INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
Development and validation of the Self Identity Inventory (SII):
A pancultural instrument

Sevig, Todd David, Ph.D.
The Ohio State University, 1993

Copyright ©1993 by Sevig, Todd David. All rights reserved.
DEVELOPMENT AND VALIDATION OF THE SELF IDENTITY INVENTORY (SII): A PAN CULTURAL INSTRUMENT

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Todd D. Sevig, B.S., M.A.

*****

The Ohio State University

1993

Dissertation Committee: Approved by
P.S. Highlen
N.E. Betz
R.K. Russell
W.B. Walsh

Adviser
Department of Psychology
To My Parents, Shirley and Palmer Sevig
and My Daughter, Mara Vaughters Sevig
ACKNOWLEDGEMENTS

I express sincere appreciation to Dr. Pamela S. Highlen for her wisdom, creativity, patience, and guidance throughout this research. Thanks also goes to the other members of my committee, Drs. Nancy E. Betz, Richard K. Russell, and W. Bruce Walsh for their suggestions, insight, and support. The statistical knowledge and patient help of Dr. Linda Nyquist and Joan Bennett is gratefully acknowledged. Thanks to my colleagues at the Program on Intergroup Relations and Conflict, especially Ximena Zúñiga and Biren (Ratnesh) Nagda who have stimulated my own identity development. Special thanks goes to Pamela T. Motoike for her multifaceted support throughout the process. To my wife, Sharon Vaughters, I appreciate and value your keen insight, advice, and willingness to join me in the past months in a helpful, gracious and loving manner.
VITA

October 11, 1961 ..................................... Born - Fergus Falls, Minnesota

1984 ............................................................... B.S., Iowa State University
          Ames, Iowa

1989 ............................................................... M.A., The Ohio State University
          Columbus, Ohio

1990-Present ................................................ Senior Counselor,
          Counseling Services
          Program Associate,
          The Program on Intergroup
          Relations and Conflict

          University of Michigan
          Ann Arbor, Michigan

PUBLICATIONS

support groups in the treatment of males with eating disorders. In A.E.

FIELD OF STUDY

Major Field: Psychology

Specialization: Counseling Psychology
TABLE OF CONTENTS

DEDICATION ..................................................................................................... ii
ACKNOWLEDGEMENTS ................................................................................ iii
VITA .................................................................................................................. iv
LIST OF TABLES ............................................................................................... xi
LIST OF FIGURES ...........................................................................................xiv

CHAPTER

I. STATEMENT OF THE PROBLEM ............................................. 1

Single Group Models of Identity Development ............... 2
Inclusive Models of Identity Development ..................... 3
Limitations of Identity Development Models ............... 4
The Self Identity Development Model of Oppressed People and The Optimal Theory
Applied to Identity Development Model .................... 6
Current Status of the OTAID Model .......................... 8
The Current Study ........................................................ 9

II. LITERATURE REVIEW .............................................................. 10

Review of Terminology ...................................................... 10
Worldview ............................................................... 11
Social Group ............................................................ 11
Dominant Societal View ......................................... 12
Afrocentric/Eurocentric Worldview ...................... 12
Identity Development ............................................... 13
Oppression .............................................................. 14
Spirituality .............................................................. 16

Single Group Models of Identity Development ........... 17
Cross Model of Black Identity Development .................. 17
Cass Model of Gay Male and Lesbian Identity Development ............................................ 20
Avery Model of Female Identity Development ............................................ 21
Downing and Roush Model of Feminist Identity Development ............................................ 22
White Racial Identity Development ............................................ 22
Similarities of Single Group Models ............................................ 27

Inclusive Models of Identity Development ............................................ 28
Stone Model of Career Development ............................................ 28
The Racial/Cultural Identity Development Model ............................................ 28
Phinney's Multigroup Ethnic Identity Measure ............................................ 31

Limitations of Existing Models of Identity Development ............................................ 32
Self Identity Development Model of Oppressed People (SIDMOP) ............................................ 33
Empirical Research of SIDMOP ............................................ 36
Reynolds' Study of SIDMOP ............................................ 36
Jecmen's Study of Female Identity Development ............................................ 38

Change From SIDMOP to OTAID Model ............................................ 39
The Optimal Theory Applied to Identity Development ............................................ 40
Tenets of the OTAID Model ............................................ 40
Phases of the OTAID Model ............................................ 44
Empirical Investigation of the OTAID Model ............................................ 48

The Present Study ............................................ 49
Statement of Purpose ............................................ 49
Hypotheses of the Current Study ............................................ 51

III. METHODOLOGY ............................................ 55
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biased Responding</td>
<td>90</td>
</tr>
<tr>
<td>Social Desirability and Infrequency Scales</td>
<td>90</td>
</tr>
<tr>
<td>Analysis of the SII's Reliability</td>
<td>92</td>
</tr>
<tr>
<td>Internal Consistency of SII Scales</td>
<td>92</td>
</tr>
<tr>
<td>Test-Retest Reliability</td>
<td>92</td>
</tr>
<tr>
<td>Construct Validity</td>
<td>94</td>
</tr>
<tr>
<td>Inter-Scale Correlations</td>
<td>94</td>
</tr>
<tr>
<td>External Construct Measures</td>
<td>97</td>
</tr>
<tr>
<td>Tolerance Scale</td>
<td>98</td>
</tr>
<tr>
<td>Belief System Analysis Scale (BSAS)</td>
<td>98</td>
</tr>
<tr>
<td>Content Validity</td>
<td>99</td>
</tr>
<tr>
<td>Fit of SII Items with OTAID Phase</td>
<td>99</td>
</tr>
<tr>
<td>Item-Scale Correlations</td>
<td>100</td>
</tr>
<tr>
<td>Group Differences</td>
<td>102</td>
</tr>
<tr>
<td>Demographic Group Scale Mean Differences</td>
<td>102</td>
</tr>
<tr>
<td>Self-Report Description of Identity</td>
<td>126</td>
</tr>
<tr>
<td>Correlations of Challenge Rating with SII Scales</td>
<td>127</td>
</tr>
<tr>
<td>Low Challenge vs. High Challenge Ratings</td>
<td>129</td>
</tr>
<tr>
<td>Additional Analyses</td>
<td>131</td>
</tr>
<tr>
<td>Characteristics of High Scorers on Each Scale</td>
<td>132</td>
</tr>
<tr>
<td>Low, Medium, and High Scorers and Challenge Rating</td>
<td>137</td>
</tr>
<tr>
<td>Age, Education, and Income</td>
<td>139</td>
</tr>
<tr>
<td>Creation of a Social Desirability Scale</td>
<td>147</td>
</tr>
<tr>
<td>Comparison Sample</td>
<td>149</td>
</tr>
</tbody>
</table>
V. DISCUSSION .................................................................154

Participants .................................................................154

The Self Identity Inventory .........................................155
  Construct Validity ..................................................155
  Reliability ..........................................................157
  Content Validity ..................................................158

Group Differences .....................................................160

Additional Analyses ..................................................162
  Age, Education, Income ........................................162
  High Scorers .......................................................164

Changes to the OTAID Model ....................................165

Limitations .............................................................165

Implications for Counseling ......................................166

Directions for Future Research ..................................167

Conclusion ..............................................................168

APPENDICES

A. Letter to Original SIDMOP/OTAID Model Research Team ..............................................170

B. Additions to Phase Concepts by Original SIDMOP/OTAID Model Research Team ......................173

C. Letter to External Judges ........................................178

D. Developmental Sample Reaction Sheet .....................181

E. Instructions for SII ................................................183

F. Personal Background Information Form ...................186

ix
G. Introductory Letter/Informed Consent Form .......................190
H. SII Items and Item Numbers .................................................192
I. OTAID Phase Concepts and SII Items ...............................205
J. SII Social Desirability Scale ..............................................211

LIST OF REFERENCES ......................................................................213
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Response rate by contact</td>
<td>57</td>
</tr>
<tr>
<td>2. Social characteristics of sample</td>
<td>58</td>
</tr>
<tr>
<td>3. Comparison of social characteristics for total sample and test-retest sample</td>
<td>73</td>
</tr>
<tr>
<td>4. Initial and final goodness of fit indices for scales of the Self Identity Inventory (SII)</td>
<td>87</td>
</tr>
<tr>
<td>5. Self Identity Inventory (SII) scale correlations with Tolerance Scale, BSAS, Social Desirability Scale, &amp; Infrequency Scale</td>
<td>91</td>
</tr>
<tr>
<td>6. Initial and final reliabilities for scales of the Self Identity Inventory (SII)</td>
<td>93</td>
</tr>
<tr>
<td>7. Scale intercorrelation matrix</td>
<td>95</td>
</tr>
<tr>
<td>8. Item-scale correlations for items on the Self Identity Inventory (SII)</td>
<td>101</td>
</tr>
<tr>
<td>9. Scale means for total sample on Self Identity Inventory (SII)</td>
<td>104</td>
</tr>
<tr>
<td>10. Scale means, standard deviations, and t-tests on the Self Identity Inventory (SII) by gender</td>
<td>107</td>
</tr>
<tr>
<td>11. Scale means and standard deviations on the Self Identity Inventory (SII) by race</td>
<td>108</td>
</tr>
<tr>
<td>12. Scale means, standard deviations, and ANOVA on the Self Identity Inventory (SII) for European Americans and people of color</td>
<td>111</td>
</tr>
</tbody>
</table>
13. Scale means, standard deviations, and t-tests on the Self Identity Inventory (SII) for European American males and females ............................................. 112

14. Scale means, standard deviations, and t-tests between European American, heterosexual, males and all other participants on the Self Identity Inventory (SII) ................................................ 115

15. Scale means, standard deviations, and t-tests on the Self Identity Inventory (SII) for African Americans compared to other people of color ............................................. 117

16. Scale means and standard deviations on the Self Identity Inventory (SII) by sexual orientation ............................................. 119

17. Scale means, standard deviations, and ANOVA on the Self Identity Inventory (SII) by sexual orientation (2 groups) ....................................................................................... 122

18. Scale means, standard deviations, and t-tests on the Self Identity Inventory (SII) by religion ............................................. 124

19. Scale means, standard deviations, and t-tests on the Self Identity Inventory (SII) by disability status ............................................. 125

20. Correlations of challenge rating scores with SII scales ...................................................................................... 128

21. Scale means, standard deviations, and t-tests on the Self Identity Inventory (SII) by challenge rating ............................................. 130

22. Scale means and standard deviations for participants scoring high on each scale of the Self Identity Inventory (SII) ............................................. 130

23. Mean challenge rating, standard deviations, and ANOVA for low, moderate, and high scorer groups on SII scales ...................................................................................... 138
24. Self Identity Inventory (SII) scale correlations by age, education, & income .......................................................... 140

25. Scale means, standard deviations, and ANOVA's on the Self Identity Inventory (SII) by age ................................. 143

26. Scale means, standard deviations, and ANOVA's on the Self Identity Inventory (SII) by highest level of education completed .......................................................... 146

27. Scale means, standard deviations, and ANOVA's on the Self Identity Inventory (SII) by income .............................. 148

28. Scale intercorrelation matrix for comparison sample .................................................................................................. 151

29. Scale means, standard deviations, and t-tests for the Self Identity Inventory (SII) for original and comparison samples .......................................................... 153
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scale means for total sample</td>
<td>105</td>
</tr>
<tr>
<td>2. Scale means for total sample by gender</td>
<td>106</td>
</tr>
<tr>
<td>3. Scale means of European Americans and people of color</td>
<td>109</td>
</tr>
<tr>
<td>4. Scale means for European American males and females</td>
<td>113</td>
</tr>
<tr>
<td>5. Scale means for European American heterosexual men compared to all other participants</td>
<td>114</td>
</tr>
<tr>
<td>6. Scale means for African Americans and other people of color</td>
<td>118</td>
</tr>
<tr>
<td>7. Scale means for heterosexuals, gay males, lesbians, and bisexuals</td>
<td>120</td>
</tr>
<tr>
<td>8. Scale means by sexual orientation (2 groups)</td>
<td>121</td>
</tr>
<tr>
<td>9. Scale means for high scorers on each scale</td>
<td>134</td>
</tr>
<tr>
<td>10. Scale means by age</td>
<td>142</td>
</tr>
<tr>
<td>11. Scale means by educational level</td>
<td>145</td>
</tr>
</tbody>
</table>
Chapter I
Statement of the Problem

The importance of understanding multicultural psychology (i.e., inclusive of racial, gender, sexual orientation groups, etc.) and counseling in particular, has been voiced many times in the literature. In response, interest and knowledge in these areas have increased dramatically in the past two decades (Heath, Neimeyer & Pedersen, 1988; Myers et al., 1991). This literature has incorporated between group differences, within group differences, and examination of the impact of cultural diversity on the process and content of counseling (Myers et al., 1991).

The identity development literature represents one example of this increased sophistication. Identity development, based on membership in certain racial, gender, or sexual orientation groups, has become an important variable to understand and improve the counseling process (Helms, 1990a; Phinney, 1990). Additionally, Maldonado (1975) has argued that identity development is integral to healthy psychological functioning. Research has focused on creating models of identity development based on clinical observation or theoretical writings. Single group models, focusing on one group such as African Americans, have been developed as well as multiple group models, which identify a common process of identity development across groups.
Two applications of identity development research are explaining and improving client-counselor interactions (e.g., Helms, 1984), and counselor trainees development of cross-cultural competencies (e.g., Carney & Kahn, 1984).

These models have been catalysts for conducting research in the area of psychological identity development. Most of the models have incorporated some aspects of environmental forces, culture, personal values, and self-identity. In fact, Erikson (1968) described identity development as psychosocial relativity in which a person is simultaneously defining and being defined by one's world.

Two lines of research in identity development can be noted: (a) development of single group models, and (b) development of multiple group models. These are explained below.

**Single Group Models of Identity Development**

Single group identity development models focus exclusively on one group, such as gays and lesbians. Such models have been proposed for many diverse groups: Blacks or African Americans (Akbar, 1979; Banks, 1981; Cross, 1971; Jackson, 1975; Thomas, 1971; Vontress, 1971), Asian-Americans (Sue, 1982; Sue & Sue, 1971), Latinos/Chicanos (Berry, 1980; Keefe & Padilla, 1987), White or European Americans (Carney & Kahn, 1984; Hardiman, 1979; Helms, 1984, 1990; Ponterotto, 1988; Terry, 1977), women (Avery, 1977; Downing & Roush, 1985), and gay men and lesbians (Cass, 1979).
These models have aided researchers and clinicians in understanding the nature of identity development in these particular groups. Different models have, for example, taken into account the differential oppressive experiences of groups, different histories, different cultural traditions, and different cultural styles (Phinney, 1992). However, as the literature grew and various models were developed, researchers noticed similarities in the process of identity development between groups. Although different terminology was used in the different models, the stages were noticeably similar (e.g., terms used to describe an "unawareness" first stage include Pre-encounter, Identity Confusion, Before the Dawn, Passive Acceptance, Acceptance, and Contact). This convergence led to the second line of research, that of developing multiple group models, or inclusive models.

**Inclusive Models of Identity Development**

In response to these similarities, another line of research in identity development has incorporated similarities among the identity development of minorities and oppressed people (Atkinson, Morten & Sue, 1983; Banks, 1984; Highlen et al., 1986; Stone, 1984). The Minority Identity Development model (MID) of Atkinson et al. (1983), for instance, is applicable for different groups based on race, gender, ethnicity, and sexual orientation. Although similarity in the experiences of these groups has been noted theoretically, no empirical investigations have been conducted. Other examples of inclusive models include Banks (1984), with his work on racial/ethnic identity development among all
oppressed racial groups, Sue (1981) in regard to cultural identity development for people of color, and Hardiman and Jackson (1992) in their description of racial identity development for Black and White people. These models have described a similar process across groups, although all have noted the cultural context of the developmental process may differ.

Limitations of Identity Development Models

While these models have made important contributions to multicultural psychology and identity development, theoretical and empirical limitations have impeded growth and knowledge of the identity development process. First, most of these models were developed in the context of a sociological zeitgeist (Myers et al., 1991; Sue & Sue, 1990). In other words, these models, used the temporally bound social milieu as the basis for these models (e.g., Civil Rights movement, women's and abortion rights movement, gay pride movement, internment camps for Japanese Americans). Even though these experiences are important in the histories of these groups, the models are based on factors which are transient in nature versus a more universal process independent of a historical sociopolitical period.

Second, the literature reflects a dearth of empirical investigations conducted to validate these identity models. Most models are presented in the literature with no follow-up investigations of the models' validity. While there are exceptions, most notably the work of Parham and Helms (1981, 1985) and Cass (1984), almost no systematic research has been
conducted utilizing these models (Reynolds, 1988). This lack of empirical research may be due to the methodological difficulties encountered when doing empirical research on psychological identity development (Helms, 1990; Reynolds, 1990) and to the intuitive appeal and assumed clinical and programmatic application properties of the models. Additionally, few psychometrically sound instruments have been developed to operationalize these models. Some researchers have taken existing instruments and altered the items to fit another group. Walters and Simoni (1993) utilized the Racial Identity Attitude Scale (RIAS; Parham & Helms, 1981) to investigate the relationship of lesbian and gay male identity attitudes and self-esteem by changing items on the RIAS to reflect content appropriate for gay males and lesbians. The lack of empirical research and instrumentation in the identity development field is a hindrance to further development of the validity of the models and to the field as a whole.

Third, identity models rarely incorporate the concept of multiple identities (Reynolds, 1990; Reynolds & Pope, 1991; Speight, Myers, Cox, & Highlen, 1991). This omission is a serious limitation since all people are faced with more than one identity (e.g., a gay Asian-American male who is physically challenged). A focus on one identity has fostered an over-emphasis on certain aspects of people that is based more on societal factors than on "true" identity development. For example, a gay man who is African American might be focused on more by society as "African American" due to the visibility of race and the invisibility of sexual/affectional orientation. In other words, people are
simultaneously all of their identities. Focusing on one facet obfuscates the complexity of people by ignoring the interrelatedness of identities. The end result is a model that oversimplifies a complex process.

A fourth limitation is that most models are based on a Eurocentric perspective or worldview, which may not be applicable to the group for which a particular model was constructed. Characteristics of a Eurocentric worldview include logic being dichotomous (e.g., "either/or" thinking), identity conceptualized solely as individualistic, individualism as a basis of self-worth, sense of well-being always in flux and struggle, segmented perspective, and a group orientation as unity primarily through common goals (Myers, 1988). For example, Cross' (1971) model, a standard in the field of African American racial identity, has been criticized for being Eurocentric rather than Afrocentric (Akbar, 1989; Nobles, 1989).

The Self Identity Development Model of Oppressed People and The Optimal Theory Applied to Identity Development Model

In responding to these limitations and in recognizing the universality of the identity development process, another inclusive model was developed by the research team of Highlen et al. (1986) at The Ohio State University and further extended by Myers et al. (1991). This model has provided a universal framework of identity development that is applicable across identity groups (e.g., race, gender, sexual orientation, socioeconomic class, etc.). This work has as its theoretical
base the optimal psychology model of Myers (1988) who grounded her writings in an Afrocentric perspective.

The original work of the research team created a Self Identity Developmental Model of Oppressed People (SIDMOP), which was developed through an emic approach from the qualitative analysis of interviews with people from various oppressed groups. Oppression in this context was defined as the internal (e.g., an individual blocking parts of him or herself) or external (e.g., societal values or norms) suppression of self (Highlen et al., 1986). With this definition, the team categorized all people socialized in the United States to be "oppressed" as the socialization in this country suppresses part of all. Research and clinical literature, as well as clinical and personal experiences of the research team members, were incorporated into the framework. A key tenet of the model is the integration of differing worldviews including ones from Native American cultures, Eastern philosophies, feminist ideology, African cultures, and Western creation spirituality within Christianity. A key similarity of these sources of knowledge is that the material and spiritual are inseparable and that all is seen as the manifestation of spirit (Highlen et al., 1986; Myers, 1984; Myers et al., 1991). The theory was refined and the name of the model was changed (to Optimal Theory Applied to Identity Development [OTAID] model) to reflect the emphasis of identity development in the Myers et al. (1991) article.

This comprehensive model addresses limitations with previous models. First, the integration of many worldviews addresses the lack of
incorporation of different group perspectives in the existing models. Second, the model focuses on universal processes, independent of any historical period in terms of sociopolitical forces. Third, the model incorporates the concept of multiple identities/oppressions in its formulations. Fourth, the model describes concrete hypotheses and predictions in its articulation of phases of development that permit the model to be tested empirically.

Current Status of the OTAID Model

Current research utilizing the OTAID model is focused on clearly articulating theoretical bases and thus, refining the tenets, predictions, and phase content of the model. Initial attempts to empirically investigate SIDMOP (e.g., Jecmen's 1989 study which developed an inventory for female identity development and Reynolds' 1988 study focused on the validity of the model with African and Asian Americans), and one attempt to validate the OTAID model with a sample of university and non-university women (Highlen, Jecmen, & Speight, 1991).

However, these investigations have been limited in two ways. First, all three studies focused on specific groups (e.g., women, African Americans and Asian Americans) and not on a sample reflective of all groups (e.g., race, age, class, gender, sexual orientation). Therefore, the universality of the OTAID model remains to be empirically demonstrated. Second, the empirical results of the studies have been mixed. For example, the inventory developed by Jecmen (1989) produced
low reliability coefficients for some of the scales designed to measure particular phases. These results suggested either a measurement problem and/or a problem with the OTAID construct.

At this point in the evolution of the OTAID model, an instrument is needed that will allow the model to be tested empirically and one which approaches identity from a pancultural level (i.e., applicable across all groups). Once a psychometrically sound instrument is developed, it becomes possible to test the assumptions and predictions of the model and, therefore, to revise the model as needed.

The Current Study

This study developed an instrument based on the OTAID model using the procedures outlined in the literature for scale construction (e.g., Dawis, 1987; DeVillis, 1990; Walsh & Betz, 1985). The goal was twofold: (a) to develop a psychometrically sound instrument; and (b) to empirically investigate the OTAID model by testing its predictions about identity development through studying the nature of responses from different identity groups. The creation of a sound instrument, based on a pancultural theoretical model, has the potential to add to the literature of the OTAID model and consequently, to the area of identity development and multicultural psychology.
Chapter II

Literature Review

Research involving identity development has focused mainly on theoretical writings in the form of developmental stage models. The sparse empirical investigations have been mostly in the areas of developing instruments based on these models (e.g., Cass, 1984; Parham & Helms, 1981), follow-up validity investigations (e.g., Helms & Carter, 1990) and some experimental investigations (e.g., Carter & Helms, 1990; Helms & Parham, 1990). This section summarizes relevant literature regarding identity development; in particular, the Optimal Theory Applied to Identity Development (OTAID) model is summarized. Included in this section are an explication of key terminology, a brief review of single group identity models and inclusive models, an examination of empirical investigations, and conclusions that can be drawn from this work. Finally, hypotheses for the current study are presented.

Review of Terminology

Literature on identity development contains many diverse and abstract terms (Atkinson et al., 1983; Helms, 1990a); at times, this terminology has been used by researchers to describe similar processes and at times, different ones (Helms, 1990a). It is beyond the scope of this study to fully explore the language differences and similarities; therefore,
this section will define conceptual terms as they are used throughout the current study. The terms to be defined are: (a) worldview, (b) social group membership, (c) dominant societal view, (d) Eurocentric and Afrocentric worldview, (e) identity development, (f) oppression, and, (g) spirituality.

**Worldview**

Crucial to theories and resulting models of identity development is the use of the term 'worldview'. This term usually means a guiding force for a person via attitudes, values, opinions, and concepts in determining how that person perceives his or her relationship with the world (Sire, 1976, in Ibrahim, 1991; Sue, 1978; Sue & Sue, 1990). Worldviews affect how we think, behave, feel, and define events (Sue, 1981; Sue & Sue, 1990). Helms (1986) used the term in focusing on cognitive structures people use to organize information about themselves, others, and society. Myers (1988) added the emphasis of a guiding conceptual system and philosophical constructs that a person adheres to and which structures reality for that person.

The term *worldview* is defined in this investigation as the psychological orientation a person uses to structure reality in terms of relationships to, and between, all elements of the world.

**Social Group**

Social groups will be defined in the present investigation as groups that are based on categorization by gender, race, sexual orientation, age, education, income (socio-economic class), religion, and
disability status. These are groups that are valued differently across society; in the United States, these factors affect evaluations of self and others. Based on the OTAID model, these factors also influence identity development.

Dominant Societal View

This term refers to the values and norms held by the majority of people in a society. In the United States, the dominant societal view refers to valuing what is European American, middle class, Christian, male, heterosexual, English speaking, young, and mentally, physically, and emotionally unimpaired (Highlen et al., 1988). All people in the United States are socialized under the dominant societal view, independent of whether they hold membership in the preferred social groups.

Afrocentric/Eurocentric Worldview

The terms Afrocentric worldview and Eurocentric worldview refer to conceptual systems which have originated from these geographic areas. A Eurocentric worldview is one in which the nature of reality is dichotomous and one which emphasizes differences and separateness (Nichols, 1976, in Myers, 1988). A split between matter and spirit causes a high value to be placed on external and material worth (Myers, 1988). Myers posited that this is a suboptimal conceptual system. An Afrocentric worldview is one in which the nature of reality is seen as encompassing both the spiritual and the material at the same time (Frye, 1978, in Myers, 1988; Zahan,
1979, in Myers, 1988); therefore, this worldview takes a holistic approach to the concept of reality. With this philosophy, an emphasis on connectedness and similarities between people occurs. Therefore, a person’s worth is inherent in the person’s being (i.e., internal) instead of in material goods (i.e., external; Myers, 1988). Myers posited that this is an optimal conceptual system.

These views originated from peoples in certain geographic areas, although not all people identifying as of African descent base assumptions on an optimal worldview; similarly, not all people identifying as of European descent base assumptions on a suboptimal worldview. Any individual has the capability of incorporating multiple worldviews across geographic regions (Myers, 1988). The emphasis is on the particular conceptual and philosophical system that socializes a person. For example, anyone socialized in the United States, independent of social group membership, is faced with the suboptimal system since the prevailing conceptual system stems from a Eurocentric worldview.

Identity Development

An understanding of identity is necessary for understanding the process and content of models of identity development. Helms (1990a) described racial identity as a sense of group or collective identity based on the perception that a person share a common racial heritage with a group. Racial identity development theory is concerned with the psychological factors associated with membership in a racial group, including belief systems that result in reaction to group membership and various modes of
identification with that group (Helms, 1990a). Hardiman and Jackson (1992) extended racial identity to include a sense of self in the context of racial group membership, including all parts of the culture of that group. Furthermore, racial identity development involves changes in identity over time in order to become more congruent with one's experiences. Jecmen (1989) described identity as the sense of unity of all one knows to be "self"; in this sense, identity as not merely the sum of one's "parts", it is a property of the self as a whole. Sue and Sue (1990) described an "identity set" in which an individual desires to be similar to a group that is held in high esteem. Finally, certain authors have noted how identity is commonly conceptualized as feelings, thoughts, beliefs, and behaviors (Cass, 1984; Downing & Roush, 1985; Helms, 1984; Phinney, 1992).

