The reliability and validity of the identity and experiences scale.

Joel R. Sneed
University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/theses


This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
THE RELIABILITY AND VALIDITY OF THE
IDENTITY AND EXPERIENCES SCALE

A Thesis Presented
by
JOEL R. SNEED

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE
September 1999
Department of Psychology
THE RELIABILITY AND VALIDITY OF THE
IDENTITY AND EXPERIENCES SCALE

A Thesis Presented
by
JOEL R. SNEED

Approved as to style and content by:

Susan K. Whitbourne, Chair

Sally I. Powers, Member

Andy B. Anderson, Member

Melinda Novak, Department Head
Psychology
ACKNOWLEDGEMENTS

I would like to thank my mentor Dr. Susan Whitbourne for her encouragement and advice in all phases of this study. From the initial planning stages, to data collection, computer entry, statistical analysis, and write-up, her confidence in my abilities enabled me to persevere. I would also like to thank her for allowing me the intellectual freedom to think and write as though her theory was my own. I am indebted to my committee members Drs. Sally Powers and Andy Anderson for their helpful suggestions and valuable time. I am grateful to Drs. Lisa Harvey and Arnold Well for their statistical consultation. I would also like to recognize Drs. Patricia Sinatra and Philip Bonifacio whose invaluable guidance has enabled me to succeed in every phase of my academic career. I am eternally grateful to my mother, Judy Rhodes, for her love and support, and for pointing me in the right direction, and to my fiancée, Katya Rekhtman, about whose axis I revolve.
This study sought to evaluate the identity and experiences scale (IES), a newly developed Likert-type self-report scale designed to quantitatively assess the identity processing styles. According to Whitbourne’s identity processing perspective (1986, 1987, 1996), older adults cope with identity discrepant experiences through the use of identity assimilation (i.e., the interpretation of life experiences through preexisting cognitive and affective schemata), identity accommodation (i.e., the changing of one’s self-schema), and identity balance (i.e., the flexible use of both processes). Using measures of self-esteem, need for cognition, self-consciousness, and defense mechanisms, the construct validity of the IES was assessed utilizing a community sample of 118 adults (83 females, 34 males) ranging in age from 42 to 82 ($X = 55.74; SD = 11.24$). Principal components factor analysis and correlational analyses yielded support for the construct validity of the identity accommodation and balance subscales; little support was obtained for the identity assimilation subscale. Cronbach’s alpha coefficients were .87 for identity balance, .82 for identity accommodation, and .72 for identity assimilation. Results are discussed in terms of Whitbourne’s (1986, 1987, 1996) identity processing perspective.
# TABLE OF CONTENTS

**ACKNOWLEDGEMENTS** .........................................................................................iii

**ABSTRACT** ..........................................................................................................iv

**LIST OF TABLES** .................................................................................................vi

**LIST OF FIGURES** ...............................................................................................vii

**CHAPTER**

I  **INTRODUCTION** ..................................................................................................1

II **METHOD** ..............................................................................................................23

III **RESULTS** ...........................................................................................................30

IV **DISCUSSION** .......................................................................................................42

**APPENDIX: QUESTIONNAIRES** .........................................................................in pocket

**REFERENCES** .........................................................................................................57
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Demographic Characteristics of Participants (N =118)</td>
<td>29</td>
</tr>
<tr>
<td>2. The Identity and Experiences Scale (IES), Means and Standard Deviations for Each Item, and Factor Loadings Greater Than .30 (N = 118)</td>
<td>37</td>
</tr>
<tr>
<td>4. Pearson Product-Moment Correlation Matrix between the IES, SEQ, NFC, SCS, and DMI</td>
<td>40</td>
</tr>
<tr>
<td>5. Partial Correlations Between the IES, NFC, SCS, and DMI Controlling for Self-Esteem</td>
<td>41</td>
</tr>
<tr>
<td>6. Observed and Expected Results Between the IES, SEQ, NFC, SCS, and DMI</td>
<td>55</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identity Processing Styles</td>
<td>22</td>
</tr>
<tr>
<td>2. Age Distribution of Sample</td>
<td>28</td>
</tr>
<tr>
<td>3. Scree Plot</td>
<td>36</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

The physical, psychological, and social role changes inherent in the aging process present particular challenges to the maintenance of a stable identity (Whitbourne, 1996a; Brandtstadter & Greve, 1994). How people cope age-related changes in physical and cognitive functioning will determine their relative success adapting to the challenges of later adulthood. This is of particular importance given that the older adult population is growing faster than ever. Thirteen percent of American society is 65 years of age or older and by the year 2030, one fifth of the population will be considered an “older adult” (Cooley, et al., 1998). Indeed, according to Cooley et al. (1998), in 1994 the 65-74 year old age group was 8 times larger than it was in 1990, the 75-84 year old segment was 14 times as large, and the 85 and older group had increased 28 fold. Therefore, investigating the processes which allow individuals to maintain a stable identity over time is of paramount importance.

According to the identity process perspective (Whitbourne, 1996a), identity is defined as “the source of self-definition within personality” (p. 3) and is “theorized to form an organizing schema through which the individual’s experiences are interpreted.” (p. 3) This definition of identity, however, does not clearly distinguish between the self-concept and identity. According to Baumeister (1997), the self-concept refers to “...the totality of inferences that a person has made about himself or herself.” (p. 681), which can be distinguished from identity, which is socially defined. The distinction between identity and the self-concept may place an arbitrary division between the two constructs because one’s self-concept does not develop in isolation of context. Thus, it is useful to conceive of
identity as a psychosocial construction (Erikson, 1963; Whitbourne, 1996a) that is inclusive of the self-concept. This eliminates, at the expense of specificity, the infinite regress that would occur if one were to attempt to separate what is socially defined from what is self-defined.

The Identity Processing Perspective

The mechanisms by which an individual maintains a stable sense of self over time have been identified within the identity processing perspective as identity assimilation and accommodation (Whitbourne, 1986a, 1996a). Identity assimilation refers to the interpretation of life events salient to identity in terms of already established cognitive and affective schemata incorporated in identity. Identity accommodation refers to changing one’s existing identity in response to identity discrepant experiences. When counter-schematic information about the self is encountered, it is assumed that the first order of information processing is identity assimilation; it is only when identity assimilation fails that identity accommodation is utilized. Block (1982) has called this proposition the adaptive imperative, that is, "Assimilate if you can; accommodate if you must!" (p. 286) It is recognized within this perspective that a dynamic balance between identity assimilation and accommodation is considered optimal; that is, “successful aging” (e.g., Rowe & Kahn, 1998; Rowe & Kahn, 1987) is the result of the flexible use of both identity assimilation and accommodation in the face of age related identity discrepant experiences.

The identity processing perspective can be viewed as a self- consistency model (e.g., Lecky, 1945). As such, it maintains that people seek to verify preexisting beliefs about themselves and sustain them across time and situations. According to Whitbourne (1986a), the belief people strive to maintain is that of the self as loving, competent, and
good. When experiences are encountered that reflect negatively on this positive identity, stress and anxiety ensue as a result of threatened self-esteem (Whitbourne, 1986a). This model of identity is analogous to the metaphor of the self-perceiver as Consistency Seeker (Robbins & John, 1997). According to Robbins and John (1997), the Consistency Seeker strives to maintain a concordant set of beliefs about the self by seeking out schema consistent information. The Consistency Seeker distorts counter schematic information to avoid facing personal shortcomings, and when this self-perceiving bias fails, negative affect or anxiety ensues.

It is important to recognize that the identity processing perspective is steeped in the cognitive tradition which views emotions (i.e., feeling states with intentional, subjective, and passive components, Averill, 1997) as a function of cognitive appraisal. According to appraisal theory (Arnold, 1960; Folkman & Lazarus, 1984; Lazarus, 1991), emotions are primarily the result of appraisal or cognitive evaluation. Folkman and Lazarus (1984) distinguished between primary and secondary appraisal. Primary appraisal refers to the evaluation of a person-environment interaction in terms of whether it is personally relevant; secondary appraisal refers to a person's coping strategies and the prospects of utilizing them. Folkman and Lazarus equate primary and secondary appraisal respectively to asking oneself the following questions: “Am I in trouble or being benefited, now or in the future, and in what way?” and “What if anything can be done about it?” (p.31) The identity processing perspective thus specifies that primary appraisal evaluates identity salient stimuli (either external stimuli or internal mental states or object representations), and partitions secondary appraisal into assimilative and accommodative dimensions.
According to the identity process perspective, the *modus operandi* of the normally functioning individual is to maintain, perhaps at the expense of accuracy, a positive self-view or "positive ego-enhancing bias." (Whitbourne, 1996a, p.280) This assumption would explain, in part, the prominent self-serving bias found in causal attribution studies (Blaine & Crocker, 1993; Greenberg, Pyszczynski, & Solomon, 1986). For example, it is consistently observed that individuals who experience success attribute their success to internal control factors, and those who experience failure to external control factors (Miller & Porter, 1988). Furthermore, it has been found that individuals inhibit performance or self-handicap (e.g., Jones & Berglas, 1978) if they are able to conjure up external attributions to explain that failure (Greenberg, et al., 1986). Greenberg et al. (1986) have interpreted this finding as especially important because it indicates that individuals will self-handicap in order to protect self-esteem even if it means they fail.

According to these researchers, threats to self-esteem cause anxiety which mobilizes distortion in information processing and self-perception.

The perspective that self-esteem functions as a buffer against anxiety is consistent with Whitbourne's conceptualization of self-esteem as tantamount to evaluating the self as loving, competent, and good. Identity challenges cause anxiety (i.e., threaten the unity of the self; Lecky, 1945) because they challenge the belief that one is competent, loving, and good. This definition of self-esteem is consistent with Brown and Mankowski's (1993) definition of self-esteem as a person's global orientation toward the self. The notion that self-esteem protects individuals from anxiety is consistent with the prominent finding that low self-esteem is positively associated with depression, anxiety, and maladjustment (Leary, Tambor, Terdal, & Downs, 1995).
Identity Processing Styles

How one characteristically handles identity challenges can be thought of as one’s identity style (Whitbourne, 1987; Berzonsky, 1990). A person’s identity style theoretically predicts how they will adapt to the physical, psychological and social role changes characteristic of the aging process (Whitbourne, 1987). Whitbourne (1987) has detailed three identity styles: a) the identity assimilative style, b) the identity accommodative style, and c) the identity balanced style. Figure 1 (page 22) represents these processing approaches schematically.

The Identity Assimilator

Identity assimilation is characteristically manifested by a set of defensive processes including self-justification, identity projection, defensive rigidity, and lack of insight. Self-justification refers to an attempt to justify one’s self-concept as loving, competent, and good. The individual imposes this positive bias onto experience without considering alternatives that may call this positive identity bias into question. Identity projection refers to a composite of self-justification and projection as a mechanism of defense. An individual will identify negative qualities in another person (aspects the individual may in fact possess) in order to emerge from the comparison in a favorable light (i.e., maintaining a positive identity bias). Defensive rigidity refers to an unwillingness to acknowledge identity discrepant experiences or the possibility that one is not regarded by significant others as loving, competent, and good. Finally, lack of insight refers to a refusal to engage in self-reflection. The potential here is that examining one’s thoughts, feelings, and behaviors introduces the possibility that one is something other than loving, competent, and good.
It is believed that identity assimilators possess fragile identities (Whitbourne, 1987). Thus, at all costs, they attempt to fit identity discrepant experiences into their existing sense of self. As a result, they characteristically possess high self-esteem which serves to defend them against threats to their fragile identities. Whitbourne (1987) has compared these characteristic attributes of the identity assimilator to the overly rigid cognitive processing style of obsessive-compulsive personalities (i.e., a dogmatic and opinionated style of thinking; Shapiro, 1965) and the paranoid thinking of paranoid personalities (i.e., looking at the world with fixed expectations and searching only for confirmation; Shapiro, 1965).

A notion similar to extreme identity assimilation is the metaphor of the self-perceiver as The Egoist (Robbins & John, 1997). According to Robins and John (1997), “The Egoist a) is motivated toward self-enhancement, b) distorts information about the self to protect and enhance self-worth, and c) regulates affect by protecting self-worth; that is, negative self-views are avoided because they produce negative affect.” (p. 666). These researchers have likened The Egoist to the narcissist who is characterized by a grandiose sense of self and correspondingly high self-esteem.

Self-justification, defined above in terms of identity assimilation (i.e., the attempt to justify one’s self-concept as loving, competent, and good), is particularly relevant to the grandiose sense of self that characterizes the narcissistic personality. According to Kernberg (1975), individuals with narcissistic personality disorder possess high self-esteem to defensively compensate for feelings of worthlessness and self-doubt. This line of reasoning is consistent with the identity processing perspective which sees self-esteem as tantamount to evaluating one’s self as loving, competent, and good, and the high self-
esteem of the identity assimilator as a defense against a weak and fragile identity. Thus, at one end of identity processing continuum is The Egoist or narcissistic personality.

It is theorized that the identity challenges inherent in the aging process will be approached by over assimilators through the use identity projection, defensive rigidity, lack of insight, and self-justification. For example, an individual utilizing self-justification may ignore signs of physical weakening while still trying to move household furniture or appliances without assistance, which may result in significant back injuries further restricting physical functioning. Individuals utilizing identity projection may engage in downward social comparisons (i.e., revising one’s comparative standard in order to remain in a favorable light) to the point where they become isolated from their peers, and consequently, at risk for depression. The employment of defensive rigidity may take the form of resisting social changes associated with aging as these changes are discrepant with a youthful identity (Whitbourne, 1996a). As Whitbourne (1996a) points out, it is interesting to note that these individuals may pride themselves on their flexibility and ability to keep up with the standards and values of the day. According to Whitbourne, lack of insight may be indicated when an individual lists many aches and pains but does not connect these with the aging process or take these to indicate a change in physical functioning and health. In general, identity assimilators distort potential signs of aging in order to keep intact their previous identity (Whitbourne, 1987).

The Identity Accommodator

Whitbourne (1996b) has identified three modes of processing identity salient information used by the identity accommodator: a) self-doubt, b) responsivity to external influence, and c) looking for alternatives. Self-doubt refers to recognizing one’s limitations
and questioning the self's integrity. Looking for alternatives refers to searching for experiences that are identity congruent rather than discrepant. In this case, there is no change in identity, but a change in the environment in order to ensure the experience of situations as compatible with the self. Lastly, responsivity to external influence refers explicitly to “looking outward to provide sources of inner guidance.” (Whitbourne, 1996a, p. 288).

Over reliance on identity accommodation is thought to occur when individuals who have unstable and incoherent identities are easily shaped by new experiences and ideas (Whitbourne, 1987). These individuals, it is thought, will be characterized by low self-esteem because of their diffuse identities (Baumeister, 1997; Whitbourne, 1996b). Furthermore, Whitbourne (1987) reasoned that identity accommodators might act on the basis of impressionistic thinking; that is, they might display a deficiency in integrating impulses into an already existing set of stable and continuous aims and interests (Shapiro, 1965). Presumably, this deficiency has less to with integration and more to do with not having stable and continuous aims and interests because of a lack of self-concept clarity.

Given the theoretical relationship between identity accommodation, self-doubting, and low self-esteem, it is further suggested that identity accommodation would be predictive of depression and depressogenic thinking because (a) depression and self-esteem have been found to be inversely correlated (Tennen & Herzeberger, 1987), and (b) it is believed the mechanisms underlying low self-esteem and depression are the same (Watson & Clark, 1984). It is thought that individuals evidencing this identity style will show low levels of aggression primarily because the majority of their hostility is turned against the self (e.g., Freud, 1917). It is further believed that at the extreme, identity
accommodators will tend to display symptomatology characteristic of borderline character structure because of their fragmented self-concepts (Kernberg, 1984).

