____9. I hate to be with people who are unpredictable.

____10. I find that a consistent routine enables me to enjoy life more.

____11. I enjoy the exhilaration of being in unpredictable situations.

____12. I become uncomfortable when the rules in a situation are not clear.

Own Dilemma

Please try to think of an unresolved personal dilemma in your life. Such predicaments are characterized by the fact that you are not yet sure whether to take action in order to change things. You feel very uncertain and you ask yourself whether it might not be better to leave things as they are. In other words, you haven't decided to take action, but you haven't decided against it either. Please do not select a problem that is easy to solve, or that you have already made your mind up about. On the other hand, do not select one for which a solution will likely never be reached.
The problem should be complex and should take the form of "Should I . . . or not?"

Please name the dilemma:____
____

In a word or two, please summarize your primary general value associated with <u>changing</u> the way things are____________________________.

In a word or two, please summarize your primary general value associated with <u>not changing</u>, and leaving things the way they are____________________________.

Part A:
With regard to the above dilemma, please take a few minutes to list possible immediate consequences, positive and negative, of making a decision that <u>involves change</u>.

Now please try to think of and list any possible long-term consequences that could result from the immediate consequences you listed above.

Finally, beside each consequence listed above, rate the percent certainty of occurrence.

Part B:

Please list the expected difficulties that might arise in trying to implement a decision involving change.

Part C:

Please take a few minutes to list possible immediate consequences, positive and negative, of <u>leaving things the way they are</u> and <u>not</u> making a change.

Now please try to think of and list any possible long-term consequences that could ensue from the immediate consequences you listed above.

Finally, beside each consequence listed above, please rate the certainty of occurrence in percentage.

Friend's Dilemma

Please try to think of an unresolved personal dilemma in the life of a friend or acquaintance of yours. Choose a predicament characterized by the fact that your friend is not yet sure whether to take action in order to change things – but you feel like you know what would best for your friend to do. Your friend feels very uncertain and asks him or herself whether it might not be better to leave things as they are. In other words, your friend hasn't decided to take action, but hasn't decided against it either. The friends' problem that you choose should be complex and should take the form of "Should I . . . or not?"

Please name the dilemma that your friend faces:________________________________
____.

In a word or two, please summarize what your friend thinks is the primary general value associated with changing the way things are________________________________.

In a word or two, please summarize what your friend thinks is the primary general value associated with not changing, and leaving things the way they are__________________.

Part A:

With regard to the above dilemma of your friend, please take a few minutes to list possible immediate consequences, positive and negative, of his or her making a decision that involves change.

Now please try to think of and list any possible long-term consequences for your friend that could result from the immediate consequences you listed above.

Finally, beside each consequence listed above, rate the percent certainty of occurrence.

Part B:

Please list the expected difficulties that your friend might face in trying to implement a decision involving change.

Part C:

Please take a few minutes to list possible immediate consequences for your friend, positive and negative, of <u>leaving things the way they are</u> and <u>not</u> making a change.

Now please try to think of and list any possible long-term consequences for your friend that could ensue from the immediate consequences you listed above.

Finally, beside each consequence listed above, please rate the certainty of occurrence in percentage.

SCC

This scale consists of a number of items pertaining to how you feel right now. Read each statement and then mark the appropriate answer in the space next to that statement. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_________1. My beliefs about myself conflict with one another

_________2. I wonder about what kind of person I really am.

_________3. I feel that I am not really the person that I appear to be.

_________4. The different aspects of my personality are in conflict.

_________5. I know other people better than I know myself.

_________6. I don't think I could tell someone what I am really like, even if I wanted to.

_________7. I have a clear sense of the kind of person I am.

Values Exercise (highest)

Please circle the value from the list below that is most important to you.

business/economics/making money

social life/relationships

art/music/theatre

social action/helping others

science/pursuit of knowledge

religion/spirituality

Write a paragraph that describes why this value is important to you, and how you have acted consistently with this value in the past and plan to act consistently with it in the future.

Values Exercise (lowest)

Please circle the value from the list below that is least important to you.

business/economics/making money

social life/relationships

art/music/theatre

social action/helping others

science/pursuit of knowledge

religion/spirituality

Write a paragraph that describes why this value is important. Do not write a paragraph about why this is not important to you, just write a paragraph about how it may be a valid and important value for some people.

ATTITUDES TOWARD CAPITAL PUNISHMENT

Part A: Please circle the number of the statement below that you <u>agree with most</u>.

1. Capital punishment is not morally right or wrong; it is merely just one method of punishment.
2. A murderer deserves to die.
3. Since capital punishment has not prevented murders, society should abolish it.
4. Capital punishment will do until something better is found.
5. Capital punishment seems to have proven to be a fairly effective deterrent to murder.
6. Rather than execute a murderer society should try to help him or her through treatment.
7. Capital punishment is absolutely never justified.
8. We must have capital punishment for some crimes.
9. Capital punishment is just and necessary.
10. Capital punishment is wrong but it is necessary in our imperfect civilization
12. Capital punishment is justified only for premeditated murder.
13. Capital punishment should be used more often than it is.
14. Capital punishment is not necessary in modern civilizations.
15. Life imprisonment is more effective than capital punishment.

Part B:

Please refer to the statement about capital punishment that you circled above, and respond to the following questions by circling a number on the ratings scale.

1. How firmly do you believe in this position?

10 9 8 7 6 5 4 3 2 1 0

very firmly ... not at all firmly

2. How willing would you be to defend this position in an argument?

10 9 8 7 6 5 4 3 2 1 0

very willing ... not at all willing

3. How strong is your conviction about this position?

10 9 8 7 6 5 4 3 2 1 0

very strong ... not at all strong

4. How certain do you feel about this position?

10 9 8 7 6 5 4 3 2 1 0

very certain ... not at all certain

5. What percentage of the population do you think would agree most with the statement that you circled?

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

6. What percentage of the population do you think would agree with the statement that you circled?

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

Part C:

To what extent do each of the following statements characterize your attitude toward capital punishment (use the following scale and mark a number to the left of each statement in the answer blank provided).