For this study, identity development is defined as the process of identification with a certain group(s) and the interactive effect on one's belief system and behavior. It also describes a process of self-definition in the context of this group(s) and/or the larger society with a resulting effect on emotions, beliefs, and behaviors of the individual.

**Oppression**

According to Webster's New World Dictionary, to oppress means "to keep down by the cruel or unjust use of power or authority". In focusing on oppression in the context of majority-minority interactions, Atkinson et al. (1983) utilized the definition of oppression as "a state a person is forced to accept with respect to self, others, and society in general" (p. 7). Highlen et al. (1986) defined oppression as "the suppression of any part of
the self based on irrelevant factors" (p. 6). This suppression may result from an external source, such as societal values and norms (i.e., dominant societal view), or from an internal source, such as an individual blocking parts of him or herself (e.g., denying parts of his or her heritage; Highlen et al., 1988). The authors adopted the Afrocentric belief that self worth is innate in existence; therefore, "irrelevant factors" (e.g., race, gender, age, religion, physical ability) have no relevance in determining worth.

While oppression can be viewed on an individual or group level, the etiology of oppression can also be analyzed through the lens of societal belief systems (Myers, 1988). Following this line of thinking, Myers argued that the nature of the conceptual system prevalent in the United States is oppressive to all who adhere to it since it forces categorization based on irrelevant factors. This categorization results in, and from, differences in power; this categorization then produces a false dichotomy of oppressor vs. oppressed. Highlen, Speight, Myers, and Cox (1989) posited that to understand oppression, one must examine the multidimensional aspects of oppression including power, worldview, and spirituality. Further, they stated oppression is most likely to occur when personal or sociocultural factors are denied or when power is given to something believed to be outside of one's self; this produces an inhibition of identity development.

This study defines oppression as the external or internal suppression of any part of the self based on irrelevant factors.
**Spirituality**

Most people and cultures of the world operate with some frame of reference to spirituality (Fukuyama & Sevig, 1992). Spirituality is also a key construct for healing in most cultures of the world (Torrey, 1986). Spirituality generally refers to something that is transcendent, ultimate, and known in an extra-sensory manner (Myers et al., 1991). Schafranske and Gorsuch (1984) defined spirituality as the courage to look inside one's self and as trust and openness to the infinite. Elkins, Hedstrom, Hughes, Leaf, and Saunders (1988) defined spirituality as a way of existing that comes from awareness of transcendence and contains values regarding self, others, nature, or what people consider to be "ultimate"; Myers (1988) extended this definition by adding that these values be in accordance with peace, love, harmony, and justice. Dershimer (1990) defined spirituality as having two forces: (a) a force which creates and propels life in all animals and plants, and (b) a force which encourages humans to seek out, nurture, and appreciate the good, the beautiful, and the truthful in life. He further described it as an impulse toward wholeness and harmony that leads people to discover and create the new and better; in this manner, the spirit fosters life's development to its greatest potential. In the OTAID model, spiritual development is closely linked with identity development. For example, self-knowledge is the basis of all knowledge and in coming to know one's self, spiritual-material boundaries are crossed (Highlen et al., 1988; Myers et al., 1991).
This study will define spirituality as a force that seeks transcendence, wholeness, harmony, and justice with the goals of creation and discovery in an external and/or internal fashion.

Single Group Models of Identity Development

Cross Model of Black Identity Development

Cross' (1971) Nigrescence model has been most frequently cited and researched in the racial/ethnic identity development literature. Parham and Helms (1981, 1985) refined and researched this model extensively. The stages proposed by Cross were Preencounter, Encounter, Immersion/Emersion, Internalization, and Internalization/Commitment. These stages represent the process a person goes through starting with a denial of Blackness to an acceptance and expression of Blackness. In the Preencounter stages, a person's worldview is dominated by Euro-American concepts and values. Concurrently, there is a valuing of Whiteness and a degradation of Blackness. People enter the Encounter stage when an experience occurs that makes them begin questioning and reinterpreting their view of the world. In the Immersion/Emersion stage, people undergo a determined search for Black identity via "immersion" in Black culture. Feelings of pride regarding being Black are present. Internalization occurs when people incorporate positive views of Blackness into their self-concept and make them personally relevant. In this stage, people feel more secure and more satisfied. The last stage occurs when people commit to a plan of action that will help all Black people.
Aside from an initial investigation conducted by Hall, Cross, and Freedle (1972) which provided some support for the model, no further investigations of the model itself have been undertaken. Parham and Helms (1981) created the Racial Identity Attitude Scale (RIAS) from Cross' Nigrescence model and the study by Hall et al. (1972). This scale has been used extensively in the past 12 years in experimental investigations.

Parham (1989) noted two limitations of Black identity models that apply to Black identity models and identity development models in general: (a) the predominant use of college populations which has perpetuated the notion of identity development occurring during late adolescence and early adulthood; and (b) the notion of a single cycle of progressing through the stages that has hidden the process of development after a person goes through the stages. Further, Akbar (1989) and Nobles (1989) stated that Black identity models are missing crucial elements in their descriptions of the developmental process; most important are the elements are utilizing an Afrocentric perspective and incorporating the role of spirituality, seen as central to Afrocentrism (Myers, 1988).

Cross' work was seminal for the field of identity development and made an important contribution to the literature. However the model is limited because: (a) data were limited to Cross' personal observations in constructing the model; (b) stage descriptions were dependent on the historical zeitgeist of the late 60's and early 70's; (c) there have been mixed results from empirical validation (Helms, 1990b); and (d) it was
implicitly based on a Eurocentric perspective (e.g., linear stage model, focus on external criteria of worth, no integration of spirituality, individualistic).

Parham and Helms (1981) developed the Black Racial Identity Attitudes Scale (RIAS-B) to measure the four stages from Cross' (1971) model (Preencounter, Encounter, Immersion/Emersion, and Internalization). The original item analyses and reliability studies were conducted using a sample of 58 Midwestern university students (Helms, 1990b). The authors have revised the scale throughout the past 10 years and incorporated new samples, although these samples still have only included university students. There are two forms of the RIAS-B, a short form (30 items) and a long form (50 items). Helms (1990b) reported the reliability estimates (Cronbach's alpha) for the short form as follows: Preencounter = .69; Encounter = .50; Immersion/Emersion = .67; Internalization = .79. The reliability estimates for the long term were: Preencounter = .76; Encounter = .51; Immersion/Emersion = .51; and Internalization = .80. Helms (1990b) also reported that the RIAS-B has gained evidence for construct validity over the past years. This scale, widely used in the identity development field, appears to fair somewhat well in measuring a Black racial identity development process, especially in terms of attitudes. The scale is limited, however, in its exclusive focus on university students and its low internal consistency measures, especially for the Encounter and Immersion/Emersion scales.
Cass (1979) Model of Gay Male and Lesbian Identity Development

Cass's model was developed from clinical experience and interpersonal congruency theory. Her model describes how gay men and lesbians have dealt with the "coming out" process involving awareness, acknowledgement, and acceptance of being gay or lesbian. The model is comprised of six stages: (a) Confusion; (b) Comparison; (c) Tolerance; (d) Acceptance; (e) Pride; and (f) Synthesis. Identity Confusion is marked by confusion regarding sexual identity in terms of thoughts, feelings, and actions. Identity Comparison is when the person sees clearly the differences between gay and lesbian culture and heterosexual culture. Identity Tolerance is reflective of some commitment to a gay or lesbian lifestyle, although contacts in the gay/lesbian community are seen as needed for survival. Identity Acceptance is where the person comes to terms with being gay or lesbian and personally accepts this identity. Identity Pride is marked by a strong pride in being gay or lesbian and a strong sense of loyalty to other gays or lesbians. Heterosexuals are seen as discreditable and unimportant. In Identity Synthesis, positive contacts with heterosexuals lead to a realization that a dichotomy of good/bad people based on sexual orientation is tenuous, at best, and that sexual orientation/identity is only one part of people.

In a follow up investigation, Cass (1984) created the Homosexual Identity Questionnaire (HIQ) containing items reflecting attitudes, feelings, and behaviors based on each of the stages of her model. The study investigated hypotheses to test the model that primarily focused on predicted and actual profile scores. Limited empirical support was
reported for these hypotheses. No further empirical work has been reported on the model.

While making an important contribution to the sparse literature on gay and lesbian identity development, Cass' model has limitations: (a) data were limited to Cass' experiences with homosexuals in constructing the model; (b) stage descriptions may be dependent on the historical zeitgeist of the mid to late 70's; and (c) empirical support is limited; and (d) it utilizes Eurocentric perspectives.

Avery Model of Female Identity Development

Avery (1977) formulated the Psycho-Social Stages of Liberation model based on clinical experience. The model contains six stages that describe a process from passive acceptance of stereotyped sex roles to an active process of freeing women and men to define themselves as they choose. The six stages are: (a) Before the Dawn; (b) Epiphany; (c) Immersion (d) Emergence; (e) Internalization; and (f) Action.

Avery's model is similar to the models proposed by Cross and Cass; a person progresses through the stages from a period of naiveté, to excluding others not like herself, and finally to incorporating female identity in a healthy manner. The limitations of the model are: (a) it was not based on psychological theory; (b) it was developed from Avery's clinical experience with women; (c) it is unclear whether the clinical experience included women of all races or sexual orientations which further restricts the model's applicability; (d) it utilizes Eurocentric perspectives; and (e) it has not been empirically validated.
Downing and Roush Model of Feminist Identity Development

Downing and Roush (1985) formulated a model of feminist identity development. They cited Cross' theory as a conceptual base for their model. The model includes five stages: (a) Passive Acceptance; (b) Revelation; (c) Embeddedness-Emanation; (d) Synthesis; and (e) Active Commitment. Passive Acceptance is reflective of someone who readily accepts traditional sex roles and the notion that men are superior to women. As questioning of these beliefs occurs, the person moves into Revelation. At some point, in Embeddedness-Emanation, the female comes to believe that women are perceived as good and men as bad. Dualistic thinking occurs and women experience a connectedness with other women. Women feel validated through this connectedness and feel affirmed. In the Synthesis stage, women develop a personal and authentic feminist identity and are no longer constrained by traditional sex roles. In Active Commitment, women are committed to behaviors aimed at creating a non-sexist world.

This model describes the process of identity development in a similar way to the other models. The process begins with unawareness, moves to a questioning period, proceeds to a time of immersion in the group's culture, and ends with an integration period into the person's total identity.

White Racial Identity Development

More recently, identity development of White people has been examined (e.g., Carney & Kahn, 1984; Hardiman, 1979; Helms, 1984,
Hardiman (1979) proposed a four stage model of development: (a) Acceptance, in which a person actively, or passively, accepts the notion of White superiority; (b) Resistance, where a person becomes aware of his or her own racial identity as a White person; (c) Redefinition, where a person attempts to define being White from a non-racist perspective; and (d) Internalization, where a person personalizes a non-racist White identity. While this model is important, and one of the first of White racial identity development, there have been no reported empirical investigations of the model's validity.

Carney and Kahn (1984) proposed a five stage model of development: (a) Stage 1, where knowledge of ethnically dissimilar people is based on group stereotypes; (b) Stage 2, where a person starts to recognize the limits of his or her knowledge, but approaches differences from a detached, intellectual manner; (c) Stage 3, where a person either denies the importance of race or expresses anger toward his or her own cultural group; (d) Stage 4, where a person begins to "blend" aspects of own cultural group with those of other groups to form a new self-identity; and (e) Stage 5, where a person attempts to promote social equality and cultural pluralism. This model is helpful in that it acknowledges the interplay of one's own group and that of others, but it is limited in that there have been no reported empirical investigations of the model's validity.

Terry (1977) reported a model of three categories that a person potentially can use as a reference in being White. It is not a stage model; rather the three categories are viewed as potential choices or options. One
type is "Color Blind" in which people attempt to ignore the importance of race by emphasizing "humanness"; implied in this type is the absence of awareness and knowledge of race. "White Blacks" describes Whites who abandon Whiteness and overidentify with Blacks. People deny Whiteness and try to gain recognition and acceptance from Blacks by being 'almost Black'. "New Whites" is where people hold a pluralistic racial view of the world and recognize that racism is a White problem and therefore, attempt to eliminate racism. This work has been important in that it has stimulated other researchers in this area, but is limited in that there has been no reported empirical work.

Building on the conceptual work of Cross (1971) and the work she had done on Black racial identity development, Helms (1984, 1990c) postulated a theory of White racial identity development. This model has received the most empirical investigation of all the White racial identity models. The model contains six stages that describe the developmental progression of White people in moving from a racist identity to a non-racist White identity (Helms, 1990c). The six stages are: Contact, Disintegration, Reintegration, Pseudo-Independence, Immersion/Emersion, and Autonomy.

In Contact, the person is oblivious to the impact of race and is unconcerned with his or her own racial identity. In Disintegration, the person experiences conflicting feelings as he or she consciously acknowledges Whiteness. A questioning of basic premises the person has always believed occurs, which prompts incongruence, or dissonance, resulting in feelings of guilt, anxiety, and helplessness. In Reintegration,
the person believes that White people are superior and minimizes similarities between White and Black people. In this stage, a person can choose to avoid situations that involve contact with Black people. In the Pseudo-Independent stage, the person begins to develop a non-racist identity. The person accepts the notion that racism is a responsibility of White people, and begins to personally see his or her role in perpetuating racism. The stage is marked by an intellectual focus. In Immersion/Emersion, the person focuses on developing a personal definition of Whiteness. The goal of changing the definition of self, and that of other White people, is primary. In Autonomy, race is no longer a threat to the person, with no need to categorize people in a rigid way based on race. Helms viewed this last stage as an ideal, on-going process, and one that is never fully "achieved".

Based on this work, Helms & Carter (1990) developed a rationally derived White Racial Identity Attitude Scale (WRIAS) based on Helms (1984) model. (This model had 5 stages; the Immersion/Emersion stage was added in the 1990c work.) The scale has an underlying premise of the development of White racial identity attitudes occurring in the context of attitudes about oneself as a White person and attitudes about Blacks; further, the attitudes progress from least sensitive about race to most aware or conscious of race (Helms & Carter, 1990).

Results of the reliability of the WRIAS have been mixed. Helms and Carter (1990) reported the reliabilities for the five subscales were in the .90's for the pilot study. In the 1990 chapter, they reported findings from three studies: one study reported reliabilities to range from .67-.82;
a second study found the range to be .55 to .77; a third study found the range to be .65-.76.

Tokar and Swanson (1991) investigated a central assumption of Helms (1984) model; specifically, the hypothesis tested was that less developmentally advanced White racial identity attitudes will be negatively associated with self-actualization. The authors used the WRIAS and the Personal Orientation Inventory (POI) from Shostrom (1963), an instrument intended to measure a person's degree of self-actualization, in a regression analysis to test the predictive power of the WRIAS scales on the criterion of the POI. The sample was 308 White university students (159 men and 149 women) enrolled in an introductory psychology course with a mean age of 19.5 years.

Results indicated reliability measures (alpha coefficients) for the WRIAS scales to be .61, .78, .84, .65, and .71 for Contact, Disintegration, Reintegration, Pseudo-Independence, and Autonomy, respectively. The main hypothesis did receive support as lower stages of White racial identity development attitudes were negative predictors of self-actualization while higher stages were positive predictors (Tokar & Swanson, 1991). Of interest, the authors noted some of the subscale intercorrelations of the WRIAS were so high as to suggest redundancy. Specifically, the correlations between Disintegration and Reintegration ($r = .81, p < .001$) and between Pseudo-Independence and Autonomy ($r = .66, p < .001$) suggested that these variables may not be measuring pure and distinct constructs. Evidence for this conclusion was supported by the
finding that only one variable from each of these two pairs significantly contributed to the prediction of any of the three criterion.

Other empirical work has also been done; White racial identity attitudes have been found to be related to cultural values (Carter & Helms, 1990); preferences for race and gender of counselors (Helms & Carter, 1987); and perceived comfort with Blacks (Claney & Parker, 1989). The results from the development and validation of the WRIAS are mixed; while there is some support for the model, it appears the model and/or the WRIAS is in need of refinement before further use.

Similarities of Single Group Models

The models described contain similarities in terms of the process of identity development. Specifically, the models describe a process where a person initially denies, devalues, or lacks awareness of identity, questions meanings of identity, immerses in the group culture, and comes to a realization that the once exclusive definition of identity is only one part of many identities. Most models (e.g., Cass, 1979; Downing & Roush, 1985; Helms, 1984) also speak to the process whereby interaction with members from other identity groups is in a manner that is eventually accepting of both self and other.

Common limitations exist across these models: (a) no empirical support is reported for most models (e.g., Avery, 1977; Downing & Roush, 1985; Hardiman, 1979); (b) usually no theory is cited as a foundation for the models (e.g., Avery, 1977; Cross, 1971); (c) all models focus on just one identity which obscures the complexity of what identity means to an
individual (i.e., multiple identities); and (d) most rely on factors which may be dependent on the zeitgeist versus a universal process of identity development per se. These limitations have led to other models which incorporate themes across identity groups. Given this characteristic, the term "inclusive" models of identity development is used.

**Inclusive Models of Identity Development**

**Stone Model of Career Development**

Stone (1984) adapted Bank's (1984) model of identity development which focused on ethnic groups in general. The phases of Stone's model include: (a) Ethnoentropy; (b) Ethnocentrism; (c) Ethnosyncretism; (d) Transethnicity; and (e) Panethnicity. The phases describe people's progression from believing in superiority of their own ethnic group to accepting new ideas about their own and other groups. Finally, people interact with other groups in a transcendent manner where one is viewed as a member of the ethnic groups of the world. The models from Banks and Stone both include a multi-ethnic group focus. However, they are limited in that they are not based on a formal theory, utilize a Eurocentric perspective, do not address the concept of multiple oppressions (i.e., restricted to race/ethnicity), and lack empirical support.

**The Racial/Cultural Identity Development Model**

Atkinson et al. (1983) described the process of development across oppressed groups (e.g., race, gender, sexual orientation) and proposed the
Minority Identity Development Model (MID). Sue and Sue (1990) noted that the use of the term Racial/Cultural Identity Development Model (R/CID) is now preferred as the model is revised and refined. This model is based on previous identity development literature and on clinical observations. The model has the advantage that it was developed for use in describing all oppressed groups (i.e., racial/ethnic, women, gay/lesbian/bisexual, etc.) and, recently, has also described the identity development process for White people, although the content is different (Sue & Sue, 1990). The model includes five stages which reflect attitudes toward self, other minorities within and outside their own group, and majority individuals. The five stages are: Conformity, Dissonance, Resistance and Immersion, Introspection, and Integrative Awareness (Sue & Sue, 1990). The descriptions below are for people in minority groups and not for White people.

The Conformity stage in the R/CID model is similar to Cross' (1971) Preencounter stage. People in this stage hold the dominant culture (i.e., dominant societal view) as the ideal and standard by which to live by. Concurrently, people hold negative views of, and disdain for, their own culture. Dissonance occurs when people encounter information or experiences that are inconsistent with previous held beliefs, attitudes, and values. Frequently, this inconsistency is information that counters a stereotype (Sue & Sue, 1990). A personal questioning and challenging period occurs in which people can no longer avoid thinking about identity. Resistance and Immersion happens when people completely endorse views of their own group and reject the dominant values of society. Desire to
eliminate oppression of their group is a prime motivator. Feelings that may occur in this stage are guilt, shame, and anger (Sue & Sue, 1990). The Introspection stage describes people who realize that anger from Resistance and Immersion is psychologically draining and takes time and energy from truly understanding one's self and other people. The need for a proactive, positive self definition is strong. Additionally, the sense of rigidity from the previous stage is now viewed as limited, and a personal view takes precedence over the group view. In Integrative Awareness, people have developed an inner sense of security and can appreciate unique aspects of their own culture as well as other cultures. There are acceptable and unacceptable aspects of every culture. They also have a strong desire to eliminate all form of oppression.

Sue and Sue (1990) outlined a number of limitations of the R/CID model and of identity development models in general. First, the model was not presented as a personality theory; therefore, the stages should not be viewed as fixed. The authors argued that culture identity development is a dynamic process. Second, the authors noted that almost all identity development models begin with a stage that involves interaction with an oppressive society; in other words, development before this stage is not described. Third, while the force of sociocultural factors in a particular zeitgeist (e.g., the Third World movement - a time in society when racial-cultural pride was heightened) are seen as influencing identity development, the authors noted that identity development may be different for people if these factors were not present. They pointed out the need for researchers in the identity development literature to investigate
how institutional and societal factors facilitate or impede development. Fourth, the authors noted that issues of class, age, gender have not been addressed adequately in existing models. Fifth, they noted that affective-behavioral correlations may not be as strong as commonly believed. In addition, further limitations include the model being based primarily on clinical observations with no empirical support, and no integration of differing perspectives and worldviews applicable across groups.

**Phinney's Multigroup Ethnic Identity Measure**

In recognizing commonalities across groups in identity development, Phinney (1992) created the Multigroup Ethnic Identity Measure (MEIM) to measure ethnic identification across all ethnic groups. She did not utilize a guiding psychological theory; rather, she drew on existing literatures of identity development for racial groups. From this review, she recognized that each group has unique aspects (e.g., histories, values, traditions) and at the same time common threads of group identification, ethnic behaviors (e.g., involvement in social activities of one's group), and a sense of belonging (Phinney, 1990). She also assessed attitudes toward other groups as they interact with one's own identity development.

The MEIM is a 14-item scale assessing three aspects of ethnic identity: positive ethnic attitudes and sense of belonging (5 items), ethnic identity achievement, (7 items) and ethnic behaviors (2 items). Also included in the scale are six items measuring attitudes towards other groups. Her scale development study used a sample of high school
students and college students. Reliabilities for the 14-item ethnic identity measure were .81 for the high school sample and .90 for the college sample. While the measure has good internal consistency, it seems limited in the following ways: (a) the sample only contained high school and college students; (b) the sample was reflective of a geographic region (Southern California) which is much different than the United States as a whole (e.g., 12 high school students were White out of 417 total students); and (c) the measure has no guiding theory as its base; rather, it utilizes concepts from the identity development literature as a whole.

Limitation of Existing Models of Identity Development

The above models have provided direction in the creation of the identity development literature. However, a number of limitations impede further refinement and extension of this literature.

1. Numerous terms and stage names used to describe similar concepts has become confusing (e.g., terms used to describe "unawareness" or denial of the importance of group identity include Preencounter, Passive/Acceptance, Preconscious, Contact, Conformity, Identity Confusion, Before the Dawn, Color Blind, and Acceptance).

2. Few models have prompted empirical validity investigations. This absence of research has limited their use and may have fostered an unwarranted acceptance and use of the models' tenets and propositions. (e.g., a decade of research with mixed, non-significant results led to revision of Cross' Psychological Nigrescence theory by Parham and Helms and the creation of the RIAS-B).
3. Most models have not explicitly stated a worldview philosophy as a conceptual base. Implicitly, most have utilized an Eurocentric perspective (e.g., linear in stage progression, spirit and matter dichotomized, focus on individualism, focus on external factors) in the conceptualization of the stages and assumptions. This Eurocentric perspective may not be appropriate for the group(s) of interest.

4. Most models were not based on psychological theory; most used clinical observations, personal observations, and/or a synthesis from various literatures for model development. While these sources of data are important, the absence of a guiding theory is problematic in terms of testing predictions and hypotheses, developing psychometrically sound instruments, and refining models.

5. While there are exceptions (e.g., the MID to R/CID model and Cross' Nigrescence model revised by Parham & Helms), most models are not a source of on-going refinement and extension.

The Self Identity Development Model of Oppressed People (SIDMOP)

In response to the above limitations, the Self Identity Development Model of Oppressed People (SIDMOP) was developed to provide a comprehensive, integrative, and unifying model of identity development across all social groups (Highlen et al., 1986; Highlen et al., 1988). A number of strategies/steps were implemented in developing the model:

1. The model had as its theoretical base the optimal psychology theory developed by Myers (1988) and conceptual support from differing worldviews (e.g., Afrocentric, Native American, Eastern philosophies). A
common theme in these worldviews is the unity of spirit and matter, a concept articulated by Myers (1988).

2. The theoretical foundations were then extended and applied to identity development through an emic approach by the research team of Highlen et al. (1986) at The Ohio State University. This emic approach utilized semi-structured interviews with people from various identity groups (e.g., groups based on race, gender, sexual orientation, age, class, physical ability, etc.); this process yielded qualitative information from interviewees regarding their own personal processes of identity development.

3. The research team utilized their own perspectives as members of the groups listed above and drew on existing literatures across all these groups.

4. The team researched Eurocentric literatures on general identity development (e.g., cognitive and psychosocial models of development, person-environment models, and existing models of racial, gender, and sexual orientation identity development models).

5. The team incorporated the concept of multiple oppressions to reflect the reality that most people are processing more than one oppression at any time (e.g., an Asian American lesbian, a lower class gay White male).

The resulting model was one with seven phases, and six transitions between phases, a person can potentially pass through. The term "phase" is used to capture the dynamic, continuous process associated with identity development (Jecmen, 1989; Sue & Sue, 1990). The process is
argued to hold true for people as they encounter and examine their multiple identities. (The tenets and phase content will be described in the following section on the revised SIDMOP, the Optimal Theory Applied to Identity Development model; much of SIDMOP was incorporated into the OTAID model.) The phases of the SIDMOP are:

1. Absence of Conscious Awareness
2. Transition from Phase I to Individuation
3. Individuation
4. Transition from Phase 3 to Dissonance
5. Dissonance
6. Transition from Phase 5 to Immersion
7. Immersion
8. Transition from Phase 7 to Internalization
9. Internalization
10. Transition from Phase 9 to Integration
11. Integration
12. Transition from Phase 11 to Transformation
13. Transformation

Each phase is intended to reflect a person's worldview. The worldview a person holds provides the filter through which he or she makes sense of life experiences and evaluates those experiences in relation to the self and others. The transition phases were intended to capture the process a person experiences when he or she encounters inconsistencies among attitudes, feelings, behaviors, and beliefs (i.e., movement toward a succeeding phase). These transitions are viewed as having components of
the previous and successive stages. The content of the phases are described in the following section on the OTAID model.