Robbins and John’s (1997) metaphor of The Politician is conceptually similar to Whitbourne’s (1987) over accommodator. The Politician is characterized by a lack of core self or identity, and can be seen solely as a product of the social context. According to Robbins and John, the self-concept of such individuals can be thought of as a public performance. Politicians are primarily concerned with the impression they make on people and will change their self-presentation to gain approval. When these individuals fail to gain approval, they experience negative affect and anxiety.

Both The Politician and the over accommodator are theoretically related to Snyder’s (1974) construct of self-monitoring (Robins & John, 1997; Whitbourne, 1996a). Self monitoring refers to the extent "Individuals...regulate their expressive self-presentation for the sake of desired public appearances, and thus [are] highly responsive to social and interpersonal cues of situationally appropriate performances." (Snyder & Gangestad, 1986, p.125) A concept related to self-monitoring is public self-consciousness (Buss, 1980). According to Buss (1980), “People high in public self-consciousness continually reflect the group consensus. Public norms are their norms, and success and failure are defined only in terms of group standards. As their identity is largely affiliative, so their performance-based self-esteem derives mainly from success in meeting group (public) standards.” (p.123) The hypothesized relationship between over accommodation and public self-consciousness (high self-monitoring) follows directly from their respective definitions; that is, the over accommodator lacks a core sense of self or identity, possesses low self-esteem, and consequently, must look to others for guidance and approval (i.e.,
rate high in public self-consciousness). Importantly, it has been empirically found that self-esteem and public self-consciousness are inversely related (Watson, Hickman, Morris, Stutz, & Whiting, 1994).

The identity challenges inherent in the aging process will be approached by over accommodators and Politicians by the use of self-doubt, looking for alternatives, and responsivity to external influence. For example, an individual who suffers a heart attack may go through a period of serious self-doubt that may result in a complete alteration of identity (Whitbourne, 1996a). In general, the over accommodator is expected to overreact to and over generalize the consequences of age-related changes (Whitbourne, 1987).

According to Whitbourne (1987), the identity of an “...aging person is an attractive one...because it provides a concrete set of external self-referents.” (p.206)

The Identity Balanced

According to Whitbourne and Connolly (1998), a dynamic balance between the opposing processes of identity assimilation and accommodation is considered optimal. That is, in the balanced state, “The individual’s identity is flexible enough to change when warranted but not so unstructured that every new experience causes the person to question fundamental assumptions about the self’s integrity and unity.” (Whitbourne, 1996a, p. 6) Thus, “Individuals who can flexibly adapt their identities to integrate age changes into a cohesive sense of self would seem to be in the best position to adjust physically and psychologically to aging.” (Whitbourne, 1987, p. 209) That is, it is believed that identity balanced individuals are in the best position to age successfully. As a result, it is theorized that identity balanced individuals will evidence appropriately high levels of self-esteem due to their positive self-regard.
Whitbourne (1996b) has identified three modes of identity processing that characterize the identity balanced individual: a) favorable change, b) flexibility, and c) honest self-evaluation. Favorable change in identity refers to the process of adaptation through accommodative processes that results in a more favorable self-concept than the individual initially possessed. Flexibility simply refers to the flexible use of identity assimilation and accommodation; indeed, this aspect most distinguishes the identity balanced person from those who rigidly utilize identity assimilation or accommodation. Lastly, honest self-evaluation refers to the ability to self-reflect and evaluate oneself in the face of identity discrepant experiences.

This aspect of the identity process perspective is conceptually related to the metaphor of the self-perceiver as Scientist (Robbins & John, 1997). Scientists are concerned with acquiring accurate self-knowledge. Thus, they construct theories about the self that are based on observation and can be tested. The Scientist metaphor is exemplified by Epstein’s (1973) theory of the self-concept. According to Epstein, people construct theories about themselves that are a) internally consistent (i.e., little awareness of internal discrepancies within the self), b) empirically testable (i.e., it develops from experience), c) empirically valid (i.e., the self-concept is influenced by experience), and d) testable (i.e., it is assumed that the self-concept is adaptive). This model, which is consonant with Robbins and John’s conceptualization of The Scientist, emphasizes perceptual and informational processes, and de-emphasizes affective ones.

It has been suggested that The Scientist, like the identity balanced individual, will score high on measures of private self-consciousness and need for cognition (Robins & John, 1997). Private self-consciousness can be defined as the tendency to become aware
of internal states such as thoughts, motives, and feelings, and to engage in self-reflection (Buss, 1980). It is thought that identity balanced individuals will be characterized by a private self-consciousness or introspection that is qualitatively different from the private self-consciousness thought to be characteristic of identity accommodation. Identity balanced individuals possess high self-esteem, their introspection therefore will be indicative of honest self-appraisal; identity accommodators, on the other hand, will engage in an introspection that is indicative of low self-esteem and self-doubt.

Need for cognition can be defined as the enjoyment of effortful thinking or cognition, and the need to structure reality in meaningful and integrated ways (Cacioppo & Petty, 1982). Balanced individuals, it is believed, tend to examine their internal cognitive and affective states in the attempt to form an accurate understanding of themselves and the world. In contrast, identity assimilators should evidence low need for cognition because of the hypothesized tendency to avoid confronting identity discrepant experiences. The over accommodator, like the identity balanced individual, should show high need for cognition but this need, unlike the identity balanced individual, will be affectively charged with self-doubt, low self-esteem, and public self-consciousness.

Balanced individuals adjust to setbacks associated with aging with optimism and renewed vitality (Labouvie-Vief, Hakim-Larson, & Hobart, 1987). When balanced individuals cannot physically and psychologically adjust to age-related physical, psychological, and social role changes, they will readily take advantage of therapeutic interventions, both psychological and physical, by becoming actively involved in social activities and exercise programs (Whitbourne, 1987). As a result, these individuals will be more able to realistically adjust to age related changes instead of a) denying that they are
aging (extreme assimilation), or b) accepting prematurely that they are “over the hill”
(over-accommodation). For example, the identity balanced individual is more likely to
respond to having a heart attack in an optimistic manner, considering it a new lease on life,
while the identity assimilator will deny its significance and the identity accommodator will
conclude life’s end is near (Whitbourne, 1987).

An identity balanced approach to the aging process emphasizes personal control
and self-efficacy (Whitbourne, 1987). Given that identity balance is considered optimal,
and in some sense “normal,” it is interesting to note that “...normal individuals have a
greater sense of personal control than do clinical populations.” (Shapiro, Schwartz, &
Astin, 1996) It is believed that balanced individuals will adapt more effectively and
realistically to the aging process, with its associated increase in physical illness, as it has
been shown that personal control is associated with decreased mortality (Alexander,
Langer, Newman, Chandler, & Davies, 1989; Rodin & Langer, 1977). However, a liability
associated with the balanced approach to aging is that many age related changes are out of
the individual’s control. Indeed, it has been observed that individuals who pride
themselves on personal control and self-efficacy can be adversely affected when events are
uncontrollable (Shapiro, et al., 1996).

Other Theoretical Perspectives

In recent years, several theorists (e.g., Emmons, 1996; Heckhausen & Schulz,
1995) have formulated models of life span development. For example, Emmons (1996)
asserts that individuals hold “personal strivings” based on one’s personal goal system that
are the precursors of life satisfaction as well as positive and negative affective states. Self-
evaluations are then based on performance criteria related specifically to one’s personal
strivings. Heckhausen and Schulz (1995) have also developed a model of successful aging which places primary control (i.e., producing behavior-event contingencies in the immediate environment external to the individual) at its center. According to these researchers, as one ages, primary control decreases and secondary control (i.e., changes in the self) increases. It is important to note that in this model the desire for primary control regulates the selection of goals and compensation strategies.

However, of particular interest here is the work of Brandstadter (e.g., Brandstadter & Renner, 1990; Brandstadter & Greve, 1994) and Berzonsky (e.g., Berzonsky, 1990, 1992, 1994) who have developed models strikingly similar to Whitbourne’s identity processing perspective.

The work of Berzonsky is of particular interest because both his model, and Whitbourne’s, developed out of Marcia’s (1966) identity statuses paradigm. Where Whitbourne (1996a, 1986a, 1987) is concerned with identity processing in the older adult, Berzonsky (1990, 1992, 1994) is concerned with identity processing in the adolescent. Berzonsky (1994) proposes three “styles” of personal decision making and problem solving: 1) information oriented, 2) norm oriented, and 3) diffuse oriented. The information orientation corresponds to Whitbourne and Connolly’s (1998) balanced approach and refers to those individuals who have evaluated their identities and have resolved an identity crisis, and who “Actively seek out, elaborate, and evaluate relevant information before making decisions and committing themselves.” (Berzonsky, 1990, p.161) A normative orientation, which corresponds to Whitbourne’s (1987) assimilative approach, is characterized by those who evidence an established sense of self but who have not formed this identity as a result of personal role experimentation and turn to
authority figures and significant others for direction and advice when faced with identity relevant experiences (Berzonsky, 1992). Lastly, a diffuse orientation, analogous to Whitbourne’s (1987) accommodative style, characterizes those who have uncommitted identities and are not currently in identity crisis. These individuals avoid confronting problems, and deny or minimize the need to make revisions of the self (Berzonsky, 1992).

Berzonsky (1990, 1992, 1994) has developed a quantitative self-report instrument to assess the above identity-styles model. The construction of the revised Identity Styles Inventory (ISI; Berzonsky, 1992) was based largely on Marcia’s (1966) identity content domains and included statements from the original interview about college major, values and beliefs, religion, and politics. The revised ISI is a 39-item, 5-point Likert-type scale, consisting of a 10-item information-style subscale (e.g., “I spent a lot of time and talked to a lot of people trying to develop a set of values that makes sense to me.”), a 9-item normative-style subscale (e.g., “I prefer to deal with situations where I can rely on social norms and standards.”), and a 10-item diffuse-style subscale (e.g., “It doesn’t pay to worry about values in advance; I decide things as they happen.”). Employing a sample of 175 undergraduates (110 female & 65 male; Mean age 19.25), the ISI yielded adequate estimates of internal reliability (coefficient α) for the informational-style subscale (.73), the diffuse-style subscale (.78), and the normative-style subscale (.68; Berzonsky, 1994).

While this model is similar in content to Whitbourne’s (1986a) identity process model, and the revised ISI appears psychometrically sound, there are fundamental issues that preclude its use with older populations. First, the ISI is based on Marcia’s (1966) identity status paradigm and it is questionable whether this paradigm is appropriate for the middle-aged and older adult (Whitbourne, 1986b). For example, Marcia’s original
interview study assessed issues related to college major, politics, and religion. Content
domains such as college major are irrelevant to the older adult and there are currently four
questions on the 39-item ISI specific to college major. Additionally, religious and political
beliefs and affiliation, while crucially important to the adolescent in the initial stages of
identity formation, may be of secondary importance to the older adult grappling with loss
of mobility, and consequently, issues of dependency.

Second, Berzonsky’s (1994) conceptualization of the diffuse/avoidant style, as
defined above, corresponds to Whitbourne’s (1987) identity accommodation approach
only as it relates to identity structure. That is, both styles originate from Marcia’s (1966)
identity diffuse status which corresponds to the individual who has not firmly developed a
sense of self. However, according to Berzonsky (1992), these individuals cope with
identity discrepant information and experiences by avoiding confronting problems and
denyng or minimizing the need to make structural revisions. This, however, is
characteristic of the extreme assimilator according to Whitbourne’s (1986a) identity
processing perspective. Thus, in terms of identity structure, Berzonsky’s diffuse/avoidant
individual is similar to Whitbourne’s (1987) identity accommodative style, but in terms of
identity process, there is considerable theoretical discrepancy. Lastly, this measure has
been developed using college students exclusively. As a result, before this measure can be
used in older adult populations, an adult version must be created. Thus, as Whitbourne
(1986b) maintains, the task ahead is to extend Marcia’s statuses, and the characteristic
styles of processing identity salient information and experiences, to issues relevant to the
aging individual.
Brandstadter and his colleagues (Brandstadter & Renner, 1990; Brandstadter & Greve, 1994) have also put forth a model that is conceptually similar to the identity processing perspective espoused by Whitbourne (1996a) and that pertains to the aging individual. Brandstadter and Greve (1994) maintain that the stabilization of positive identity is accomplished by two modes of coping: assimilative and accommodative.

Assimilative coping strategies refer to self-corrective, compensatory, and self-confirmatory actions. Self-corrective strategies are behaviors that attempt to maintain the desired aspects of the self (e.g. personal attractiveness). Compensatory strategies are those strategies that minimize or counteract the consequences of unavoidable losses (e.g., wearing bifocals or hearing aids). Self-confirmatory actions refer to a) the selection information or creation of environments that reflect positively on the self, or to avoid those situations that reflect negatively on the self, and b) the symbolic presentation of the self in order to minimize discrepancies between one’s public and private self. The assimilative mode of coping just outlined resembles identity assimilation as postulated in Whitbourne’s (1986a) identity process perspective. That is, both Brandstadter (Brandstadter & Greve, 1994) and Whitbourne conceptualize the assimilative mode as an attempt to maintain a positive sense of self in the face of identity discrepant experiences without making drastic revisions in one’s self-concept.

The accommodative mode, according to Brandstadter and Greve (1994), refers to the stabilization of positive identity via disengagement from blocked goals, the adjustment of aspirations and self-evaluative standards, self-enhancing comparisons, and palliative interpretations. Disengagement from blocked goals refers to lowering the attraction of formerly held goals because they are no longer attainable. Adjustment of aspirations and
self-evaluative standards refers to changing one’s expectations/aspirations and personal standards so that they are consistent with one’s current level of functioning. Self-enhancing comparisons refers to the alteration of one’s comparative standard. For example, older adults may see themselves as quite capable with respect to their own age group but rather feeble in comparison to the young adult. Lastly, palliative interpretations refer to the shifting away of attention from aversive stimuli or situations to more attractive alternatives.

Brandstadter and Greve’s (1994) conceptualization of the accommodative mode has little in common with the identity processing perspective. It is believed that this difference reflects a fundamental discrepancy between the two models. According to Brandstadter and Greve, assimilative strategies target the realization or maintenance of one’s desired goals. In the event one’s goals remained blocked, and assimilative strategies fail, accommodative strategies are utilized to disengage the individual from those goals and to make other goals more palatable. Thus, in Brandstadter’s model, assimilative and accommodative strategies are directed at the attainment of, or disengagement from, one’s most salient goals.

According to the identity processing perspective (Whitbourne, 1996a), identity is the axis of experience. Experiences that reflect positively or negatively on the belief that one is loving, competent, and good are processed through identity using identity assimilation and identity accommodation (Whitbourne, 1986). Assimilative strategies, therefore, are direct attempts at maintaining the fundamental belief that one is loving, competent, and good in those domains of personality essential to self-definition. Accommodative strategies are direct attempts at changing fundamental aspects of one’s
self-definition in order to maintain this belief. Thus, in Brandstadter and Greve’s (1994) model, it is a change of goals that reduces the identity salient discrepancy, whereas in Whitbourne’s model, it is a restructuring of some fundamental aspect of the self.

Brandstadter and Renner (1990) have developed the Tenacious Goal Pursuit (TGP) and Flexible Goal Adjustment (FGA) scale to assess the above model. It has demonstrated satisfactory internal reliability (TGP, \( \alpha = .80 \); FGA, \( \alpha = .83 \)) and validity. However, this measure cannot be used to assess identity development in the aging individual as formulated by Whitbourne (1996a) because a) there are theoretical discrepancies in the formulation of the accommodative process or mode of coping, and b) a balanced approach to aging is not represented in the TGP/FGA. While both Berzonsky and Brandstadter (Brandstadter & Greve, 1994; Brandstadter & Renner, 1990) have developed models theoretically similar to Whitbourne’s approach, neither the ISI nor the TGP/FGA adequately measure the identity assimilation, accommodation, and balanced styles.