-5	-4	-3	-2	-1	0	1	2	3	4	5
extremely uncharacteristic of my attitude									extremely characteristic of my attitude	

_________I find myself feeling "torn" between the two sides of the issue of capital punishment; my feelings go in both directions only.

_________My head and my heart seem to be in disagreement on the issue of capital punishment.

_________I have strong mixed emotions both for and against capital punishment, all at the same time.

_________My "gut" feeling about capital punishment lines up perfectly with what my rational intellect tells me to do.

ATTITUDES TOWARD ABORTION

Part A: Please circle the number of the statement below that you agree with most.

1. Abortion should be legal, but with many restrictions.
2. Abortion should be legal and readily accessible to people requesting it.
3. The benefits of abortion should be publicized by the government.
4. Abortion should have to be approved by a panel of medical experts who agree to its necessity.
5. I find abortion morally repugnant.
6. Legal abortion should be allowed only in case of rape or incest, thus severely limiting the number of abortions performed.
7. Abortion should be illegal except in life-threatening situations.
8. A legal abortion should be available during the first 3 months of a pregnancy.
9. The law should allow the woman to control her own body by permitting a legal abortion.
10. To protect the rights of the unborn baby, legal abortion should never be available.
11. Abortion should be legal, but with a few restrictions.
12. Abortions should be legal only if childbirth could impair the woman's health, thus somewhat limiting the number of abortions performed.
13. A legal abortion should be available during the first 6 months of pregnancy, but after that time, only if the woman's life or health would be endangered by a birth.
14. It is difficult to decide whether the rights of the unborn or the woman are more important in formulating laws regarding abortion.
15. Abortion on demand and paid by OHIP should be guaranteed by law to any woman when she asks for it; without this protection, she is a slave to the state through compulsory pregnancy.

Part B:

Please refer to the statement about abortion that you circled above, and respond to the following questions by circling a number on the ratings scale.

1. How firmly do you believe in this position?

10	9	8	7	6	5	4	3	2	1	0
very firmly										not at all firmly

2. How willing would you be to defend this position in an argument?

10	9	8	7	6	5	4	3	2	1	0
very willing										not at all willing

3. How strong is your conviction about this position?

10	9	8	7	6	5	4	3	2	1	0
very strong										not at all strong

4. How certain do you feel about this position?

10	9	8	7	6	5	4	3	2	1	0
very certain										not at all certain

5. What percentage of the population do you think would <u>agree most</u> with the statement that you circled?

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

6. What percentage of the population do you think would <u>agree</u> with the statement that you circled?

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

Part C:

To what extent do each of the following statements characterize your attitude toward abortion (use the following scale and mark a number to the left of each statement in the answer blank provided).

-5	-4	-3	-2	-1	0	1	2	3	4	5
extremely uncharacteristic of my attitude									extremely characteristic of my attitude	

_________I find myself feeling "torn" between the two sides of the issue of abortion; my feelings go in both directions.

_________My head and my heart seem to be in disagreement on the issue of abortion.

_________I have strong mixed emotions both for and against abortion, all at the same time.

_________My "gut" feeling about abortion lines up perfectly with what my rational intellect tells me to do.

POLITICIANS' ATTITUDES TOWARD CAPITAL PUNISHMENT

Part A: Please circle the number of the statement below that you think <u>most politicians</u> would agree with most.

1. Capital punishment is not morally right or wrong; it is merely just one method of punishment.
2. A murderer deserves to die.
3. Since capital punishment has not prevented murders, society should abolish it.
4. Capital punishment will do until something better is found.
5. Capital punishment seems to have proven to be a fairly effective deterrent to murder.
6. Rather than execute a murderer society should try to help him or her through treatment.
7. Capital punishment is absolutely never justified.
8. We must have capital punishment for some crimes.
9. Capital punishment is just and necessary.
10. Capital punishment is wrong but it is necessary in our imperfect civilization
12. Capital punishment is justified only for premeditated murder.
13. Capital punishment should be used more often than it is.
14. Capital punishment is not necessary in modern civilizations.
15. Life imprisonment is more effective than capital punishment.

Part B:

Please refer to the statement about capital punishment that you circled above, and respond to the following questions by circling a number on the ratings scale.

1. How firmly would most politicians believe in this position?

10	9	8	7	6	5	4	3	2	1	0
very firmly										not at all firmly

2. How willing would most politicians be to defend this position in an argument?

10	9	8	7	6	5	4	3	2	1	0
very willing										not at all willing

3. How strong would most politicians conviction be about this position?

10	9	8	7	6	5	4	3	2	1	0
very strong										not at all strong

4. How certain would most politicians feel about this position?

10	9	8	7	6	5	4	3	2	1	0
very certain										not at all certain

Part C:

To what extent do you think each of the following statements would characterize <u>most politicians' attitude</u> toward capital punishment (use the following scale and mark a number to the left of each statement in the answer blank provided).

-5	-4	-3	-2	-1	0	1	2	3	4	5
extremely uncharacteristic of most politicians' attitude										extremely characteristic of most politicians' attitude

_________I feel "torn" between the two sides of the issue of capital punishment; my feelings go in both directions.

_________My head and heart are in disagreement on the issue of capital punishment.

_________I have strong mixed emotions both for and against capital punishment, all at the same time.

_________My "gut" feeling about capital punishment lines up perfectly with what my rational intellect tells me to do.

POLITICIANS' ATTITUDES TOWARD ABORTION

Part A: Please circle the number of the statement below that you think <u>most politicians</u> would agree with most.