Empirical Research of SIDMOP

Reynold’s Study of SIDMOP

Two attempts to empirically validate SIDMOP have been conducted. Reynolds (1988, 1990) examined the validity of SIDMOP by focusing on African American and Asian American identity using Phase 5 (Dissonance) through Phase 13 (Transformation) excluding the transitions between phases. The transitions were not studied due to methodological difficulties (i.e., cumbersome nature of measuring 13 stages). Phase 0 and Phase 1 also were not studied -- Phase 0 (Absence of Conscious Awareness) because this phase is a pre-verbal phase and Phase 3 (Individuation) because this phase focuses on identity before people define themselves as oppressed. In the study, 121 participants (31 African Americans and 90 Asian Americans) performed sorting tasks utilizing descriptions of the phases and 30 statements (attitudinal, affective, and behavioral in focus) based on the phases. Participants also completed the Racial Identity Attitude Scale or the Suinn-Lew Asian Self-Identity Acculturation Scale, depending on their race.

The first task, that of sorting the paragraphs into the order of the SIDMOP phases, revealed no significant differences between the two groups. This finding provided preliminary construct validity for the tenet
of universality of the SIDMOP with African-American and Asian-American identity groups.

The second task, that of placing 30 descriptive statements into their corresponding phases, revealed partial support for the hypothesis that the phases are clear and recognizable. The statements were correctly sorted between 7% and 82% of the time, with 10 items sorted less than 50% of the time. Further, the majority of the errors were connected with Phase 9 (Internalization). Statistical analysis (ANOVA) revealed no significant differences between African-American and Asian-American groups on this task thus, supporting the construct validity of the SIDMOP.

Results of Reynolds’ (1988, 1990) work provided some support for the SIDMOP. Generally, some support for the hypothesis that the phases were clear, unique, and identifiable occurred. Additionally, no differences between two racial identity groups were found, thus providing preliminary support that SIDMOP is a model applicable across different groups.

The author also highlighted a number of limitations. First, the study only included university students. Second, participants were asked to evaluate the model without expressly asking if the participants felt the model corresponded with their experiences. Therefore, the results may have been due to the participants’ ability to perform sorting tasks rather than providing construct validity support for the model. Third, Reynolds used a condensed version of SIDMOP; however, the version of SIDMOP at that time had 13 phases (phases and transitions between phases). The impact of condensing the model to five phases was unclear.
As Reynolds (1990) noted, further validation work on the model was needed. Due to the ambiguous results with the Internalization phase, she recommended further work on the theoretical predictions/statements of the model, and the Internalization phase in particular. She also recommended further work on the methodology and instruments used in future validation studies.

**Jecmen's Study of Female Identity Development**

Jecmen (1989) conducted a second study utilizing the SIDMOP framework. The author developed the Female Identity Development Scale (FIDS) based on SIDMOP and included the six phases and five transitions. The scale was developed in a rational-empirical manner utilizing traditional scale development methods. The end product was an instrument with 11 subscales (one each for the six phases and five transition phases). The FIDS was administered to 477 female university students.

An analysis of the item-subscale correlations indicated that certain items were more highly correlated with subscales other than the ones for which they were designed. Jecmen then decided whether the item should be eliminated or relocated to another subscale. Also, items that obtained a Pearson correlation coefficient of .30 or less with their own subscales were eliminated. After this process, results of internal consistency (measured by Cronbach's alpha) for each subscale indicated that six of the subscales obtained reliabilities greater than .70; these were Transition to Dissonance (.74), Dissonance (.82), Transition to Immersion (.77),
Immersion (.72), Transition to Transformation (.74), and Transformation (.81). Five of the subscale reliabilities were less than .70; these were Individuation (.69), Transition to Internalization (.36), Internalization (.49), Transition to Integration (.47), and Integration (.62). Additionally, the intersubscale correlational pattern was inconsistent with regard to predictions based on the model. These data suggested that the instrument and/or the model needed further refinement.

The work of Reynolds (1988, 1990) and Jecmen (1989) suggested that the model was in need of refinement, particularly Phase 4 (Internalization) and Phase 5 (Integration). Further, as Jecmen (1989) noted, the transitions were hard to characterize, and their presence may cloud the distinctiveness of the six primary phases.

Change from SIDMOP to OTAID Model

Based on the empirical work of Reynolds and Jecmen, and on-going conceptual refinement by the research team, SIDMOP was renamed to clarify the description of identity development (Myers et al., 1991). The theory was changed to exclude the transitions (consequently, the phases were renumbered) and to become clearer in the descriptions of Phase 4 (Internalization) and Phase 5 (Integration). The revised model was named the Optimal Theory Applied to Identity Development (OTAID model; Myers et al., 1991).
The Optimal Theory Applied to Identity Development (OTAID)

The OTAID model addresses the limitations of previous models and holds promise for increasing understanding in the area of psychological identity development. Specifically, it addresses the impact of oppression, defined as the external or internal suppression of any part of the self based on irrelevant factors, on the development of self-identity (Myers et al., 1991). As the research team further investigated the phenomenon of spiritual-material unity among differing cultures, support was found for a fundamental change in a person's conceptions of reality which takes place as one develops a deeper, more expansive sense of identity. In this manner, the OTAID model addresses identity development holistically in that the "whole" of self is viewed as greater than the sum of its parts (Myers et al., 1991). The assumptions and phases of the model are described below.

Tenets of the OTAID Model

There are several key tenets inherent in the OTAID model. These underlying assumptions revolve around the nature of one's worldview, conceptual systems of reality, the nature of self, and the role of spirituality.

Nature of identity development. First, identity development is viewed as a broadening and deepening of one's worldview (Myers et al., 1991). For example, the first part of the identity development process is
marked by a dependency on others' views (Phase 1 - Individuation in the OTAID model) and gradually progresses where one is focused on individual factors, irrespective of the larger community (Phase 4 - Internalization). In the latter phases, one gains a sense of the ultimate community with larger forces, including the cosmic, and seeks to understand and connect with people while transcending socioculturally reinforced differences (Phase 6 - Transformation). Therefore, the phases in the OTAID model are developmental in terms of a progression of one's worldview. Additionally, identity development is viewed as occurring in a predictable sequence.

Nature of conceptual systems. Second, the force of conceptual systems operating in the socialization of people and as the cause of oppression within a society is acknowledged and highlighted in the OTAID model. Myers (1988) outlined the differences between a suboptimal conceptual system and an optimal conceptual system. A suboptimal system is one which is self-alienating in that it assumes the segmentation of spirit and matter. Persons who utilize this system are subject to feelings of insecurity and vulnerability in that worth is measured by external validation. An optimal system is one which assumes a holistic view of life. Spirit and matter are in unity and self-worth is considered intrinsic and natural in one's being. Individuals embark on a journey of self-discovery and self-acceptance; part of this journey involves breaking the alienation that is fostered by the suboptimal system (Myers, et al. 1991). While differential experiences resulting from group identities (e.g., race, religion, gender, age, sexual orientation, class, etc.) are viewed as
important in the OTAID model, the experience of oppression is not totally dependent on group membership. The OTAID model posits that anyone socialized within a suboptimal system is oppressed, irrespective of a particular group identity. Thus, White males in the United States would be viewed as being oppressed, even though this group has the most economic power and is seen as the "standard" in the United States. For example, a White male supervisor who is verbally abusive to employees (especially women) in order to increase work productivity, would be viewed as oppressed given the way in which he was, and continues to be, socialized. In other words, he was taught at an early age, and continues to be reinforced, to suppress feelings, to not value connections between people, to not value work relationships, and to overemphasize material worth and gain. In this way, the OTAID model differs from other models in the literature in that traditional distinctions between "oppressed" and "oppressor" are not present.

**Self worth as inherent in one's being.** If one follows a suboptimal conceptual system, then the development of self and the definition of self would follow the same system. In other words, self would be defined and measured on the basis of external factors that are tenuous and transient in nature. In this view, identity is alienated from its inherent value (Myers, 1988). Self within the optimal conceptual system is seen as multidimensional and self worth is inherent in one's being. Self is seen within a holistic system designed to foster peace and harmony within and between people (Myers, 1988).
Role of spirituality. The fourth tenet of the model is the role of spirituality. Spirituality has been traditionally separated from material factors in the Western worldview (Myers et al., 1991). Formal psychology, since its separation from philosophy, has rarely focused on spirituality. However, spirituality is seen as an integral part of "being" and therefore an inherent part of the OTAID model. The model posits that the process of self-knowledge and spiritual development is one of people coming to realize the integration of themselves as spiritual and material beings. Transposed on this process are the guiding values of love, peace, harmony, and justice into which self, others, nature, and the transcendent are placed (Myers et al. 1991). Part of the multi-faceted nature of self includes being connected to all living entities as they are all manifestations of spirit. An aim of optimal theory is to transform the alienation people sense when viewing themselves within a suboptimal conceptual system (Myers, 1988). The identity development process is seen as spiritual in content as well as in process.

Process of identity development. Fifth, the OTAID model posits that identity development is a progression of 'unlearning' the suboptimal system and concurrently, incorporating the optimal system. Self identity processes are viewed as an expandable and contractible spiral (Highlen et al., 1988). For example, an individual begins his or her life implicitly living in the spiritual-material unity and the connectedness of all life (Phase 0 - Absence of Conscious Awareness); this is similar to the Phase 6 (Transformation). The difference between Phase 0 and Phase 6 is
knowledge of self, knowledge of the world in this spiritual-material unity, and knowledge of self's relation to the world (Jecmen, 1989).

**Multiple oppressions.** Sixth, combinations of oppressions involve some unique concerns that are different than dealing with a single oppression. In the OTAID model, people do not "recycle" through previous phases for "different" oppressions; they utilize the current phase and concomitant worldview experienced at the time. For example, a gay male Latino focusing on race may be in Immersion; if he encounters experiences which focus on being gay, he would do this in the context of Immersion, as well as utilizing all the knowledge gained in the previous phases. Relatedly, people do not have to complete all phases for one oppression before focusing on another oppression.

**Phases of the OTAID Model**

The specific OTAID model phases are described below. The descriptions are based on the Myers et al. (1991) article, which is the most current form of the OTAID model. Each phase represents a unique set of characteristics that are distinctive from the rest of the phases. Examples are given to further illustrate the phases.

Phase 0, **Absence of Conscious Awareness**, is descriptive of newly borns who have no conscious awareness of being. Babies do not experience themselves as separate from their environment. Life is comprised of innocence, experienced without judgment and as inherently good. Phase 0 is restricted developmentally to early development (i.e., a baby).
Phase I, **Individuation**, is characteristic of people who begin early childhood as individuals who experience separateness from their world; this can extend throughout a person's lifetime. People in this phase have a definition of self as being the one in which they were socialized, mostly transmitted through family values and the dominant societal view. People rarely assign meaning or significance to their identities and are unaware of how society has shaped them. They are more likely to hold conventional beliefs about various social groups and are likely to accept the status quo without question. If people are greatly reinforced by society for most parts of their identity, people will be less likely to move beyond this phase.

**Example**: John is a Mexican American male who only identifies as a "person" and who has not done any exploration of what being "Mexican American" or "male" means to him; he views this as "unimportant". He also holds stereotypic views of other groups.

Phase 2, **Dissonance**, is characteristic of people who are starting to explore part(s) of their identity and ask questions about what social group membership means. This exploration usually leads to feelings of conflict between the people they think they are and what society emphasizes. Consciously and/or unconsciously, people have internalized sociocultural values that portray the devalued parts of identity as negative (i.e., internalized oppression). Individuals are starting to explore how society's values have shaped them and how society oppresses people. People may deny or suppress this examination in order to escape the negative, and often painful, feelings associated with the process.
Example: Ann is a female college student who has always held traditional views of male and female gender roles. After taking a class in geology, she started to explore this field as a possible major and talked to her geology professor. The professor said that the major is primarily for men due to the physical demands of the career. Ann left feeling confused and unsure of what her next step would be.

Phase 3, Immersion, is characterized by people who fully accept others like themselves based on social group membership. This acceptance allows people to explore and value the parts of identity that were previously viewed by society as negative. Feelings of excitement and pride, as well as a sense of belonging and feeling supported, occur when people identify with the devalued group. There is a single-minded focus on their own group as a way of feeling good about themselves. This group identity leads to strength and security, albeit tenuous, in that it is directly tied to social group membership. Concurrently, there may be negative feelings associated with the dominant group; these negative feelings (e.g., anger, distrust) may prompt people to move away from or reject the dominant group and/or society. Negative feelings may also exist toward other people in their own group who are not doing identity exploration work.

Example: Art is a gay male who is active in the local gay rights activist group. His social contacts are primarily people who are gay, and he has trouble trusting anybody who is not gay. While he is not fully aware of what being male means to him, he has spoken negatively of gays who are still in the "closet".
Phase 4, **Internalization**, describes people who have successfully attached feelings of self worth associated to the part of self that was previously viewed as negative by the dominant societal view. This part of identity, heavily focused on in Phase 3 (Immersion), is now viewed as only one part among many in the totality of identity. An increased sense of personal security is experienced as a product of the work done in Phase 2 (Dissonance), Phase 3, and from the current work in Phase 4 by personalizing a worldview. People are more tolerant and accepting of others who do not threaten this newfound sense of self.

**Example:** Susan is an African American female who has studied the role of culture in everyday life. She recently has started to feel more secure in her identity and has started to study oppression among various groups. However, she still cannot accept people who are lesbians, especially African American lesbians.

Phase 5, **Integration**, describes a significant change in the way people view life, others, and self. People recognize that the dominant societal view has created and perpetuated oppression. They have a strong sense of inner security which extends to relationships with others. Others are approached more consistently out of wholeness, and people exhibit unconditional positive regard for individuals, groups, and all of life. There is greater congruence between what people say and what they do. An understanding that the nature of reality depends on one's worldview, and the assumptions people make, is acknowledged. All people are valued and differences are not only recognized, they are applauded.
Example: Jack is a Caucasian who attempts to fully affirm everyone he comes into contact with in his job, personal life, and interactions with others. He has a strong sense of what being White and male means to him, and he actively seeks out experiences that involve diverse groups of people. Additionally, he serves on committees at work to fight against all forms of discrimination in his work setting.

Phase 6, Transformation, is characterized by people who define self as including ancestors, those unborn, nature, and community. People's view of the world and reality is based on spiritual awareness instead of external situations. All forms of life are seen as interrelated and valued simply because they exist. The role of "negative" experiences is expanded to include the fact that these experiences can teach people, and that self-growth can be gained from them. Thus, every experience offers opportunity for enrichment.

Example: Mary is a person who seeks experiences that help her grow in fully knowing herself. She has a strong sense of guiding principles she lives by which include peace, justice, and harmony. She values highly the connectedness between all people and all of life and considers this to be sacred. She is at peace with herself and strives to help others in this manner.

Empirical Investigation of the OTAID Model

Highlen, Jecmen, and Speight (1991) investigated the structure of the OTAID model utilizing Phases 1--6. They administered a revised version of the FIDS (based on the original FIDS from Jecmen's 1989
study) to a sample ($N = 668$) of female undergraduates and women in the community. Results found the reliability coefficients (Cronbach's alpha) to be as follows: Individuation: .82; Dissonance: .83; Immersion: .74; Internalization: .44; Integration: .76; and Transformation: .84. As in Jecmen's (1989) study, the scale measuring Phase 4 (Internalization) obtained a low reliability coefficient. Additionally, Phase 3 (Immersion) and Phase 5 (Integration) obtained somewhat low reliability coefficients.

These data, along with the data from Reynolds' and Jecmen's studies, provide some support for the SIDMOP/OTAID model construct. The data also support the notion of refining Phases 4 (Internalization) and 5 (Integration) of the OTAID model.

**The Present Study**

**Statement of Purpose**

While instruments exist for assessing identity development in some groups, no such instrument exists to measure this construct independent of particular social group membership. The OTAID model is the most comprehensive model designed that could be used to develop such an instrument. It has the potential to describe and unite the identity development process transcending social group membership. An instrument based on this model has the potential to add to the literature on identity development and further test the validity of the OTAID model.

Therefore, one purpose of this study was to create an empirical instrument based on the OTAID model. Given preliminary empirical data
on SIDMOP and the OTAID model, this direction seemed warranted. If further development and refinement of the OTAID model is to take place, the theory needs a reliable and valid instrument. Jecmen (1989), Reynolds (1988, 1990), and Highlen, Jecmen, and Speight (1991) have provided a methodology on which to build. This study examined the version of the OTAID model phase typology reported in the Myers et al. (1991) article and extended these phase descriptions. From these phase descriptions, an instrument applicable to all people who experience the suboptimal conceptual system (i.e., members from all oppressed identity groups) was created. While it is true that a person may be in a transition between phases (as conceptualized in earlier SIDMOP efforts), Jecmen's (1989) results indicated that the phases of the current OTAID model are probably distinguishable and distinct from each other and, therefore, should provide a structure for creating homogeneous scales. Therefore, the current research created an instrument, with six scales, that measures the phases of the OTAID model (excluding Phase 0 due to pre-verbal characteristics and, as such, untestable). The scale was developed in a rational-empirical manner.

A second purpose of the study was to analyze the patterns of responding from the various identity groups in order to test predictions made by the OTAID model. The foci of the study is further explained in the hypotheses listed below.
Hypotheses for Present Study

This study developed the Self Identity Inventory (SII) from the OTAID model's phase structure and content. Certain hypotheses can be generated from the OTAID model for the present study. These hypotheses are derived from the optimal psychology theory of Myers (1988) and the OTAID model's tenets and predictions.

1. Each SII scale will be internally consistent.

2. The OTAID model predicts that change in a person's identity development process has the potential to occur. Further, it is possible that a person can experience a major life event at any time which would affect a person's placement in the phases. However, generally the model predicts that a person's phase placement will be relatively stable over a short amount of time. Therefore, the SII scales will show good test-retest reliability.

3. The OTAID model posits that the phases are distinct from each other, yet related. Therefore, the six scales of the SII will be intercorrelated in a manner predicted by the model. This general hypothesis will be evaluated by the pattern and magnitudes of the scale intercorrelations.
The specific hypotheses are listed below:

a. The OTAID model predicts a progression of identity development. Specifically, a person may remain in one phase throughout a lifetime or may spend much time in one phase and not much time in another. However, one goes through the phases in a sequential manner in dealing with an identity. Therefore, each phase (scale) will be significantly positively correlated with phases on either side (e.g., Individuation [Scale 1] with Dissonance [Scale 2], Dissonance [Scale 2] with Individuation [Scale 1] and Immersion [Scale 3] etc.).

b. The OTAID model predicts that people in Individuation represent a distinct group of people by virtue of their naiveté of identity and a total acceptance of the suboptimal conceptual system. Individuation is fundamentally different than the other phases, although there are similarities with Dissonance (Scale 2; as this is the next phase of development). Therefore, Individuation (Scale 1) will be significantly negatively correlated with Immersion (Scale 3), Internalization (Scale 4), Integration (Scale 5), and Transformation (Scale 6).

c. The OTAID model predicts that people in Dissonance are just starting to explore and examine incongruities between their self definition and the way they are treated by society. Therefore, they are just starting to examine issues of identity, a process different than most of the phases. Therefore, Dissonance (Scale 2) will be
significantly negatively correlated with all other phases, except for Individuation (Scale 1; adjoining scale) and Immersion (Scale 3; adjoining scale), which both will show a significantly moderate positive correlation.

d. The OTAID model predicts people in Immersion to be focused on their "own" group; this runs counter to Integration and Transformation. It is somewhat similar to Internalization. Therefore, Immersion (Scale 3) will be negatively correlated with Integration (Scale 5) and Transformation (Scale 6); it will be significantly positively correlated with Dissonance (Scale 2) and Internalization (Scale 4) as these are adjoining scales.

e. Internalization (Scale 4) will be significantly positively correlated with Immersion (Scale 3) and Integration (Scale 5) as these are adjoining scales.

f. The OTAID model posits that Integration and Transformation are similar in that people in these phases have fully realized the nature of oppression. They are different due to the added spiritual dimension in Transformation. Therefore, Integration (Scale 5) will be significantly positively correlated with Transformation (Scale 6).

5. The OTAID model states that identity development stems from adherence to the suboptimal or optimal conceptual systems in varying
degrees and not totally from social group membership. Between group
differences in identity development still occur, however, because
members of these groups are valued differently under the dominant
societal view. From an OTAID model lens, this differential can impede
or promote identity development.

Therefore, differences across social groups on scale means of the SII
will occur between groups who are more valued under the dominant
societal view compared to those who are not (e.g., men vs. women;
European Americans vs. people of color; heterosexual vs.
gay/lesbian/bisexual; people without a disability vs. people with a
disability; people who are Catholic or Protestant [i.e., Christian] vs.
other religions and practices). Those who are more valued under the
dominant societal view will be higher on Scale 1 (Individuation) and
those who are not will be higher on Scales 2-6 (Dissonance, Immersion,
Internalization, Integrations, and Transformation). Relatedly, no
differences will occur between groups who are not valued under the
dominant societal view (e.g., all minority racial groups and minority
sexual orientation groups).
Chapter III
Methodology

Participants
While a number of researchers have voiced the need for studying a representative sample, rarely has this been achieved. The Optimal Theory Applied to Identity Development (OTAID) model has a main tenet of applicability across all social groups (e.g., race, gender, sexual orientation, class, etc.) Therefore, the representativeness of the sample was crucial to the intent of this study; randomness is not appropriate for a study such as this, which focused on obtaining a true representative sample across many social groups. The goal was to obtain representation of people in all social groups based on gender, race, age, education level, socio-economic class, geographic region, religion, sexual orientation, job/occupation/career, and disability status. The target numbers for each group in the sample were proportionate to the population in the United States.

Convenience sampling was utilized to obtain this representative sample. "Contacts" at various locations throughout the country (e.g., universities such as University of Florida, University of Massachusetts, University of Akron, Ohio State University, University of Michigan, and Drake University; and, different communities in Pennsylvania, Minnesota, Michigan, California, and Florida) were used to obtain the desired diversity. There was one contact for each site. Participants
were contacted through: (a) academic courses; (b) student organizations; (c) individual student/faculty/staff at various universities; and, (d) community contacts throughout the country. The response rate was recorded for each contact; for example, the contact at Drake University distributed 55 surveys, and 50 were returned, for a response rate of 91% (see Table 1). A total of 478 survey packets were distributed and 325 returned, producing an overall response rate of 68%.

Factor analysis was an integral part of the development of the Self Identity Inventory (SII); therefore, it was important to have enough data sets to utilize the factor analysis procedures. The target number was at least 300 participants, following the recommendation of Tinsley and Tinsley (1988) in their discussion of factor analysis procedures.

The participant pool included 325 participants (for complete description, see Table 2). The sample was comprised of 240 females (74%) and 85 males (26%) with an age range of 18 to 82 (M = 33.8, SD = 15.2) from 24 states (mostly Midwest and East). Eleven percent had no college education; 58% were in college or had completed an undergraduate degree; and 32% had obtained a professional or graduate degree. Forty-three percent were students, and 31% were professionals (e.g., physicians, lawyers, psychologists). Ten percent were African-American (9 males and 25 females); 3% were Asian American (1 male and 8 females); 2% were Biracial/Multiracial (1 male and 5 females); 83% were European American (72 males and 197 females); and 2% were Hispanic/Latino (2 males and 3 females). Six percent were bisexual; 4% were gay males; 74% were heterosexual; and 16% were lesbians.
TABLE 1

Response Rate by Contact

<table>
<thead>
<tr>
<th>Contact</th>
<th>Region</th>
<th>Population</th>
<th>Distributed</th>
<th>Received</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MW</td>
<td>S/G</td>
<td>100</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>MW</td>
<td>S</td>
<td>35</td>
<td>27</td>
<td>77</td>
</tr>
<tr>
<td>3</td>
<td>MW</td>
<td>S/G</td>
<td>55</td>
<td>50</td>
<td>91</td>
</tr>
<tr>
<td>4</td>
<td>MW</td>
<td>G</td>
<td>50</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>5</td>
<td>MW</td>
<td>G</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>MW</td>
<td>S/G/P</td>
<td>20</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>7</td>
<td>MW</td>
<td>G/P</td>
<td>30</td>
<td>25</td>
<td>83</td>
</tr>
<tr>
<td>8</td>
<td>MW</td>
<td>P</td>
<td>5</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>9</td>
<td>MW</td>
<td>S</td>
<td>20</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>10</td>
<td>MW</td>
<td>S/G</td>
<td>8</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>11</td>
<td>MW</td>
<td>S/G/P</td>
<td>5</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td>12</td>
<td>MW</td>
<td>S/G/P</td>
<td>5</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>13</td>
<td>E</td>
<td>S/G</td>
<td>53</td>
<td>35</td>
<td>62</td>
</tr>
<tr>
<td>14</td>
<td>E</td>
<td>G</td>
<td>37</td>
<td>31</td>
<td>84</td>
</tr>
<tr>
<td>15</td>
<td>E</td>
<td>S</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>E</td>
<td>P</td>
<td>5</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>17</td>
<td>S</td>
<td>G</td>
<td>25</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>18</td>
<td>S</td>
<td>P</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>W</td>
<td>G</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. MW = Midwest, S = South, E = East, W = West; regions were region of origin - there were participants who listed residence outside of their region of origin. S = student, G = general population, P = professional.
TABLE 2

Social Characteristics of Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
<th>%-'90 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>85</td>
<td>26</td>
<td>49</td>
</tr>
<tr>
<td>Women</td>
<td>240</td>
<td>74</td>
<td>51</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>67</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>21-24</td>
<td>54</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>25-44</td>
<td>138</td>
<td>43</td>
<td>33</td>
</tr>
<tr>
<td>45-54</td>
<td>22</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>55-59</td>
<td>12</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>60-64</td>
<td>12</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>65-74</td>
<td>13</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>75-84</td>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>85 and over</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>234</td>
<td>72</td>
<td>24</td>
</tr>
<tr>
<td>Northeast</td>
<td>65</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>South</td>
<td>19</td>
<td>6</td>
<td>34</td>
</tr>
<tr>
<td>West</td>
<td>6</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>elementary</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>junior high</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>some high school</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>high school</td>
<td>22</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>technical school</td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>first yr college</td>
<td>34</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>second</td>
<td>47</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>third</td>
<td>31</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>fourth</td>
<td>15</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>fifth</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>bachelor's</td>
<td>56</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>master's</td>
<td>73</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>21</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>professional</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>student</td>
<td>133</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>homemaker</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 2 (continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>professional</td>
<td>94</td>
<td>31</td>
</tr>
<tr>
<td>manager</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>blue collar</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>secretary/clerical</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>nurse</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>sales</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>artisan</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>owner of business</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>skilled worker</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>service</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Total</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Men</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Asian American</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Biracial</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>83</td>
<td>80</td>
</tr>
<tr>
<td>Men</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Men</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

#### Disability Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Total</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has disability</td>
<td>55</td>
<td>17</td>
</tr>
<tr>
<td>No disability</td>
<td>270</td>
<td>83</td>
</tr>
</tbody>
</table>

#### Sexual Orientation

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Total</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisexual</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Gay male</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>240</td>
<td>74</td>
</tr>
<tr>
<td>Lesbian</td>
<td>53</td>
<td>16</td>
</tr>
</tbody>
</table>
### TABLE 2 (continued)

<table>
<thead>
<tr>
<th>Income</th>
<th>&lt; 10,000</th>
<th>10-14,999</th>
<th>15-24,999</th>
<th>25-34,999</th>
<th>35-49,999</th>
<th>50-74,999</th>
<th>&gt; 75,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31</td>
<td>22</td>
<td>49</td>
<td>49</td>
<td>62</td>
<td>47</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>7</td>
<td>15</td>
<td>15</td>
<td>19</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>10</td>
<td>18</td>
<td>16</td>
<td>17</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Single Income</td>
<td>165</td>
<td>51</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual Income</td>
<td>158</td>
<td>49</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Religion/Spiritual orientation**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agnostic</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>Atheist</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Catholic</td>
<td>68</td>
<td>21</td>
</tr>
<tr>
<td>Hindu</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Jewish</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Protestant</td>
<td>128</td>
<td>40</td>
</tr>
<tr>
<td>Other</td>
<td>68</td>
<td>21</td>
</tr>
</tbody>
</table>

**Note.** N = 325. Numbers do not always add up to 325 due to missing data. * = data not available.
Seventeen percent had an income under $14,999; 15% were between $15,000 and $24,999; 15% were between $25,000 and $34,999; 19% were between $35,000 and $49,999; 15% were between $50,000 and $74,999; and 18% were $75,000 and above. Although not specifically examined empirically, representation from participants of multiple groups occurred (e.g., African American lesbian, Asian American gay male, lower class European American male). While the goal of reaching a representative sample was not met in some cases (e.g., number of males was low; almost half of the sample were students), diversity in a number of areas (e.g., sexual orientation, race, income level, age) was achieved. Further, the sample was more diverse than samples traditionally utilized in the literature.