**Purpose of Study**

The primary purpose of the proposed study is to examine the construct validity (i.e., convergent validity) and internal consistency of the Identity and Experiences Scale (IES) (Whitbourne, 1996b). Convergent validity refers to the extent to which a scale is correlated, either positively or negatively, with a related measure. Pearson product-moment correlations was employed to examine this type of validity. Construct validity was also be examined using exploratory principle component factor analysis. Internal consistency was also examined by estimating Cronbach’s alpha coefficients (i.e.,
intercorrelations between subscale items). In addition, this study intended to empirically evaluate the identity processing styles as described above.

Hypotheses

1) It is hypothesized that scores on identity assimilation and balance will be positively correlated with self-esteem, whereas scores on identity accommodation will be negatively associated with self-esteem.

2) It is hypothesized that scores on identity assimilation will be negatively associated with need for cognition, whereas scores on both identity accommodation and balance will be positively associated with a measure of this construct.

3) It is hypothesized that identity accommodation will positively correlate with measures of private self-consciousness, public self-consciousness, and social anxiety.

4) It is hypothesized that identity balance will positively correlate with private self-consciousness, and negatively correlate with public self-consciousness and social anxiety.

5) It is hypothesized that identity assimilation will negatively correlate with social anxiety and private self-consciousness, and positively correlate with public self-consciousness.

6) It is hypothesized that scores on identity accommodation will positively correlate with scores on a measure of defensive turning against the self (i.e., directing excessive disapproval, anger, or hostility toward the self) and negatively correlate with scores on a measure of defensive reversal (i.e., diminishing internal conflict or perceived external threats by minimizing their significance or casting them out from consciousness).

7) It is hypothesized that identity balance will be positively associated with scores on a measure of defensive principalization (i.e., creating the illusion of control by
detaching emotional significance from perceived conflicts).

8) It is hypothesized that identity assimilation will be positively correlated with scores on a measure of defensive projection (i.e., attributing to others undesirable aspects of the self) and reversal (i.e., diminishing internal conflict or perceived external threats by minimizing their significance or casting them out from consciousness).
The Identity Balanced

Identity structure: Stable
Processing style: Realistic self-appraisal; flexible self-evaluation
Self-Esteem: High
Characteristic defenses: Principalization and sublimation
Personality style: The Scientist; detached and objective

The Identity Accommodator

Identity structure: Fragile and unstable
Processing style: Self-doubt
Self-Esteem: Low
Characteristic defenses: Intrapunative; turning against the self
Personality style: Depressive; hysterical; dependent

The Identity Assimilator

Identity structure: Fragile and rigid
Processing style: Self-enhancement
Self-Esteem: Defensively high
Characteristic defenses: Denial and projection
Personality style: Neurotic; narcissistic; obsessive-compulsive

Figure 1. Identity Processing Styles
Participants

A community sample of 118 adults (83 females and 34 males) ranging in age from 42 to 82 years of age ($X = 55.74; SD = 11.24$) participated in the present investigation. The age distribution of the sample is presented in Figure 2 (page 28). The demographic characteristics of the sample are presented in Table 1 (page 29). As displayed in this table, nearly three quarters of the sample was below 65 years of age (74.4%); additionally, nearly one quarter of the sample was retired (24.6%). The majority of the sample was married (72.9%) while 20.5% of the sample was either widowed or divorced. The sample was well-educated with 84.7% receiving at least some college education. Specifically, 38% of the sample received professional training (i.e., beyond post-baccalaureate level), 21% completed their college degree, while 25% did not complete their baccalaureate but received some college education. The sample was predominantly Caucasian (88%) and consisted predominantly of individuals owning their own home (85.6%).

Using Hollingshead’s (1958) two-factor index of social position, 11% of the sample was found to belong to the highest socioeconomic class (i.e., higher executives, proprietors of large concerns, and major professionals), 49% belonged to a socioeconomic class comprised of business managers, proprietors of medium-sized businesses, and lesser professionals (class II), while 33% of the sample belonged to a socioeconomic class comprised of administrative personnel, small independent business owners, and minor professionals (class III). Overall, the sample consisted largely of well-educated Caucasian females belonging to the middle and upper-middle classes.
Identity and Experiences Scale (IES; see Appendix): The Identity and Experiences Scale (IES) is a questionnaire designed to assess an individual's use of identity assimilation, accommodation, and balance. The IES consists of 55 Likert-type self-report questions rated on a scale of 1 (not like me at all) to 7 (completely like me) with a 19-item identity assimilation subscale, a 16-item accommodation subscale, and a 20-item identity balance subscale. Statements such as, "Have many doubts and questions about myself," tap the dimension of accommodation, "Have very few doubts or questions about myself," tap the assimilation dimension, and "Have benefited as much from my failures as my successes," tap the balance dimension.

Items for this measure were derived from an interview study (Whitbourne, 1986a) in which 94 adults (24 to 61 years old) shared their thoughts and feelings regarding family, work, values, and aging. The identity assimilation and accommodation subscales of the IES were developed in three pilot phases resulting in 9-item subscales for each dimension. During the fourth pilot study or revision of the IES, seven additional items were added to both the identity assimilation and accommodation subscales, and a 20-item balance subscale was also included.

For the present investigation, four items formerly dropped from the IES, and one new item, were added to assess the identity projection component of identity assimilation. These items are 1) "Find it difficult to admit that others may not like me," 2) "Tend to find fault in those who criticize me," 3) "Find myself blaming others when something bad happens to me," 4) "Feel that other people often share my opinions," 5) "I often find that others are overly rigid and closed minded." Assimilation items 1 (e.g., Prefer to think
about my strengths rather than my weaknesses”) and 19 (e.g. “Like to focus on the positive rather than the negative about myself”) were dropped due to their conceptual similarity. Lastly, assimilation item 28 was reworded from “Prefer to think about what’s good about myself” to “Prefer to think only about the good in myself.”

**Self-Esteem Scale (SEQ; see Appendix).** Rosenberg’s (1965) 10-item Self-Esteem Scale was used to assess self-esteem. Questions are in Likert-type format and range from 1 (strongly disagree) to 4 (strongly agree). There are two dimensions on this scale: a personal effectiveness dimension and sense of personal worth dimension. Items like “I feel I am a person of self-worth, at least on an equal basis with others” tap the personal worth dimension; items like “I am able to do things as well as most people” assess personal effectiveness. In the present sample, Cronbach’s alpha was estimated at .84.

**Need for Cognition Scale (NFC; see Appendix).** The Need for Cognition Scale (NFC) is an 18-item paper-and-pencil scale designed to measure the extent to which individuals engage in and enjoy thinking or effortful cognition (Cacioppo & Petty, 1982; Cacioppo, Petty, & Kao, 1984). Respondents are asked to indicate how characteristic an item is of them with (A) equaling very characteristic and (F) equaling very uncharacteristic. Interpretation of the NCS is based on a single score ranging from 0 to 90, with the upper half or third of the range indicating high need for cognition and the lower half or third indicating low need for cognition. The NFC has achieved excellent internal reliability (.91; Cacioppo, Petty, & Kao, 1984). In the present sample, Cronbach’s alpha was estimated at .90.

**Self-Consciousness Scale (SCS; see Appendix).** The 23-item Likert-type self-report Self-Consciousness Scale (SCS; Fenigstein, Scheier, & Buss, 1975) will be used to
assess private and public self-consciousness. This measure contains a private self-consciousness subscale (e.g., “I reflect about myself a lot”), a public self-consciousness subscale (e.g., “I’m concerned about the way I present myself”), and a social anxiety subscale (e.g., “I feel anxious when I speak in front of a group”). Alpha coefficients for this scale have been estimated at .63 (private self-consciousness), .78 (public self-consciousness), and .68 (social anxiety), indicating that it possesses adequate internal reliability (Watson, et al., 1994). For the present investigation, alpha coefficients were .63 (private self-consciousness), .74 (public self-consciousness), and .73 (social anxiety).

Defense Mechanisms Inventory (DMI; see Appendix). Gleser and Ihilevich’s (1969) Defense Mechanisms Inventory (DMI) will be utilized to assess the use of particular defense mechanisms. The DMI is one of the most widely used objective measures of defense mechanisms (Cramer, 1988). The 200-item inventory consists of 10 hypothetical interpersonal dilemmas intended to elicit defensive responses from respondents. Each vignette is followed by four questions, and each question is followed by five possible responses.

This forced choice format is designed to tap five defense mechanism clusters: turning against the self (TAS; i.e., self-handicapping, pessimism, & masochism), projection (PRO; i.e., attributing to others undesirable aspects of the self), principalization (PRN; i.e., intellectualization, rationalization, & isolation of affect), turning against the object (TAO; i.e., identification with the aggressor and displacement), and reversal (REV; i.e., negation, denial, reaction formation, & repression). Respondents are instructed to indicate which of the five possible choices is most like them, scored +2, and least like them, scored zero; the three remaining responses are scored +1 (Ihilevich & Gleser, 1986).
Thus, each defense cluster on the DMI ranges from 0 to 80 in total subscale score.

Averages of estimates of internal consistency have been calculated at .80 for TAO, .61 for PRO, .69 for PRN, .70 for TAS, and .78 for REV (Ihilevich & Gleser, 1995) indicating that it has adequate internal consistency.

Procedure

Students in a fall introductory psychology course received a packet of materials including a demographics questionnaire, the IES, SEQ, NFC, SCS, and DMI. These students were instructed to solicit one parent, grandparent, or relative, 40 years of age or older, and ask them to fill out anonymously the above questionnaires and mail this packet back to the experimenter. In return, students participating in the study received a small amount of course credit that was put towards their final grade.
Figure 2. Age Distribution of Sample
Table 1. Demographic Characteristics of Participants (N = 118)

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30</td>
<td>25.6</td>
</tr>
<tr>
<td>No</td>
<td>87</td>
<td>74.4</td>
</tr>
<tr>
<td>Retired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>24.6</td>
</tr>
<tr>
<td>No</td>
<td>89</td>
<td>75.4</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>Female</td>
<td>84</td>
<td>71</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>Married</td>
<td>86</td>
<td>73.5</td>
</tr>
<tr>
<td>Separated</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>10</td>
<td>8.5</td>
</tr>
<tr>
<td>Widowed</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Training (MS+)</td>
<td>45</td>
<td>38.1</td>
</tr>
<tr>
<td>College Graduate</td>
<td>25</td>
<td>21.2</td>
</tr>
<tr>
<td>Some College</td>
<td>30</td>
<td>25.4</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>15</td>
<td>12.7</td>
</tr>
<tr>
<td>Some High School</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>96</td>
<td>88.1</td>
</tr>
<tr>
<td>African-American</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>Asian-American</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Living Situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own Home</td>
<td>101</td>
<td>85.6</td>
</tr>
<tr>
<td>Rent</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>Home of Children</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Condo/Retirement Community</td>
<td>7</td>
<td>5.9</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class I</td>
<td>13</td>
<td>11.2</td>
</tr>
<tr>
<td>Class II</td>
<td>58</td>
<td>50</td>
</tr>
<tr>
<td>Class III</td>
<td>39</td>
<td>33.6</td>
</tr>
<tr>
<td>Class IV</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Class V</td>
<td>3</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Note. Class I = major business and professional; Class II = medium business, minor professional, technical; Class III = skilled craftsmen, clerical, sales workers, Class IV = machine operators, semi-skilled workers; Class V = unskilled laborers, menial service workers.
CHAPTER III

RESULTS

This study sought to examine the validity and reliability of the Identity and Experiences Scale (IES), a Likert-type self-report scale designed to assess an individual’s use of identity assimilation, accommodation, and balance. Study findings will be presented in four sections: (a) exploratory factor analysis, (b) internal consistency estimates of the IES subscales, (c) Pearson product-moment correlations between the IES subscales and the other self-report measures employed in the study, and (d) partial correlational analyses controlling for self-esteem. Correlations between the IES subscales themselves are also reported.

Factor Structure

A principal-components factor analysis with Varimax rotation on the entire sample yielded the expected three factors that accounted for 32% of the scale’s variance. Identity balance defined the first factor, identity accommodation, the second, and identity assimilation, the third. Figure 3 (page 36) presents the Scree plot for the 55 - item Identity and Experiences Scale. As displayed in this figure, eigenvalues begin to level off after the third factor indicating, in conjunction with theory, the appropriateness of the three factor solution. Factor loadings are based on the correlation matrix between items rather than the covariance matrix as suggested by Kim and Mueller (1978). Separate factor analyses for males and females were not possible due to the low number of males in the sample (i.e., \( n = 34 \)). In addition to orthogonal rotation, oblique rotation (i.e., oblimin) was also performed yielding highly similar results. This indicates that orthogonality is not an artifact of forcing orthogonal rotation.
The necessary statistical criteria for item retention were: (a) a factor loading of .30 or greater on the intended factor, (b) a mean of greater than 2 and less than 6 on the 7-point Likert type scale, and (c) a standard deviation of greater than 1. In addition, items that loaded on two factors with approximately equal factor loadings were not retained. Items contributing to each factor, their factor loadings, and means and standard deviations are presented in Table 2 (pages 37-38).

Three Identity Assimilation items (i.e., 1, 44, & 49), two Identity Accommodation items (i.e., 7 & 45), and two Identity Balance items (i.e., 22 & 25) loaded less than .30 on all three factors. Identity Accommodation item 36 loaded above cutoff on the Identity Balance subscale but not on its intended factor, whereas Identity Accommodation item 37 loaded above .30 on both its intended factor and the Identity Assimilation factor. These items were not included in the calculation of subscale total scores.

Both Identity Assimilation items 11 and 29 loaded above cutoff on the intended factor, as well as on an additional factor. However, in both cases, the loading on the unintended factor was just above cutoff whereas their factor loadings on the Identity assimilation factor were substantially greater. As a result, these items were retained for further analyses. Identity Assimilation items 20 and 35 both loaded on the Identity Accommodation factor above cutoff, .52 and .56 respectively, and not on the Identity Assimilation factor as intended. Item 39 originally intended to be an Identity Assimilation item loaded significantly on the Identity Balance factor only. Items 19 and 40 both loaded highly on the intended Identity Assimilation factor, but also loaded highly on the Identity Accommodation factor. Lastly, Identity Assimilation item 10 loaded above .30 on both the
Identity Balance and Assimilation factors. All of the above items were not included as part of the final subscale scores for their respective factors.

Based on this analysis, IES subscale total scores were computed for the Identity Balance, Accommodation, and Assimilation subscales of the IES. The Identity Balance subscale consists of 18 items, the Identity Accommodation subscale consists of 12 items, and lastly, the Identity Assimilation subscale consists of 10 items (see Table 2, pages 37-38). Total scores are computed for each subscale by calculating the means for that subscale and multiplying it by the number of items on the subscale. For example, if the mean score for an individual on the Identity Assimilation subscale is 4.5, this value would be multiplied by 10, yielding a total subscale score of 45. This method of calculation is advantageous because it automatically corrects for missing data. There is no total scale score for the IES as a whole and averaging across subscales is not recommended.

Internal Consistency

The full sample of 118 adults was used to examine the internal consistency of the Identity and Experiences Scale. Cronbach’s alpha coefficients were .87 for identity balance, .82 for identity accommodation, and .72 for identity assimilation. These internal consistency estimates are similar to those obtained in previous studies. For example, Sneed and Whitbourne (submitted for publication) obtained internal consistency estimates of .88, .85, and .71 for Identity Balance, Accommodation, and Assimilation respectively.