1. Abortion should be legal, but with many restrictions.
2. Abortion should be legal and readily accessible to people requesting it.
3. The benefits of abortion should be publicized by the government.
4. Abortion should have to be approved by a panel of medical experts who agree to its necessity.
5. I find abortion morally repugnant.
6. Legal abortion should be allowed only in case of rape or incest, thus severely limiting the number of abortions performed.
7. Abortion should be illegal except in life-threatening situations.
8. A legal abortion should be available during the first 3 months of a pregnancy.
9. The law should allow the woman to control her own body by permitting a legal abortion.
10. To protect the rights of the unborn baby, legal abortion should never be available.
11. Abortion should be legal, but with a few restrictions.
12. Abortions should be legal only if childbirth could impair the woman's health, thus somewhat limiting the number of abortions performed.
13. A legal abortion should be available during the first 6 months of pregnancy, but after that time, only if the woman's life or health would be endangered by a birth.
14. It is difficult to decide whether the rights of the unborn or the woman are more important in formulating laws regarding abortion.
15. Abortion on demand and paid by OHIP should be guaranteed by law to any woman when she asks for it; without this protection, she is a slave to the state through compulsory pregnancy.

Part B:

Please refer to the statement about abortion that you circled above, and respond to the following questions by circling a number on the ratings scale.

1. How firmly would most politicians believe in this position?

10	9	8	7	6	5	4	3	2	1	0
very firmly										not at all firmly

2. How willing would most politicians be to defend this position in an argument?

10	9	8	7	6	5	4	3	2	1	0
very willing										not at all willing

3. How strong would most politicians conviction be about this position?

10	9	8	7	6	5	4	3	2	1	0
very strong										not at all strong

4. How certain would most politicians feel about this position?

10	9	8	7	6	5	4	3	2	1	0
very certain										not at all certain

Part C:

To what extent do each of the following statements characterize <u>most politicians'</u> attitude toward abortion (use the following scale and mark a number to the left of each statement in the answer blank provided).

-5	-4	-3	-2	-1	0	1	2	3	4	5
extremely uncharacteristic of most politicians' attitude									extremely characteristic of most politicians' attitude	

_________I find myself feeling "torn" between the two sides of the issue of abortion; my feelings go in both directions.

_________My head and my heart seem to be in disagreement on the issue of abortion.

_________I have strong mixed emotions both for and against abortion, all at the same time.

_________My "gut" feeling about abortion lines up perfectly with what my rational intellect tells me to do.

Current Feelings

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____interested	_____irritable	_____proud
_____mixed	_____contradictory	_____jumbled
_____distressed	_____distractible	_____afraid
_____consistent	_____harmonious	_____uniform
_____uneasy	_____ashamed	_____uncomfortable
_____rebellious	_____unclear	_____meaningful
_____upset	_____inspired	_____alert
_____torn	_____of two minds	_____conflicted
_____strong	_____nervous	_____indecisive
_____bothered	_____muddled	_____determined
_____scared	_____attentive	_____guitly
_____preoccupied	_____restless	_____chaotic
_____hostile	_____jittery	_____enthusiastic
_____confused	_____active	_____excited
_____unsure of self or goals	_____confused about identity	_____distractible

Current Thoughts

This is a questionnaire designed to measure what you are thinking at this moment. There is, of course, no right answer for any statement. The best answer is what you feel is true of yourself at this moment. Be sure to answer all of the items, even if you are not certain of the best answer. Again, answer these questions as they are true for you right now. Each item is scored on the following scale:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

______1. I feel confident about my abilities.
______2. I am worried about whether I am regarded as a success or failure.
______3. I feel satisfied with the way my body looks right now.
______4. I feel frustrated or rattled about my performance.
______5. I feel that I am having trouble understanding things that I read.
______6. I feel that others respect and admire me.
______7. I am dissatisfied with my weight.
______8. I feel self-conscious.
______9. I feel as smart as others.
______10. I feel displeased with myself.
______11. I feel good about myself.
______12. I am pleased with my appearance right now.
______13. I am worried about what other people think of me.
______14. I feel confident that I understand things.
______15. I feel inferior to others at this moment.
______16. I feel unattractive.
______17. I feel concerned about the impression I am making.
______18. I feel that I have less scholastic ability right now than others.
______19. I feel like I am not doing well.
______20. I am worried about looking foolish.

Appendix E

Experiment 5 Materials

The Projective Life Attitudes Assessment (1)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK HAPPENS TO YOU PHYSICALLY AS YOU WATCH TELEVISION.

2. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF WATCHING TELEVISION AROUSES IN YOU.

The Projective Life Attitudes Assessment (2)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

2. PLEASE JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO <u>YOUR BODY</u> AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

The Projective Life Attitudes Assessment (3)

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EVENTS, PEOPLE AND SCENE (i.e., location, sounds, smells etc.) ASSOCIATED WITH AN IMPORTANT, VIVID MEMORY FROM YOUR CHILDHOOD OR ADOLESCENCE.

2. JOT DOWN HOW YOU IMAGINE THE PHYSICAL SCENE OF THIS ABOVE MEMORY MIGHT BE DIFFERENT IF YOU REVISITED IT IN THE YEAR 2035 A.D. (please be specific). HOW DOES IT MAKE YOU FEEL TO IMAGINE THIS?