**Development of the Self Identity Inventory (SII)**

**Initial Item Generation**

The procedures for creating the pilot instrument were based, in part, on the procedures utilized by Jecmen (1989) in his creation of the Female Identity Development Scale (FIDS) and on established methods for scale construction (e.g., Dawis, 1987; DeVellis, 1991; Walsh & Betz, 1985). In the initial phase, items were generated through brainstorming and revision sessions by the author and individuals who developed the OTAID model and its precursor, the Self Identity
Development Model of Oppressed People (SIDMOP). Items were generated for Phases 1-6. (Phase O was not investigated since the theory indicates this phase to be a phase associated with infancy and, as such, pre-verbal; therefore, this phase is not measurable through verbal/written procedures.) The initial pool of items was generated in a rational manner according to the tenets of each phase of the model.

During this time period, each person of the original research team was contacted and asked for additions to the descriptions of the phases (for letter describing the task, see Appendix A). The author itemized each original phase description by concepts as described in the Myers et al. (1991) article and asked the team members to add to these concepts. Of the seven team members, three responded (the original and additional concepts of the phases are noted in Appendix B with the additions highlighted in bold). This was an important step in the study; earlier research suggested on-going revision of the OTAID model phases, especially Phase 4 (Internalization).

Through this step, the construct of the OTAID model was refined and items were generated from these conceptual additions. Two major conceptual additions came from this procedure: (a) the notion of "conditional" acceptance of others was incorporated into Phase 4 (Internalization); and (b) the notion of minimal discrepancies between what a person says and does was incorporated into Phase 5 (Integration). Other additions were refining existing concepts or adding related concepts.
Items were also examined from Jecmen's (1989) study (i.e., Female Identity Development Scale items) and were adapted for use in the current instrument. These items were developed by Jecmen in a rational and empirical manner, and they were selected for the current study in terms of relevant psychometric properties (e.g., item-subscale correlations).

Items were generated for the SII that reflected attitudes, behaviors, and feelings that are characteristic of people in the OTAID model phases. In each revision stage (there were five revision stages of items), items were examined for clarity, readability, and fit with the assigned phase. Questionable items (e.g., unclear wording, unclear fit with the phase) were eliminated at various points in the process. The goal was to have a 'pre-pilot' instrument that could be judged by independent experts for content validity (i.e., members of the original team and thus, knowledgeable of the theory yet not associated with the present study).

Through this process, approximately 30 items were generated for each phase of the OTAID model. This number was higher than the number eventually desired due to the inevitability of discarding items at each stage of rational revision and statistical analysis. In his review of other scale development studies, Jecmen (1989) stated that item to stage ratios ranged from 7 to 30. Reynolds (1988) recommended no more than 10 items per phase to prevent respondent fatigue from interfering with the validity of responses. Therefore, the eventual goal of approximately
10 items per phase in the pre-pilot instrument required having a large initial item pool.

**Rating by Experts**

Two independent experts (knowledgeable of the theory yet not associated with the study) rated the pre-pilot items on clarity and assigned each item to a particular phase. The experts were members of the original research team that conceptualized SIDMOP and the OTAID model and were, therefore, familiar with the theory. The experts were asked to rate each item on clarity of wording and fit with the intended phase and to make changes in the items (see Appendix C for a copy of the letter to the experts with instructions). This step was intended to increase the content validity of the SII.

The author then systematically reviewed these data. Specifically, the clarity scores and confidence scores for each item were evaluated, as well as the assignment of items to OTAID model phases. Items that were difficult to assign to a phase were studied in depth. Criteria for inclusion or exclusion included the following. If both experts agreed on keeping an item or on eliminating an item, the author followed this recommendation. If the experts disagreed, discretion of the author and advisor was used in a rational manner. Wording changes and general comments noted by the experts were incorporated through the judgement of the author and advisor. From these data, the author created a pilot instrument. This pilot instrument also included the
Development Sample

The pilot instrument was administered to a small development sample (N = 6) as recommended by Dawis (1987) and Walsh and Betz (1985). The development sample included people of differing social groups (i.e., Japanese American female professional, White female professional who is a lesbian, Native American male professional, Pakistani American female undergraduate student, and two White males, both professionals). The number of development sample subjects was small because a qualitative analysis of participants’ reactions to completing the instrument was desired. This analysis was done through interviewing each participant after they completed the instrument about relevant points (i.e., how long it took each participant to respond to the scale, general reactions, discussing unclear words/items and why they were unclear, and reactions to the instructions). Participants completed a reaction form which was used as a guide for the semi-structured interview (see Appendix D). The goal was twofold: (a) to obtain qualitative data regarding the process of taking the instrument from a participant point of view, and (b) to obtain feedback on the content of the items. The purpose of this stage was to refine the instrument and instructions based on actual participant reactions.
Revision of the SII

After this stage was completed, the author revised/eliminated items as needed and created the final experimental instrument of 195 items. Scale 1 (Individuation) contained 29 items; Scale 2 (Dissonance) contained 30 items; Scale 3 (Immersion) contained 33 items; Scale 4 (Internalization) contained 33 items; Scale 5 (Integration) contained 39 items; and Scale 6 (Transformation) contained 31 items. Two important additions to the instrument resulted from the development sample's responses. First, a set of instructions for the SII was added. All six people from the developmental sample reported it was too confusing to respond to certain items that contained a reference to "my group". People reported that those items were ambiguous and created too much stress (although, incidentally, most responded to the items in the way intended). Therefore, the decision was made to make this notion explicit; thus, instructions to the SII were developed (see Appendix E). The instructions outlined the concept of group membership, asked participants to define "my group" before taking the instrument, and instructed them to respond to items with reference to their definition(s).

Second, a number of items made reference to "recently" (e.g., 'I have recently realized that society devalues parts of who I am.'; 'I recently realized for the first time that I was a target of discrimination and it hurt.'). Most participants found these items confusing (although, incidentally, most responded to the items in the way intended). Therefore, the decision was made to make these items clearer by
underlining certain words to emphasize the reference to time.
Retaining this wording was deemed important due to the concept of changes over time in a person's identity development, which corresponds to specific OTAID model phase definitions.

The items were then randomized in the following manner.
Numbers were assigned to each item and written on a piece of paper. These were then placed in a box and selected randomly. The order in which they were drawn determined the final order of the items for the experimental instrument.

**Measures**

**Background Information Form**
Participants completed a demographic information form (see Appendix F) that asked them identify a number of variables including age, gender, race, sexual orientation, educational status, state of residence, income level, religion, etc. Each category was designed to be exhaustive to eliminate large "other" categories (e.g., biracial people being listed under "other").

**Self Identity Inventory Scale (SII)**
The first part of the SII asked participants to describe, in their own words, their particular identity(ies) in two ways: (a) by 'listing' the separate identities; and (b) by writing, in their own words, how they describe their total identity. Additionally, they were asked to rate how challenging each of the identity parts and the total description of identity
were for them (see Appendix E for a copy of this section). For example, if a person were an African American female and identified herself as such, she would report "African American" and "female" and report a rating of how challenging each part was for her (on a scale of 1 to 6, with higher numbers indicating a higher degree of challenge); in her description of total identity, she might write "African American" and then rate how challenging this was. If a person were an Asian American gay male, but only identified as "Asian American", he would report Asian American in the total description and a rating of how challenging that was for him.

The second part of the SII contained 195 items assessing participants' attitudes, feelings, and behaviors corresponding to the phases of the OTAID model. These items comprised six scales with each scale reflecting Phases 1-6 (Individuation, Dissonance, Immersion, Internalization, Integration, and Transformation) in the OTAID model. Each participant indicated the degree to which he or she agreed or disagreed with a SII item, using a 6-point Likert scale (strongly disagree to strongly agree; scored so a higher score indicated agreement with an item). All items were scored in the positive direction. A 6-point scale was used in order to eliminate a neutral choice.

**Tolerance Scale**

The Tolerance scale from the California Psychological Inventory (Gough, 1987) was used as a measure of construct validity of the SII
scales. The Tolerance scale contains 32 items scored true/false and is intended to be a measure of one's ability to accept differences and beliefs that are different from one's own (Gough, 1987). Means for women and men have been reported as 21.08 (SD = 5.41) and 20.05 (SD = 5.27), respectively (Gough, 1987).

**Belief System Analysis Scale**

The Belief System Analysis Scale (BSAS) from Montgomery, Fine and Myers (1990) was also used as a measure of construct validity of the SII scales. The BSAS is a measure of adherence to an optimal Afrocentric belief system. This belief system is characterized by a holistic, nonmaterialistic, and communal orientation in persons. The scale contains 31 attitudinal items scored on a Likert scale from 1=Strongly disagree to 5=Strongly agree; items are scored in both positive and negative directions. This scale is relatively new and thus, has limited psychometric data. The initial development study for the scale was conducted using a sample of college students; the mean age of the sample was 18.6 years with 69% being female and 31% male. The following data were reported from the development study (Montgomery et al., 1990). The mean of the BSAS for all subjects (n=140) was 104.71 (SD = 13.05); Cronbach's alpha was .80; the test-retest reliability coefficient (n=41, one week apart) was .63. Further, the BSAS correlated significantly in the expected directions with three criterion variables that were utilized (Dogmatism scale: r = -.51, Symptom Checklist 90 - R: r=-.38, and Social Interest Scale: r=.50).
Social Desirability and Infrequency Scales

The Social Desirability and Infrequency Scales were used as measures of a socially desirable response set and a random response set. The items from these two scales comprised 32 true/false items (16 items per scale) taken from the PRF-Form E (Jackson, 1984). Reliability estimates (odd-even) for the Social Desirability Scale and the Infrequency Scale have been reported at .68 and .71, respectively (Jackson, 1984).

Order of the Measures

All subjects completed a questionnaire packet comprised of a personal background form, the Self Identity Inventory (SII), the Tolerance scale, the Social Desirability and Infrequency scales, and the BSAS. The ordering of the measures was as follows: (a) Demographic form; (b) SII; (c) Tolerance scale, Infrequency scale, and Social Desirability (these scales were combined into one measure to reduce the number of measures and because all three utilize true/false scoring; the items were randomized); and (d) BSAS. The SII was deemed as the most important instrument and thus, was second in the ordering so participants would not be subject to fatigue and so they would not be influenced by other measures (i.e., the BSAS).

The same order was used for all participants for uniformity. While it was an option to counterbalance the measures to identify a possible ordering effect, this option was not chosen for two reasons: (a) there was minimal control of the survey completion procedure due to
convenience sampling; and (b) there was no guarantee of the number of surveys received due to the sampling method.

Procedure

Groups of questionnaires were given to the contact people. Each questionnaire packet contained an introductory letter explaining the nature and intent of the study. This letter also comprised the informed consent form (see Appendix G for a copy of the letter). The contact people then distributed questionnaires to participants. The participants either mailed back surveys to the author or returned them to the contact people (in sealed envelopes) who, in turn, mailed them to the author. Informed consent was indicated by the fact that people returned the packets. This procedures was approved by the Ohio State University human subjects review committee.

Test-Retest Data

People indicated consent to participate in the test-retest portion of the study by submitting their name and address on the bottom of the informed consent form. This information was compiled, and a second questionnaire packet was administered at a time interval of 6-10 weeks following the first administration. Of the total sample \(N = 325\), 102 (31%) participants indicated a willingness to take a second questionnaire; of these 102, 66 (65%) people completed and returned the second survey packet.
Characteristics of the test-retest sample included 22 (34%) men and 43 (66%) women with an average age of 40.05 (SD = 17.63). Four (6%) were African American, two (3%) were Asian American, two (3%) were Biracial, 56 (86%) were European American, and one (2%) was Hispanic/Latino. Twenty-two (35%) were gay, lesbian, or bisexual while 42 (66%) were heterosexual. The sample also reflected diversity in highest level of education completed, income level, geographic region, occupation, and disability status.

The test-retest sample was comparable to the total sample in this study (see Table 3 for specific comparison). There were no significant differences between the two samples in terms of race, gender, sexual orientation, education or income (tested through t-tests and Chi-square analyses). There was a significant difference in age with the total sample being younger (M = 32.19; SD = 14.08) than the test-retest sample (M = 40.05; SD = 17.63); t(322) = -3.81, p < .001.

Analysis of Data

The data were analyzed in six steps: (a) testing hypotheses for construct validity of the SII through factor analysis and interscale correlations; (b) analysis of the SII's reliability through internal consistency and test-retest reliability; (c) examining the content validity of the SII through qualitative analysis of the OTAID phase concepts and the SII items and by the item-scale correlations; (d) testing hypotheses of external measures of construct validity; (e) testing hypotheses for
**TABLE 3**

Comparison of Social Characteristics for Total Sample and Test-Retest Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total Sample N=325</th>
<th></th>
<th>Test-Retest Sample n=65</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>85</td>
<td>26</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>Women</td>
<td>240</td>
<td>74</td>
<td>43</td>
<td>66</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>34</td>
<td>10</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Asian American</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Biracial</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>European American</td>
<td>269</td>
<td>83</td>
<td>56</td>
<td>86</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Native American</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sexual Orientation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bisexual</td>
<td>19</td>
<td>6</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Gay Male</td>
<td>12</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>240</td>
<td>74</td>
<td>42</td>
<td>66</td>
</tr>
<tr>
<td>Lesbian</td>
<td>53</td>
<td>16</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>121</td>
<td>38</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>25-44</td>
<td>138</td>
<td>43</td>
<td>25</td>
<td>43</td>
</tr>
<tr>
<td>45-55</td>
<td>23</td>
<td>6</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>56 &amp; older</td>
<td>42</td>
<td>13</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td><strong>Education Completed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High/Tech School</td>
<td>34</td>
<td>11</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>In College</td>
<td>130</td>
<td>41</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>56</td>
<td>17</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Master's, Ph.D.</td>
<td>104</td>
<td>32</td>
<td>27</td>
<td>42</td>
</tr>
<tr>
<td>Professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 14,999</td>
<td>53</td>
<td>17</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>15-24,999</td>
<td>49</td>
<td>15</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>25-34,999</td>
<td>49</td>
<td>15</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>35-49,999</td>
<td>62</td>
<td>19</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>50-74,999</td>
<td>47</td>
<td>15</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>&lt; 75,000</td>
<td>58</td>
<td>18</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>
construct validity through between group differences; and (f) testing hypotheses for construct validity through analyzing the self-reported identity description data.

**Confirmatory Factor Analysis and Interscale Intercorrelations**

Analysis of the psychometric properties of the SII involved a number of steps. First, a preliminary step, before the factor analysis, examined measures of skewness and kurtosis (measures of variability) for each of the SII items.

Second, a confirmatory factor analysis (CFA) was conducted using LISREL 7 (Joreskog & Sorbom, 1988). While it was an option to conduct an exploratory factor analysis, the decision was made to examine the data only in the factor structure proposed by the OTAID model. Thus, each scale was analyzed separately using the maximum likelihood estimation procedure, and all items were forced to load on only one scale. Factor loadings (representing the correlation of variables with the factor) and communality values (the proportion of the total variance of a variable that is common variance) were then examined in an effort to select items for inclusion in the CFA. The general strategy for each scale involved an interplay of decisions at each step in the process of the CFA. This interplay of decisions is necessary when using LISREL 7, and thus, the strategy for each scale was slightly different. Factor loadings greater than .50 and communality values greater than .30 were sought for each item.
In addition, reliabilities were estimated for each scale prior to elimination of items. These reliabilities were used for comparison to the final scale reliabilities after the CFA. Once the items for each scale were selected, final internal consistency coefficients (measured by Cronbach's alpha) were determined, as well as goodness of fit and adjusted goodness of fit indices (measure of how well the data fit with the hypothesized perfect model; the goodness of fit index is the ratio of the sums of squares accounted for by the model to the total sums of squares of the estimated population matrix). Goodness of fit indices were determined for the initial model and final model for comparison; goodness of fit indices are interpreted in the same manner as correlation coefficients in terms of desirable values (Fassinger, 1987). During the CFA, items were also dropped due to correlated measurement error.

Third, the scale intercorrelation patterns were examined by developing a correlation matrix of correlations between SII scales. This procedure was only done utilizing the final version of the SII (i.e., the items suggested by the confirmatory factor analysis).

Reliability

The reliability of the SII scales was evaluated through measures of internal consistency (Cronbach's alpha) for each scale and through the test-retest reliability for each scale. The time interval between the first and second administrations was 6-10 weeks.
Content Validity

Content validity was examined using two strategies. First, the item-scale correlations were examined for each scale. The general guideline of .3 or above for each item was used in evaluating each item's "fit" with a scale. Second, a qualitative analysis of how well the items represented the domain of the OTAID model phase concepts was conducted. This was done by the author through placing the SII items with a particular concept or concepts within each phase, with particular attention to the additions to the original concepts. This was a check on the content validity procedure conducted by the expert judges.

External Construct Validity

Further analysis of construct validity was conducted by examining the correlations between each SII scale and the Tolerance Scale and the BSAS. The OTAID model predicts a certain pattern of correlations with both of these measures (see Hypothesis 12 below).

Between Group Differences

These analyses were conducted to further examine construct validity. Some analyses were limited due to low sample size in certain demographic groups; therefore, some categories were collapsed. Consequently, analyses of variance (ANOVAs), post-hoc analyses (Fisher's LSD procedure) and t-tests were conducted for the following comparisons: (a) men vs. women; (b) European Americans vs. people of color; (c) European American women vs. European American men; (d)
European American, heterosexual men vs. all other participants; (e) African American vs. other people of color; (f) heterosexual vs. gays, lesbians, and bisexuals; (g) participants with a disability vs. those without; and (h) Christians vs. other religions/practices. Differences were analyzed by SII scale means. Profiles of SII scale mean scores for each demographic group were also obtained and plotted.

Self-Reported Identity Descriptions

The data from the self-identity descriptions were analyzed through the following procedures. The variable of interest was how participants, in their own words, defined themselves; they were also asked to rate how challenging the listed identity is for them. The instructions were intended to have people limit their choices to social identity groups (i.e., race, class, gender, sexual orientation, etc.) or "none". However a few participants (n = 14) listed factors not included in the definition of the OTAID model. While these factors are important, meaningful, and related to social group membership (e.g., an African American female single parent is most likely dealing with issues as an "African American female" but also as a single parent), they were excluded from the analysis because they are not defined in the OTAID model. Some of these factors listed by participants included student, single parent, follower of Jesus, tall, blonde, psychologist, father, artist, and nun.

The descriptions were categorized in the manner in which participants filled out the description and the challenge rating was
recorded (e.g., White female - 5, African American lesbian - 3, gay male - 6). For the people who added identity factors not defined by the OTAID model, in addition to factors that are considered, a separate process was developed. This process was used because most likely the challenge rating was influenced by the additional factor(s) (e.g., a female student who reported a rating of 5 might be communicating that being a student is challenging while being a female is not). Specifically, if they included additional factors, the listing of "separate" parts was examined. So, if a person listed Asian American, female, and student, only the race and gender were examined. The challenge rating was then recorded as an average of the rating for the two separate parts. Due to low numbers in some of the relevant OTAID categories (e.g., disability status, age, class, religion), only four factors were recorded: (a) race, (b) gender, (c) sexual orientation, and (d) none.

**Hypotheses for Present Study**

1. **Hypothesis 1.** The SII scales will be as proposed by the OTAID model phase structure. This hypothesis will be evaluated through the confirmatory factor analysis. Goodness of fit indices will be at least .90.

2. **Hypothesis 2.** The SII scales will not be biased through social desirability (measured by Social Desirability Scale) or random responding (measured by Infrequency Scale). The correlations
between the SII scales and the Social Desirability and Infrequency Scales will not be significant at \( p < .05 \).

3. **Hypothesis 3.** Each SII scale will be homogeneous. Measures of internal consistency (Cronbach's alpha) for each scale will be above .70.

4. **Hypothesis 4.** Each SII scale will have good test-retest reliability measured through correlations between the first and second administrations; the correlations for all scales will be above .8.

5. The scales of the SII will be intercorrelated as listed below:

   a. **Hypothesis 5.** Each scale will be significantly correlated with its two adjoining scales (e.g., Scale 1 (Individuation) with Scale 2 (Dissonance), Scale 2 (Dissonance) with Scale 1 (Individuation) and Scale 3 (Immersion), etc.).

   b. **Hypothesis 6.** Scale 1 (Individuation) will be significantly negatively correlated with Scale 3 (Immersion), Scale 5 (Integration), and Scale 6 (Transformation).

   c. **Hypothesis 7.** Scale 1 (Individuation) will be significantly positively correlated, although weak (below .20), with Scale 4 (Internalization).
d. **Hypothesis 8.** Scale 2 (Dissonance) will be significantly negatively correlated with all other scales, except for Scale 3 (Immersion), which will produce a significant positive correlation.

e. **Hypothesis 9.** Scale 3 (Immersion) will be significantly negatively correlated with Scale 5 (Integration) and Scale 6 (Transformation); it will be significantly positively correlated with Scale 4 (Internalization).

f. **Hypothesis 10.** Scale 4 (Internalization) will be significantly positively correlated with Scale 3 (Immersion) and Scale 5 (Integration).

g. **Hypothesis 11.** Scale 5 (Integration) will be significantly positively correlated with Scale 6 (Transformation).

6. **Hypothesis 12.** The SII will show good construct validity as measured by correlations with the external validity measures (i.e., Tolerance Scale and the Belief System Analysis Scale [BSAS]). The scales will be correlated with the Tolerance Scale and the BSAS in the pattern of significant negative correlations between both the Tolerance Scale and the BSAS with Scales 1 (Individuation), Scale 2 (Dissonance), Scale 3 (Immersion), and Scale 4 (Internalization) in a descending manner (i.e., highest with Scale 1, then Scale 2, etc.), and
significant positive correlations with Scale 5 (Integration) and Scale 6 (Transformation).

7. **Hypothesis 13.** The SII will show good content validity evaluated by item-scale correlations of the SII items and scales and by the fit of the selected items and the OTAID phase concepts.

8. **Hypothesis 14.** Significant differences will occur in mean scale scores between groups who are more valued under the dominant societal view compared to those who are not. Those who are more valued under the dominant societal view will be significantly higher on Scale 1 (Individuation) and those who are not will be significantly higher on Scales 2 (Dissonance), Scale 3 (Immersion), Scale 4 (Internalization), Scale 5 (Integration), and Scale 6 (Transformation). The comparisons will be (with the more valued group listed first): (a) men vs. women; (b) European Americans vs. people of color; (c) European American men vs. European American women; (d) European American, heterosexual men vs. all other participants; (e) heterosexuals vs. gays, lesbians, and bisexuals; (f) participants without a disability vs. those with a disability; (g) Christians vs. other religions/practices. There will be no differences in scale means between groups who are not valued in the dominant societal view (e.g., racial minority groups). The comparison will be African American participants vs. other participants of color.
9. **Hypothesis 15.** The challenge rating of the self-identity description will be correlated with two scales of the SII. Specifically, there will be a significant negative correlation with Scale 1 (Individuation) and a significant positive correlation with Scale 2 (Dissonance).

10. **Hypothesis 16.** The low challenge rating group will be significantly higher on Scale 1 (Individuation) and significantly lower on Scales 2-6 (Dissonance, Immersion, Internalization, Integration, and Transformation).
Chapter IV

Results

This study developed and presented preliminary validity data for the Self Identity Inventory (SII); this chapter will present and summarize the results from the data analyses of the hypotheses and additional analyses. There are eight sections: (a) results from the factor analysis; (b) examination of biased responding data (i.e., social desirability and random responding); (c) analysis of the SII’s reliability, evaluated by the internal consistency of the scales (Cronbach’s alpha) and the test-retest reliability; (d) analysis of the SII’s content validity (evaluated through the fit of items with OTAID phase descriptions and item-scale correlations) and construct validity (evaluated through interscale correlations and through correlations with two external measures); (e) examination of the profiles of mean SII scale scores and statistical test of scale mean differences by demographic groups; (f) examination of the data regarding self-reported identity descriptions; (g) additional analyses, including analyses of age, education, income, and high scorer groups; results from an attempt to create a social desirability scale; and analyses of data obtained from a comparison sample.
Confirmatory Factor Analysis

Descriptive Measures

The first step in the confirmatory factor analysis of the SII items was examining measures of skewness and kurtosis (measures of variability) for each item. Items with values greater than 2.00 (skewness) and 3.00 (kurtosis) were deleted from consideration in scale construction (these values are accepted as "rules of thumb" in the field; Nyquist, 1993). This procedure resulted in the deletion of six items (items 10, 91, 101, 154, 173, and 179; for a listing of all 195 items and item numbers, see Appendix H). Two additional items (41 and 124) were deleted due to values greater than 4.0 for kurtosis even though the values for skewness were within bounds (the kurtosis is more important when evaluating items for variability than skewness; Nyquist, 1993).