Pearson product-moment correlations

To determine the convergent validity of the Identity and Experiences Scale (IES), Pearson product-moment correlations were performed on the sample as a whole. Separate correlational analyses for males and females were not conducted due to low statistical
power (i.e., \( n = 34 \) for males). Table 3 (page 39) presents the mean, standard deviation, and minimum and maximum values for each measure employed in this study. Pearson product-moment correlations are presented in Table 4 (page 40).

Hypothesis 1 was confirmed in that all correlations were in the expected direction. A strong negative correlation was obtained between identity accommodation and self-esteem \( (r = -0.54, p < .0001) \), and a moderate positive correlation was observed between the identity balance component of the IES and self-esteem \( (r = 0.39, p < .0001) \). A low correlation between the identity assimilation component of the IES and self-esteem was observed \( (r = 0.19, p < .05) \).

Hypothesis 2 was partially confirmed in that a low positive correlation was observed between identity accommodation and need for cognition \( (r = 0.29, p < .001) \). However, a low negative relationship was observed between identity balance and need for cognition \( (r = -0.26, p < .01) \) and identity assimilation was not found to be significantly related to need for cognition.

Hypothesis 3 was confirmed. A moderate positive correlation was found between identity accommodation and private self-consciousness \( (r = 0.42, p < .0001) \), whereas strong correlations were found between identity accommodation and public self-consciousness \( (r = 0.51, p < .0001) \) and social anxiety \( (r = 0.55, p < .0001) \).

With the respect to hypothesis 4, partial confirmation was obtained. A moderate negative relationship was observed between identity balance and social anxiety \( (r = -0.39, p < .0001) \), whereas identity balance was not significantly related to private or public self-consciousness.
Hypothesis 5 was partially supported in that identity assimilation and private self-consciousness were weakly correlated as well (r = -.18, p < .05). However, identity assimilation was not found to correlate with either social anxiety or public self-consciousness.

Hypothesis 6 was confirmed. A low positive correlation between identity accommodation and turning against the self was observed (TAS; r = .27, p < .01). A moderate negative correlation was obtained between identity accommodation and reversal (REV; r = -.36, p < .001). Additionally, analysis indicates that identity accommodation and turning against the object are positively correlated (TAO; r = .23, p < .05).

With respect to hypothesis 7, partial confirmation was obtained. The identity balance dimension of the IES correlated positively with principalization (PRN; r = .29, p < .01). Additionally, analysis indicates that identity balance correlates negatively with TAO (r = -.26, p < .01) and positively with reversal (REV; r = .31, p < .01).

Hypothesis 8 was not supported. Identity assimilation was not significantly correlated with any subscale of the DMI.

To adjust for Type 1 error inflation, a Bonferroni adjustment on the above correlations was applied. Using an adjusted alpha level of .005, the correlations involving identity assimilation would not reach statistical significance. In addition, the correlation between identity accommodation and turning against the object (TAO) would also fail to reach significance. The correlation between identity balance and TAO would approach but not reach statistical significance (p = .007).
Partial correlations

Given the statistically significant correlations between self-esteem and all but two subscales used in this study, partial correlations were performed controlling for self-esteem at the .05 alpha level. Table 5 (page 41) displays partial correlations between the IES, NFC, SCS, and DMI controlling for self-esteem. As indicated in Table 5, there was a decrease in the magnitude of the correlations between the IES and the other self-report measures. For those correlations between the IES and the other measures that remained significant, the difference in magnitude was not statistically significant (using a Fisher Z-transformation for testing differences between correlations).

Specifically, the correlations between identity assimilation and private self-consciousness, identity accommodation and identity balance, identity accommodation and need for cognition (NFC), and identity accommodation and TAS (i.e., turning against the self) did not reach statistical significance when partialling out the effects of self-esteem. With the effects of self-esteem controlled, a positive and statistically significant correlation between identity balance and private self-consciousness emerged ($r = .25, p < .05$).

Employing a Bonferroni adjusted alpha level of .005, the correlations between identity accommodation and the three subscales of the SCS, identity accommodation and REV, and identity balance and social anxiety reached significance.
Figure 3. Scree Plot
Table 2. The Identity and Experiences Scale (IES), Means and Standard Deviations for Each Item, and Factor Loadings Greater Than .30 (N = 118)

<table>
<thead>
<tr>
<th>Identity balance</th>
<th>Factor loading</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have benefited as much from my failures as my successes (3)</td>
<td>.50</td>
<td>5.26</td>
<td>1.34</td>
</tr>
<tr>
<td>Can honestly admit when I've failed at something (6)</td>
<td>.48</td>
<td>5.50</td>
<td>1.41</td>
</tr>
<tr>
<td>Look for feedback from others but still follow my own course in life (9)</td>
<td>.42</td>
<td>5.21</td>
<td>1.35</td>
</tr>
<tr>
<td>Find it very easy to change in response to new experiences (12)</td>
<td>.32</td>
<td>4.76</td>
<td>1.29</td>
</tr>
<tr>
<td>Can accept negative feedback about myself from others (15)</td>
<td>.43</td>
<td>4.42</td>
<td>1.49</td>
</tr>
<tr>
<td>Try to be flexible but also try to maintain my goals (18)</td>
<td>.67</td>
<td>5.53</td>
<td>1.10</td>
</tr>
<tr>
<td>Although I like to be consistent, I have changed when I had to (28)</td>
<td>.35</td>
<td>5.40</td>
<td>1.09</td>
</tr>
<tr>
<td>My experiences have contributed to “who” I am (31)</td>
<td>.62</td>
<td>5.86</td>
<td>1.18</td>
</tr>
<tr>
<td>Am challenged but not overwhelmed by change (32)</td>
<td>.54</td>
<td>5.38</td>
<td>1.35</td>
</tr>
<tr>
<td>Feel I can handle disappointments about myself (34)</td>
<td>.62</td>
<td>5.00</td>
<td>1.33</td>
</tr>
<tr>
<td>Try to keep a steady course in life but am open to new ideas (38)</td>
<td>.73</td>
<td>5.75</td>
<td>1.08</td>
</tr>
<tr>
<td>Have had my share of experiences in which I've learned about myself (41)</td>
<td>.64</td>
<td>5.61</td>
<td>1.15</td>
</tr>
<tr>
<td>Feel confident in “who” I am but am willing to learn more about myself (47)</td>
<td>.74</td>
<td>5.41</td>
<td>1.37</td>
</tr>
<tr>
<td>Often take stock of what I have or have not accomplished (51)</td>
<td>.57</td>
<td>4.53</td>
<td>1.53</td>
</tr>
<tr>
<td>Have a clear sense of my goals but am willing to consider alternatives (52)</td>
<td>.75</td>
<td>5.19</td>
<td>1.19</td>
</tr>
<tr>
<td>Am always looking for ways to improve myself (53)</td>
<td>.59</td>
<td>5.32</td>
<td>1.33</td>
</tr>
<tr>
<td>Not afraid to confront my failures (54)</td>
<td>.58</td>
<td>5.07</td>
<td>1.42</td>
</tr>
<tr>
<td>Am influenced by my experiences but also feel I can control my life (55)</td>
<td>.59</td>
<td>5.43</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Continued next page
<table>
<thead>
<tr>
<th>Identity accommodation</th>
<th>Factor loading</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have many doubts and questions about myself (5)</td>
<td>.51</td>
<td>3.23</td>
<td>1.68</td>
</tr>
<tr>
<td>Have thought about other lifestyles that may be better for me (8)</td>
<td>.41</td>
<td>3.76</td>
<td>1.77</td>
</tr>
<tr>
<td>Often wonder whether others like me or not (14)</td>
<td>.41</td>
<td>3.78</td>
<td>1.68</td>
</tr>
<tr>
<td>Very influenced by what others think (16)</td>
<td>.64</td>
<td>3.59</td>
<td>1.49</td>
</tr>
<tr>
<td>Often wonder about how my life could be different than it is (17)</td>
<td>.55</td>
<td>4.05</td>
<td>1.70</td>
</tr>
<tr>
<td>At times seriously question “who” I am (24)</td>
<td>.60</td>
<td>3.17</td>
<td>1.77</td>
</tr>
<tr>
<td>Behave according to what I think others want from me (26)</td>
<td>.60</td>
<td>3.48</td>
<td>1.57</td>
</tr>
<tr>
<td>Feel that it’s hard to decide on which course I want in life (27)</td>
<td>.68</td>
<td>3.14</td>
<td>1.62</td>
</tr>
<tr>
<td>Need people to tell me they like me (33)</td>
<td>.61</td>
<td>3.30</td>
<td>1.82</td>
</tr>
<tr>
<td>Rely on others because I lack confidence in my judgement (42)</td>
<td>.59</td>
<td>2.76</td>
<td>1.69</td>
</tr>
<tr>
<td>Wonder what others will think of my behavior (43)</td>
<td>.68</td>
<td>3.49</td>
<td>1.69</td>
</tr>
<tr>
<td>Look to others for guidance in my important decisions (46)</td>
<td>.33</td>
<td>4.53</td>
<td>1.52</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Identity assimilation</th>
<th>Factor loading</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not very interested in advice from others (2)</td>
<td>.33</td>
<td>3.44</td>
<td>1.64</td>
</tr>
<tr>
<td>Spend little time wondering “why” I do things (4)</td>
<td>.68</td>
<td>3.56</td>
<td>1.79</td>
</tr>
<tr>
<td>Have very few doubts or questions about myself (11)</td>
<td>.30</td>
<td>.43</td>
<td>4.23</td>
</tr>
<tr>
<td>Don’t spend much effort reflecting on “who” I am (13)</td>
<td>.66</td>
<td>4.04</td>
<td>1.70</td>
</tr>
<tr>
<td>Generally try to avoid change in my life or how I see myself (21)</td>
<td>.46</td>
<td>3.42</td>
<td>1.53</td>
</tr>
<tr>
<td>Don’t think very deeply about my goals because I know what they are (23)</td>
<td>.64</td>
<td>4.00</td>
<td>1.49</td>
</tr>
<tr>
<td>Prefer to think only about the “good” in myself (29)</td>
<td>.32</td>
<td>.49</td>
<td>4.19</td>
</tr>
<tr>
<td>Like to see myself as stable, consistent, and unlikely to change (30)</td>
<td>.53</td>
<td>4.27</td>
<td>1.48</td>
</tr>
<tr>
<td>Don’t think about my mistakes or shortcomings (48)</td>
<td>.47</td>
<td>3.23</td>
<td>1.39</td>
</tr>
<tr>
<td>When it comes to understanding myself, I’d rather not look too deeply (50)</td>
<td>.49</td>
<td>2.83</td>
<td>1.45</td>
</tr>
</tbody>
</table>

Note. Numbers in parentheses indicate the sequence of items on the 55-item scale. Factor 1 = identity balance; Factor 2 = identity accommodation; Factor 3 = identity assimilation.
Table 3. Means, Standard Deviations, and Minimum and Maximum Values

<table>
<thead>
<tr>
<th>Subscale</th>
<th>M</th>
<th>SD</th>
<th>Min - max</th>
</tr>
</thead>
<tbody>
<tr>
<td>IES - Assimilation</td>
<td>73.91</td>
<td>11.94</td>
<td>10 – 70</td>
</tr>
<tr>
<td>IES - Accommodation</td>
<td>58.55</td>
<td>13.75</td>
<td>12 – 84</td>
</tr>
<tr>
<td>IES - Balance</td>
<td>102.93</td>
<td>14.27</td>
<td>18 – 126</td>
</tr>
<tr>
<td>SEQ</td>
<td>34.32</td>
<td>4.14</td>
<td>10 – 40</td>
</tr>
<tr>
<td>NFC</td>
<td>53.37</td>
<td>14.81</td>
<td>18 – 108</td>
</tr>
<tr>
<td>SCS - Private self-consciousness</td>
<td>19.97</td>
<td>5.00</td>
<td>0 – 40</td>
</tr>
<tr>
<td>SCS - Public self-consciousness</td>
<td>16.22</td>
<td>4.93</td>
<td>0 – 28</td>
</tr>
<tr>
<td>SCS - Social anxiety</td>
<td>11.73</td>
<td>5.12</td>
<td>0 – 24</td>
</tr>
<tr>
<td>DMI - Turning against object</td>
<td>32.63</td>
<td>8.07</td>
<td>0 – 80</td>
</tr>
<tr>
<td>DMI - Projection</td>
<td>36.84</td>
<td>5.99</td>
<td>0 – 80</td>
</tr>
<tr>
<td>DMI - Principalization</td>
<td>47.71</td>
<td>6.93</td>
<td>0 – 80</td>
</tr>
<tr>
<td>DMI - Turning against self</td>
<td>38.50</td>
<td>5.66</td>
<td>0 – 80</td>
</tr>
<tr>
<td>DMI - Reversal</td>
<td>44.15</td>
<td>6.31</td>
<td>0 – 80</td>
</tr>
</tbody>
</table>

Note. Only 106 of the 118 participants provided usable data on the DMI. For all other measures, N = 118. Min – max = minimum and maximum values; IES = Identity and Experiences Scale; SEQ = Self-Esteem Questionnaire; NFC = Need for Cognition; SCS = Self-Consciousness Scale.
Table 4. Pearson Product-Moment Correlation Matrix between the IES, SEQ, NFC, SCS, and DMI

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>IES - As*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IES - Ac*</td>
<td>-.11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IES - Bal*</td>
<td>.06</td>
<td>-.32**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEQ*</td>
<td>.19*</td>
<td>-.54****</td>
<td>.39****</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFC*</td>
<td>-.06</td>
<td>.29***</td>
<td>-.26**</td>
<td>-.37****</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private*</td>
<td>-.18*</td>
<td>.42****</td>
<td>.07</td>
<td>-.30***</td>
<td>-.04</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public*</td>
<td>.02</td>
<td>.51****</td>
<td>-.10</td>
<td>-.446***</td>
<td>.26**</td>
<td>.30***</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social*</td>
<td>-.01</td>
<td>.55****</td>
<td>-.39****</td>
<td>-.40****</td>
<td>.29**</td>
<td>.22*</td>
<td>.46****</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAO*</td>
<td>-.12</td>
<td>.23*</td>
<td>-.26**</td>
<td>-.11</td>
<td>.14</td>
<td>.10</td>
<td>.03</td>
<td>.14</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRO*</td>
<td>.04</td>
<td>-.02</td>
<td>-.15</td>
<td>-.08</td>
<td>.11</td>
<td>.06</td>
<td>.10</td>
<td>-.04</td>
<td>.26**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRN*</td>
<td>-.02</td>
<td>-.16</td>
<td>.29**</td>
<td>.26**</td>
<td>-.28**</td>
<td>-.04</td>
<td>-.30*</td>
<td>.09</td>
<td>-.55**</td>
<td>-.45****</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAS*</td>
<td>.01</td>
<td>.27**</td>
<td>-.10</td>
<td>-.30**</td>
<td>.24*</td>
<td>-.07</td>
<td>.29**</td>
<td>.12</td>
<td>-.32***</td>
<td>-.34****</td>
<td>-.19</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>REV*</td>
<td>.13</td>
<td>-.36***</td>
<td>.31**</td>
<td>.25*</td>
<td>-.21*</td>
<td>-.12</td>
<td>-.18</td>
<td>-.18</td>
<td>-.65****</td>
<td>-.48****</td>
<td>.26**</td>
<td>.02</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. IES = Identity and Experiences Scale; As = Assimilation, Ac = Accommodation, Bal = Balance; SEQ = Self-Esteem Questionnaire; NFC = Need for Cognition; SCS = Self-Consciousness Scale; Private = Private Self-Consciousness; Public = Public Self-Consciousness; Social = Social Anxiety; TAO = Turning Against Object. PRO = Projection, PRN = Principalization, TAS = Turning Against Self; REV = Reversal