Feelings and Emotions

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now. Use the following scale to record your answers:

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____cheerful	_____shaky	_____lively
_____disgusted	_____happy	_____ashamed
_____attentive	_____timid	_____at ease
_____bashful	_____alone	_____scared
_____sluggish	_____alert	_____drowsy
_____daring	_____upset	_____angry at self
_____surprised	_____angry	_____enthusiastic
_____strong	_____bold	_____downhearted
_____scornful	_____blue	_____sheepish
_____relaxed	_____shy	_____distressed
_____irritable	_____active	_____blameworthy
_____delighted	_____guilty	_____determined
_____inspired	_____joyful	_____frightened
_____fearless	_____nervous	_____astonished
_____amazed	_____lonely	_____interested
_____sad	_____sleepy	_____loathing
_____calm	_____excited	_____confident
_____afraid	_____hostile	_____energetic
_____tired	_____proud	_____concentrating
_____disgusted with self	_____jittery	_____dissatisfied with self

PERSONAL GOALS

We are interested in the personal goals that characterize your life. Most of us have a number of these goals at any given time that we think about, plan for, and try to attain or accomplish. They may be positive or negative, that is, they may be about something that is typically approached or sought after or about something that is avoided. Here are some examples of such goals that people have listed in the past:

try to be physically attractive
seek new and exciting experiences
try to avoid being noticed by others
earn as much money as possible
get A's in all my courses
help Gary get along better with others.
make my parents proud of me
try to stop fighting in my relationship
clarify my religious beliefs.
avoid being dependent on my boyfriend
try to avoid putting on weight
help and be kind to people
stay on top of house chores

We would appreciate it if you could begin by thinking of and writing down in the next ten minutes as many of your personal goals as you can -- remember they need not be formal or important ones - although they may be. We are interested in any of the kinds of goals you anticipate trying to accomplish in the future, regardless of what they may be.

List of Goals

Go ahead and write down as many as you can in ten minutes (please write as clearly as you can).

Completing the Matrix

Now, please copy the goals in as brief a form as possible on to the matrix on the next page. Just make your description long enough to keep each goal clearly in your mind. As you can see, there is space for 10 goals. If your initial list contains more than ten, select the ten that as a set, are most representative of the kind of person that you are. If you wrote down fewer than ten, see if you can think of some more, or break down some of those you listed into several subgoals. It is important for everyone to try to fill in ten goals.

Once you have done this, please rate each of your goals using **any** number from 0 to 10 on the 14 dimensions listed on the next page. Most people find it easiest to rate all ten goals on one dimension at a time, for example, rate each goal on "importance", then proceed to rate each goal on "fun" and so on. If any of the descriptions or instructions I have used are not clear, or if you find some parts to be confusing, please be sure to ask me for clarification. Thanks.

Goals Matrix

Personal Goals	1 Importance	2 Fun	3 Togetherness	4 Self benefit	5 Value-congruency	6 Others' benefit	7 Pleasure	8 Self-identity	9 Self-worth	10 Big picture
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

1. Importance: How important is each goal to you at the present time? (Use 10 if the goal is very important to you and 0 if it is not at all important to you).

2. Fun: Some goals are intrinsically fun, whimsical or delightful. How much fun is each goal for you? (Use 10 if it is extremely fun and 0 if it is not fun at all).

3. Togetherness: To what extent is each goal oriented toward a sense of togetherness, harmony and/or communion with other people or your environment? (Use 10 if the goal is extremely togetherness oriented and 0 if it is not togetherness oriented at all).

4. Self benefit: To what extent is each goal oriented toward your own benefit or well-being? (Use 10 if it is highly oriented toward your own benefit and 0 if it is not self-beneficial at all).

5. Value Congruency: To what extent is each goal consistent with the values which guide your life? (use 10 if a goal is totally in line with your values and 0 if a goal is totally against your values).

6. Others' benefit: To what extent is each goal oriented toward the benefit or well-being of others? (Use 10 if it is highly oriented toward the benefit of others and 0 if it is not oriented toward others' benefit at all).

7. Pleasure: To what extent is each goal oriented toward pleasure, i.e., comfortable, relaxing, self-indulgent or hedonistic? (Use 10 if very pleasurable and 0 if not pleasurable at all).

8. Self-Identity: Most of us have some goals that are "really us", and some others that we don't really feel "ourselves" when doing. To what extent does each of your goals feel distinctly "you" -- like a personal trademark - as opposed to being quite alien to you? (use 10 if you really identify with the goal i.e. if it is "really you" and 0 if the goal is decidedly alien i.e."really not you").

9. Self-Worth: To what extent is each goal oriented toward increasing or maintaining your sense of self-worth? (use 10 if it is highly oriented toward self-worth and 0 if it is not oriented toward self-worth at all).

10. Big picture Imagine reflecting on each goal from your deathbed. How important do you think each would seem from that perspective? (Use 10 if it would seem very important and 0 if it would seem not at all important).

Appendix F

Experiment 5 Follow-Up Materials

Project Elaboration

In session-one, several days ago, you completed an exercise in which you rated ten of your personal projects on a number of dimensions. For this exercise, we have randomly selected two of them, and would like you to tell us more about why you are doing them. In the space provided, please describe why you are doing the project and what it means to you in your life.

1. I am doing my ______________________________ project because______

____

____

____

____

____

____

Some projects contribute to a sense of "meaning in life" while others feel meaningless. How personally meaningful is this project? (10 = extremely meaningful, 0 = not meaningful at all.)

Please circle a number to rate how meaningful this project is to you. 0 1 2 3 4 5 6 7 8 9 10

How important to you is this project at the present time? (10 = extremely important, 0 = not important at all.)

0 1 2 3 4 5 6 7 8 9 10

2. I am doing my ______________________________ project because______

____

____

____

____

____

____

Some projects contribute to a sense of "meaning in life" while others feel meaningless. How personally meaningful is this project? (10 = extremely meaningful, 0 = not meaningful at all.)

Please circle a number to rate how meaningful this project is to you. 0 1 2 3 4 5 6 7 8 9 10

How important to you is this project at the present time? (10 = extremely important, 0 = not important at all.)