Factor Analysis

Each scale was analyzed separately using the maximum likelihood estimation procedure. All items in a scale were forced to load on only one scale. Factor loadings (representing the correlation of variables with the factor; Tinsley & Tinsley, 1987) and communality values (the proportion of the total variance of a variable that is common variance; Tinsley & Tinsley, 1987) were then examined to select items for inclusion in the confirmatory
factor analysis (CFA), which utilized LISREL 7 (Joreskog & Sorbom, 1988).

The following strategy for the scales is outlined briefly in general terms due to the interplay of decisions necessary when using LISREL 7, and thus, the strategy for each scale was slightly different. In general, factor loadings greater than .50 and communality values greater than .30 (standard values for this procedure) were sought (for specific cut-off values for each scale, see below). Items were dropped due to correlated measurement error; generally, values for correlated measurement error were sought that produced a decrease in the Chi-square of 20 or greater. Items were also dropped due to low reliability by evaluating the squared maximum likelihood estimates and the squared multiple correlations; in general, cut-offs for the standardized maximum likelihood estimates were below .4; for the squared multiple correlations, values of at least .3 were sought and in most cases, .4. The specific strategy for each scale is outlined below.

**Goodness of Fit Indices**

The goodness of fit index demonstrates how well the obtained structure of the data fit with the hypothesized structure. An acceptable goodness of fit value is .90 or above (Fassinger, 1987). The indices obtained in the CFA for each SII scale ranged from .90 to .92, indicating close approximations of the perfect
hypothesized model for each scale (see Table 4 for complete results).

**Confirmatory Factor Analysis Strategy for Each SII Scale**

**Scale 1: Individuation.** Items with a factor loading less than .50 and communality less than .30 were not included. These criteria resulted in the exclusion of seven items. Although the communality values for items 102, 141, 147, and 160 were less than .30, these items were retained due to their factor loadings (i.e., above .50). Sixteen items were included in the confirmatory factor analysis (CFA). See Table 4 for initial and final goodness of fit indices (a measure of how well the data fit the perfect hypothesized structure). Items 138 and 141 were dropped due to correlated measurement error. The final 14 items for Scale 1 were 50, 80, 85, 102, 111, 116, 139, 147, 151, 160, 163, 171, 181, and 194 (see Appendix I for final model items and item numbers).

**Scale 2: Dissonance.** Items with a factor loading less than .50 and communality less than .30 were not included. These criteria resulted in the exclusion of 17 items. Although the communality values for items 112 and 162 were less than .30, these items were retained due to their factor loadings (i.e., above .50). Fifteen items were included in the CFA. See Table 4 for initial and final goodness of fit indices. Items 112 and 162 were dropped because of their low reliability, and items 22 and 189 were
<table>
<thead>
<tr>
<th>Scale</th>
<th>Initial model</th>
<th></th>
<th>Final model</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GFI</td>
<td>AGFI</td>
<td>GFI</td>
<td>AGFI</td>
</tr>
<tr>
<td>1</td>
<td>.88</td>
<td>.85</td>
<td>.91</td>
<td>.88</td>
</tr>
<tr>
<td>2</td>
<td>.82</td>
<td>.76</td>
<td>.91</td>
<td>.86</td>
</tr>
<tr>
<td>3</td>
<td>.82</td>
<td>.75</td>
<td>.92</td>
<td>.88</td>
</tr>
<tr>
<td>4</td>
<td>.86</td>
<td>.83</td>
<td>.92</td>
<td>.88</td>
</tr>
<tr>
<td>5</td>
<td>.76</td>
<td>.69</td>
<td>.90</td>
<td>.85</td>
</tr>
<tr>
<td>6</td>
<td>.85</td>
<td>.82</td>
<td>.91</td>
<td>.88</td>
</tr>
</tbody>
</table>

**Note.** Scale 1 = Individuation, scale 2 = Dissonance, scale 3 = Immersion, scale 4 = Internalization, scale 5 = Integration, scale 6 = Transformation. GFI = Goodness of Fit Index, AGFI = Adjusted Goodness of Fit Index.
dropped due to correlated measurement error. The final 11 items for Scale 2 were 46, 73, 94, 99, 130, 145, 153, 168, 182, and 192 (see Appendix I).

**Scale 3: Immersion.** Items with a factor loading less than .45 and communality less than .26 were not included. These criteria resulted in the exclusion of 20 items. Thirteen items were included in the CFA. See Table 4 for initial and final goodness of fit indices. Items 60, 82, and 149 were dropped due to correlated measurement error. The final 10 items for Scale 3 were 40, 48, 53, 57, 61, 68, 88, 143, 157, and 159 (see Appendix I).

**Scale 4: Internalization.** Items with a factor loading less than .20 and communality less than .30 were not included. These criteria resulted in the exclusion of 16 items. Seventeen items were included in the CFA. See Table 4 for initial and final goodness of fit indices. Items 7, 19, 54, 62, 120, and 195 were dropped because of their low reliability and item 72 was dropped due to correlated measurement error. The final 10 items for Scale 4 were 23, 25, 66, 70, 100, 115, 127, 132, 137, and 187 (see Appendix I).

**Scale 5: Integration.** Items with a factor loading less than .40 and communality less than .20 were not included. These
criteria resulted in the exclusion of 20 items. Although the communality values for items 31, 35, 39, 81, 167, 183, and 185 were less than .20, these items were retained due to their good factor loadings (i.e., above .40). Seventeen items were included in the CFA. See Table 4 for initial and final goodness of fit indices. Items 110 and 113 were dropped because of their low reliability and items 39, 75, 81, and 183 were dropped due to correlated measurement error. The final 11 items for Scale 5 were 31, 35, 76, 83, 84, 97, 106, 118, 167, 184, and 185 (see Appendix I).

Scale 6: Transformation. Items with a factor loading less than .50 and communality less than .25 were not included. These criteria resulted in the exclusion of 13 items. Eighteen items were included in the CFA. See Table 4 for initial and final goodness of fit indices. Items 44, 58, and 128 were dropped due to correlated measurement error. Item 128 also had low reliability. The final 15 items for Scale 6 were 8, 29, 37, 42, 43, 59, 74, 87, 98, 104, 107, 152, 164, 170, and 193 (see Appendix I).

Hypothesis 1. These data provide confirmatory evidence for Hypothesis 1 -- that the SII scales are as proposed by the structure of the OTAID model. The goodness of fit indices (all .9 or above; the standard for these indices) support this hypothesis, thus providing support for the construct validity of the SII.
Biased Responding

Social Desirability and Infrequency Scales

Table 5 presents the correlations between the SII scales and the Social Desirability and Infrequency scales (this analysis, and all subsequent analyses in this study, are with the final items for each scale). One of the SII scales produced a low significant correlation with the Social Desirability scale (Scale 1-Individuation; \( r = .14, p < .05 \)); one scale (Scale 2-Dissonance) had a low significant correlation with the Infrequency scale (\( r = .13, p < .05 \)). While these correlations were statistically significant, they were low and not that meaningful (following a guideline of meaningfulness at .20 or above), although the correlation between Scale 1 and the Social Desirability scale makes sense in that people in Phase 1 would be most likely to respond in a socially desirable manner (e.g., biased toward the status quo and "in tune" with what others want).

Hypothesis 2. These data suggest that, on the whole, the SII scales were not subject to bias through responding in a socially desirable or random manner and thus, provide confirmatory evidence for Hypothesis 2.
TABLE 5

Self Identity Inventory (SII) Scale Correlations with Tolerance Scale, BSAS, Social Desirability Scale, & Infrequency Scale

<table>
<thead>
<tr>
<th>SCALE</th>
<th>TOL</th>
<th>BSAS</th>
<th>SD</th>
<th>INF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-.39**</td>
<td>-.47**</td>
<td>.14*</td>
<td>.05</td>
</tr>
<tr>
<td>2</td>
<td>-.36**</td>
<td>-.24**</td>
<td>-.08</td>
<td>.13*</td>
</tr>
<tr>
<td>3</td>
<td>-.27**</td>
<td>-.08</td>
<td>-.03</td>
<td>.04</td>
</tr>
<tr>
<td>4</td>
<td>-.30**</td>
<td>-.11</td>
<td>-.04</td>
<td>.05</td>
</tr>
<tr>
<td>5</td>
<td>.24**</td>
<td>.43**</td>
<td>.02</td>
<td>-.03</td>
</tr>
<tr>
<td>6</td>
<td>.21**</td>
<td>.41**</td>
<td>-.02</td>
<td>-.01</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.

Note. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. TOL = Tolerance Scale, BSAS = Belief Systems Analysis Scale, SD = Social Desirability Scale, INF = Infrequency Scale.
Analysis of the SII’s Reliability

Internal Consistency of SII Scales

A measure of internal consistency (Cronbach's alpha) was estimated for each scale prior to elimination of items, as well as for the final model of each scale (see Table 6). The six SII scales obtained good internal consistency coefficients. The internal consistency measures were .70 or above for all scales; in fact, four of the six scales (Individuation, Dissonance, Immersion, and Transformation) obtained Cronbach's alphas of .80 or above, and two scales (Dissonance and Transformation) obtained Cronbach's alphas of .90.

Hypothesis 3. These data provide confirmatory evidence for Hypothesis 3 -- that the SII scales are homogeneous.

Test-Retest Reliability

Sixty-five participants completed the SII a second time (interval of 6-10 weeks) as a measure of test-retest reliability. The sample paralleled the diversity of the total sample gender, age, race, sexual orientation, highest level of education completed, and income level. There was diversity in geographic region, occupation, and disability status, and some diversity in religion. Statistical tests (t-tests and Chi-square analyses) revealed no significant differences on any of these variables except for age
### Initial and Final Reliabilities for Scales of the Self Identity Inventory (SII)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Initial reliability (number of items)</th>
<th>Final reliability (number of items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.89 (23)</td>
<td>.89 (14)</td>
</tr>
<tr>
<td>2</td>
<td>.90 (30)</td>
<td>.90 (11)</td>
</tr>
<tr>
<td>3</td>
<td>.87 (33)</td>
<td>.84 (10)</td>
</tr>
<tr>
<td>4</td>
<td>.71 (32)</td>
<td>.72 (10)</td>
</tr>
<tr>
<td>5</td>
<td>.85 (38)</td>
<td>.78 (11)</td>
</tr>
<tr>
<td>6</td>
<td>.92 (31)</td>
<td>.90 (15)</td>
</tr>
</tbody>
</table>

*Note.* Scale 1 = Individuation, 2 = Dissonance, 3 = Immersion, 4 = Internalization, 5 = Integration, 6 = Transformation.
with the test-retest sample being older ($M = 40.05; SD = 17.63$) than the total sample ($M = 32.19; SD = 14.08$); $t(322) = -3.81, p < .001$). Thus, the test-retest sample was comparable to the total sample in this study.

Results suggested that the SII scales have good test-retest reliability (over a 6-10 week interval). Pearson correlation coefficients were as follows: $r = .92 (N = 65)$ for Scale 1 (Individuation); $r = .81 (N = 65)$ for Scale 2 (Dissonance); $r = .72 (N = 64)$ for Scale 3 (Immersion); $r = .83 (N = 65)$ for Scale 4 (Internalization); $r = .90 (N = 65)$ for Scale 5 (Integration); and, $r = .87 (N = 62)$ for Scale 6 (Transformation). All correlations were significant at $p < .01$.

**Hypothesis 4.** These data provide confirmatory evidence for Hypothesis 4 - that the SII scales will have good test-retest reliability.

**Construct Validity**

**Inter-Scale Correlations**

The first strategy for testing the construct validity of the SII was the factor analysis. A second strategy for testing the construct validity of the SII was to examine the scale intercorrelations. The intercorrelations between the scales of the SII are reported in Table 7. Results indicated that Scale 1 was
TABLE 7

Scale Intercorrelation Matrix

<table>
<thead>
<tr>
<th>SCALE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>.36**</td>
<td>-.09</td>
<td>.12*</td>
<td>-.64**</td>
<td>-.26**</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>.20**</td>
<td>.63**</td>
<td>-.16**</td>
<td>.11*</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>.48**</td>
<td>.16**</td>
<td>.14*</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14**</td>
<td>.28**</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.51**</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
*p < .05.
**p < .01.
most highly correlated with Scale 2; not correlated with Scale 3; had a low positive correlation with Scale 4; and negatively correlated with Scales 5 and 6. Scale 2 was most highly correlated with Scale 4, followed by Scales 1 and 3; had a low correlation with Scale 6; and negatively correlated with Scale 5. Scale 3 was most highly correlated with Scale 4 followed by Scale 2 and had low correlations with Scales 5 and 6. Scale 4 was most highly correlated with Scale 2; followed by Scale 3, was moderately correlated with Scale 6, and had low correlations with Scales 1 and 5. Scale 5 was most highly correlated with Scale 6; negatively correlated with Scale 1 and Scale 2; and had a low correlation with Scale 4. Scale 6 was most highly correlated with Scale 5 followed by Scale 4; had low correlations with Scales 3 and 2; and negatively correlated with Scale 1.

Results indicated that, generally, the scales were interrelated in a manner predicted by the OTAID model. First, three of the scales were most highly correlated with their adjoining scales (Scales 1, 3, and 6). Scale 2 was most highly correlated with Scale 1 but not with Scale 3 (it was with Scale 4). Scale 4 was most highly correlated with Scale 3 but not with Scale 5 (it was with 6). Scale 5 was most highly correlated with Scale 6 but not with Scale 4 (it was with Scale 3, although the correlations with Scales 3 and 4 were almost the same). Second, Scale 1 was negatively correlated with Scales 5 and 6, but positively correlated with Scale 2 (moderately) and Scale 4 (low). No significant
correlation between Scale 1 and Scale 3 was obtained. Third, Scales 5 and 6 were highly correlated as predicted by the model. Finally, Scale 6 was correlated with the other scales in a descending manner (i.e., highest with Scale 5, then Scale 4, etc.)

**Hypotheses 5-11.** These data provide confirmatory evidence for Hypotheses 5-11, for the most part, and provide support for the construct validity of the SII.

**External Construct Measures**

The Tolerance scale from the California Psychological Inventory (CPI) from Gough (1987) and the Belief Systems Analysis Scale (BSAS) from Montgomery et al. (1990) were used to measure the construct validity of the SII. The psychometric data from the present sample paralleled the data obtained from previous studies of these instruments making the results interpretable. In the present study, the mean for men was the same as the mean for women on the Tolerance scale (M = 24.40, SD = 4.03 for men; M = 24.40, SD = 4.07 for women). These are presented in comparison to the means obtained in the norming of the CPI (M = 20.01, SD = 5.41 for men; M = 21.08, SD = 5.51 for women; Gough, 1987). The mean for the BSAS in this study (M = 112.24, SD = 18.24) was comparable to the mean reported by Montgomery et al. in the initial development study of the BSAS (M
The measure of internal consistency (Cronbach's alpha) for the BSAS in the present study (.84, n = 299) was comparable to the Montgomery et al. finding (.80, n = 140), as well as the test-retest reliability (r = .64, p < .01, n = 59, 6-10 weeks apart in this study; r = .63, n = 41, one week apart in the BSAS development study). The correlation between the Tolerance Scale and the BSAS was .47, p < .01.

Tolerance Scale

Table 5 reports the correlations between the Tolerance Scale and the scales of the SII. Results indicated that the correlations were in the expected directions. Specifically, the Tolerance scale was negatively correlated with Scales 1 - 4 (Individuation, Dissonance, Immersion, and Internalization) and positively correlated with Scales 5 and 6 (Integration and Transformation). These results support the prediction of the OTAID model that people in Phases 1 - 4 are more likely to be less accepting of differences and beliefs that are different than their own compared to people in Phases 5 and 6.

Belief System Analysis Scale (BSAS)

The BSAS is a measure of adherence to an Afrocentric belief system (Montgomery et al., 1990); while the OTAID model has a base of multiple spiritual traditions, it is grounded in an
Afrocentric belief system (Myers et al., 1991). Therefore, the BSAS is an appropriate measure of construct validity.

The BSAS was negatively correlated with Scales 1 - 4 (Individuation, Dissonance, Immersion, and Internalization) and positively correlated with Scales 5 and 6 (Integration and Transformation; [see Table 5]). These results support the prediction that as people progress through the developmental phases of the OTAID model, their worldview is expanding and deepening to become more accepting, non-material, and communal in nature, which is what the BSAS measures.

**Hypothesis 12.** These data provide confirmatory evidence for Hypothesis 12 - that the SII will show good construct validity, as measured through external construct validity measures.

**Content Validity**

**Fit of SII Items with OTAID Phase Concepts**

Appendix I presents the results of a qualitative analysis, by the author, of the fit of the final SII items with the OTAID model phase concepts. Specifically, items were attached with the OTAID model phase(s) in terms of their content. Results revealed that the items represented the content domain of the phases and concepts. All phase concepts were covered by the SII items that were in the final scale models produced by the confirmatory factor analysis;
this supported the ratings conducted by the external experts. Additionally, the concepts that were added (by three of the original SIDMOP/OTAID research team members) were also covered by the SII items; this fact supports the incorporation of these concepts into the OTAID model construct.

Item-Scale Correlations

Pearson's correlation coefficients were calculated between each item in the final scale models produced by the factor analysis and its own total scale (see Table 8). Most of the scales produced good item-scale correlations; Scale 1 (Individuation) had a range of correlations from .46-.68; Scale 2 (Dissonance) had a range of .54-.70; Scale 3 (Immersion) had a range of .39-.59; Scale 4 (Internalization) had a range of .25-.65 with four items below .3; Scale 5 (Integration) had a range of .32-.56; and Scale 6 (Transformation) had a range of .49-.69. The fact that four items in Scale 4 produced correlations below .3 is a weakness, following the guidelines established by Nunnally (1978), who recommended item-total correlations to be .3 or above. However, the results of the CFA produced the best possible combination of items within a scale, and each scale produced an acceptable goodness of fit index (i.e., values of .90 and higher are considered "acceptable"). Additionally, the low item-scale correlations of four items in Scale 4 were .25 or above (i.e., .25, .26, .27, and .29) and are not
<table>
<thead>
<tr>
<th>SII Item</th>
<th>Item-scale</th>
<th>SII Item</th>
<th>Item-scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale 1</td>
<td></td>
<td>Scale 4</td>
<td></td>
</tr>
<tr>
<td>item 50</td>
<td>.63</td>
<td>item 23</td>
<td>.27</td>
</tr>
<tr>
<td>item 80</td>
<td>.54</td>
<td>item 25</td>
<td>.30</td>
</tr>
<tr>
<td>item 85</td>
<td>.58</td>
<td>item 66</td>
<td>.53</td>
</tr>
<tr>
<td>item 102</td>
<td>.46</td>
<td>item 70</td>
<td>.47</td>
</tr>
<tr>
<td>item 111</td>
<td>.56</td>
<td>item 100</td>
<td>.30</td>
</tr>
<tr>
<td>item 116</td>
<td>.60</td>
<td>item 115</td>
<td>.29</td>
</tr>
<tr>
<td>item 139</td>
<td>.58</td>
<td>item 127</td>
<td>.49</td>
</tr>
<tr>
<td>item 147</td>
<td>.49</td>
<td>item 132</td>
<td>.65</td>
</tr>
<tr>
<td>item 151</td>
<td>.54</td>
<td>item 137</td>
<td>.26</td>
</tr>
<tr>
<td>item 160</td>
<td>.49</td>
<td>item 187</td>
<td>.25</td>
</tr>
<tr>
<td>item 163</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 171</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 181</td>
<td>.68</td>
<td>item 31</td>
<td>.36</td>
</tr>
<tr>
<td>item 194</td>
<td>.58</td>
<td>item 35</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>item 76</td>
<td>.50</td>
</tr>
<tr>
<td>Scale 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 46</td>
<td>.56</td>
<td>item 84</td>
<td>.56</td>
</tr>
<tr>
<td>item 73</td>
<td>.60</td>
<td>item 97</td>
<td>.34</td>
</tr>
<tr>
<td>item 94</td>
<td>.63</td>
<td>item 106</td>
<td>.52</td>
</tr>
<tr>
<td>item 99</td>
<td>.70</td>
<td>item 118</td>
<td>.45</td>
</tr>
<tr>
<td>item 130</td>
<td>.67</td>
<td>item 167</td>
<td>.48</td>
</tr>
<tr>
<td>item 136</td>
<td>.61</td>
<td>item 184</td>
<td>.48</td>
</tr>
<tr>
<td>item 145</td>
<td>.74</td>
<td>item 185</td>
<td>.46</td>
</tr>
<tr>
<td>item 153</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 168</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 182</td>
<td>.58</td>
<td>item 18</td>
<td>.56</td>
</tr>
<tr>
<td>item 192</td>
<td>.56</td>
<td>item 29</td>
<td>.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>item 37</td>
<td>.49</td>
</tr>
<tr>
<td>Scale 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>item 40</td>
<td>.54</td>
<td>item 43</td>
<td>.76</td>
</tr>
<tr>
<td>item 48</td>
<td>.52</td>
<td>item 59</td>
<td>.63</td>
</tr>
<tr>
<td>item 53</td>
<td>.50</td>
<td>item 74</td>
<td>.52</td>
</tr>
<tr>
<td>item 57</td>
<td>.57</td>
<td>item 87</td>
<td>.53</td>
</tr>
<tr>
<td>item 61</td>
<td>.53</td>
<td>item 98</td>
<td>.58</td>
</tr>
<tr>
<td>item 68</td>
<td>.58</td>
<td>item 104</td>
<td>.62</td>
</tr>
<tr>
<td>item 88</td>
<td>.59</td>
<td>item 107</td>
<td>.69</td>
</tr>
<tr>
<td>item 143</td>
<td>.55</td>
<td>item 152</td>
<td>.68</td>
</tr>
<tr>
<td>item 157</td>
<td>.39</td>
<td>item 164</td>
<td>.63</td>
</tr>
<tr>
<td>item 159</td>
<td>.48</td>
<td>item 170</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>item 193</td>
<td>.58</td>
</tr>
</tbody>
</table>

Note. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
problematic in the total context of the confirmatory factor analysis for Scale 4 (i.e., the goodness of fit index was .92; Bennett, 1993).

**Hypothesis 13.** These data provide confirmatory evidence for Hypothesis 13 -- that the SII will have good content validity.

**Group Differences**

**Demographic Group Scale Mean Differences**

Analyses regarding group differences were conducted to further test the construct validity of the SII. The OTAID model predicts certain similarities and differences in SII scale mean scores by demographic group membership. For instance, Phase 1 (Individuation), posits that if an individual is greatly reinforced by society, then that person is less likely to progress from this phase. This may be indicative, then, of White, heterosexual, males in the United States. It also may be indicative of men compared to women; European Americans compared to people of color; heterosexual people compared to gay, lesbian, or bisexual people; people who are Catholic/Protestant compared to people from other religions; and people with no disability compared to people with a disability. Further, differences between oppressed groups are predicted to be minimal. For example, African Americans should be similar to other people of color in scale mean scores. Group scale means were examined through t-tests, Analyses of
Variance (ANOVAs), and post-hoc analyses (Fisher's least significant difference [LSD] procedure).

**Total sample.** Means for the total sample are presented in Table 9. The profile configuration is one of a progressive increase of scale means from Scale 1 (Individuation) to Scale 5 (Integration) with a drop for Scale 6 (Transformation; see Figure 1).

**Gender.** A profile representing the scale means for men and women is in Figure 2. Significant differences in mean scale scores between men and women were found on all scales of the SII (see Table 10). Specifically, men scored higher on Scale 1 (Individuation) and women scored higher on Scales 2 - 6 (Dissonance, Immersion, Internalization, Integration, and Transformation).

**Race.** Scale means and standard deviations for each racial group are reported in Table 11. Due to low sample sizes for the racial minority groups, these groups were collapsed into one category -- people of color -- for statistical tests of scale mean differences. A profile of scale means for these two groups is represented in Figure 3. Significant differences in mean scale scores between European Americans and people of color (African American, Asian American, Biracial, Hispanic/Latino, and
### Scale Means for Total Sample on Self Identity Inventory (SII)

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.60</td>
<td>.86</td>
<td>322</td>
</tr>
<tr>
<td>2</td>
<td>2.90</td>
<td>.95</td>
<td>320</td>
</tr>
<tr>
<td>3</td>
<td>3.12</td>
<td>.81</td>
<td>320</td>
</tr>
<tr>
<td>4</td>
<td>3.42</td>
<td>.71</td>
<td>316</td>
</tr>
<tr>
<td>5</td>
<td>4.14</td>
<td>.71</td>
<td>321</td>
</tr>
<tr>
<td>6</td>
<td>3.67</td>
<td>.90</td>
<td>313</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
Figure 1. Scale Means for Total Sample
Figure 2. Scale Means for Total Sample by Gender
### TABLE 10

**Scale Means, Standard Deviations, and t-tests on the Self Identity Inventory (SID) by Gender**

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.78</td>
<td>.85</td>
<td>85</td>
<td>2.54</td>
<td>.85</td>
<td>237</td>
<td>2.23*</td>
<td>320</td>
</tr>
<tr>
<td>2</td>
<td>2.72</td>
<td>.89</td>
<td>85</td>
<td>2.97</td>
<td>.97</td>
<td>235</td>
<td>-2.04*</td>
<td>318</td>
</tr>
<tr>
<td>3</td>
<td>2.89</td>
<td>.90</td>
<td>83</td>
<td>3.20</td>
<td>.77</td>
<td>237</td>
<td>-3.03**</td>
<td>318</td>
</tr>
<tr>
<td>4</td>
<td>3.23</td>
<td>.78</td>
<td>84</td>
<td>3.49</td>
<td>.68</td>
<td>232</td>
<td>-2.93**</td>
<td>314</td>
</tr>
<tr>
<td>5</td>
<td>3.89</td>
<td>.79</td>
<td>85</td>
<td>4.23</td>
<td>.66</td>
<td>236</td>
<td>-3.56***</td>
<td>319</td>
</tr>
<tr>
<td>6</td>
<td>3.36</td>
<td>.92</td>
<td>82</td>
<td>3.78</td>
<td>.86</td>
<td>231</td>
<td>-3.76***</td>
<td>311</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.