* N = 118. ** N = 106.
* p < .05. ** p < .01. *** p < .001. **** p < .0001
Table 5. Partial Correlations Between the IES, NFC, SCS, and DMI Controlling for Self-Esteem

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IES – As</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. IES – Ac</td>
<td>-.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. IES Bal</td>
<td>-.05</td>
<td>-.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. NFC</td>
<td>-.00</td>
<td>.14</td>
<td>-.23*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Private</td>
<td>-.14</td>
<td>.28**</td>
<td>.25*</td>
<td>-.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Public</td>
<td>.12</td>
<td></td>
<td>.33***</td>
<td>.06</td>
<td>.11</td>
<td>.20*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Social</td>
<td>.06</td>
<td></td>
<td>.38****</td>
<td>-.30**</td>
<td>.16</td>
<td>.03</td>
<td>.30**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. TAO</td>
<td>-.10</td>
<td></td>
<td></td>
<td>.20*</td>
<td>.24*</td>
<td>.10</td>
<td>.07</td>
<td>.02</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. PRO</td>
<td>.05</td>
<td></td>
<td>.07</td>
<td>.13</td>
<td>.09</td>
<td>.03</td>
<td>.07</td>
<td>.07</td>
<td>.25**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. PRN</td>
<td>-.07</td>
<td></td>
<td>.03</td>
<td>.22*</td>
<td>.21*</td>
<td>.04</td>
<td>.13</td>
<td>.00</td>
<td>.55****</td>
<td>-.44****</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. TAS</td>
<td>.08</td>
<td></td>
<td>.13</td>
<td>.00</td>
<td>.15</td>
<td>.18</td>
<td>.17</td>
<td>.00</td>
<td>-.37****</td>
<td>-.38****</td>
<td>-.12</td>
<td></td>
</tr>
<tr>
<td>12. REV</td>
<td>.09</td>
<td></td>
<td>.27**</td>
<td>.24*</td>
<td>.14</td>
<td>.05</td>
<td>.08</td>
<td>.10</td>
<td>-.65****</td>
<td>-.47****</td>
<td>.21*</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note. IES = Identity and Experiences Scale; As = Assimilation, Ac = Accommodation, Bal = Balance; NFC = Need for Cognition; SCS = Self-Consciousness Scale; Private = Private Self-Consciousness; Public = Public Self-Consciousness, Social = Social Anxiety, TAO = Turning Against Object. PRO = Projection; PRN = Principalization; TAS = Turning Against Self; REV = Reversal

^N = 118  ^n = 106.

* p < .05. ** p < .01. *** p < .001. **** p < .0001
CHAPTER IV
DISCUSSION

In this study, the construct validity and internal consistency of The Identity and Experiences Scale was assessed using exploratory factor analysis, Pearson product-moment correlations, partial correlations, and Cronbach’s alpha. In general, the IES displayed adequate internal consistency and its factor structure was consistent with theory. Initial support for the construct validity of the identity accommodation and balance subscales of the IES was obtained. However, limited construct validity was found for the identity assimilation subscale. Table 6 (page 55) presents the observed and expected results of this study using Bonferroni criteria and partialling out the effects of self-esteem.

Factor structure and reliability of the IES

The factor structure of The Identity and Experiences Scale was consistent with past research and theoretical expectations. However, the three factor solution only accounted for 32% of the variance of the total scale. The remaining variance of the scale could be accounted for in part by the seven items that did not load significantly on any factor. Less meaningful and uninterpretable factors may also explain a substantial portion of the unexplained variance. In addition, method variance (i.e., the presentation of items in the same format) and measurement error could have also accounted for a portion of the total variance of the scale.

IES and SEQ

The first hypothesis stated that scores on identity assimilation and balance would be positively correlated with self-esteem, and that scores on identity accommodation would be negatively associated with self-esteem. In general, this hypothesis was
supported. These findings provide support for the convergent validity of the IES for all subscales, though the correlation between identity assimilation and self-esteem was weak.

The magnitude of the correlation between identity balance and self-esteem was greater than that between identity assimilation and self-esteem which is consistent with past research (e.g., Sneed & Whitbourne, submitted for publication), though this difference was not statistically significant using the Fisher Z-transformation for correlation coefficients. However, the finding is inconsistent with theoretical expectations. In theory, identity assimilators should display defensively high self-esteem and therefore, scores on identity assimilation should correlate with self-esteem as strongly as identity balance. This was not observed in this investigation or in previous studies (e.g., Sneed & Whitbourne, submitted for publication, Whitbourne & Collins, in press).

**IES and NFC**

The second hypothesis stated that scores on identity assimilation would be negatively associated with need for cognition, and that scores on identity accommodation and balance would be positively associated. Partial confirmation of this hypothesis was obtained. As predicted, a negative relationship between need for cognition and identity accommodation emerged when the effects of self-esteem were allowed to vary. However, this relationship did not hold when the effects of self-esteem were controlled. As a result, identity accommodation may be related to effortful processing of information because they both correlate with low self-esteem.

The hypothesis that identity assimilation and need for cognition would be negatively associated was not supported. The hypothesis that identity balance and need for cognition would be positively related was also not supported. Surprisingly, as opposed to
a positive relationship, a negative relationship was observed. It had been hypothesized that identity balanced individuals would tend to examine their internal cognitive and affective states in an attempt to form an accurate understanding of themselves and the world. A similar hypothesis was put forth by Robbins and John’s (1997). These researchers suggested that the self-perceiver as scientist (i.e., individuals concerned with acquiring accurate self-knowledge who therefore construct theories about themselves that are based on observation and can be tested) would tend to engage in effortful processing of the kind just described. The results of this study do not support predictions based on either model.

IES and SCS

The third hypothesis that identity accommodation would be positively correlated with private self-consciousness, public self-consciousness, and social anxiety, was substantiated. A positive relationship between identity accommodation and public self-consciousness was obtained. Identity accommodators, who theoretically lack a core sense of self and possess low self-esteem, apparently look to others for guidance and approval. A positive relationship was observed between identity accommodation and private self-consciousness, a result consistent with predictions. It appears that individuals who endorse identity accommodative coping strategies tend to introspect, engage in self-reflection, and attend their inner thoughts and feelings.

A positive relationship was also observed between identity accommodation and social anxiety (i.e., discomfort in the presence of others). Due to the conceptual similarities between identity accommodation and Robbins and John’s (1997) depiction of The Politician as self-perceiver, it was reasoned that the self-concept of these individuals could be thought of as a public performance. The impression they make on people is of
primary importance and to gain approval, these individuals may change their self-presentation. This relationship was supported in that individuals who endorse identity accommodation tend to feel uncomfortable in social situations because they fear evaluation. Presumably, the motivating force behind this approval seeking behavior is the experience of negative affect and anxiety.

The fourth hypothesis stated that identity balance would positively correlate with private self-consciousness, and negatively correlate with public self-consciousness and social anxiety. Partial confirmation of this hypothesis was obtained. When the effects of self-esteem were controlled, the expected relationship between identity balance and private self-consciousness emerged at the .05 alpha level. Clearly, identity balance is related to the tendency to engage in introspection and to become aware of internal thoughts and feelings. Presumably, the drive to formulate an accurate self-conception motivates identity balanced individuals to look within. However, this result needs to be replicated because the magnitude of the relationship was small and the effect could have resulted from Type 1 error inflation as evidenced by the fact that it did not reach significance using Bonferroni criteria.

A negative relationship between identity balance and social anxiety was observed. Clearly, individuals endorsing identity balanced coping strategies have high self-esteem, positive self-regard, and self-confidence, and have little reason to be socially anxious. This relationship was borne out in the data with and without controlling for the effects of self-esteem. In addition, the relationship was highly significant meeting Bonferroni criteria. Thus, that aspect of identity balance that is concerned with perceptions of group interaction has received empirical support in this study.
The fifth hypothesis stated that identity assimilation would be negatively correlated with social anxiety and private self-consciousness, and positively correlated with public self-consciousness. Limited support for this hypothesis was obtained. Allowing the effects of self-esteem to vary, a negative relationship between identity assimilation and private self-consciousness (i.e., the tendency to become aware of internal states such as thoughts, motives, and feelings, and to engage in self-reflection) was observed. This finding provided initial support for the hypothesis that identity assimilation is inversely related to introspective tendencies; however, when the effect of self-esteem was controlled, it was not supported. Thus, it appears that the relationship between identity assimilation and private self-consciousness was due to the effects of self-esteem rather than an aspect of identity assimilation independent of self-esteem.

**IES and DMI**

The sixth hypothesis stated that identity accommodation would be positively associated with defensive turning against the self and negatively associated with defensive reversal. This hypothesis was partially confirmed. With respect to turning against the self, when the effects of self-esteem were allowed to vary, a positive relationship was observed with identity accommodation. This initially indicated that individuals who tend to accommodate (i.e., make changes in the self-concept or identity in the face of identity discrepant experiences) tend to direct anger inward (as would be expected by classical psychoanalytic theory). However, when the effects of self-esteem were controlled, the relationship did not reach significance indicating that it was largely moderated by self-esteem.
With respect to defensive reversal, a negative relationship was found with identity accommodation. That is, individuals utilizing identity accommodative coping strategies tend to not diminish internal conflict or perceived external threats by minimizing their significance or casting them out from consciousness. As previously indicated, identity accommodation is related to introspection and the enjoyment of engaging in effortful processing. As a result, it appears they tend to examine themselves and their motives critically and are relatively unable to deny internal conflict or external threats.

The seventh hypothesis stated that identity balance would be positively associated with defensive principalization. This hypothesis was confirmed. Identity balance was positively related to principalization; that is, the tendency to create the illusion of control by detaching emotional significance from perceived conflicts. This finding empirically supports the identity balance construct and is analogous to the Scientist as self-perceiver (Robbins and John, 1997). These individuals tend emphasize perceptual and informational processing and de-emphasize affective processing and content by utilizing defensive principalization. This findings provide support for the convergent validity of the identity balance subscale.

With respect to hypotheses six and seven, both identity accommodation and balance were found to correlate with defensive turning against the object. These findings were not predicted initially. A negative relationship between turning against the object and identity balance, and a positive relationship between turning against the object and identity accommodation were observed. Though these relationships were not significant by Bonferroni criteria p < .005), these findings are potentially important.
Kemis, Grannemann, and Barclay (1989) have demonstrated that expression and experience of anger is moderated by level and stability of self-esteem. Specifically, individuals with unstable high self-esteem tend to experience high levels of anger, individuals with stable high self-esteem experience low levels of anger, and individuals who possess stable or unstable low self-esteem fall in between. Interestingly, the results reported by Kemis et al. are similar to those obtained in this study. That is, a negative relationship between identity balance (i.e., individuals evidencing stable high self-esteem) and aggression was obtained, where as a positive relationship was observed between identity accommodation (i.e., individuals with low levels of self-esteem) and turning against the object. Though identity assimilation was not significantly related to TAO in the direction consistent with this research, it might be expected that identity assimilators, because of their theoretically high levels of defensive self-esteem (presumably unstable), might report especially high levels of anger and hostility. Importantly, the above results were obtained while controlling for the effects of self-esteem indicating that the hypothesized relationships may be a distinct property of the identity processing style approach.

With respect to hypothesis seven, it was also found that identity balance was negatively related to reversal (i.e., diminishing internal conflict or perceived external threats by minimizing their significance or casting them out from consciousness). It was hypothesized originally that identity assimilation and reversal would be positively correlated but this relationship was observed for identity balance. It is possible that identity balanced individuals tend to minimize internal conflict by minimizing its significance or casting the conflict from consciousness using defensive denial like
processes. This would be consistent with the notion of the identity balanced individual as Scientist (e.g., Robbins & John, 1997).

The eighth hypothesis stated that identity assimilation would positively correlate with defensive projection and reversal. This hypothesis was not supported. The lack of support may be due to the weakness of the identity assimilation subscales as evidenced by the reported findings of this study. It is clear from the above findings that convergent validity has been demonstrated for identity accommodation and identity balance. However, virtually no support for the construct of identity assimilation, as measured by the identity assimilation subscale, was obtained. Either the identity assimilation construct is untenable or the measure used to assess it is not valid. It is believed that there is strong converging theoretical support for the identity assimilation construct and that the difficulty is in the measurement of the construct.

Identity Assimilation

It is believed that three primary reasons account for the finding that the assimilation subscale lacks strong empirical validation and is less reliable than the identity accommodation and balance subscales of the IES: 1) the defensive nature of the individual scoring high on identity assimilation, 2) the related issue of social desirability, and 3) the unconscious nature of the processes described as characteristic of identity assimilation.

As conceptualized above, the identity assimilator characteristically uses self-justification, identity projection, defensive rigidity, and lack of insight to cope with identity challenges. Thus, this kind of individual may be conceptualized, in general, as defensive. This is especially the case when compared with the identity accommodator who can be characterized, in general, as responsive to environmental cues. As a result, those items that
Theoretically correspond to identity assimilation, are also items that the assimilative
individual characteristically denies or projects onto others. For example, item 2 on the IES
“not very interested in advice from others” will be denied by identity assimilators because
recognizing this tendency is to recognize a shortcoming. Given this assumption,
establishment of the validity and reliability of this subscale is especially problematic.

Social desirability refers to the fact that people are only willing to acknowledge
aspects of themselves that they believe to be favorable. It is a problem inherent in the self-
report process that cannot be avoided. In this case, social desirability has considerable
importance given the defensive nature of identity assimilators. Indeed, Safyer and Hauser
(1995) maintain that the biases resulting from defensive denial, which is characteristic of
the identity assimilator, and social desirability are serious limitations of the self-report
method in general.

Lastly, the mechanisms characteristic of identity assimilators are defensive in
nature. They are not defense mechanisms in the classical psychoanalytic sense (i.e.,
preventing forbidden unconscious impulses and their associated affects from becoming
conscious) but are conceptually related (i.e., projection as the attribution to others of
undesirable aspects of the self). As a result, it is only possible to measure conscious
derivatives of these primarily unconscious processes, which makes establishing a reliable
and valid instrument difficult.

Limitations of the Study

The primary shortcoming of this investigation is was its sample, and relatedly, the
methodology used to obtain it. To examine the identity processing styles with which older
adults cope with the psychological, physical, and social role changes inherent in the aging
process, a sample with a mean age of 65 years would have been appropriate. However, the mean age of the present sample was 55.74 (SD = 11.24) with the majority of the sample falling below 60 years of age (70.9%). It is possible that many of the age related changes thought to require adaptive strategies like identity accommodation and assimilation may not have occurred. For example, the social role changes associated with retirement were predominantly not experienced given that only one-quarter of the sample was retired (24.6%) and nearly three-quarters of the sample below 65 years of age (74.4%). However, the IES is a measure of an adult’s tendency to process identity salient discrepancies. Thus, it is believed the specific age related changes associated with “aging” are not necessary to tap the identity processing styles.

The sample was predominantly female, white, educated, and belonging to the middle and upper middle classes. It is possible that differences exist on each of these dimensions. For example, it might be that women tend to utilize identity accommodation more so than men, who utilize identity assimilation. Identity balance might be equally endorsed by both sexes. Socioeconomic status may also have an effect on one’s tendency to endorse a particular identity processing style. For example, it is possible that individuals belonging to the middle and upper middle classes endorse identity accommodative strategies more so than individuals belonging to the lower strata; individuals from this segment of the population might utilize identity assimilation to a greater extent. Differences due to education level may also exist. For example, individuals with higher education levels might endorse identity accommodative strategies whereas individuals with lower education levels may endorse identity assimilative strategies. The employment of an
ethnically and socioeconomically diverse sample would allow for a test of the above possibilities.