0 1 2 3 4 5 6 7 8 9 10

Appendix G

Sample Temporal-Extension Exercise Responses from Experiments 1, 2, 3, and 5

<u>Sample 1</u>

"When I was two years old, my family went to Jasper National Park in Alberta. I get this flashback of a scene. I see the mountains (rock) all around me and I am surrounded by mountain rams. I remember quite vividly a particular moment where my uncle gets rammed by one of these animals. He was facing the rest of us when he got hit. I could see it coming."

"I know for one thing that the National Park would probably not be as beautiful as it once was. Pollution and acid rain will destroy the woodland forcing the wildlife out. This scares me because even semi-isolated locations such as Jasper cannot escape environmental mass destruction."

<u>Sample 2</u>

"Riding my bike through old construction site with friends. Big pile of dirt. Riding down side of dirt pile towards jump – falling off."

"Same except kids would be wearing bike helmets and have better bikes."

<u>Sample 3</u>

"When my family first came to Canada I was seven years old. There weren't a lot of people of my nationality at that time. I couldn't speak a word of English. When I went to school for the first time, I hated it. The kids looked different from me, the classroom looked different from my classroom in my old country. People spoke tome and couldn't understand a thing. It was very frustrating."

"It's hard to imagine how much a classroom will change. It would probably become more hi-tech with more machinery. More different races of kids."

Sample 4

"In my most vivid memory from childhood I was 9 - 10 and lived beside my best friend. The house was small but perfect. All events associated were happy ones because it was a new house, and also a new beginning for me and my 'new' family. The people were my mom, my step-father and brother and sister. I was very content at this house. because for me it symbolized a new beginning."

"I don't want to imagine this [imagining revisiting the scene in 2035], so I won't. I like to think of this memory as it was. If I revisited it, it wouldn't be the same and this is not what I want. The memory is perfect the way it is, it is stable. That was the only time in my life where everything was stable, for a while. I felt secure and I don't want to change this."

Sample 5

"My family along with a couple other families would take 2 or 3 weeks in the summer to go camping when I was 4-10. We went to a different place every time and we always hiked, fished, canoed (attempted portage), had campfires, went to the beach. I always loved it."

"In the year 2035 this scene probably wouldn't happen because pollution would wreck the beaches, water and fish. Environmental degradation would have destroyed all the beauty and taken all the fun out of being outdoors."

Sample 6

"In the eighth grade I was elected Student Council President of my junior high school. I remember how hard I worked on the election with the help of friends and family. When I won the election my parents had a cake made for me and a little celebration."

"If I revisited this memory in the year 2035 I would have made all the posters using a computer and the students would probably vote electronically. My parents would still hold a celebration. Computers are not machines I enjoy using so I'm glad I won the election when I did."

Appendix H

Sample Mortality-Salience Exercise Responses from Experiments 2, 3, and 5

Sample 1

"I suppose specifics depend on how I eventually die, but I think that as I die, I will probably lose my faculties and senses. Probably, one at a time in no particular order, and once I am dead my hair will grow a little longer. I will excrete feces once, and my body will become stiff and cold. After a while, the rigor mortis will wear off, and I would either slowly decompose or be cremated. (No I'm not morbid; I just read a lot of mystery novels)."

"I'm fairly calm and accepting of the idea, though I'm certainly in no hurry to die. Thinking of the physical occurrences slightly disgusts me. Most upsetting is the thought of leaving loved ones and never playing outside with animals (dogs, horses, etc.) again."

Sample 2

"Gradually function will be lost in each or all organ systems until such a time as no function will remain to enable any life to be maintained (i.e., blood flow, breathing, etc.). Upon death, the organic components of my body will break down over time, leaving only a skeleton. Eventually this too may decompose to dust or fragments of its former self.

"An uncertainty in who, outside my family, will miss me. As well, wondering bout whether I have completed all I was meant to do in my life. In short, uncertainty is the strongest emotion I have."

Sample 3

"All body's chemical processes will slow down and shortly after that, they will stop. Then you will start to decay."

"If it's a gentle death, I do not fear death. But if it is painful and horrific then I fear death. I would prefer if I didn't die at all, and just stayed a young adult. The emotions of close people after my death would also concern me."

Sample 4

"My blood will stop flowing. My skin will become very pale. My muscles will be tense (rigor mortis). All movement in my body will stop. My skin will start to drop."

"I get very scared and sad that life can end so suddenly and everything you've ever worked for and done is for no reason. I get terrified that people will not remember me."

Sample 5

"I would think that my body would generally start to slow down. As I start to die. my muscles will start to become stiffer, my heart will slowdown, my brain will start to shut down — I think the present will no longer be visible, but only past memories will remain. Once I am physically dead, my entire body will cease to function, and I will slowly rot away and decay to nothing"

"The thought of my own death makes me think of how it will affect the people in my life. I am not so much concerned with how I myself will physically feel. I often wonder what people would say, how they would react (upset, indifferent, sad, etc.) and who it would affect the most. I often wonder if I have actually contributed anything to anyone's life, or if my death would go unnoticed."

Sample 6

"As death occurs, the heartbeat stops, and all biological processes will terminate. The brain will not realize it is dead, it just "STOPS" functioning. After this occurs, a higher state of being begins, as the soul will take over where the brain left off. The soul is an entity that will separate from the body and begin its journey towards Heaven, and eternal being."

"Fear — definitely — uncertainty. A type of depression (momentary). I know that there is nothing I can do about the eventuality of the event, and not knowing what will definitely happen gives me an uncertain feeling. Then, a feeling of fear of the unknown."