* $p < .05$, two-tailed.
** $p < .01$, two-tailed.
*** $p < .001$, two-tailed.
### TABLE 11

**Scale Means and Standard Deviations on the Self Identity Inventory (SII) by Race**

<table>
<thead>
<tr>
<th>Scale</th>
<th>African Americans (n=9)</th>
<th>Asian Americans (n=6)</th>
<th>Biracial Americans (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>2.46 .78</td>
<td>33</td>
<td>2.21 .90</td>
</tr>
<tr>
<td>2</td>
<td>2.64 1.07</td>
<td>33</td>
<td>2.95 1.24</td>
</tr>
<tr>
<td>3</td>
<td>3.79 .69</td>
<td>34</td>
<td>3.24 .70</td>
</tr>
<tr>
<td>4</td>
<td>3.52 .82</td>
<td>33</td>
<td>3.60 .51</td>
</tr>
<tr>
<td>5</td>
<td>4.33 .53</td>
<td>33</td>
<td>4.35 .59</td>
</tr>
<tr>
<td>6</td>
<td>3.76 .89</td>
<td>32</td>
<td>3.15 1.35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>European Americans (n=5)</th>
<th>Hispanic/Latino Americans (n=5)</th>
<th>Native Americans (n=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>2.65 .86</td>
<td>267</td>
<td>2.34 .65</td>
</tr>
<tr>
<td>2</td>
<td>2.95 .92</td>
<td>265</td>
<td>3.02 1.11</td>
</tr>
<tr>
<td>3</td>
<td>3.02 .78</td>
<td>264</td>
<td>3.28 1.01</td>
</tr>
<tr>
<td>4</td>
<td>3.41 .71</td>
<td>261</td>
<td>3.50 1.05</td>
</tr>
<tr>
<td>5</td>
<td>4.10 .73</td>
<td>266</td>
<td>4.21 .72</td>
</tr>
<tr>
<td>6</td>
<td>3.68 .88</td>
<td>259</td>
<td>3.25 .76</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
Figure 3. Scale Means of European Americans and People of Color
Native American) were found on Scales 1 - 3 (Individuation, Dissonance, and Immersion) and on Scale 5 (Integration; see Table 12). Specifically, European Americans scored higher on Scale 1 (Individuation) and Scale 2 (Dissonance) while people of color scored higher on Scale 3 (Immersion) and Scale 5 (Integration). No significant differences were found between European Americans and people of color on Scale 4 (Internalization) and Scale 6 (Transformation).

**European American males vs. European American females.** Scale means, standard deviations, and t-tests are reported in Table 13. A profile of scale mean scores for these two groups is presented in Figure 4. Results revealed that European American men and women were significantly different on all scale means. Specifically, men scored higher on Scale 1 (Individuation) and women scored higher on Scales 2-6 (Dissonance, Immersion, Internalization, Integration, Transformation).

**European American, heterosexual males vs. all other participants.** A profile for these two groups of scale means is presented in Figure 5. Significant differences were found between European American, heterosexual, males when compared to all other participants on all mean scale scores, except for Scale 2 (Dissonance; see Table 14). Specifically, European American,
<table>
<thead>
<tr>
<th>Scale</th>
<th>European Americans</th>
<th>People of Color</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.65 .86</td>
<td>2.37 .79</td>
<td>4.93*</td>
<td>(1, 319)</td>
</tr>
<tr>
<td>2</td>
<td>2.95 .92</td>
<td>2.67 1.05</td>
<td>3.90*</td>
<td>(1, 317)</td>
</tr>
<tr>
<td>3</td>
<td>3.02 .78</td>
<td>3.64 .77</td>
<td>29.08**</td>
<td>(1, 317)</td>
</tr>
<tr>
<td>4</td>
<td>3.41 .71</td>
<td>3.50 .74</td>
<td>.75</td>
<td>(1, 313)</td>
</tr>
<tr>
<td>5</td>
<td>4.10 .73</td>
<td>4.33 .57</td>
<td>4.99*</td>
<td>(1, 318)</td>
</tr>
<tr>
<td>6</td>
<td>3.68 .88</td>
<td>3.63 1.00</td>
<td>.15</td>
<td>(1, 310)</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. People of color = African American, Asian American, Biracial, Hispanic/Latino, and Native American.

*p < .05.

**p < .001.
TABLE 13

Scale Means, Standard Deviations, and t-tests on the Self Identity Inventory (SII) for European American Males and Females

European Americans

<table>
<thead>
<tr>
<th>Scale</th>
<th>Men</th>
<th>Women</th>
<th></th>
<th></th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>2.84</td>
<td>.88</td>
<td>72</td>
<td>2.58</td>
<td>.85</td>
<td>195</td>
</tr>
<tr>
<td>2</td>
<td>2.75</td>
<td>.80</td>
<td>72</td>
<td>3.03</td>
<td>.95</td>
<td>193</td>
</tr>
<tr>
<td>3</td>
<td>2.74</td>
<td>.83</td>
<td>70</td>
<td>3.12</td>
<td>.74</td>
<td>194</td>
</tr>
<tr>
<td>4</td>
<td>3.19</td>
<td>.77</td>
<td>71</td>
<td>3.49</td>
<td>.67</td>
<td>232</td>
</tr>
<tr>
<td>5</td>
<td>3.81</td>
<td>.81</td>
<td>72</td>
<td>4.20</td>
<td>.67</td>
<td>194</td>
</tr>
<tr>
<td>6</td>
<td>3.33</td>
<td>.88</td>
<td>69</td>
<td>3.82</td>
<td>.84</td>
<td>190</td>
</tr>
</tbody>
</table>

Note. Scores range from 1-6 on each scale. Each scale mean only includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.

*p < .05, two-tailed.

**p < .01, two-tailed.

***p < .001, two-tailed.
Figure 4. Scale Means for European-American Males and Females
Figure 5. Scale Means for European American Heterosexual Men Compared to all Other Participants
**TABLE 14**

Scale Means, Standard Deviations, and t-tests Between European American, Heterosexual, Males and All Other Participants on the Self Identity Inventory (SII)

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.03</td>
<td>.81</td>
<td>59</td>
<td>2.50</td>
<td>.84</td>
<td>263</td>
<td>4.40**</td>
<td>320</td>
</tr>
<tr>
<td>2</td>
<td>2.83</td>
<td>.75</td>
<td>59</td>
<td>2.92</td>
<td>.99</td>
<td>261</td>
<td>-.74</td>
<td>318</td>
</tr>
<tr>
<td>3</td>
<td>2.56</td>
<td>.75</td>
<td>57</td>
<td>3.25</td>
<td>.77</td>
<td>263</td>
<td>-6.09**</td>
<td>318</td>
</tr>
<tr>
<td>4</td>
<td>3.16</td>
<td>.79</td>
<td>59</td>
<td>3.48</td>
<td>.68</td>
<td>257</td>
<td>-3.19*</td>
<td>314</td>
</tr>
<tr>
<td>5</td>
<td>3.69</td>
<td>.75</td>
<td>59</td>
<td>4.24</td>
<td>.66</td>
<td>262</td>
<td>-5.63**</td>
<td>319</td>
</tr>
<tr>
<td>6</td>
<td>3.32</td>
<td>.90</td>
<td>57</td>
<td>3.75</td>
<td>.88</td>
<td>256</td>
<td>-3.32**</td>
<td>311</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1 - 6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.

* *p < .01.
** *p < .001.
heterosexual, males scored significantly higher on Scale 1 (Individuation) while all other participants scored significantly higher on Scales 3-6 (Immersion, Internalization, Integration, Transformation).

**African Americans vs. other people of color.** Scale means, standard deviations, and t-tests for African Americans and other people of color are reported in Table 15. A profile of scale mean scores for these two groups is presented in Figure 6. No significant differences were found on scale means for these two groups. These data support the tenet of the OTAID model which views identity development from a universal perspective.

**Sexual orientation.** Scale means and standard deviations for each sexual orientation group are reported in Table 16; a profile of scale means for these groups is in Figure 7. Due to low sample size, gay males, bisexuals, and lesbians were collapsed into one category for statistical tests of mean scale differences. (Figure 8 represents this profile). Results revealed significant differences on all scales except Scale 2 (Dissonance; see Table 17). Specifically, heterosexuals had higher means on Scale 1 (Individuation), while gay males, bisexuals, and lesbians had higher means on Scales 3-6 (Immersion, Internalization, Integration, and Transformation).
## TABLE 15

Scale Means, Standard Deviations, and t-tests on the Self Identity Inventory (SII) for African Americans Compared to Other People of Color

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.46</td>
<td>.78</td>
<td>33</td>
<td>2.22</td>
<td>.81</td>
<td>21</td>
<td>1.10</td>
<td>52</td>
</tr>
<tr>
<td>2</td>
<td>2.64</td>
<td>1.07</td>
<td>33</td>
<td>2.74</td>
<td>1.04</td>
<td>21</td>
<td>-.34</td>
<td>52</td>
</tr>
<tr>
<td>3</td>
<td>3.79</td>
<td>.69</td>
<td>34</td>
<td>3.40</td>
<td>.85</td>
<td>21</td>
<td>1.86</td>
<td>53</td>
</tr>
<tr>
<td>4</td>
<td>3.52</td>
<td>.82</td>
<td>33</td>
<td>3.47</td>
<td>.61</td>
<td>21</td>
<td>.24</td>
<td>52</td>
</tr>
<tr>
<td>5</td>
<td>4.33</td>
<td>.53</td>
<td>33</td>
<td>4.34</td>
<td>.64</td>
<td>21</td>
<td>-.07</td>
<td>52</td>
</tr>
<tr>
<td>6</td>
<td>3.76</td>
<td>.89</td>
<td>32</td>
<td>3.44</td>
<td>1.14</td>
<td>21</td>
<td>1.15</td>
<td>51</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 on each scale. Each scale mean only includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.

* *p < .05, two-tailed.
** *p < .01, two-tailed.
*** *p < .001, two-tailed.
Figure 6. Scale Means for African-Americans and Other People of Color
### Scale Means and Standard Deviations on the Self Identity Inventory (SII) by Sexual Orientation

<table>
<thead>
<tr>
<th>Scale</th>
<th>Bisexual (n=19)</th>
<th>Gay Male</th>
<th>Heterosexual</th>
<th>Lesbian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>2.07</td>
<td>.78</td>
<td>2.08</td>
<td>.63</td>
</tr>
<tr>
<td>2</td>
<td>2.81</td>
<td>1.03</td>
<td>2.50</td>
<td>1.11</td>
</tr>
<tr>
<td>3</td>
<td>3.29</td>
<td>.64</td>
<td>3.78</td>
<td>.71</td>
</tr>
<tr>
<td>4</td>
<td>3.57</td>
<td>.51</td>
<td>3.60</td>
<td>.86</td>
</tr>
<tr>
<td>5</td>
<td>4.43</td>
<td>.68</td>
<td>4.23</td>
<td>.73</td>
</tr>
<tr>
<td>6</td>
<td>3.97</td>
<td>1.06</td>
<td>3.26</td>
<td>.93</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
Figure 7. Scale Means for Heterosexuals, Gay Males, Lesbians, and Bisexuals
Figure 8. Scale Means by Sexual Orientation (2 Groups)
TABLE 17

Scale Means, Standard Deviations, and ANOVA on the Self Identity Inventory (SII) by Sexual Orientation (2 groups)

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.79</td>
<td>.83</td>
<td>237</td>
<td>2.05</td>
<td>.66</td>
<td>84</td>
<td>55.01**</td>
<td>(1, 319)</td>
</tr>
<tr>
<td>2</td>
<td>2.94</td>
<td>.85</td>
<td>236</td>
<td>2.79</td>
<td>1.19</td>
<td>83</td>
<td>1.67</td>
<td>(1, 317)</td>
</tr>
<tr>
<td>3</td>
<td>2.96</td>
<td>.79</td>
<td>235</td>
<td>3.59</td>
<td>.68</td>
<td>84</td>
<td>41.26**</td>
<td>(1, 317)</td>
</tr>
<tr>
<td>4</td>
<td>3.36</td>
<td>.69</td>
<td>233</td>
<td>3.59</td>
<td>.77</td>
<td>82</td>
<td>6.74*</td>
<td>(1, 313)</td>
</tr>
<tr>
<td>5</td>
<td>3.99</td>
<td>.68</td>
<td>236</td>
<td>4.56</td>
<td>.62</td>
<td>84</td>
<td>46.64**</td>
<td>(1, 318)</td>
</tr>
<tr>
<td>6</td>
<td>3.56</td>
<td>.85</td>
<td>231</td>
<td>3.98</td>
<td>.97</td>
<td>81</td>
<td>13.60**</td>
<td>(1, 310)</td>
</tr>
</tbody>
</table>

Note. Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.

*p < .01.

**p < .001.
Christian vs. other religions/traditions. Two groups were created for this analysis. First, Catholics and Protestants were combined into one group, because these subgroups represent Christians. This group is more valued under the dominant societal view than those who are not. The groups other than Catholic and Protestant (agnostic, atheist, Hindu, Jewish, and 'other') were collapsed into one category for two reasons: (a) low sample size for these groups; and (b) these groups are considered non-dominant according to OTAID theory. Significant differences in mean scale scores were found between these two groups on three of the six scales (see Table 18). Specifically, Catholics and Protestants had higher scale means on Scales 1 and 2 (Individuation and Dissonance) and lower scale means on Scale 5 (Integration). No statistically significant differences in mean scores were found on Scales 3, 4, and 6 (Immersion, Internalization, and Transformation).

Disability Status

No significant differences in scale means were found for participants with a disability when compared to those with no disability (see Table 19). This finding does not support Hypothesis 14. This could be due to two possible reasons: (a) the characteristics of the subgroups; or (b) the small sample size of the participants with a disability (n = 18). Further research is needed to analyze these subgroups more thoroughly.
### Scale Means, Standard Deviations, and t-tests on the Self Identity Inventory (SII) by Religion

<table>
<thead>
<tr>
<th>Scale</th>
<th>Catholic/Protestant M</th>
<th>SD</th>
<th>n</th>
<th>Agnostic, Atheist, Hindu, Jewish, “Other” M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.82</td>
<td>.83</td>
<td>194</td>
<td>2.26</td>
<td>.79</td>
<td>124</td>
<td>6.04**</td>
<td>316</td>
</tr>
<tr>
<td>2</td>
<td>3.01</td>
<td>.93</td>
<td>193</td>
<td>2.75</td>
<td>.97</td>
<td>123</td>
<td>2.33*</td>
<td>314</td>
</tr>
<tr>
<td>3</td>
<td>3.09</td>
<td>.80</td>
<td>193</td>
<td>3.16</td>
<td>.82</td>
<td>123</td>
<td>-.81</td>
<td>314</td>
</tr>
<tr>
<td>4</td>
<td>3.42</td>
<td>.71</td>
<td>191</td>
<td>3.40</td>
<td>.72</td>
<td>121</td>
<td>.32</td>
<td>310</td>
</tr>
<tr>
<td>5</td>
<td>3.99</td>
<td>.67</td>
<td>193</td>
<td>4.35</td>
<td>.70</td>
<td>124</td>
<td>-4.60**</td>
<td>315</td>
</tr>
<tr>
<td>6</td>
<td>3.71</td>
<td>.80</td>
<td>188</td>
<td>3.60</td>
<td>1.03</td>
<td>121</td>
<td>.98</td>
<td>307</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. *p < .05.  **p < .001.
### Scale Means, Standard Deviations, and t-tests on the Self Identity Inventory (SII) by Disability Status

| Scale | Disability | | | No Disability | | | | | | |
|-------|------------|---|---|------------|---|---|---|---|---|
|       | M          | SD | n  | M           | SD | n  | t  | df |
| 1     | 2.63       | .94 | 18 | 2.60        | .85 | 302 | .12 | 318 |
| 2     | 2.80       | 1.11 | 18 | 2.91        | .94 | 300 | -.47 | 316 |
| 3     | 3.18       | 1.04 | 18 | 3.12        | .80 | 300 | .32 | 316 |
| 4     | 3.41       | .99 | 17 | 3.42        | .70 | 297 | -.03 | 312 |
| 5     | 4.13       | .76 | 18 | 4.13        | .71 | 301 | .00 | 317 |
| 6     | 3.71       | .82 | 18 | 3.66        | .90 | 293 | .21 | 309 |

**Note.** Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. No two means were significantly different.
Hypothesis 14. These data provide partial confirmatory evidence for Hypothesis 14. Results generally supported the prediction groups more valued under the dominant societal view would have higher means scores on Scale 1 (Individuation) and lower mean scores on Scales 2-6 (Dissonance, Immersion, Internalization, Integration, and Transformation), although there were exceptions (no significant differences by disability status; no significant differences on Scales 4 and 6 between European Americans vs. people of color; no significant difference on Scale 2 between European American, heterosexual males vs. all other participants; no significant difference on Scale 2 between heterosexuals vs. gay males, bisexuals, and lesbians; no significant differences on Scales 3, 4, and 6 between Christians vs. other religious groups). These exceptions were, for the most part (except disability status), on Scale 2.

Results from this section generally supported the OTAID model tenet that membership in groups based on gender, race, sexual orientation, and religion is related to differences in placement on the phases.

Self-Report Description of Identity

Of the 325 participants in the total sample, 311 (96%) described their identity in terms of race, gender, sexual orientation, or "none". The remaining 14 participants did not
complete this section or identified other factors in describing their identity (e.g., profession, a personality characteristic, or an identity that was mentioned infrequently such as age or socio-economic class). Participants also reported how challenging their identity was to them on a scale from 1 = not at all challenging to 6 = very challenging (Part I of the SII; see Appendix E). Data from the self-reported descriptions of identity of these 311 participants were analyzed in two ways: (a) examining the correlations between the challenging rating and the scales of the SII; and (b) examining differences in phase scale mean scores between those who reported low and high challenging ratings attached to their self description of identity.

Correlations of Challenge Rating with SII Scales

The correlations between challenge rating of participants (those participants who reported race, gender, and/or sexual orientation, or "none") and mean scores on the scales of the SII are presented in Table 20. The moderately negative correlation between the challenge rating and Scale 1 (Individuation) suggested support for the prediction that people in Phase 1 would be less likely to report their identity, however defined, as challenging or difficult. No significant correlation between the challenge rating and Scale 2 (Dissonance) was obtained; this finding does not support the notion that people in Dissonance are experiencing difficulty or being challenged in their exploration of
**Correlations of Challenge Rating Scores with SII Scales**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-.37*</td>
</tr>
<tr>
<td>2</td>
<td>-.04</td>
</tr>
<tr>
<td>3</td>
<td>.30*</td>
</tr>
<tr>
<td>4</td>
<td>.16*</td>
</tr>
<tr>
<td>5</td>
<td>.33*</td>
</tr>
<tr>
<td>6</td>
<td>.19*</td>
</tr>
</tbody>
</table>

**Note.** Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. *p < .01.
identity, as predicted by the OTAID model. The correlations between ratings of difficulty and Scales 3 (Immersion), 4 (Internalization), 5 (Integration), and 6 (Transformation) were all low to moderately positive. These results suggest that people may experience degrees of challenge or difficulty as they explore their identity(ies) in the context of Phases 3-6.

**Hypothesis 15.** These data provide partial confirmatory evidence for Hypothesis 15. Support was found for the first part of Hypothesis 15 -- that challenge ratings will be significantly negatively correlated with Scale 1; the second part of Hypothesis 15 was not supported -- that challenge ratings will be significantly positively correlated with Scale 2.

**Low Challenge vs. High Challenge Ratings**

Scale means, standard deviations, and t-tests are reported in Table 21 for two groups based on people who had a mean of 2.5 and below on the challenge rating vs. those who had a mean above 2.5; the 2.5 was the median split for challenge rating. Significant differences in SII scale means between these two groups were found on Scale 1 (Individuation) and Scales 3-6 (Immersion, Internalization, Integration, and Transformation). Specifically, those with a mean challenge rating of 2.5 or below were significantly higher on Scale 1 and significantly lower on
### TABLE 21

**Scale Means, Standard Deviations, and t-tests on the Self Identity Inventory (SII) by Challenge Rating**

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.89</td>
<td>.81</td>
<td>156</td>
<td>2.23</td>
<td>.72</td>
<td>149</td>
<td>7.59***</td>
<td>303</td>
</tr>
<tr>
<td>2</td>
<td>2.93</td>
<td>.87</td>
<td>154</td>
<td>2.81</td>
<td>1.03</td>
<td>149</td>
<td>1.09</td>
<td>301</td>
</tr>
<tr>
<td>3</td>
<td>2.87</td>
<td>.77</td>
<td>153</td>
<td>3.36</td>
<td>.78</td>
<td>150</td>
<td>-5.50***</td>
<td>301</td>
</tr>
<tr>
<td>4</td>
<td>3.28</td>
<td>.72</td>
<td>154</td>
<td>3.52</td>
<td>.69</td>
<td>145</td>
<td>-2.89**</td>
<td>297</td>
</tr>
<tr>
<td>5</td>
<td>3.88</td>
<td>.73</td>
<td>155</td>
<td>4.40</td>
<td>.61</td>
<td>149</td>
<td>-6.84***</td>
<td>302</td>
</tr>
<tr>
<td>6</td>
<td>3.43</td>
<td>.83</td>
<td>150</td>
<td>3.88</td>
<td>.92</td>
<td>146</td>
<td>-4.38***</td>
<td>294</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.  
*P < .05, two-tailed.  
**P < .01, two-tailed.  
***P < .001, two-tailed.
Scales 3-6. No difference was found on Scale 2 (Dissonance), and thus, not fully supporting Hypothesis 16.

**Hypothesis 16.** These data provide partial confirmatory evidence for Hypothesis 16 -- that people high on Scale 1 (Individuation) should report a lower degree of challenge in working with their identity vs. people high on Scales 2-6 (Dissonance, Immersion, Internalization, Integration, Transformation). The hypothesis did not receive full support due to no differences on Scale 2.

**Additional Analyses**

Several additional analyses were conducted to examine the data with the purpose of increasing understanding of the OTAID model. These additional analyses related to variables not defined in the OTAID model (e.g., age, education, income); variables that became interesting and noteworthy in the data analysis process (e.g., high scorers on each scale); the creation of a social desirability scale based on items not selected for the final models suggested by the confirmatory factor analysis; and data from a comparison sample to which the SII was administered.
Characteristics of High Scorers on Each Scale

The high scorers on each scale were grouped for the purpose of examining their demographic composition and to examine their patterns of responding to the SII. Criterion for membership in these groups was if their scale mean fell in the top third of all participants' means. For example, 33% of all participants had a mean of 3.00 or higher on Scale 1. These 33%, then, formed the 'high scorers' for Scale 1. The cutoff points for other scale means were 3.27 and above for Scale 2; 3.50 and above for Scale 3; 3.70 and above for Scale 4; 4.45 and above for Scale 5; and 4.07 and above for Scale 6. Means were obtained for these high scorer groups on all SII scales (see Table 22) and their profiles are presented in Figure 9.

The demographic characteristics of each group are as follows. High scorers on Scale 1 (Individuation) had a mean age of 36.84 (SD = 19.94) and included 32 men (29%) and 82 women (71%). Ten (9%) were African American; three (3%) were Asian American; one (1%) was biracial; and 98 (88%) were European American. Three (3%) were bisexual; two (2%) were gay males; 101 (91%) were heterosexual; and five (5%) were lesbians. Twenty-six (23%) had completed elementary, secondary, or technical school; 55 (48%) were in college; 18 (16%) had a bachelor's degree; and 13 (11%) had a master's degree, Ph.D., or professional degree. Twenty-two (20%) had incomes less than $15,000; 19 (18%) had incomes between $15,000-24,999; 18 (17%) were between $25,000-
## Table 22

### Scale Means and Standard Deviations for Participants Scoring High on Each Scale of the Self Identity Inventory (SII)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>3.57</td>
<td>.45</td>
<td>112</td>
</tr>
<tr>
<td>2</td>
<td>3.25</td>
<td>.73</td>
<td>111</td>
</tr>
<tr>
<td>3</td>
<td>3.10</td>
<td>.79</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>3.53</td>
<td>.68</td>
<td>108</td>
</tr>
<tr>
<td>5</td>
<td>3.64</td>
<td>.60</td>
<td>111</td>
</tr>
<tr>
<td>6</td>
<td>3.40</td>
<td>.74</td>
<td>106</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>2.76</td>
<td>.94</td>
<td>113</td>
</tr>
<tr>
<td>2</td>
<td>3.54</td>
<td>.83</td>
<td>113</td>
</tr>
<tr>
<td>3</td>
<td>3.50</td>
<td>.72</td>
<td>113</td>
</tr>
<tr>
<td>4</td>
<td>4.15</td>
<td>.38</td>
<td>113</td>
</tr>
<tr>
<td>5</td>
<td>4.22</td>
<td>.63</td>
<td>113</td>
</tr>
<tr>
<td>6</td>
<td>3.94</td>
<td>.84</td>
<td>112</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. Group 1 = mean scores above 3.00 on Scale 1, Group 2 = mean scores above 3.27 on Scale 2, Group 3 = mean scores above 3.50 on Scale 3, Group 4 = mean scores above 3.70 on Scale 4, Group 5 = mean scores above 4.45 on Scale 5, and Group 6 = mean scores above 4.07 on Scale 6.
Figure 9. Scale Means for High Scorers on Each Scale
34,999; 21 (19%) were between $35,000-49,999; 15 (14%) were between $50,000-74,999; and 13 (12%) were $75,000 and above.

High scorers on Scale 2 (Dissonance) had a mean age of 32.51 (SD = 16.14) and included 25 men (22%) and 90 women (78%). Ten (9%) were African American; five (4%) were Asian American; 98 (85%) were European American; and two (2%) were Hispanic/Latino. Six (5%) were bisexual; three (3%) were gay males; 87 (76%) were heterosexual; and 19 (17%) were lesbians. Nineteen (17%) had completed elementary, secondary, or technical school; 61 (54%) were in college; 17 (15%) had a bachelor's degree; and 17 (15%) had a master's degree, Ph.D., or professional degree. Twenty (18%) had incomes less than $15,000; 22 (19%) had incomes between $15,000-24,999; 19 (17%) were between $25,000-34,999; 23 (20%) were between $35,000-49,999; 13 (12%) were between $50,000-74,999; and 16 (14%) were $75,000 and above.

High scorers on Scale 3 (Immersion) had a mean age of 33.85 (SD = 14.91) and included 20 men (18%) and 93 women (82%). Twenty-two (19%) were African American; five (4%) were Asian American; four (4%) were biracial; and 80 (71%) were European American. Nine (8%) were bisexual; eight (7%) were gay males; 63 (56%) were heterosexual; and 33 (29%) were lesbians. Fifteen (14%) had completed elementary, secondary, or technical school; 42 (36%) were in college; 25 (22%) had a bachelor's degree; and 31 (27%) had a master's degree, Ph.D., or professional degree.
Twenty-three (20%) had incomes less than $15,000; 18 (16%) had incomes between $15,000-24,999; 20 (18%) were between $25,000-34,999; 18 (16%) were between $35,000-49,999; 9 (8%) were between $50,000-74,999; and 23 (21%) were $75,000 and above.

High scorers on Scale 4 (Internalization) had a mean age of 34.34 (SD = 17.23) and included 23 men (20%) and 90 women (80%). Twelve (11%) were African American; four (4%) were Asian American; 95 (84%) were European American; and two (2%) were Hispanic/Latino. Nine (8%) were bisexual; five (4%) were gay males; 76 (67%) were heterosexual; and 23 (20%) were lesbians. Twenty-one (20%) had completed elementary, secondary, or technical school; 47 (43%) were in college; 18 (16%) had a bachelor's degree; and 26 (24%) had a master's degree, Ph.D., or professional degree. Twenty-two (20%) had incomes less than $15,000; 24 (21%) had incomes between $15,000-24,999; 20 (18%) were between $25,000-34,999; 19 (17%) were between $35,000-49,999; 10 (9%) were between $50,000-74,999; and 18 (16%) were $75,000 and above.