The use of a convenience sample rather than a sample representative of the general older adult population limits the generalizability of the present findings. Cook and Campbell (1979) maintain that if the purpose of a study is primarily theoretical, external validity, to which representative sampling pertains, is of least importance; more important are internal, construct, and statistical conclusion validity. Because internal validity refers to the attempt to establish causality among covarying variables, the current study is primarily concerned with construct and statistical conclusion validity. Furthermore, Cook and Campbell (1979) maintain that in practice, external validity is often sacrificed for an increase in statistical power which is associated with convenience samples.

This study also exclusively relied on self-report, paper and pencil, Likert-type questionnaires. This form of mono-method bias introduces ‘surplus construct irrelevances’ (Cook & Campbell, 1979) whose influence cannot be dissociated from the measurement of the target construct. Shared method variance (i.e., presenting all questions in the same format) contributes to the magnitude of the correlation when the same participant is filling out both measures, and also increases Type 1 error. However, to eliminate mono-operation bias, multiple measures of the effect constructs (i.e., IES subscales) must be employed (Cook & Campbell, 1979). For the purpose of this study, the validity of the effect constructs was of primary importance.

Future Directions

Given the above findings, several recommendations are in order for prospective studies. First, the employment of an ethnically and socioeconomically diverse sample
would allow for the examination of differences in gender, education level, and socioeconomic status. Second, a sample consisting of larger numbers of “younger-old” (ages 65-74), “older-old” (ages 75-85), and “oldest old” (ages 85+) individuals would represent those who are experiencing the physical and psychological difficulties inherent in aging and would more accurately assess predictions based on the identity processing perspective. In the current study, only 25% of the sample (n = 30) was 65 years of age or older. Employing an older sample might also allow for the possibility of examining shifts in identity processing styles across the different stages of older adulthood.

Related to this would the employment of a measure of defense that is easy to use and short enough for older adults to complete. In this study, the DMI was the only questionnaire to not be correctly completed in its entirety (n = 12). The DMI however is the most reliable and valid measure of defensive processes but its length (200 items) and difficult administration procedures make it unlikely that it will be of use in populations older than the current sample. A short form of the elderly version of the DMI is needed. It would be highly beneficial to examine the issue of social desirability with respect to the IES. Because theoretically individuals who endorse identity assimilation will also be highly influenced by social desirability, an investigation using, for example, the Crowne-Marlowe Social Desirability Scale (Crowne & Marlowe, 1960) would be fruitful.

Additionally, a future study examining the endorsement of identity processing styles in an older psychiatric sample would be beneficial. A study assessing use of the identity processing styles in a psychiatric sample of anxious and depressed patients might tap those individuals who exclusively endorse identity accommodation and assimilation. Lastly, in addition to examining the construct validity of the IES, further research should
also examine the discriminant validity of its subscales (Kazdin, 1995). That is, examining
the extent to which the IES does and does not correlate with other measures provides a
more complete and accurate assessment of its construct validity (i.e., identifying what the
constructs of the IES are and are not like).

In summary, this study provides an interesting foray into the processes by which
adults cope with identity salient age related changes. The identity processing perspective
provides a unique theoretical framework for understanding how older adults cope with
change. By placing identity at the center of experience, successful aging is understood as
the ability to maintain a stable identity, through the negotiation of self-other experiences,
in later adulthood.
Table 6. Observed and Expected Results Between the IES, SEQ, NFC, SCS, and DMI

<table>
<thead>
<tr>
<th></th>
<th>SEQ</th>
<th>NFC</th>
<th>Private</th>
<th>Public</th>
<th>Social</th>
<th>TAO</th>
<th>PRO</th>
<th>PRN</th>
<th>TAS</th>
<th>REV</th>
</tr>
</thead>
<tbody>
<tr>
<td>IES - As</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IES - Ac</td>
<td>-</td>
<td>+</td>
<td>+*</td>
<td>+**</td>
<td>+***</td>
<td></td>
<td>+</td>
<td></td>
<td>-*</td>
<td></td>
</tr>
<tr>
<td>IES - Bal</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-*</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

Note. IES = Identity and Experiences Scale; As = Assimilation; Ac = Accommodation; Bal = Balance; SEQ = Self-Esteem Questionnaire; NFC = Need for Cognition; SCS = Self-Consciousness Scale; Private = Private Self-Consciousness; Public = Public Self-Consciousness; Social = Social Anxiety; TAO = Turning Against Object; PRO = Projection; PRN = Principalization; TAS = Turning Against Self; REV = Reversal. Blank cells indicate that no relationship was expected. Asterisks indicate significance controlling for the effects of self-esteem and using Bonferroni criteria (p < .005).

*p < .005. **p < .001. ***p < .0001
APPENDIX

QUESTIONNAIRES

(in pocket)
REFERENCES


INSTRUCTIONS: Read carefully
PLEASE DO NOT MAKE ANY MARKS ON THIS BOOKLET

On each of the following pages is a short story. Following each story are four questions with a choice of five answers for each. The four questions inquire about four kinds of reactions to the story: actual behavior, impulsive behavior (in fantasy), thoughts, and feelings. Of the four, it is only actual behavior which is outwardly expressed; the other three take place in the privacy of one's mind. On the accompanying answer sheet, the stories are identified with the same letters as in the story booklet: b.-, a.-, u.-, s.-, d.-, m.-, etc.

What we want you to do is to select the one answer of the five which you think is the most (M) representative of how you would react. Then find the number corresponding to that answer on the answer sheet and make a mark between the green dots of the M for the answer you have chosen. Next, select the one answer which you think is least (L) representative of how you would react and make a mark between the green dots of the L for that answer. For example, let us assume that out of the five possible answers to a question (e.g., numbers 136, 137, 138, 139, 140), answer number 137 is the one you consider most representative of the way you would react, and answer number 140 is the least representative. In this case, the corresponding part of the answer sheet would look like this:

```
136 M L
137 M L
138 M L
139 M L
140 M L
```

Be sure to make a mark through only one M and one L in each group of five responses. The remaining Ms and Ls in each cluster should not be marked in any way.

Read all the five answers following the question before you make your choices. In marking your responses on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Note that each story is answered in a separate column. Fill out the answer sheet using only a soft, black pencil. If you change your answer, be sure to erase the undesired one completely.

There are no right or wrong answers here; the only thing that should guide your selections is your own knowledge of yourself. Allow your mind to imagine for a moment that the event described in the story is really happening to you, even though you may never have experienced such an event. When you select your answer, remember we are not asking which answer you like most and like least, but rather the answers which would most and least represent the way you would act and feel in these situations.

If you have no questions, fill out the information at the top of the answer sheet, then turn this page and begin. Be sure to note that this booklet is printed on both sides of a page.
You are waiting for the bus at the edge of the road. The streets are wet and muddy after the previous night's rain. A car sweeps through a puddle in front of you, splashing your clothing with mud.

What would your ACTUAL reaction be?
1. I would note the car's license number so that I could track down that careless driver.
2. I'd wipe myself off with a smile.
3. I'd yell curses after the driver.
4. I would scold myself for not having at least worn a raincoat.
5. I'd shrug it off; after all, things like that are unavoidable.

What would you IMPULSIVELY (in fantasy) want to do?
6. Wipe that driver's face in the mud.
7. Report that incompetent driver to the police.
8. Kick myself for standing too close to the edge of the road.
9. Let the driver know that I don't really mind.
10. Inform that driver that bystanders also have rights.

What THOUGHT might occur to you?
11. Why do I always get myself into things like this?
12. To hell with that driver!
13. I'm sure that basically that driver is a nice fellow.
14. One can expect something like this to happen on wet days.
15. I wonder if that driver splashed me on purpose.

How would you FEEL and why?
16. Satisfied; after all, it could have been worse.
17. Depressed, because of my bad luck.
18. Resigned, for you've got to take things as they come.
19. Resentment, because the driver was so thoughtless and inconsiderate.
20. Furious that that driver got me dirty.
You hold a post of responsibility for the smooth operation of an important organization which is constantly under great pressure to meet deadlines. Because things haven't been running as smoothly as they should lately, despite your initiative and resourcefulness, you have planned some changes in personnel for the near future.

Before you do so, however, your area manager arrives unexpectedly, asks some brusque questions about the work of the department, and then tells you that he is relieving you of your responsibility and assigning your assistant to your place.

What would your ACTUAL reaction be?
21. I'd accept my dismissal gracefully, since the area manager is only doing his job.
22. I'd blame the area manager for having made up his mind against me even before the visit.
23. I'd be thankful for being relieved of such a tough job.
24. I'd look for an opportunity to undercut my assistant.
25. I'd blame myself for not being competent enough.

What would you IMPULSIVELY (in fantasy) want to do?
26. Congratulate my assistant on the promotion.
27. Expose the probable plot between my superior and my assistant to get rid of me.
28. Tell the area manager off in no uncertain terms.
29. I'd like to shoot myself for not having made the necessary changes sooner.
30. I'd like to quit, but one must take the bad with the good in any organization.

What THOUGHT might occur to you?
31. I wish I could come face to face with the area manager in a dark alley.
32. In an organization it is essential to have the right person in the right job.
33. There is no doubt that this was just an excuse to get rid of me.
34. I'm really lucky that I no longer have all that responsibility.
35. How could I be so dumb as to let things slide?

How would you FEEL and why?
36. Resentful, because the area manager had it in for me.
37. Angry at my assistant for getting my job.
38. Pleased that nothing worse had happened.
39. Upset that I am a failure.
40. Resigned; after all, one must be satisfied with having done the best one can.
You have been living with your daughter and son-in-law since your spouse passed away. They have been good to you and made you feel at home. However, you have been seeking new friends and have finally decided it would be better for you to set up house with one of them so that both of you would be more independent. You tell your children of your decision, and they are shocked and hurt that you would want to move. They tell you they are against the whole idea.

What would you ACTUAL reaction be?
41. I would stay because my children know what's best for me.
42. I'd tell them, "You're just afraid your friends will think you kicked me out."
43. I would cancel my plans, since one must keep peace in the family.
44. I'd tell them it was none of their business and move anyway.
45. I'd agree to remain with them and apologize for having upset them.

What would you IMPULSIVELY (in fantasy) want to do?
46. Knock my head against the wall.
47. Tell them to stop ruining my life.
48. Thank them for being so concerned with my welfare.
49. Leave, slamming the door in their faces.
50. Make my own decision, since one must do what is best for oneself.

What THOUGHT might occur to you?
51. Why don't they just shut up.
52. They never have really cared about my welfare.
53. They are so good to me; I should follow their advice.
54. You can't take without giving something in return.
55. It's all my own fault for planning such a move.

How would you FEEL and why?
56. Annoyed that they think I am incompetent to make my own decisions.
57. Miserable, because there is nothing I can say to change their minds.
58. Grateful for their concern.
59. Comfortable with my decision, since you can't please everyone all the time.
60. Furious, because they are interfering with my plans.
You are spending your vacation visiting an old friend who has found an exciting new job in another town and has gone to live there. She invites you to go with her to a dance given that weekend at the community club-house.

Shortly after you arrive, she accepts an invitation to dance, leaving you with a group of strangers to whom you have barely been introduced. They talk with you, but for some reason no one asks you to dance. Your friend, on the other hand, seems to be very popular that evening; she looks as if she is having a wonderful time. As she dances past, she calls out to you, “Why aren’t you dancing?”

What would your ACTUAL reaction be?
61. I’d say sarcastically, “I’m not dancing because I’d rather watch you.”
62. I’d tell her that I really didn’t feel like dancing.
63. I’d go to the powder room to see what’s wrong with me.
64. I’d tell her that it’s easier to become acquainted through conversation than it is by dancing.
65. I’d get up and leave because she apparently wants to embarrass me.

What would you IMPULSIVELY (in fantasy) want to do?
66. Assure her that I am perfectly content and happy so she won’t worry.
67. I’d like to slap her face.
68. Point out that one cannot expect to be the belle of the ball one’s first evening in a strange place.
69. Tell her that I know now what sort of a “friend” she really is.
70. I’d like to sink into the floor and disappear.

What THOUGHT might occur to you?
71. She has it in for me.
72. I should never have come here in the first place.
73. I’m glad my friend is enjoying herself.
74. Experiences like this one can’t be avoided at a party where you don’t know the crowd.
75. I’ll make her regret her behavior.

How would you FEEL and why?
76. Upset, because I was so unsuccessful.
77. Furious at her for embarrassing me.
78. Resigned, because this is a situation every newcomer must endure.
79. Angry at being entrapped by her like that.
80. Grateful for having had such a pleasant evening.
At your job you want to impress upon your foreman the fact that you are more skilled than your fellow workers. You are eagerly awaiting an opportunity to prove yourself.

One day a new machine is brought into the factory. The foreman calls all the workers together and asks whether anyone knows how to operate it. You sense the chance you have been waiting for, so you tell the foreman that you have worked with a similar machine and would like a chance to try your hand at this one. He refuses, saying, “Sorry, we can't take a chance,” and calls a veteran worker to come over and try to get the machine started.

No sooner has the veteran worker pulled the starter, than sparks begin to fly and the machine grinds to a halt. At this point the foreman calls and asks you if you still want a chance to try and start the machine.

What would your ACTUAL reaction be?

81. I'd say that I doubt if I could do it either.
82. I'd tell my fellow workers that the foreman wants to hold me responsible for the machine's crack-up.
83. I'd tell the foreman that I appreciated being given the chance.
84. I'd decline, cursing the foreman under my breath.
85. I'd tell the foreman that I would try because one must never back down from a challenge.

What would you IMPULSIVELY (in fantasy) want to do?

86. Tell that foreman that he'll not make me the scapegoat for a broken machine.
87. Thank the foreman for not letting me try it first.
88. Tell the foreman that he should try to start the broken machine himself.
89. Point out to the foreman that experience doesn't guarantee success.
90. Kick myself for talking myself into an unbearable situation.

What THOUGHT might occur to you?

91. That foreman is really a pretty decent guy.
92. Damn him and his blasted machine.
93. This foreman is out to get me.
94. Machines are not always reliable.
95. How could I be so stupid as to even think of operating that machine.

How would you FEEL and why?

96. Indifferent, because when one's abilities are not appreciated one's enthusiasm is lost.
97. Angry that I was asked to do an impossible job.
98. Glad that I didn't wreck the machine.
99. Annoyed that I was purposely put on the spot.
100. Disgusted with myself, because I risked making a fool out of myself.
On your way to catch a train, you are hurrying through a narrow street lined with tall buildings. Suddenly a piece of masonry comes crashing down from a roof where repairmen are working. A piece of brick bounces off the sidewalk, bruising your leg.

What would your ACTUAL reaction be?
101. I'd tell them I ought to sue them.
102. I'd curse myself for having such bad luck.
103. I'd hurry on, for one should not permit oneself to be diverted from one's plans.
104. I'd continue on my way, grateful that nothing worse had happened.
105. I'd try to discover who these irresponsible people are.

What would you IMPULSIVELY (in fantasy) want to do?
106. Remind the repairmen of their obligation to public safety.
107. Assure those men that nothing serious had happened.
108. Give them a piece of my mind.
109. Kick myself for not having watched where I was going.
110. See to it that those careless workers pay for their negligence.

What THOUGHT might occur to you?
111. Those repairmen don't know how to do their job right.
112. I'm lucky that I wasn't seriously hurt.
113. Damn those men!
114. Why do these things always happen to me?
115. One can't be too careful these days.