Appendix I

Sample Television-Salience Exercise Responses from Experiments 2, 3, and 5

Sample 1

"Your mind goes into a state of acceptance. You will not challenge many things. Your body becomes relaxed. So relaxed that it is almost asleep state (REM). Metabolic processes start up (I think). Your body becomes very heavy and weighty. You lack any energy."

"Guilt — should be studying instead of wasting time in front of t.v. Enjoyment of watching a good movie in the evening and getting engrossed in the plot. Disgust — for some of the shows that are on, especially the sitcoms."

Sample 2

"I think that when I watch T.V. my ears pick up the sound at the same time my eyes see movement. As I watch T.V. I try to understand what they are saying by watching the movement of their mouths. My body seems to get relaxed but may jump or become tense whenever a loud noise or weird vision appears."

T.V. makes me relaxed and makes me think that if I am watching T.V. there is nothing else in my way or in my mind. My brain concentrates completely on the action of the T.V."

Sample 3

"I think I tend to slump down in my chair, but I jump up if I'm watching the leafs and they score. Sometimes I even do a dance if it's a big goal. If I'm watching anything else though, I just focus on the T.V., and sit comfortably in my chair, not really having great posture, and not really moving all that much. Back home, I tend to lie down as I watch T.V.. and cover myself with a blanket. I don't move much physically when in this state."

"Well, if I'm watching hickey, I get really emotional and excited, especially when the leafs score. If the game is close, I sometimes get nervous and jittery a lot. For regular television programs, I don't really put too much of myself into it. I just watch to kill time, and if it's funny, I laugh, but then seem after to forget about it. I don't put too much importance into television. Except when hockey's on."

Sample 4

"I often become absorbed in shows (my attention is generally focused only on the T.V.). My breathing and heart rate decrease due to my immobility. I blink less because my eyes are focused on the screen."

"Relief that I have a chance to wind down and relax for a while. Anticipation about what will happen in the next show (e.g., E.R.). Guilt when I may not have the time, and should be doing something else."

Sample 5

"It's as if our brains aren't working, because the side of the brain that's being used is not the literal hemisphere and one's imagination actually decreases the more one watches TV. Our bodies get lazy. We get fat. The sedentary position causes back problems."

"Visually stimulating. Enjoy seeing others experience situations and wonder how I would react. Relaxation. No thinking involved (most times)."

Sample 6

If it is a program that is interesting or thought provoking (educational TV) you probably stay more alert and your brain functions. If it is a comedy, sitcom (non-educational) the brain functions slow and one doesn't think as much. Most television programs put a person into a semi-hypnotic state, staring at a specific point, brain functions slow, heart rate slows and motivation becomes less."

"Certain programs can be sad if it brings back your memories or if it revolves around a sad moment, e.g., death, funerals, sickness. Excitement during programs (sports or action scenes). Frightened if program contains scary scenes or if it contains something in which you have a phobia about. Relaxed — television tends to have a relaxing effect."

Appendix J

Sample Own-Dilemma-Deliberation Exercise Responses from Experiment 4

Sample 1

Dilemma. Should I stay in school or not?

Conflicting values. Freedom vs. gaining stability in the future

Immediate consequences of leaving school. Gaining freedom. Stop schooling from interfering with my education. Allow time to achieve personal goals. Upset relatives. Lose the stability of an education. Miss out on learning great things. Miss the social experiences of school.

Long term consequences of leaving school. Avoid the "rat race." Become who I want to be. have a different vantage point on life. Lose the pride my parents have for me. Lose the stability for a future family.

Possible difficulties associated with change. A large amount of money would be lost and that makes it difficult to start. Taking the first step in any decision is difficult because of the time of instability that follows.

Immediate consequences of staying in school. have a place to live. Have free money. Learn things that I wouldn't without school. Constricting, stifling environment might take its toll. I might miss opportunities.

Long term consequences of staying in school. Long term stability would be gained. Might miss a chance to be more than average.

Sample 2

Dilemma. Should I stay in Math or change to Arts?

Conflicting values. Inspiration vs. finishing what I start

Immediate consequences of switching to Arts. I would feel better about myself. I would have to start over.

Long term consequences of switching to Arts. Could get into drama. Starting over could be a good thing (learn from my previous mistake). Couldn't be a high school math teacher.

Possible difficulties associated with change. What others around me might think. If I'm strong enough to implement change. Complications involved. May end up hurting someone you care about.

Immediate consequences of staying in Math. Wouldn't have to go through trouble of making change. I would continue to feel uninspired like I don't belong in Math.

Long term consequences of staying in Math. Would have satisfaction that I finished what I first set out to do. Would always wonder "what if" I had made the change. Would probably never feel that I belonged in Math.

Sample 3

Dilemma. Should I tell my girlfriend that I am cheating on her or not?

Conflicting values. Truth vs. enjoyment

Immediate consequences of telling her that I am cheating. She leaves me. She forgives me. She wont talk to me. She hurts herself. I feel bad. I feel lonely.

Long term consequences of telling her that I am cheating on her. She never talks to me again. She grows up very bitter. She eats a lot and gets big. She permanently injures herself. We get back together. I feel empty inside.

Possible difficulties associated with change. Can't bring myself to do it. Can't think of a way to do it. I'm afraid to do it. She won't accept it/believe it.

Immediate consequences of not telling her that I am cheating. I have lots of fun. A bit of remorse. Some friends love me for it. Some friends hate me for it. Have to lie every time I talk to my girlfriend. Have to cover my tracks well. Sort of cool dodging the bullet. May back myself into a corner. May get caught.

Long term consequences of not telling her that I am cheating. Remorse builds up. Lying comes easier. Lose friends. I get caught. It gets boring hiding the truth. May end up backing myself in a corner and have to tell her. Get really good at covering my tracks.

Sample 4

Dilemma. Should I break up with my boyfriend or not?

Conflicting values. Personal freedom vs. stability and security.