High scorers on Scale 5 (Integration) had a mean age of 30.41 (SD = 11.16) and included 22 men (19%) and 91 women (81%). Fourteen (12%) were African American; four (4%) were Asian American; three (3%) were biracial; 89 (79%) were European American; two (2%) were Hispanic/Latino; and one (1%) was Native American. Nine (8%) were bisexual; five (4%) were gay males; 62 (55%) were heterosexual; and 37 (33%) were lesbians.
Three (3%) had completed elementary, secondary, or technical school; 40 (36%) were in college; 21 (19%) had a bachelor's degree; and 49 (44%) had a master's degree, Ph.D., or professional degree. Twenty-one (19%) had incomes less than $15,000; 16 (14%) had incomes between $15,000-24,999; 15 (14%) were between $25,000-34,999; 22 (20%) were between $35,000-49,999; 13 (12%) were between $50,000-74,999; and 24 (22%) were $75,000 and above.

High scorers on Scale 6 (Transformation) had a mean age of 37.80 (SD = 14.76) and included 21 men (19%) and 91 women (81%). Fourteen (13%) were African American; two (2%) were Asian American; two (2%) were biracial; 93 (83%) were European American; and one (1%) was Hispanic/Latino. Nine (8%) were bisexual; three (3%) were gay males; 69 (62%) were heterosexual; and 31 (28%) were lesbians. Thirteen (12%) had completed elementary, secondary, or technical school; 26 (23%) were in college; 23 (21%) had a bachelor's degree; and 50 (45%) had a master's degree, Ph.D., or professional degree. Eighteen (16%) had incomes less than $15,000; 23 (21%) had incomes between $15,000-24,999; 22 (20%) were between $25,000-34,999; 24 (22%) were between $35,000-49,999; 11 (10%) were between $50,000-74,999; and 11 (10%) were $75,000 and above.

**Low, Medium, and High Scorers and Challenge Rating**

Table 23 presents the mean challenge rating for low, medium, and high scorers for each scale of the SII. Significant
### Mean Challenge Rating, Standard Deviations, and ANOVA's for Low, Moderate, and High Scorer Groups on SII Scales

#### Challenge Rating

<table>
<thead>
<tr>
<th>Scale</th>
<th>Low Scorers</th>
<th>Medium Scorers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>3.42&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.29</td>
</tr>
<tr>
<td>2</td>
<td>2.94</td>
<td>1.49</td>
</tr>
<tr>
<td>3</td>
<td>2.12&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>1.15</td>
</tr>
<tr>
<td>4</td>
<td>2.36&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>1.42</td>
</tr>
<tr>
<td>5</td>
<td>1.99&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>1.25</td>
</tr>
<tr>
<td>6</td>
<td>2.34&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.44</td>
</tr>
</tbody>
</table>

#### High Scorers

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.00&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.23</td>
<td>103</td>
<td>28.30&lt;sup&gt;**&lt;/sup&gt;</td>
<td>(2,302)</td>
</tr>
<tr>
<td>2</td>
<td>2.60</td>
<td>1.40</td>
<td>104</td>
<td>1.74</td>
<td>(2,268)</td>
</tr>
<tr>
<td>3</td>
<td>3.23&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.49</td>
<td>106</td>
<td>19.73&lt;sup&gt;**&lt;/sup&gt;</td>
<td>(2,280)</td>
</tr>
<tr>
<td>4</td>
<td>2.81&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.45</td>
<td>104</td>
<td>4.26&lt;sup&gt;*&lt;/sup&gt;</td>
<td>(2,290)</td>
</tr>
<tr>
<td>5</td>
<td>3.21&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.41</td>
<td>109</td>
<td>21.72&lt;sup&gt;**&lt;/sup&gt;</td>
<td>(2,301)</td>
</tr>
<tr>
<td>6</td>
<td>3.16&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>1.27</td>
<td>104</td>
<td>8.83&lt;sup&gt;**&lt;/sup&gt;</td>
<td>(2,286)</td>
</tr>
</tbody>
</table>

**Note.** Challenge ratings range from 1 to 6 with higher values meaning more challenging. Low scorers = bottom third percentile of scale means, medium scorers = middle third percentile of scale means, high scorers = top third of scale means. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. <sup>a,b</sup>Means are significantly different from each other at p < .05; post-hoc analyses done through LSD procedure. 
<sup>*</sup>p < .05. <sup>**</sup>p < .001.
differences in the mean challenge ratings were found between these three groups for each scale except Scale 2 (Dissonance). For Scale 1 (Individuation), differences between all three groups occurred. For Scales 3-6 (Immersion, Internalization, Integration, Transformation), high scorers reported the highest challenge rating compared to medium and low scorers, although for Scale 4 (Internalization) groups, medium scorers had the highest mean challenge rating. These data are interesting in that people high on Scale 1 (Individuation) are predicted to have a lower challenge rating because they are unaware of the complexities of identity. Further, as people progress through the phases of the OTAID model, they become more and more aware of identity and the contradictions and ambiguities it provides.

**Age, Education, and Income**

The variables of age, education, and income were significantly correlated with some of the SII scales (see Table 24). Therefore, these variables were examined in relation to scale means on the SII.

**Age.** The OTAID model posits that age, and therefore the experience gained through life, interacts with the identity development process. Also, age is an important variable since socialization under the dominant societal view changes with time.
### Self Identity Inventory (SII) Scale Correlations by Age, Education, & Income

<table>
<thead>
<tr>
<th>Scale</th>
<th>Age</th>
<th>Education</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.24**</td>
<td>-.46**</td>
<td>-.09</td>
</tr>
<tr>
<td>2</td>
<td>-.06</td>
<td>-.39**</td>
<td>-.15**</td>
</tr>
<tr>
<td>3</td>
<td>.00</td>
<td>.01</td>
<td>-.16**</td>
</tr>
<tr>
<td>4</td>
<td>-.02</td>
<td>-.22**</td>
<td>-.19**</td>
</tr>
<tr>
<td>5</td>
<td>-.12*</td>
<td>.28**</td>
<td>.03</td>
</tr>
<tr>
<td>6</td>
<td>.22**</td>
<td>.18**</td>
<td>-.21**</td>
</tr>
</tbody>
</table>

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

**Note.** Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
producing an age cohort effect. Therefore, age was examined in the present study.

Four groups were created for analyzing the function of age. Groups were 18-24 (n = 121), 25-44 (n = 123), 45-55 (n = 37), and 56 and older (n = 40); these four groups were chosen as a function of sample size and also because the groups represent distinct generations and stages in one's life (i.e., in college, younger middle age, older middle age, and older). A profile of mean scale scores for these groups is presented in Figure 10. Significant differences between groups on scale means were found on all scales except for Scale 4 (Internalization; see Table 25). Results revealed that older people (56 and older) scored higher on Scale 1 than all other groups; younger people (18-24) scored higher on Scale 2 than middle aged people (25-44 and 45-55); those age 25-44 scored higher on Scale 3 than those age 45-55; those age 25-44 scored higher on Scale 5 than all other groups; and those age 18-24 scored lower on Scale 6 than all other groups.

**Education.** The OTAID model posits that the phase progression from Phase 0-6 is a process of learning through self-knowledge. Formal education (gained through academic institutions) is predicted to affect the development process; those with more formal education should be further along on the phase progression (i.e., in higher phases). Therefore, the variable of education was examined.
Figure 10. Scale Means by Age
TABLE 25

Scale Means, Standard Deviations, and ANOVA's on the Self Identity Inventory (SID) by Age

<table>
<thead>
<tr>
<th>Scale</th>
<th>18 - 24</th>
<th>25 - 44</th>
<th>45 - 55</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>2.70a,b</td>
<td>.85</td>
<td>121</td>
</tr>
<tr>
<td>2</td>
<td>3.11a,b</td>
<td>.91</td>
<td>121</td>
</tr>
<tr>
<td>3</td>
<td>3.07</td>
<td>.76</td>
<td>119</td>
</tr>
<tr>
<td>4</td>
<td>3.46</td>
<td>.64</td>
<td>120</td>
</tr>
<tr>
<td>5</td>
<td>4.08a,b</td>
<td>.69</td>
<td>121</td>
</tr>
<tr>
<td>6</td>
<td>3.22a,b,c</td>
<td>.85</td>
<td>118</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>56 and older</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>F</td>
<td>df</td>
</tr>
<tr>
<td>1</td>
<td>3.42b,d,e</td>
<td>.76</td>
<td>40</td>
<td>23.81**</td>
<td>(3, 317)</td>
</tr>
<tr>
<td>2</td>
<td>2.97</td>
<td>.90</td>
<td>39</td>
<td>3.74*</td>
<td>(3, 315)</td>
</tr>
<tr>
<td>3</td>
<td>3.16</td>
<td>.88</td>
<td>40</td>
<td>3.09*</td>
<td>(3, 315)</td>
</tr>
<tr>
<td>4</td>
<td>3.42</td>
<td>.90</td>
<td>40</td>
<td>.74</td>
<td>(3, 311)</td>
</tr>
<tr>
<td>5</td>
<td>3.82b,d</td>
<td>.59</td>
<td>39</td>
<td>6.03**</td>
<td>(3, 316)</td>
</tr>
<tr>
<td>6</td>
<td>3.81c</td>
<td>.69</td>
<td>39</td>
<td>20.55**</td>
<td>(3, 308)</td>
</tr>
</tbody>
</table>

Note. Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.

Means are significantly different from each other at p < .05; post-hoc analyses done through LSD procedure.

*p < .05.

**p < .001.
Due to sample size, four groups were created for highest level of education completed. The four groups were: (a) completed high school or technical school (n = 34), (b) in college (n = 129), (c) bachelor's degree (n = 56), and (d) master's, Ph.D., or professional degree (n = 103). A profile of mean scale scores for these groups is presented in Figure 11. Significant differences between groups on scale means were found on all scales of the SII (see Table 26). Results revealed that those who completed high school or technical school obtained a significantly higher scale mean on Scale 1 than all other groups. Those who completed high school or technical school had a higher mean on Scale 2 than all other groups, while those in college had a higher Scale 2 mean than those with a bachelor's degree and those with a professional degree. Finally, those in college had a significantly lower mean on Scale 6 than all other groups.

Income. The OTAID model contains references to self-worth, and materialism in terms of the suboptimal conceptual system. Since these concepts can be related to income, this variable was examined.

Due to low sample size in the under $10,000 group for income, this category was combined with $10,000-$14,999 resulting in six groups based on income. Significant differences in mean scale scores were found between groups on Scales 2 - 4.
Figure 11. Scale Means by Educational Level
### TABLE 26

Scale Means, Standard Deviations, and ANOVA's on the Self Identity Inventory (SII) by Highest Level of Education Completed

<table>
<thead>
<tr>
<th>Scale</th>
<th>High School or Technical School</th>
<th>In College</th>
<th>Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>n</strong></td>
</tr>
<tr>
<td>1</td>
<td>3.49&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.74</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>3.50&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.73</td>
<td>33</td>
</tr>
<tr>
<td>3</td>
<td>3.34</td>
<td>.81</td>
<td>33</td>
</tr>
<tr>
<td>4</td>
<td>3.79&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>.52</td>
<td>33</td>
</tr>
<tr>
<td>5</td>
<td>3.71&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>.65</td>
<td>33</td>
</tr>
<tr>
<td>6</td>
<td>3.83&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.59</td>
<td>32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>Masters Degree, Ph.D., or Professional Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td>1</td>
<td>2.18&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>2</td>
<td>2.45&lt;sup&gt;a,c&lt;/sup&gt;</td>
</tr>
<tr>
<td>3</td>
<td>3.05&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>4</td>
<td>3.25&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>5</td>
<td>4.37&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>6</td>
<td>3.92&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. Means are significantly different from each other at <sup>a,b,c</sup><sub>P < .05</sub>; post-hoc analyses done through LSD tests.

<sup*a</sup><sub>P < .05</sub>,  
<sup**a</sup><sub>P < .01</sub>,  
<sup***a</sup><sub>P < .001</sub>.
(Dissonance, Immersion, Internalization) and Scale 6 (Transformation); there were no differences on Scales 1 and 5 (Individuation and Integration; see Table 27). Results revealed that those in an income range of $15,000-$24,999 had a higher mean on Scale 2 than those with incomes of $25,000-$34,999, $50,000-$74,999 and $75,000 and above. Further, those with an income of $50,000-$74,999 had a significantly lower scale mean on Scale 3 (Immersion) than all other groups. Finally, those with incomes of $50,000-$74,999 and $75,000 and above had significantly lower scale means on Scale 6 (Transformation) than all other groups.

Creation of a Social Desirability Scale

An attempt was made to create a social desirability scale for the SII from the items not selected through the factor analysis. This additional scale would have the capability of finding "false positives" in profiles of individuals taking the SII.

The procedure involved three steps. First, items not selected in the factor analysis were correlated with the Social Desirability Scale (PRF; Jackson, 1984). Nineteen items were significantly correlated at $p < .01$. Items that were negatively
## TABLE 27

Scale Means, Standard Deviations, and ANOVA's on the Self Identity Inventory (SII) by Income

<table>
<thead>
<tr>
<th>Scale</th>
<th>under $15,000</th>
<th>$15,000 - $24,999</th>
<th>$25,000 - $34,999</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>1</td>
<td>2.70</td>
<td>1.02</td>
<td>52</td>
</tr>
<tr>
<td>2</td>
<td>3.06</td>
<td>.96</td>
<td>52</td>
</tr>
<tr>
<td>3</td>
<td>3.25a</td>
<td>.82</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>3.60a,b</td>
<td>.70</td>
<td>51</td>
</tr>
<tr>
<td>5</td>
<td>4.15</td>
<td>.69</td>
<td>52</td>
</tr>
<tr>
<td>6</td>
<td>3.80a,b</td>
<td>.82</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$35,000 - $49,999</th>
<th>$50,000 - $74,999</th>
<th>$75,000 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>2.60</td>
<td>.91</td>
</tr>
<tr>
<td>2</td>
<td>2.90</td>
<td>1.06</td>
</tr>
<tr>
<td>3</td>
<td>3.14d</td>
<td>.73</td>
</tr>
<tr>
<td>4</td>
<td>3.36c</td>
<td>.70</td>
</tr>
<tr>
<td>5</td>
<td>4.19</td>
<td>.71</td>
</tr>
<tr>
<td>6</td>
<td>3.74g,h</td>
<td>.94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.27</td>
<td>(5, 309)</td>
</tr>
<tr>
<td>2</td>
<td>2.48*</td>
<td>(5, 307)</td>
</tr>
<tr>
<td>3</td>
<td>3.50**</td>
<td>(5, 307)</td>
</tr>
<tr>
<td>4</td>
<td>3.38**</td>
<td>(5, 303)</td>
</tr>
<tr>
<td>5</td>
<td>.84</td>
<td>(5, 308)</td>
</tr>
<tr>
<td>6</td>
<td>4.90***</td>
<td>(5, 300)</td>
</tr>
</tbody>
</table>

**Note.** Scores range from 1-6 for each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. a,b,c,d,e,f,g,h Means are significantly different from each other at \( p < .05 \); post-hoc analyses done through LSD procedure.

* \( p < .05 \).
** \( p < .01 \).
*** \( p < .001 \).
correlated (items 16, 112, 150, 186, and 191) were recoded for reverse scoring. Second, from this pool of 19 items, three items were selected that were most highly correlated with the Jackson Social Desirability Scale (item 172-.32; item 186-.30; and item 191-.29). Third, these three items were then correlated with the other items from the pool of 19 items. Results revealed six items that were significantly correlated with these three items. This analysis resulted in a nine-item scale (items 16, 63, 105, 112, 150, 172, 186, 190, and 191; see Appendix J). The internal consistency (Cronbach's alpha) of this scale was .74. The correlation between this scale and Jackson's Social Desirability Scale was .38 (p < .01).

**Comparison Sample**

The SII was administered, as part of a larger study examining female identity development, to a sample of 164 female undergraduates at a large midwestern university; the goal was to obtain comparison data to further examine the psychometric properties of the SII. Of these 164 participants, 149 data sets were analyzed (some data sets could not be analyzed). The age range of this comparison sample was 18-36 years old with 7% being African American, 6% Asian American, 1% Biracial, 79% European American, 1% Hispanic/Latino, and 3% Native American.

Results of the reliability analysis for the comparison sample indicated the following Cronbach's alpha coefficients for the SII scales: (a) Individuation = .61; (b) Dissonance = .87; (c) Immersion = .84; (d)
Internalization = .73; (e) Integration = .74; and (f) Transformation = .91. These results provide corroborating evidence for the good internal consistency of the SII. Although the coefficient for Scale 1 (Individuation) was lower than in the original sample, the coefficients for the remaining five scales were similar. Further research utilizing other samples is needed to examine the internal consistency of Scale 1 (Individuation).

The interscale correlations for the comparison sample are reported in Table 28. The correlation pattern was similar to the pattern in the original sample (refer to Table 7). Major differences included: (a) Scale 1 (Individuation) was not significantly correlated with Scale 2 (Dissonance) in the comparison sample; (b) in the comparison sample, Scale 1 and Scale 5 (Integration) were significantly negatively correlated ($r = -.29; p < .01$), but not as highly as in the original sample ($r = -.64; p < .01$); (c) in the original sample, Scale 6 (Transformation) and Scale 1 (Individuation) were significantly negatively correlated; in the comparison sample, these two scales were not significantly correlated; (d) in the original sample, Scales 2 (Dissonance) and 5 (Integration) were significantly negatively correlated; in the comparison sample, these scales were significantly positively correlated; (e) in the comparison sample, Scale 2 (Dissonance) and Scale 6 (Transformation) were significantly positively correlated, as in the original sample, but at a higher magnitude. These findings provide more confirmatory evidence for the construct validity of the SII.
<table>
<thead>
<tr>
<th>SCALE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>----</td>
<td>.02</td>
<td>-.09</td>
<td>-.01</td>
<td>-.29**</td>
<td>-.07</td>
</tr>
<tr>
<td>2</td>
<td>----</td>
<td>.40**</td>
<td>.72**</td>
<td>.29*</td>
<td>.38*</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>----</td>
<td>.55**</td>
<td>.16**</td>
<td>.14*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>----</td>
<td>.37**</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td>.58**</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.

Note. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation. N=149.
To further compare the two samples (i.e., the original sample and the comparison sample), scale mean scores were examined for these two groups. In order to conduct this procedure, it was necessary to have each sample be comparable in terms of age, gender, and sample size. Given these constraints, only female participants, ages 19-20, were examined from each sample.

Results from this analysis indicated no significant difference on any of the SII scales between these two samples, thus providing evidence for generalizability of the results obtained from the original sample (see Table 29). Further research utilizing different samples is needed to increase generalizability.
<table>
<thead>
<tr>
<th>Scale</th>
<th>Original Sample</th>
<th>Comparison Sample</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>3.06</td>
<td>.65</td>
<td>44</td>
<td>3.33</td>
</tr>
<tr>
<td>2</td>
<td>3.39</td>
<td>.77</td>
<td>44</td>
<td>3.31</td>
</tr>
<tr>
<td>3</td>
<td>2.95</td>
<td>.78</td>
<td>44</td>
<td>2.89</td>
</tr>
<tr>
<td>4</td>
<td>3.55</td>
<td>.64</td>
<td>44</td>
<td>3.46</td>
</tr>
<tr>
<td>5</td>
<td>4.02</td>
<td>.62</td>
<td>44</td>
<td>3.68</td>
</tr>
<tr>
<td>6</td>
<td>3.19</td>
<td>.81</td>
<td>43</td>
<td>3.44</td>
</tr>
</tbody>
</table>

Note. Scores range from 1-6 on each scale. Each scale mean includes participants who responded to at least 80% of items in that scale. Scale 1 = Individuation, Scale 2 = Dissonance, Scale 3 = Immersion, Scale 4 = Internalization, Scale 5 = Integration, Scale 6 = Transformation.
Original sample = 19-20 year old females from original sample pool; Comparison sample = 19-20 year old female undergraduates.
Chapter V
Discussion

This study developed the Self Identity Inventory (SII) based on the Optimal Theory Applied to Identity Development (OTAID) model. The main purpose of this study was to develop a psychometrically sound instrument to measure identity development from a pancultural point of view. A second purpose was to test 12 hypotheses based on the OTAID model's tenets and predictions.

In this chapter, the results will be discussed and integrated with the literature. Limitations of the study will be noted; implications for multicultural psychology will be addressed and directions for future research will be suggested.

Participants

The sample included representation from diverse social groups (e.g., race, gender, sexual orientation, occupation, age, education, income). While the goal of having the sample approximate the United States population was not met in some cases, diversity was achieved. There was representation from men and women, all racial groups, all sexual orientation groups, age (18-82), income levels (under $10,000-75,000 +), education completed (elementary school to Ph.D./professional
degree), geographic diversity (24 states, although mostly in Midwest and East), and a wide array of occupations (including student, "blue-collar" jobs, managerial, sales, secretarial/clerical, and professional).

Although not specifically examined empirically, representation from participants of multiple groups occurred; for example, African American lesbian, lower class European American female, gay male, which strengthened the generalizability of results.

**The Self Identity Inventory**

**Construct Validity**

The construct validity of the SII was evaluated using three strategies: (a) confirmatory factor analysis; (b) scale intercorrelations; and (c) correlations with two related measures. First, results from the confirmatory factor analysis produced a 71-item inventory, with the number of items in each of the six scales ranging from 10-15. The goodness of fit indices for each scale were all .9 or above. These results supported Hypothesis 1 -- that the scales of the SII are as proposed by the OTAID model.

Second, the scales of the SII were highly intercorrelated. Of the 15 correlations, only one (between Scale 1 [Individuation] and Scale 3 [Immersion]) did not reach significance at $p < .05$ or $p < .01$. For the most part, the scales were related to each other in a manner predicted by the OTAID model and partially supported Hypotheses 5-11; the results are discussed in detail as follows.
One noteworthy result regarding **Hypothesis 5** (each scale most highly correlated with its adjoining scales) was that Scale 2 (Dissonance) was more highly correlated with Scale 4 (Internalization; \( r = .63, p < .01 \)) than with Scale 3 (Immersion; \( r = .20, p < .01 \)). Since the correlation between Scales 2 and 4 was high, it may be that the scales are measuring somewhat similar constructs. These data do not support the OTAID model prediction because these constructs are very different. Dissonance predicts a person to be in conflict regarding self, and Internalization predicts a person to be gaining a secure sense of self. One similarity, however, is that both scales contain many items with reference to time (e.g., "I have recently realized that society devalues parts of who I am." -- Scale 2-Dissonance; "I recently realized there are many parts of my identity and I have accepted them as important parts of who I am." -- Scale 4-Internalization). It may be that the common dimension of time contributed to this unexpected high correlation. Alternatively, these two scales may be measuring error (i.e., variability not due to content differences between Scale 2 items and Scale 4 items). Scale 4 also had a higher correlation with Scale 6 (Transformation; \( r = .28, p < .01 \)) than with Scale 5 (Integration; \( r = .14, p < .05 \)).

A second finding was that Scale 1 (Individuation) and Scale 5 (Integration) were significantly negatively correlated (\( r = -.63; p < .05 \)). This high correlation suggests that Scale 1 might be measuring the "opposite" of Scale 5. While it is true, conceptually, that Phase 1 and Phase 5 are, in some ways, oppositional, these scales may be measuring two poles of the same construct.
Of the seven hypotheses related to the scale intercorrelations, three received full support (Hypotheses 7, 10, 11) and four received partial support (Hypotheses 5, 6, 8, 9). Further research is recommended to examine the scale relationships.

A third analysis of the construct validity supported predicted correlations with the Tolerance scale from the California Psychological Inventory (Gough, 1987) and the Belief System Analysis Scale (Montgomery et al., 1990). These results provided further support for the construct validity of the SII. Results were as predicted in Hypothesis 12; significant negative correlations occurred between both of the construct validity measures and Scales 1-4 (Individuation, Dissonance, Immersion, Internalization), and significant positive correlations were found between both of the construct validity measures and Scales 5 and 6 (Integration and Transformation). These results support the OTAID model tenet that Phases 1-4 (Individuation, Dissonance, Immersion, Internalization) are fundamentally different than Phases 5 and 6 (Integration and Transformation).

**Reliability**

Each scale had good internal consistency with alpha coefficients ranging from .72-.90, thus supporting Hypothesis 3 (the scales will be homogeneous). Two scales (Dissonance and Transformation) had an alpha coefficient of .90, and two scales (Individuation and Immersion) had an alpha coefficients above .80. These results suggest that the
scales were internally consistent, although Scale 4 (Internalization) had a lower coefficient than the other scales (.72).

Test-retest reliability coefficients for the scales ranged from .72-.92 (five scales above .80: Scale 1-Individuation, Scale 2-Dissonance, Scale 4-Internalization, Scale 5-Integration, and Scale 6-Transformation; Scale 3-Immersion had a coefficient of .72), thus supporting Hypothesis 4 (scales having good test-retest reliability). The time interval (6-10 weeks) seemed appropriate for the OTAID model, which predicts potential changes over a long period of time (i.e., a developmental model), with relative stability over a short period of time.

Content Validity

Content validity evidence demonstrates the degree to which a sample of items represents the total domain, or the total construct of interest (Sundberg, 1980; Walsh & Betz, 1985). The results from this study of the expert judges' ratings of the SII items' fit with the OTAID phases supported the content validity of the SII. As a check on this procedure, the author and one other member of the original SIDMOP/OTAID model research team, tied the SII items with OTAID phase concepts. Each final SII item fit with the original phase concepts (as described in Myers et al., 1991) and/or the additional concepts (generated by three members of the research team), which further demonstrated that the SII has good content validity.

These procedures resulted in changing the construct of the OTAID model; in other words, each phase description was developed
more fully than in the Myers et al. (1991) article. The fact that the final items "fit" with these additional phase concepts suggests that these additions be incorporated into the OTAID model.

The reliabilities of the SII scales from the present study are presented in comparison to the RIAS-B (Parham & Helms; 1981) and the WRIAS (Helms & Carter, 1990). The four scales of the RIAS-B (short form-30 items) have obtained reliability coefficients (Cronbach's alpha) as follows: Preencounter = .69; Encounter = .50; Immersion/Emersion = .67; and Internalization = .79 (Helms, 1990), although in one study, the coefficients for Encounter and Internalization were substantially lower (.37 for both subscales; Ponterotto & Wise, 1987). The long form (50 items) reliability coefficients have been reported as follows: Preencounter = .76; Encounter = .51; Immersion/Emersion = .69; and Internalization = .80 (Helms, 1990).