How would you FEEL and why?
116. Angry, because I was hurt.
117. Furious, because I was almost killed by their negligence.
118. Calm, for one must practice self-control.
119. Upset by my bad luck.
120. Thankful that I'd gotten away with no more than a scratch.
Driving through town in the late afternoon, you arrive at one of the busiest intersections. Although the light has changed in your favor, you see that pedestrians are not obeying the “wait” sign and are blocking your path. You attempt to complete your turn with due caution before the light turns against you, as the law requires. As you complete the turn, a traffic policeman orders you over to the side and charges you with violating the pedestrians’ right-of-way. You explain that you had taken the only possible course of action, but the policeman proceeds to give you a ticket nevertheless.

What would your ACTUAL reaction be?
121. I’d blame myself for having been careless.
122. I’d go to court and bring counter charges against the policeman.
123. I’d ask the policeman why he has such a grudge against drivers.
124. I’d try to cooperate with the policeman, who, after all, is a good guy.
125. I’d take the ticket without question, since the policeman was just doing his duty.

What would you IMPULSIVELY (in fantasy) want to do?
126. Tell the policeman he can’t use his position to push me around.
127. Kick myself for not having waited for the next green light.
128. Thank the policeman for saving me from a possible accident.
129. Stand up for my rights as a matter of principle.
130. Slam the door in his face and drive off.

What THOUGHT might occur to you?
131. He’s doing the right thing; actually, I ought to thank him for teaching me an important lesson.
132. Each man must carry out his job as he sees it.
133. This guy ought to go back to pounding a beat.
134. How could I be so stupid!
135. I bet he gets a kick out of giving tickets to people.

How would you FEEL and why?
136. Boiling anger, because he’s making trouble for me.
137. Resentment, because he’s picking on me.
138. Ashamed, because I was negligent.
139. Indifferent; after all, this sort of thing happens all the time.
140. Relieved, because I’d been prevented from getting into worse trouble.
You have been retired for 2 years after having turned your business over to your son. At the time he wanted you to stay on in a supervisory capacity, but you refused. Now you find you are bored and would like to start up a new business in a different area. You have decided to ask your son if he would like to have a part in the new enterprise so you can start off in a more ambitious way. After listening to your proposal, he reminds you that he had wanted you to stay on in your old business and not to retire. Then he tells you, "I think you're crazy to start something new at this stage in your life and I'm certainly not going to participate. If you want to do something, why don't you come back and work with me."

What would your ACTUAL reaction be?
141. I'd accept his offer since what's important is keeping busy.
142. I would admit that I guess I am too old to start something new.
143. I'd tell him off for trying to tell me what to do.
144. I'd tell him he really wants me where he can keep an eye on me because he thinks I'm getting senile.
145. I'd thank him for still wanting me after I had quit on him.

What would you IMPULSIVELY (in fantasy) want to do?
146. Go to work for him and make him happy.
147. Give up trying and end it all.
148. Take my son's offer since it's not wise to test your luck twice.
149. Let him know what an ungrateful son everyone thinks he is.
150. Tell him that I wouldn't work for him if he were the last man on earth.

What THOUGHT might occur to you?
151. He'll get what's coming to him one day.
152. Family considerations can't enter into business decisions.
153. Why was I so stupid as to bring the subject up.
154. I must admit that my son is acting for my own good.
155. This proves what I've suspected all along, that my son no longer trusts my judgment.

How would you FEEL and why?
156. Angry, because he doesn't want to see me surpass him in business.
157. Grateful for his offer of a job.
158. Resentful that he is sabotaging my plans.
159. Resigned, since you can't have everything your own way all the time.
160. Hopeless, because I couldn't get my son's approval.
One afternoon while you and your best friend are playing cards, the man you've been dating drops in unexpectedly. Although you and he have been seeing each other regularly for over a year, you have not been able to get together lately; therefore, you are very happy he has dropped by. You invite him in for a cup of coffee and introduce him to her. The next night you ring up to invite him to your house for dinner, but he tells you that he has come down with a bad cold and thinks that it is best for him to stay home. After dinner you feel sort of let down, so you decide to go to the movies. Coming out of the movie theater, you come upon your gentleman friend arm-in-arm with your best friend.

What would your ACTUAL reaction be?
161. I'd ignore them since I'm sure they'd try to pretend that they didn't see me.
162. I'd greet them politely as a civilized person should.
163. I'd curse them under my breath and walk past them.
164. I'd tell them that I am delighted that they have become friends.
165. I'd go home and have a good cry.

What would you IMPULSIVELY (in fantasy) want to do?
166. Hide somewhere in order to avoid facing them.
167. Slap his face.
168. Show them that I am perfectly happy seeing them together.
169. Ask her if stealing is the only way she knows of getting a man.
170. Indicate that I know that all is fair in love and war.

What THOUGHT might occur to you?
171. Naturally he likes her; she's so much prettier than I am.
172. Self-interest can cause the best of friends to be disloyal.
173. They certainly are a pair of double-crossers.
174. I hope they get what they deserve.
175. They really do make a handsome couple.

How would you FEEL and why?
176. Pleased that they get along so well.
177. Upset, because I shouldn't have been so trusting.
178. Resigned, because you've got to take life as it comes.
179. Enraged, because of their dishonesty.
180. Furious at them because of what happened.
You and an old school friend are competing for a newly vacated executive position in the firm where you work. Although both your chances seem about equal, your friend has had more opportunity to show resourcefulness in critical situations. Recently, however, you have successfully pushed through some excellent deals. In spite of this, the board of directors decides to promote your friend rather than you.

**What would your ACTUAL reaction be?**

181. I'd try to find out which director “blackballed” me.
182. I'd continue to do my duty as a responsible person must.
183. I'd accept the outcome as proof that I'm not executive material.
184. I'd protest the decision of the board most vehemently.
185. I'd congratulate my friend on the promotion.

**What would you IMPULSIVELY (in fantasy) want to do?**

186. Ask the board to reconsider, since a mistake would be detrimental to the company.
187. Kick myself for having aspired to a job for which I wasn't qualified.
188. Show the board how biased they’ve been in their unjust treatment of me.
189. Help my friend make a success at the new job.
190. Break the neck of each and every member of the board of directors.

**What THOUGHT might occur to you?**

191. I guess I just don't have what it takes.
192. I probably wouldn't enjoy an executive position as much as the one I have now.
193. There certainly is something fishy about the board’s decision.
194. One must take a blow such as this in one's stride.
195. Damn that board of directors!

**How would you FEEL and why?**

196. Happy that I still have the job I am used to.
197. Upset, because my inadequacy was made public.
198. Furious at the directors because of their treatment of me.
199. Resigned, for that’s the way it goes in the business world.
200. Angry, because I have been the victim of an unjust decision.
INSTRUCTIONS: Read carefully

PLEASE DO NOT MAKE ANY MARKS ON THIS BOOKLET

On each of the following pages is a short story. Following each story are four questions with a choice of five answers for each. The four questions inquire about four kinds of reactions to the story: actual behavior, impulsive behavior (in fantasy), thoughts, and feelings. Of the four, it is only actual behavior which is outwardly expressed; the other three take place in the privacy of one’s mind. On the accompanying answer sheet, the stories are identified with the same letters as in the story booklet: b.---, a.---, u.---, s.---, d.---, m.---, etc.

What we want you to do is to select the one answer of the five which you think is the most (M) representative of how you would react. Then find the number corresponding to that answer on the answer sheet and make a mark between the green dots of the M for the answer you have chosen. Next, select the one answer which you think is least (L) representative of how you would react and make a mark between the green dots of the L for that answer. For example, let us assume that out of the five possible answers to a question (e.g., numbers 136, 137, 138, 139, 140), answer number 137 is the one you consider most representative of the way you would react, and answer number 140 is the least representative. In this case, the corresponding part of the answer sheet would look like this:

```
136 M L
137 M L
138 M L
139 M L
140 M L
```

Be sure to make a mark through only one M and one L in each group of five responses. The remaining Ms and Ls in each cluster should not be marked in any way.

Read all five answers following the question before you make your choices. In marking your responses on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Note that each story is answered in a separate column. Fill out the answer sheet using only a soft, black pencil. If you change your answer, be sure to erase the undesired one completely.

There are no right or wrong answers here; the only thing that should guide your selections is your own knowledge of yourself. Allow your mind to imagine for a moment that the event described in the story is really happening to you, even though you may never have experienced such an event. When you select your answer, remember we are not asking which answer you like most and like least, but rather the answers which would most and least represent the way you would act and feel in these situations.

If you have no questions, fill out the information at the top of the answer sheet, then turn this page and begin. Be sure to note that this booklet is printed on both sides of a page.
You are waiting for the bus at the edge of the road. The streets are wet and muddy after the previous night’s rain. A car sweeps through a puddle in front of you, splashing your clothing with mud.

What would your ACTUAL reaction be?
1. I would note the car’s license number so that I could track down that careless driver.
2. I’d wipe myself off with a smile.
3. I’d yell curses after the driver.
4. I would scold myself for not having at least worn a raincoat.
5. I’d shrug it off; after all, things like that are unavoidable.

What would you IMPULSIVELY (in fantasy) want to do?
6. Wipe that driver’s face in the mud.
7. Report that incompetent driver to the police.
8. Kick myself for standing too close to the edge of the road.
9. Let the driver know that I don’t really mind.
10. Inform that driver that bystanders also have rights.

What THOUGHT might occur to you?
11. Why do I always get myself into things like this?
12. To hell with that driver!
13. I’m sure that basically that driver is a nice fellow.
14. One can expect something like this to happen on wet days.
15. I wonder if that driver splashed me on purpose.

How would you FEEL and why?
16. Satisfied; after all, it could have been worse.
17. Depressed, because of my bad luck.
18. Resigned, for you’ve got to take things as they come.
19. Resentment, because the driver was so thoughtless and inconsiderate.
20. Furious that that driver got me dirty.
You hold a post of responsibility for the smooth operation of an important organization which is constantly under great pressure to meet deadlines. Because things haven't been running as smoothly as they should lately, despite your initiative and resourcefulness, you have planned some changes in personnel for the near future.

Before you do so, however, your area manager arrives unexpectedly, asks some brusque questions about the work of the department, and then tells you that he is relieving you of your responsibility and assigning your assistant to your place.

What would your ACTUAL reaction be?
21. I’d accept my dismissal gracefully, since the area manager is only doing his job.
22. I’d blame the area manager for having made up his mind against me even before the visit.
23. I’d be thankful for being relieved of such a tough job.
24. I’d look for an opportunity to undercut my assistant.
25. I’d blame myself for not being competent enough.

What would you IMPULSIVELY (in fantasy) want to do?
26. Congratulate my assistant on the promotion.
27. Expose the probable plot between my superior and my assistant to get me.
28. Tell the area manager off in no uncertain terms.
29. I’d like to shoot myself for not having made the necessary changes sooner.
30. I’d like to quit, but one must take the bad with the good in any organization.

What THOUGHT might occur to you?
31. I wish I could come face to face with the area manager in a dark alley.
32. In an organization it is essential to have the right person in the right job.
33. There is no doubt that this was just an excuse to get rid of me.
34. I’m really lucky that I no longer have all that responsibility.
35. How could I be so dumb as to let things slide?

How would you FEEL and why?
36. Resentful, because the area manager had it in for me.
37. Angry at my assistant for getting my job.
38. Pleased that nothing worse had happened.
39. Upset that I am a failure.
40. Resigned; after all, one must be satisfied with having done the best one can.
You have been living with your daughter and son-in-law since your spouse passed away. They have been good to you and made you feel at home. However, you have been seeking new friends and have finally decided it would be better for you to set up house with one of them so that both of you would be more independent. You tell your children of your decision, and they are shocked and hurt that you would want to move. They tell you they are against the whole idea.

What would you ACTUAL reaction be?
41. I would stay because my children know what’s best for me.
42. I’d tell them, “You’re just afraid your friends will think you kicked me out.”
43. I would cancel my plans, since one must keep peace in the family.
44. I’d tell them it was none of their business and move anyway.
45. I’d agree to remain with them and apologize for having upset them.

What would you IMPULSIVELY (in fantasy) want to do?
46. Knock my head against the wall.
47. Tell them to stop ruining my life.
48. Thank them for being so concerned with my welfare.
49. Leave, slamming the door in their faces.
50. Make my own decision, since one must do what is best for oneself.

What THOUGHT might occur to you?
51. Why don’t they just shut up.
52. They never have really cared about my welfare.
53. They are so good to me; I should follow their advice.
54. You can’t take without giving something in return.
55. It’s all my own fault for planning such a move.

How would you FEEL and why?
56. Annoyed that they think I am incompetent to make my own decisions.
57. Miserable, because there is nothing I can say to change their minds.
58. Grateful for their concern.
59. Comfortable with my decision, since you can’t please everyone all the time.
60. Furious, because they are interfering with my plans.
You are extremely eager to continue your sports activities now that you're retired. You work out regularly and play competition tennis. You have a big contest coming up the following week and have been out on the court practicing. On the way home, you stop off at a restaurant for a cold drink and discover your wife is there with a friend. As you are about to go over to join them, you overhear the friend say, “Your husband certainly is a great tennis player. I think he has a good chance of winning the senior men's tournament.” Your wife laughs and replies, “He really hasn't got what it takes anymore.”

What would your ACTUAL reaction be?
61. I'd tell her off then and there.
62. I would greet her affectionately, as usual, because I know she really appreciates me.
63. I'd be quiet and withdrawn, not mentioning what I had overheard.
64. I'd take it in my stride, for women's talk is never to be taken seriously.
65. I'd tell her that I had overheard her and had always suspected she was two-faced.

What would you IMPULSIVELY (in fantasy) want to do?
66. Assure my wife that I was proud of her frankness.
67. Break her neck.
68. Tell her that men expect loyalty from their wives.
69. Let her know that I'd always suspected her of talking behind my back.
70. Disappear without letting them see how upset I was.

What THOUGHT might occur to you?
71. I bet she talks about me that way to everybody.
72. Perhaps she is right about my game.
73. I'm sure she's only kidding.
74. One shouldn't be bothered by such talk.
75. She needs to be taught a lesson.

How would you FEEL and why?
76. Worthless, because I'd realize my prowess was slipping.
77. Furious at her for speaking about me that way.
78. Unconcerned, because words never really hurt anybody.
79. Outraged, because her gossip will ruin my game.
80. Serene, because she didn't really mean what she said.
At your job you want to impress upon your foreman the fact that you are more skilled than your fellow workers. You are eagerly awaiting an opportunity to prove yourself.

One day a new machine is brought into the factory. The foreman calls all the workers together and asks whether anyone knows how to operate it. You sense the chance you have been waiting for, so you tell the foreman that you have worked with a similar machine and would like a chance to try your hand at this one. He refuses, saying, "Sorry, we can't take a chance," and calls a veteran worker to come over and try to get the machine started.

No sooner has the veteran worker pulled the starter, than sparks begin to fly and the machine grinds to a halt. At this point the foreman calls and asks you if you still want a chance to try and start the machine.

What would your ACTUAL reaction be?

81. I'd say that I doubt if I could do it either.
82. I'd tell my fellow workers that the foreman wants to hold me responsible for the machine's crack-up.
83. I'd tell the foreman that I appreciated being given the chance.
84. I'd decline, cursing the foreman under my breath.
85. I'd tell the foreman that I would try because one must never back down from a challenge.

What would you IMPULSIVELY (in fantasy) want to do?

86. Tell that foreman that he'll not make me the scapegoat for a broken machine.
87. Thank the foreman for not letting me try it first.
88. Tell the foreman that he should try to start the broken machine himself.
89. Point out to the foreman that experience doesn't guarantee success.
90. Kick myself for talking myself into an unbearable situation.