Immediate consequences of breaking up with him. Jealous thoughts of him with other girls. Insecurity and instability. A sense of freedom to date other people. We have a chance to think about whether we really "belong" together. Depression. Emptiness.

Long term consequences of breaking up with him. We might never get back together. I might end up with someone who doesn't treat me well.

Possible difficulties associated with change. Self-doubt and wondering whether or not I made the right decision. Once the change is made, it can often not be "unmade." Feelings of stress and anxiety.

Immediate consequences of staying with him. Stability and the feeling that he is still there for me, even though not physically. Not having to deal with a breakup. Might be tempted to see other people anyway, since he's not right there.

Long term consequences of staying with him. Get frustrated with long distance relationship and decide to break it off. See someone behind his back. He might see someone behind my back.

Sample 5

Dilemma. Should I tell my parents I have a non-Muslim boyfriend or not?

Conflicting values. Family vs. relationship with boyfriend

Immediate consequences of telling my parents. My parents would be quite hurt and angry. They may lose trust in me. I may be forced to break up with my boyfriend. They may not give me freedom. There will be tension in the family. If the approve, things will be much easier with my boyfriend because we won't have to hide things.

Long term consequences of telling my parents. It might have a great impact on the relationship between my parents and myself. The will never be fully able to trust me. This situation will stay with me for the rest of my life. They will become suspicious of everything I do, be it with school, work, going out, etc.

Possible difficulties associated with change. There will always be positive and negative outcomes which one has to eventually deal with. Not all decisions are win-lose situations. In most cases one needs to take into account other people's feelings and emotions. Need to consider consequences. Is it worth it? Am I being rational?

Immediate consequences of not telling my parents. I could continue going out with my boyfriend and we could be as happy as we are. My parents could find out (through word of mouth), and get extremely upset. He could continue to support me and love me which makes life easier. My parents and boyfriend are both happy.

Long term consequences of not telling my parents. Eventually (after a couple of years), being more involved with one another my boyfriend and I would have to tell my parents and they would be very hurt and confused and upset etc. People may judge me by putting my parents through such pain (I've lied to them for so long). It may have to end with my boyfriend, as I don't want to marry a non-Muslim (we'd both be hurt).

Sample 6

Dilemma. Should I go to Africa in my third year in order to teach over there?

Conflicting values. Experience vs. efficiency.

Immediate consequences of going to Africa. Get teaching experience. Broaden horizon. Appreciate given things more. Shape my future possibly. Parents would miss me. Not enough money. Definite risks I could get involved in.

Long term consequences of going to Africa. I could lose a year of University (5 years instead of 4). Make life-long friends. Know I did something worthwhile. Could shape my way of life. Could catch some odd disease.

Possible difficulties associated with change. Leaving friends and family behind. The cost could be too great. Become too involved down there.

Immediate consequences of not going to Africa. I would stay close to the friends I have. My mom wouldn't bawl all day. I could finish school in 4 years. I would probably never get to see Africa. I might regret not taking the opportunity. Would have to find other means of getting teaching experience.

Long term consequences of not going to Africa. No new culture to identify with. Smaller circle of friends. Might not make it to teachers college.

Sample 7

Dilemma. Should I quit drinking or not?

Conflicting values. Maturity vs. fun.

Immediate consequences of quitting. More money. Less acquaintances met: less memories of youthful exuberance. Better sleep and more work done on weekends. Loss of bonding that beer brings. Won't talk to some people I want to that I normally get drunk and talk to.

Long term consequences of quitting drinking. Won't become an alcoholic for sure if I don't drink. Won't have a reputation (good or bad) for my drunken antics. Better health. Better marks.

Possible difficulties associated with change. I don't really want to. Peer pressure and the memories of good times will be all over the place. The desire to drink will be strong. Being around drunks when sober is hard.

Immediate consequences of not quitting drinking. Carry on meeting new people when drunk. Keep sleeping in too late after drinking. Gradually drink more.

Long term consequences of not quitting drinking. Possibility of alcoholism at a later age. Poor health associated with alcoholism. Possible poorer marks than I could get. Might get a gut. Maintain reputation for drunken antics.

Appendix K

Sample Friend's-Dilemma-Deliberation Exercise Responses from Experiment 4

Sample 1

Dilemma. Should he attend graduate school?

Conflicting values. Immediate purpose in life vs. avoiding rejection.

Immediate consequences of going to graduate school. Give clear direction in life. Give new challenges. Step towards goal of being able to help others in need. May fail to gain acceptance. May let himself down. Unsure if that choice is optimal. Increase pressure and expectations on himself.

Long term consequences of going to graduate school. Could lead towards his ideal career. Could be a wasted avenue, his regretting the time and resources spent. Failing to get into program could deflate his large goals.

Possible difficulties associated with change. Grades must be high. Time spent researching and preparing for schools. Graduate test pressure and results. Relocating geographically. General increase in organizational and time pressures.

Immediate consequences of not going to graduate school. Enjoying current time more (relaxed). Finding a good alternative. May convince himself it was not for him. Regret of never trying. Failure to find another direction. May avoid future challenges.

Long term consequences of not going to graduate school. Could take future 'easy roads' avoiding uncertainties. Could find an equally interesting alternate and be completely happy. Could return to the same decision later in life.

Sample 2

Dilemma. Should she have an abortion or keep the baby.

Conflicting values. Continuing education vs. becoming a mother.

Immediate consequences of having the abortion. Being able to continue education and get a good job. Can be financially emotionally stable before having children. May have feelings of depression after the procedure and it may hurt her existing relationship. Something could go wrong in the procedure and she won't ever be able to have children.

Long term consequences of having the abortion. May regret having an abortion later in life. Depression could continue throughout life.

Possible difficulties associated with change. Deciding whether it is morally right. Guessing how her friends and family would react to the news. If she would be given any support (financially and emotionally) from the father and the other family. How it would affect her education. Would she be able to continue?

Immediate consequences of having the baby. Becoming a social outcast in school or town. Having her family turn against her. Having to drop out of school. Not being able to find a job to make money before the baby is born so she could support it in the first months after it is born. Not getting any support form her boyfriend or family. Being abandoned.

Long term consequences of having the baby. She could never have a close relationship with her family again because they would be disappointed in her. On the other hand, this could make her become closer with her family than ever before. She may never be able to get back in school. She may not be able to get a good job without post secondary education. The baby may have no relationship with its father.

Sample 3

Dilemma. Should she break up with her boyfriend for another guy?

Conflicting values. Selfishness vs. loyalty

Immediate consequences of breaking up with her boyfriend. Hurt his feelings. Be happier because made a final decision. new and exciting relationship (exciting). Relief that she doesn't have to deal with boyfriends irresponsibility.

Long term consequences of breaking up with her boyfriend. Realize "the grass isn't always greener on the other side of the fence." Realize how much she loves her boyfriend. and how much he means to her. Regret that she broke up with him.

Possible difficulties associated with change. How to break up with him the best possible way (if there is a best way to break up), hurting him the least. Being positive this is the decision she wants to make and actually going through with it.

Immediate consequences of not breaking up with her boyfriend. Won't hurt him. Might always wonder how things might have been if she did decide to break up with him for the other guy (if he would have been as exciting as she fantasized in her head). Some continuing dissatisfaction in her relationship.

Long term consequences of not breaking up with her boyfriend. If things stay as they are and she stays in the relationship she may get more and more irritated with him and it might get so bad she won't be able to "stand his guts" if it got that drastic. They may break up in the future anyway and someone will get hurt anyway. She may realize what a special thing they have together and be glad she never broke up with him and ruin a "good" relationship.

Appendix L

Sample Identity Repair Exercise Responses from Experiment 4

Sample 1

Highest value: Social action/ helping others. Social action and helping others is an important value to me because it gives me satisfaction knowing that my abilities and knowledge is able to help others in need. It is nice to feel useful in the world. I was involved in a food drive, providing and distributing food to the needy; donated my things to others who can make full use of them. I love helping kids in school, answering their questions and talking to them in general about things that are going on in their lives, their personal problems. I was there as a support and role model. In the future, I would like to continue helping others by becoming a teacher.

Sample 2

Highest value: Religion/ spirituality. From this value springs the essence of all other values that are important to me. I was raised as a Catholic and spent 15 years in Catholic schools. Spirituality enables me to see the person I was, I am, and who I want to be. In my teenage years I was an active participant in my church through being a church reader and volunteering in various events (dinners, charities, auctions, and fashion shows). My spirituality motivated me to help others. Three years ago I traveled to Dominican Republic to do missionary work. At present my spirituality keeps me grounded and focused on what is important tome, and what is needed to maintain my happiness. My religion and spirituality will guide me in future and I will share my values and beliefs to my children through the church.

Sample 3

Highest value: Social life/ relationships. Relationships are extremely important in my life. My relationship with God, my family, and my friends have been and will be my focus in life. I thing how you relate to others around you and God who is always there for you is the most important thing in the world. Building relationships with the lonely, the down-hearted and the hurt is also an important value in life. Relationships are vital to human beings and one needs to have a relationship. I intend to keep building the relationships I already have and form new relationships throughout life.

Sample 4

Highest value: Science/ pursuit of knowledge. I am eager about a variety of different things. The fact that I am now in university shows that I am not yet done learning. I believe that people will think I am smart if I can learn a lot of things and then somehow display this knowledge. I like to play games such as Trivial pursuit and Jeopardy because I learn from them. I plan to continue attending university, and after graduating I want to continue learning this through continuing education courses, not necessarily related to my career.

Sample 5

Highest value: Business/ economics/ making money. I went to applied Systems Design Engineering because the skills I was going to learn from this program are very in demand in the work place. All the work terms I've had involved very challenging projects and required learning in-demand skills. I am going to be an IT consultant. I will get my MBA two years from now. I will start my own business after I've finished my MBA.

Appendix M

Sample Identity-Repair-Control (Lowest Value) Exercise Responses from Experiment 4

Sample 1

Lowest value: Art/ music/ theatre. Art, music and theatre may be an extremely important aspect of other people's lives even though it's least important in mine. It's important because it allows people to be absorbed in it and take their mind off of their problems as well as reality in general. They are free to let go of their emotions and illustrate them through paintings, sculpting, etc., music and acting. If people aren't participating in these things they could still be important because the person is temporarily allowed to put all their problems aside and slip into someone else's shoes. They can become someone else, if only for a few minutes. It's a good way for people etc. relieve stress and just relax.

Sample 2

Lowest value: Religion/ spirituality. Some people need others to be a central focal point in their lives and religion can be that to them. To some religion, through their upbringing is a way of life and would be lost without it. Others have no clear direction in life and through religion somehow find what they couldn't find before. I guess it all boils down to how much faith one has. The more faith the more important religion or spirituality is to that person.

Sample 3

Lowest value: Business/ economics/ making money. Business and making money provide some people with a sense of stability. In this world if you have money there is very little that can touch you. I feel that money is also important to some because it gives them something to serve. Man can be left feeling quite useless since he is on the world a very short time. I feel that it is because of this that people choose to serve something greater than themselves. Through their service they can raise themselves above the lowly drudgery of their finite human existence and make some sort of difference. Some choose God, some lovers, and children but some choose the almighty dollar. And that is why Money is important.

IMAGE EVALUATION TEST TARGET (QA-3)

150mm

6"

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