What THOUGHT might occur to you?

91. That foreman is really a pretty decent guy.
92. Damn him and his blasted machine.
93. This foreman is out to get me.
94. Machines are not always reliable.
95. How could I be so stupid as to even think of operating that machine.

How would you FEEL and why?

96. Indifferent, because when one's abilities are not appreciated one's enthusiasm is lost.
97. Angry that I was asked to do an impossible job.
98. Glad that I didn't wreck the machine.
99. Annoyed that I was purposely put on the spot.
100. Disgusted with myself because I risked making a fool out of myself.
On your way to catch a train, you are hurrying through a narrow street lined with tall buildings. Suddenly a piece of masonry comes crashing down from a roof where repairmen are working. A piece of brick bounces off the sidewalk, bruising your leg.

What would your ACTUAL reaction be?

101. I'd tell them I ought to sue them.
102. I'd curse myself for having such bad luck.
103. I'd hurry on, for one should not permit oneself to be diverted from one's plans.
104. I'd continue on my way, grateful that nothing worse had happened.
105. I'd try to discover who these irresponsible people are.

What would you IMPULSIVELY (in fantasy) want to do?

106. Remind the repairmen of their obligation to public safety.
107. Assure those men that nothing serious had happened.
108. Give them a piece of my mind.
109. Kick myself for not having watched where I was going.
110. See to it that those careless workers pay for their negligence.

What THOUGHT might occur to you?

111. Those repairmen don't know how to do their job right.
112. I'm lucky that I wasn't seriously hurt.
113. Damn those men!
114. Why do these things always happen to me?
115. One can't be too careful these days.

How would you FEEL and why?

116. Angry, because I was hurt.
117. Furious, because I was almost killed by their negligence.
118. Calm, for one must practice self-control.
119. Upset by my bad luck.
120. Thankful that I'd gotten away with no more than a scratch.
Driving through town in the late afternoon, you arrive at one of the busiest intersections. Although the light has changed in your favor, you see that pedestrians are not obeying the “wait” sign and are blocking your path. You attempt to complete your turn with due caution before the light turns against you, as the law requires. As you complete the turn, a traffic policeman orders you over to the side and charges you with violating the pedestrians’ right-of-way. You explain that you had taken the only possible course of action, but the policeman proceeds to give you a ticket nevertheless.

What would your ACTUAL reaction be?
121. I’d blame myself for having been careless.
122. I’d go to court and bring counter charges against the policeman.
123. I’d ask the policeman why he has such a grudge against drivers.
124. I’d try to cooperate with the policeman, who, after all, is a good guy.
125. I’d take the ticket without question, since the policeman was just doing his duty.

What would you IMPULSIVELY (in fantasy) want to do?
126. Tell the policeman he can’t use his position to push me around.
127. Kick myself for not having waited for the next green light.
128. Thank the policeman for saving me from a possible accident.
129. Stand up for my rights as a matter of principle.
130. Slam the door in his face and drive off.

What THOUGHT might occur to you?
131. He’s doing the right thing; actually, I ought to thank him for teaching me an important lesson.
132. Each man must carry out his job as he sees it.
133. This guy ought to go back to pounding a beat.
134. How could I be so stupid!
135. I bet he gets a kick out of giving tickets to people.

How would you FEEL and why?
136. Boiling anger, because he’s making trouble for me.
137. Resentment, because he’s picking on me.
138. Ashamed, because I was negligent.
139. Indifferent; after all, this sort of thing happens all the time.
140. Relieved, because I’d been prevented from getting into worse trouble.
You have been retired for 2 years after having turned your business over to your son. At the time he wanted you to stay on in a supervisory capacity, but you refused. Now you find you are bored and would like to start up a new business in a different area. You have decided to ask your son if he would like to have a part in the new enterprise so you can start off in a more ambitious way. After listening to your proposal, he reminds you that he had wanted you to stay on in your old business and not to retire. Then he tells you, "I think you're crazy to start something new at this stage in your life, and I'm certainly not going to participate. If you want to do something, why don't you come back and work with me."

What would your ACTUAL reaction be?
141. I'd accept his offer since what's important is keeping busy.
142. I would admit that I guess I am too old to start something new.
143. I'd tell him off for trying to tell me what to do.
144. I'd tell him he really wants me where he can keep an eye on me because he thinks I'm getting senile.
145. I'd thank him for still wanting me after I had quit on him.

What would you IMPULSIVELY (in fantasy) want to do?
146. Go to work for him and make him happy.
147. Give up trying and end it all.
148. Take my son's offer since it's not wise to test you luck twice.
149. Let him know what an ungrateful son everyone thinks he is.
150. Tell him that I wouldn't work for him if he were the last man on earth.

What THOUGHT might occur to you?
151. He'll get what's coming to him one day.
152. Family considerations can't enter into business decisions.
153. Why was I so stupid as to bring the subject up.
154. I must admit that my son is acting for my own good.
155. This proves what I've suspected all along, that my son no longer trusts my judgment.

How would you FEEL and why?
156. Angry, because he doesn't want to see me surpass him in business.
157. Grateful for his offer of a job.
158. Resentful that he is sabotaging my plans.
159. Resigned, since you can't have everything your own way all the time.
160. Hopeless, because I couldn't get my son's approval.
One evening at a party you introduce your current female companion to your best friend who is a divorcé. That weekend you telephone to invite your lady friend out to dinner, but she tells you that she has come down with a bad cold and thinks it is best for her not to leave home. After dinner you feel sort of let down, so you decide to go to the movies. Coming out of the movie theater, you come upon your lady friend arm-in-arm with your best friend.

What would your ACTUAL reaction be?
161. I'd tell my lady friend she could have told me it was over instead of cheating behind my back.
162. I'd greet them politely as a civilized person should.
163. I'd make sure they both knew I wanted nothing more to do with them.
164. I'd tell them that I am delighted that they have become friends.
165. I'd duck out of sight to avoid facing them.

What would you IMPULSIVELY (in fantasy) want to do?
166. Go home and sulk.
167. Knock him down and grab her away from him.
168. Show them that I really don't mind their being together.
169. Ask him if stealing is the only way he knows of getting a woman.
170. Indicate that it takes more than one battle to win a war.

What THOUGHT might occur to you?
171. This wouldn't have happened if I had been more attentive to her.
172. All's fair in love and war.
173. They certainly are a pair of double-crossers.
174. I hope they get what they deserve.
175. I was getting tired of her, anyhow.

How would you FEEL and why?
176. Relieved that I was free again.
177. Upset, because I shouldn't have been so trusting.
178. Resigned, because you've got to take life as it comes.
179. Disgusted, because of their dishonesty.
180. Furious at them because of what happened.
You and an old school friend are competing for a newly vacated executive position in the firm where you work. Although both your chances seem about equal, your friend has had more opportunity to show resourcefulness in critical situations. Recently, however, you have successfully pushed through some excellent deals. In spite of this, the board of directors decides to promote your friend rather than you.

What would your ACTUAL reaction be?
181. I'd try to find out which director “blackballed” me.
182. I'd continue to do my duty as a responsible person must.
183. I'd accept the outcome as proof that I'm not executive material.
184. I'd protest the decision of the board most vehemently.
185. I'd congratulate my friend on the promotion.

What would you IMPULSIVELY (in fantasy) want to do?
186. Ask the board to reconsider, since a mistake would be detrimental to the company.
187. Kick myself for having aspired to a job for which I wasn't qualified.
188. Show the board how biased they've been in their unjust treatment of me.
189. Help my friend make a success at the new job.
190. Break the neck of each and every member of the board of directors.

What THOUGHT might occur to you?
191. I guess I just don't have what it takes.
192. I probably wouldn't enjoy an executive position as much as the one I have now.
193. There certainly is something fishy about the board's decision.
194. One must take a blow such as this in one's stride.
195. Damn that board of directors.

How would you FEEL and why?
196. Happy that I still have the job I am used to.
197. Upset, because my inadequacy was made public.
198. Furious at the directors because of their treatment of me.
199. Resigned, for that's the way it goes in the business world.
200. Angry, because I have been the victim of an unjust decision.
<table>
<thead>
<tr>
<th>NAME</th>
<th>OCCUPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLACE</td>
<td>DATE</td>
</tr>
</tbody>
</table>

Mark your response by drawing a line through the appropriate character.

Example: 300 M

Print your numerals like this:

01234
56789X

<table>
<thead>
<tr>
<th>IDENTIFICATION NUMBER</th>
<th>AGE</th>
<th>EDUCATION</th>
<th>M</th>
<th>SEX</th>
<th>F</th>
<th>ACTUAL BEHAVIOR (AB)</th>
<th>THOUGHT (T)</th>
<th>FANTASY BEHAVIOR (FB)</th>
<th>AFFECT (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. a. u. s. d. m.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 M L 21 M L 41 M L 61 M L 81 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 M L 22 M L 42 M L 62 M L 82 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 M L 23 M L 43 M L 63 M L 83 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 M L 24 M L 44 M L 64 M L 84 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 M L 25 M L 45 M L 65 M L 85 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 M L 26 M L 46 M L 66 M L 86 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 M L 27 M L 47 M L 67 M L 87 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 M L 28 M L 48 M L 68 M L 88 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 M L 29 M L 49 M L 69 M L 89 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 M L 30 M L 50 M L 70 M L 90 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 M L 31 M L 51 M L 71 M L 91 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 M L 32 M L 52 M L 72 M L 92 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 M L 33 M L 53 M L 73 M L 93 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 M L 34 M L 54 M L 74 M L 94 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 M L 35 M L 55 M L 75 M L 95 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 M L 36 M L 56 M L 76 M L 96 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 M L 37 M L 57 M L 77 M L 97 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 M L 38 M L 58 M L 78 M L 98 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 M L 39 M L 59 M L 79 M L 99 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 M L 40 M L 60 M L 80 M L 100 M L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Copyright © 1983, 1993 by David Ihilevich and Goldine Gleser. All rights reserved. May not be reproduced in whole or in part in any form or by any means without written permission of Psychological Assessment Resources, Inc.

This form is printed in blue and green ink on white paper. Any other version is unauthorized.

PAR Psychological Assessment Resources, Inc./P.O. Box 998/Odessa, FL 33556
SEQ

Please read the following statements and circle the response that best applies to you.

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel that I'm a person of worth, at least on an equal basis with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I feel that I have a number of good qualities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>All in all, I am inclined to feel that I am a failure.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>I am able to do things as well as most people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>I feel I do not have much to be proud of.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>I take a positive attitude toward myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>On the whole, I am satisfied with myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>I wish I could have more respect for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>I certainly feel useless at times.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>At times I think I am no good at all.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Please circle the number next to each item indicating the extent to which you agree or disagree with each item:

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would prefer complex to simple problems.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I like to have the responsibility of handling a situation that requires a lot of thinking.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>Thinking is not my idea of fun.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I find satisfaction in deliberating hard and for long hours.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I only think as hard as I have to.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I prefer to think about small, daily projects to long-term ones.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I like tasks that require little thought once I’ve learned them.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>The idea of relying on thought to make my way to the top appeals to me.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I really enjoy a task that involves coming up with new solutions to problems.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>Learning new ways to think doesn’t excite me very much.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I prefer my life to be filled with puzzles I must solve.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>The notion of thinking abstractly appeals to me.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I feel relief rather than satisfaction after completing a task that required a lot of mental effort.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>It’s enough for me that something gets the job done; I don’t care how or why it works.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
<tr>
<td>I usually end up deliberating about issues even when they do not affect me personally.</td>
<td>1 2 3 4 5 6</td>
<td></td>
</tr>
</tbody>
</table>
IES Scale – Form G

Please circle the number next to each item that best describes yourself as you are in general. **Read each item carefully and think about your answer before you respond.** Answers range from 1 (not like me) to 7 (completely like me). Some items may appear similar but each item is unique. There are 55 items on this scale. **BE SURE TO ANSWER ALL ITEMS.**

<table>
<thead>
<tr>
<th>Item</th>
<th>Not Like Me</th>
<th>Completely Like Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feel that other people often share my opinions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2. Not very interested in advice from others.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3. Have benefited as much from my failures as my successes.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4. Spend little time wondering “why” I do things.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5. Have many doubts and questions about myself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6. Can honestly admit when I’ve failed at something.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7. Depend heavily on others for advice and feedback.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8. Have thought about other lifestyles that may be better for me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>9. Look for feedback from others but still follow my own course in life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>10. My weaknesses are less important to me than my strengths.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>11. Have very few doubts or questions about myself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>12. Find it very easy to change in response to new experiences.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>13. Don’t spend much effort reflecting on “who” I am.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>14. Often wonder whether others like me or not.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>15. Can accept negative feedback about myself from others.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>16. Very influenced by what others think.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>17. Often wonder about how my life could be different than it is.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>18. Try to be flexible but also try to maintain my goals.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>19. Find it difficult to admit that others may not like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>20. Tend to find fault in those who criticize me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>21. Generally try to avoid change in my life or how I see myself.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>22. Feel that the bad things I’ve experienced were worth the pain.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>23. Don’t think very deeply about my goals because I know what they are.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>24. At times seriously question “who” I am.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>25. Don’t worry about making mistakes even though I might look bad.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>26. Behave according to what I think others want from me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Feel that it’s hard to decide on which course I want in life.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Although I like to be consistent, I have changed when I had to.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Prefer to think only about the “good” in myself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Like to see myself as stable, consistent, and unlikely to change.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. My experiences have contributed to “who” I am.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Am challenged but not overwhelmed by change.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Need people to tell me they like me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Feel I can handle disappointments about myself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Find myself blaming others when something bad happens to me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Often ask others for their opinions on things that are important to me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Have always preferred not to make firm commitments about my future.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Try to keep a steady course in life but am open to new ideas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. See myself as important in the things I do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Try not to get into situations that cause me to question myself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Have had my share of experiences in which I’ve learned about myself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. Rely on others because I lack confidence in my judgement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Wonder what others will think of my behavior.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. Feel that I am usually right in my opinions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Often change my mind as I consider different alternatives in life.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Look to others for guidance in my important decisions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Feel confident in “who” I am but am willing to learn more about myself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. Don’t think about my mistakes or shortcomings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. Often find others overly rigid and closed-minded.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. When it comes to understanding myself, I’d rather not look too deeply.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. Often take stock of what I have or have not accomplished.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. Have a clear sense of my goals but am willing to consider alternatives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. Am always looking for ways to improve myself.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. Not afraid to confront my failures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. Am influenced by my experiences but also feel I can control my life.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please read the following statements and circle the number that indicates how characteristic or uncharacteristic a statement is about you on a scale from 0 to 4.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Extremely Uncharacteristic</th>
<th>Extremely Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I'm always trying to figure myself out.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2. I'm concerned about my style of doing things.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3. Generally, I'm not very aware of myself.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4. It takes me time to overcome my shyness in new situations.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5. I reflect a lot about myself.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6. I am concerned about the way I present myself.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7. I am often the subject of my own fantasies.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8. I have trouble working when someone is watching me.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9. I never scrutinize myself.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10. I get embarrassed very easily.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11. I'm self-conscious about the way I look.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12. I don't find it hard to talk to strangers.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13. I am generally attentive to my inner feelings.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>14. I usually worry about making a good impression.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15. I am constantly examining my motives.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16. I feel anxious when I speak in front of a group.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>17. One of the last things I do before I leave my house is look in the mirror.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>18. I sometimes have the feeling that I am off somewhere watching myself.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19. I'm concerned about what other people think of me.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20. I'm alert to changes in my mood.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21. I'm usually aware of my appearance.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>22. I'm aware of the way my mind works when I work through a problem.</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23. Large groups make me nervous.</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>