For White racial identity using the WRIAS, the following ranges of reliability coefficients from three studies have been reported: Contact = .55-.67; Disintegration = .75-.77; Reintegration = .75-.82; Pseudo-Independence = .65-.74; and Autonomy = .65-.74 (Helms & Carter, 1990). While many of these values for both the RIAS-B and the WRIAS are suitable for research use (≥ .70), they are lacking in their applicability for clinical use (using a standard of ≥ .80). In comparison, the SII scales obtained good reliabilities (all scales above .70 and four scales above .80).
Group Differences

The examination of group differences provided a method of testing the construct validity of the SII and of testing the tenets of the OTAID model. Specifically, Hypothesis 14 focused on the dominant societal view and its impact on the identity development of people from all social groups. Those more valued under the dominant societal view were hypothesized to be higher on Phase 1 (Individuation) while those not valued under the dominant societal view were hypothesized to be higher on Phases 2-6 (Dissonance, Immersion, Internalization, Integration, Transformation). For the most part, this hypothesis was supported. Significant differences in mean scale scores were found between groups on most scales for most groups (e.g., men vs. women, European Americans vs. people of color, heterosexual vs. gay, lesbian, bisexual).

One way in which the hypothesis was not supported involved Scale 2 (Dissonance); when there were no significant difference in mean scale scores, it was usually on Scale 2. Several reasons for this unexpected finding may be posited. First, perhaps participants who are more valued under the dominant societal view are having doubts about how much they agree with this view whereas people in nondominant groups have already experienced this due to their non-acceptance in this society. Second, perhaps responding to the items in the SII sensitized participants to problems of oppression in society. This sensitization may have prompted participants to endorse items in a particular manner.
Both of these reasons would explain the finding of minimal differences between groups on Scale 2.

The configuration of "high on Scale 3" (Immersion) was found in the gay male and lesbian groups, as well as African Americans and biracial people. It was not found in the bisexual, or other racial minority groups (i.e., Asian Americans, Latino/as, or Native Americans). This common profile suggests that there may be something similar in the experiences of identity development and/or experiences with oppression in these groups; it may be that Phase 3 (Immersion) is an important part of the journey for people in these groups (African Americans, biracial people, gay males, lesbians) and that strength is drawn from the group identity of the Immersion phase. The OTAID model suggests that people in Immersion feel a sense of belonging and positive feelings when in this phase (Myers et al., 1991). One can speculate that this part of one's identity development acts as a "survival mechanism" against racism and heterosexism. In the latter case, the current debate regarding gays in the military, "gay bashing", and anti-gay civil rights legislation (in many states and cities) probably interact with gay males' and lesbians' identity development. The fact that bisexuals or non-African American people of color did not obtain this profile suggests that, generally, there may be different experiences of oppression for these groups, although the specifics are unclear. Further research is warranted to examine differences of identity development between people of color.
Additional Analyses

Age, Education, and Income

The variables of education, age, and income were also found to have an effect in the present study. While the OTAID model does not define these variables in the same way as race, gender, and sexual orientation, the model recognizes that these variables interact with one's identity development. These variables were examined to further extend the scope of the OTAID model construct.

The variable of age produced significant differences on five of the six scales. An interesting finding was the oldest group (age 56 and above; ranging from 56-82) had a significantly higher scale mean on Scale 1 (Individuation) than all other groups. This group represents a distinct generation that was socialized in their youth in the "pre-civil rights era". Another finding was that the 25-44 age group obtained a significantly higher mean on Scale 5 (Integration) than all other groups. This age group reflects a distinct generation, "baby boomers", that was socialized in their youth when social activist reforms occurred (e.g., civil rights, women's rights, beginning of gay, lesbian, and bisexual rights) that encouraged acceptance and respect. This cohort effect suggests that age influences identity development. Furthermore, it may be that the socialization associated with different generations may be an underlying factor (independent of age).

In the present study, significant differences in scale mean scores were found for all groups based on highest level of education completed.
Those with lower levels of education had higher means on Scale 1 (Individuation), while those with higher levels of education had higher means on Scale 5 (Integration). This finding suggests that the journey of one's identity development may be, in part, a function of one's educational experiences. This finding also concurs with the OTAID model's tenet of the role of knowledge throughout one's life. The phase progression starts with Phase 0 (Absence of Conscious Awareness) and continues in an expanding spiral with an endpoint Phase 6 (Transformation). Phase 0 and Phase 6 are essentially the same; the difference is one of knowledge and specifically self-knowledge. The effect of education conforms to the OTAID model construct in that formal education can stimulate self-knowledge.

Two interesting findings regarding income were found; first, people in income groups of $50,000 - 74,999 and $75,000 and above obtained significantly lower mean scores on Scale 6 (Transformation) than all other groups; second, people in $50,000 - 74,999 had a significantly lower mean on Scale 3 (Immersion) than all other groups. These findings concur with the OTAID model in that people in higher income groups may prize materialism (i.e., financial gain) and not have a need to bond with a group (i.e., Immersion) to survive under the dominant societal view (part of the suboptimal worldview; Myers, 1988; Myers, et al., 1991).

The findings related to the variables of age, education, and income, suggest these variables be directly incorporated in the OTAID model as moderator variables.
High Scorers

The pattern of high scorer groups (those scoring high on each SII scale) means was interesting. Specifically, each group had a high mean on Scale 5 (Integration), and in three cases (i.e., groups scoring high on Scales 1 [Individuation], 2 [Dissonance], and 3 [Immersion]) the mean on Scale 5 was higher than their "own" mean. This occurrence was possible due to the way the high scorer groups were categorized (e.g., it was possible to be in Scale 2 high scorer group, due to scale mean being in the top third, and be high on Scale 5). Further, the profile of scale means for these groups showed that each group had the highest mean on their own scale when compared to the other groups (e.g., Scale 1 high scorers were highest on Scale 1 when compared to Scale 2 high scorers, Scale 3 high scorers, Scale 4 high scorers, etc.). In other words, even when people were considered high on a particular scale, they were also high on Scale 5. This finding (highest on Scale 5) was also true for the total sample, as well as almost every social group examined (e.g., men, women, all race groups, all sexual orientation groups, all age groups, most education groups, except for high school/technical school, and all income groups).

Two possible explanation may be posited: (a) the finding of "high on Scale 5" may be due to the particular sample used in this study in that they are more in Integration (Scale 5) than would be expected in a random sample; and/or, (b) that there is something about the nature of the scale and/or the conceptual phase of Integration that is not
differentiating people who would really be in this phase. One piece of evidence, that the sample was skewed toward an educated and professional group, lends support to the former possible explanation. Further investigation of lower educated and non-professional groups is warranted to test/examine this possibility. Further research is also needed to examine the profiles of certain groups, especially examination of "total profiles" (e.g., second highest score, third highest score, lowest score, etc.).

**Changes to the OTAID Model**

This study suggested a number of changes to the OTAID model. First, the additions of the phase concepts seemed warranted in that they were a source of final SII items. In future descriptions of the OTAID model phases, it is recommended these concepts be included. Second, some of the predictions of the OTAID model may need to be revised (e.g., around the nature of Scale/Phase 2 [Dissonance]). Third, it is recommended the variables of age, education, and income be incorporated directly into the OTAID model.

**Limitations**

The biggest limitation of this study was that it did not meet the goal of full representation from all groups. The lack of full representation was a weakness stemming from utilizing a convenience
sample, and may have produced biases (e.g., results due to something in common about the participants versus actual results regarding identity development). For example, while there was diversity in terms of different groups, the sample was positively skewed in terms of students, professionals, and women.

A second limitation was that the study utilized as measures of construct validity two scales reflecting constructs that were predicted to correlate positively with the higher phases (i.e., Phase 5 [Integration] and Phase 6 [Transformation]) of the OTAID model. Further research needs to be done to see if predicted relationships occur with a construct that is predicted to have negative correlation with the higher phases.

Implications for Counseling

Previous applications of the OTAID model's use in counseling have been made (Myers et al., 1991). This section will focus on the potential applications of the SII in counseling. These applications should be viewed with caution, as the instrument is new, and the uses described are untested.

The SII has the advantage in that it can be used for anyone. In other words, it is not restricted to members of particular social groups as is the case with existing identity development instruments. It can be an important means of gaining information about clients who are struggling with identity development issues. The process of filling out the inventory may even be a stimulus in itself; in other words, just
taking the instrument may prompt a clients to think of issues they have not thought of previously (e.g., filling out the self definition of identity section; responding to certain items, etc.).

The SII has potential to aid counselors in understanding processes regarding counselor/counselee dyads, similar to the work of Helms (1984; 1990). However, the SII has the advantage of not focusing on single group membership; in other words, a multiple group focus reflects more of who people really are and of their experiences. For example, the dyad of a young African American, heterosexual male counselor and an older European American lesbian is more complex than Helms' model captures (i.e., more than Black/White). By focusing on multiple oppressions, the SII can aid in gaining insight into the person's journey of identity development, however it is defined by the person at any particular time. For example, an African American lesbian can fill out the RIAS-B (Parham & Helms, 1981) and be in Internalization (their final stage) when focusing on race, yet be in a beginning stage incorporating her identity as a lesbian.

Directions for Future Research

The results of this study suggest directions for future research. First, Scale 4 (Internalization) obtained a low reliability coefficient (.72) in comparison to the other scales (ranging from .78-.90), a finding corroborated with other studies utilizing the SIDMOP/OTAID model (e.g., Highlen et al., 1991; Jecmen, 1989). Further research is
warranted of Scale/Phase 4 to identify the source(s) of these findings. Second, the negative correlation between Scales 1 (Individuation) and 5 (Integration) in the present study was almost "too high" (-.64) in that Scale 1 could possibly be measuring the "opposite" of Scale 5. Further research of these two scales/phases is warranted to examine this finding. Third, it would be possible to conduct structured interviews with a small sample to determine the participants' placement in the OTAID phases. Correlations between these results and the SII scale scores could then be done. Fourth, a "typology" of high, medium, and low scorers on each SII scale could be created. This could be done by identifying correlates which typify high, medium, or low scorer groups. Further, norms for each SII scale could be obtained for each of these groups. Fifth, further examination of multiple oppressions is needed. Specifically, profiles of participants who are dealing with multiple oppressions could be examined and statistical tests of difference in mean scale scores between groups could be conducted. This would entail an interplay of the scales scores/profiles and the self definition of identity section.

Conclusion

For the last decade, research on identity development has predominantly focused on single groups or on "Black-White" issues. Although these foci have made significant contributions to the field, more remains to be examined. Concepts integral to extending the
identity development knowledge base include multiple oppressions, inclusive instruments to measure identity development, and incorporating worldviews that are inclusive (i.e., more than Eurocentric).

The SII was developed to address these concepts/needs. The field of identity development is in need of a psychometrically sound instrument and the SII holds promise for filling this need. The psychometric properties are sound and are better than existing measures of identity development in single groups (e.g., the RIAS-B, the WRIAS). The SII has potential for assessing identity development as conceptualized by the OTAID model, a theory that conceptualizes people as having the potential to transcend the bonds of oppression (Myers et al., 1991). The SII, with the OTAID model as its base, can contribute to the field by extending traditional conceptualizations of identity development in order to increase understanding of a complex process.
APPENDIX A
LETTER TO ORIGINAL SIDMOP/OTAID MODEL RESEARCH TEAM
July 9, 1992

Dear Friend:

I am writing to let you know of a research project I am doing and to ask for your help. I am working on my dissertation, under the direction of Pam Highlen, and am developing an instrument based on the OTAID model as described in the JCD article. I am writing to the original members of the SIDMOP/OTAID model development team to inform you what I am doing and to invite your input on some things. We have been in the process of developing items for each of the phases and plan to collect data beginning of August.

Every study that has utilized the SIDMOP/OTAID framework to date has had trouble with the internalization phase producing clean empirical results; it is unclear whether this is due to the theory, measurement methods, or some other factor. What we hope to do is avoid this by getting as much input as possible in the planning stages. Pam has analyzed data from the Female Identity Development Scale, developed by her and a master's student, and the results are encouraging, except for phase IV -- internalization, and to some degree, phases III and V.

My study is trying to develop an instrument that will apply to all groups. We are also trying to incorporate the concept of multiple identities/oppressions more fully. To that end, we have done a concept analysis of sorts by looking at the concepts of the phases and tying them to items. In this process, we have created some new concepts that either were not in the JCD article or were implied, but not clearly stated. This was done by Pam and myself, and also Eve Adams and Amy Reynolds.

I have enclosed a copy of this for you; I would appreciate it if you would look at this and give feedback. This might take the form of jotting notes in the margins, adding concepts that you think should be included, crossing out ones we have, calling me and just talking on the phone, etc. We are trying to make the theory clear and explicit and would very much value your conceptual input. I would like this feedback by July 24th, if at all possible. You can either write to me or call me and leave a message.
I realize that everyone is busy and there is not much time for this; if you choose not to be involved, I will understand and that is OK. If you do want to send some feedback, I would value this and appreciate it very much.

Finally, we are in the process of lining up help in data collection. As I mentioned above, I am trying to include all groups in the study, roughly paralleling the US population. I am trying to get subjects of all races, age groups, sexual orientation, SES groups, and geographic regions. This will not be a random sample as the strength is in getting representation from the various groups. If you could at all help with this, please let me know. Thank you all very much.

Sincerely,

Todd D. Sevig
APPENDIX B
ADDITIONS TO PHASE CONCEPTS BY THREE MEMBERS OF ORIGINAL SIDMOP/OTAID MODEL RESEARCH TEAM
Phase Descriptions (by concept)
Revised 7/92—additions to theory in boldface

Phase 1 — Individuation  The world is the way it is.

1) Individuals lack awareness of any view of self other than the one to which they are initially introduced.

2) and rarely assign particular meaning or value to any aspect of their identity.

3) Family values solidify personal identity.

4) Individuals may lack awareness of the part of self that is devalued by others.

5) To the extent that certain aspects of individuals' identity may be reinforced by society, they may be less likely to move from this phase.

6) Are more likely to espouse very conventional beliefs about "minority groups"

7) Individuals have no social group identity and accept the status quo

Phase 2 — Dissonance  I'm beginning to wonder who I am.

1) Individuals affectively explore those aspects of self that may be devalued by others.

2) This experience triggers conflict between what individuals believe they are and a false image of self that would be inferior.

3) Feelings of anger, guilt, confusion, insecurity, isolation, or sadness may accompany the encounter with the devalued sense of self.

4) Consciously or unconsciously, individuals may internalize sociocultural values that hold the negative view of the self.

5) Some individuals may suppress that salient aspect of the self to disassociate themselves from this negative self-definition.

6) Individuals are feeling a sense of awakening due to a negative experience where they feel devalued or have to suppress aspects of self to gain approval.
7) Individuals experience internal dissonance or disruption

8) individuals begin to ask questions about their social group membership and what it means to them

9) individuals may feel hurt from any of the above experiences

10) individuals are starting to see society's values and how society oppresses people

Phase 3 - Immersion _______ I focus my energy on people like me.

1) Individuals fully embrace others like themselves who are devalued.

2) This acceptance enables people to learn about and appreciate the devalued aspect of themselves.

3) Individuals may "immerse" themselves, directly, vicariously, or both, in the culture of the devalued group.

4) As a part of the group, individuals may feel excitement, joy, pride, and a sense of belonging.

5) Negative feelings regarding the perceived dominant group, including anger, distrust, and rage, may exist.

6) Individuals may withdraw from or ignore the dominant group and its norms and values.

7) exploration of self and group identity (ies)

8) shutting out of people who are not doing this exploration work

9) single-minded focus on their own group as a way of feeling good about themselves and ridding the internalized oppression

10) strength and security for the person comes from #9

Phase 4 - Internalization _______ I feel good about who I know I am.

1) Individuals have effectively incorporated feelings of worth associated with the salient aspects of self
2) resulting in an increased sense of security.

3) The salient part of self is recognized as just one of many components of self-identity.

4) With this broadened perspective, individuals can be more tolerant and accepting of others who do not seem to threaten their sense of self.

5) **personalizing** (more personal) of worldview where one sifts through the rhetoric of the dominant culture and the norms of the oppressed group; view of self is more multi-faceted, though **not** as true of one's views of others.

6) identity is focused beyond their own social group membership

7) more tolerant of more groups though not necessarily all groups

8) more tolerant of some people within these groups, though not all; especially the type that the person deems ‘OK’ (i.e., conditional acceptance)

9) acceptance of others and other groups is similar to ‘tolerance’ rather than ‘appreciation’

10) the acceptance is more of the cognitive type of acceptance, i.e. "intellectual acceptance" and not so much behaviorally or affectively; there are discrepancies between what the person says and does

11) sense of security and feelings of worth are consequences of the work done in phases 2 and 3 and from the **personalizing**

Phase 5 -- Integration   With my deeper understanding of myself I am changing my assumptions about the world.

1) Individuals’ sense of self has developed to a stronger place of inner security so that relationships and perceptions of others reflect this degree of inner peace.

2) Individuals’ sense of community has deepened and expanded as a result of a connection to more people because criteria of acceptance go beyond appearance.

3) A conceptual switch is beginning to occur. Individuals are beginning to understand the true nature of oppression as reflecting the nature of one’s worldview:
4) All people can oppress or be oppressed, depending upon one's assumptions about one's self and relationships to others.

5) sense of multi-dimensional spreads to others so that one feels connected to others, even those in most direct competition

6) recognition that society's (or the dominant culture's) most basic values are the 'culprit'

7) approaches others out of a place of wholeness; person believes and exhibits unconditional positive regard for others, other groups, and for all of life

8) the acceptance of others who are different is cognitive, affective, and behavioral -- minimal discrepancies between what person says and does

Phase 6 -- Transformation

1) The self is redefined toward a sense of personhood that included the ancestors, those yet unborn, nature, and community.

2) Individuals have experienced shift in worldview based on the realization of the interrelatedness and interdependence of all things

3) and are empowered to define their reality based on spiritual awareness rather than external circumstance.

4) They have gone deeply into a holistic understanding and appreciation of their culture and their history, unifying with all humankind and with all of life.

5) The universe is understood as orderly, rational, and personal.

6) Increased understanding of the role of negativity in experience makes growth possible and the developmental process of life harmonious.

7) All forms of life are accepted and valued for their contribution to the greater good of the whole.

8) less fragmentation and more unification based on commonalities

9) we have something to learn from everyone and therefore everything is necessary

10) every experience and feeling is necessary
APPENDIX C
LETTER TO EXTERNAL JUDGES
June 3, 1992

__________, Ph.D.

__________, Ph.D.

Dear,

Thank you for agreeing to participate in my dissertation which is under the supervision of Pamela Highlen, Ph.D. Specifically, thank you for agreeing to be judges/expert raters of the items in the OTAID model instrument. We have gone through an initial item development phase. What you have is a revised item pool based on frequent revisions. What I would like you to do is the following:

1. indicate which OTAID phase you think the item belongs to; included is a summary of the phases from the Myers et al. 1991 article; use the corresponding number (e.g., "1" for individuation; "2" for dissonance, etc.);

2. rate your confidence level in assigning the item to the correct phase using a 5-point Likert scale (1 = not at all confident to 5 = very confident). For example, if you are very sure an item fits in Transformation you would put a "6" under 'phase' and a "5" under 'confidence'. Another example: If you are not sure which phase an item belongs to, take a guess and put a "1" under confidence (or, whatever rating you would give for confidence);

3. rate each item on clarity of wording using a 5-point Likert scale (1 = very unclear to 5 = very clear); then, if an item is unclear, please circle the word or phrase or total item that is unclear; if you have ideas about how to change the item, insert that in the box of that item;

4. make general comments on the items;

5. also, feel free to add items we may have not generated;
6. finally, somewhere (on back of rating sheet or a separate piece of paper, indicate a phrase or phrases which guides your thinking about each phase. Specifically, indicate how you tell the difference between, for example, individuation and transformation; or indicate your defining construct for immersion, etc.;

If you have any questions, please call me. When finished, please mail back to me by June 19th, if possible. Enclosed is a self-addressed, stamped, envelope.

Thank you very much. I value your opinions and appreciate the time and energy you will put into this.

Take care,

Todd D. Sevig, M.A.
APPENDIX D
DEVELOPMENTAL SAMPLE REACTION SHEET
Reaction sheet for development sample participants

1. How long did it take you to complete the instrument? _______

   Comments:

2. Were the instructions for taking the instrument clear? Was the informed consent form clear?

3. What are your general reactions to completing the instrument?

4. What were your reactions to the use of the term "my group" in the survey?

5. Was the demographic form clear and easy to complete?

6. Do you think people with less than a college education could easily complete this survey?
PART 2

Instructions
Listed on the following pages are statements about attitudes, feelings, and behaviors. Please respond to all items thoughtfully and honestly. There are no correct answers. For references to "my group" or "group", please define this by thinking about how you would describe your identity or parts of your identity. Some examples are: African-American female; Asian-American lower class; Caucasian male; Native American female with a disability; elderly person; Caucasian person who is Jewish; Hispanic gay male; etc. Answer these questions based on how you define your identity -- there is no right or wrong way.

Section 1
Please describe below how you define your identity. List on the lines on the next page the different parts that make up your identity. After listing the different parts, go back and rate how challenging or difficult the parts are for you by circling the number on the scale to the right of the identity you listed.

Examples:
1. John is an African-American male from an upper class background. However, he chooses to focus only on the African American part of his identity and not his being from the upper class or being male. Being African-American is challenging for him. So John would fill the following out in this manner:

   | not very difficult | very difficult |
---|-------------------|---------------|
African American | 1 2 3 4 5 6 |

2. Ann is a Caucasian female who is also a lesbian. She focuses on being a female and a lesbian, yet does not focus on being Caucasian. Being a female is not difficult for Ann but being a lesbian is challenging or difficult. So Ann would fill the following out in this manner:

   | not very difficult | very difficult |
---|-------------------|---------------|
Female | 1 2 3 4 5 6 |
lesbian | 1 2 3 4 5 6 |

3. Steve is Caucasian male who is heterosexual yet does not define his identity by membership in any group. This is not difficult for Steve. So Steve would fill the following out in this manner:

   | not very difficult | very difficult |
---|-------------------|---------------|
one | 1 2 3 4 5 6 |
• Please list the different parts of how you define yourself with the corresponding rankings:

<table>
<thead>
<tr>
<th>Part</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(add more parts and rankings if necessary)

• Now on the line below, write in your own words how you define your identity. For example, John in the above example would write "African-American"; Ann would write "female lesbian"; Steve would write "none". Use your own words to describe your identity:


• Rate how challenging or difficult it is for you to be what you just wrote above.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>not difficult/challenging</td>
<td>difficult/challenging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 2
Please respond to each of the following items thoughtfully and honestly. There are no correct answers. Use the 6-point scale below to rate each statement as it applies to you. Write the number of your response in the box next to the item. Do not spend too much time on any one item; record the first response that comes to your mind.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>strongly disagree</td>
<td>disagree</td>
<td>slightly disagree</td>
<td>slightly agree</td>
<td>agree</td>
<td>strongly agree</td>
</tr>
</tbody>
</table>

Response

Example:

1. I like to go to concerts.

(If you strongly agree with this statement, you would record a "6" in the box under 'response'.)
APPENDIX F
PERSONAL BACKGROUND INFORMATION FORM
PART 1

Background Information Form

First of all, we'd like to know a little about you. Please answer all of the following questions by circling the appropriate choice or by filling in the blank.

1. Gender:
   1. male
   2. female

2. Age: ____________

3. State of Residence: _______________________

4. Highest education level completed:
   1. elementary school
   2. junior high school
   3. some high school
   4. completed high school
   5. technical school
   6. first year undergraduate
   7. second year undergraduate
   8. third year undergraduate
   9. fourth year undergraduate
   10. fifth year undergraduate
   11. bachelor's degree
   12. master's degree
   13. Ph.D. degree
   14. professional degree

5. Job/Career/Occupation: (if retired, list former job/occupation)

   ______________________________________

6. Race/Ethnicity:
   1. African American (specify ethnicity; ________________________)
   2. Asian American (specify ethnicity; ________________________)
   3. Biracial/Multiracial (specify; ________________________)
   4. Caucasian/White (specify; e.g., Italian, Polish, Norwegian, etc.)
   5. Hispanic (specify ethnicity; ________________________)
   6. Native American (specify tribe; ________________________)
7. Has there ever been a time in your life when you did not live in the United States?
   1. ______ yes; how many years? ________________;
      what age(s) were you? ________________
   2. ______ no

8. I have a disability/am physically challenged:
   1. ______ yes (explain nature of disability; ________________)
   2. ______ no

9. Sexual Orientation/Affectional Preference
   1. bisexual (sexual/affectional preference for both males and females)
   2. gay male
   3. heterosexual
   4. lesbian

10. Income status of you, or you and your spouse or partner (if student, your family)
    1. under 10,000
    2. 10,000 - 14,999
    3. 15,000 - 24,999
    4. 25,000 - 34,999
    5. 35,000 - 49,999
    6. 50,000 - 74,999
    7. 75,000 and above

11. This income reported in #10 is the result of:
    1. single income
    2. dual income

12. Mother's Education Status
    1. 0-6 yrs (elementary)
    2. 7-9 yrs (junior high)
    3. 10-12 yrs (high school)
    4. 13-16 yrs (undergraduate college)
    5. 17+ yrs (graduate school or professional school)

13. Father's Education Status
    1. 0-6 yrs (elementary)
    2. 7-9 yrs (junior high)
    3. 10-12 yrs (high school)
    4. 13-16 yrs (undergraduate college)
    5. 17+ yrs (graduate school or professional school)
14. Mother's occupation (if retired, list former job/occupation)

15. Father's occupation (if retired, list former job/occupation)

16. Current Marital/Living Status

1. Divorced
2. Married
3. Partnered
4. Separated
5. Single (never married)
6. Widowed
7. Other (specify; ________)

17. Religion/Spiritual Orientation

1. Agnostic
2. Atheist
3. Buddhist
4. Catholic
5. Hindu
6. Islam
7. Jewish
8. Protestant
9. Other (specify; ________)
APPENDIX G
INTRODUCTORY LETTER/ INFORMED CONSENT FORM
Dear Participant,

The goal of this study is to understand more about identity development, or in other words, how we come to know ourselves and feel about ourselves. Part of this involves how we feel about other people and the society in which we live.

If you agree to participate, you will be asked to fill out a set of three questionnaires and a demographic form. The items on the questionnaires involve subjects relating to the above areas (e.g., about yourself, others, society, etc.). The whole study will take about an hour to fill out. If at all possible, please complete this in one sitting.

I hope you will benefit from the study by learning something about yourself in filling out the questionnaire. I believe the study will contribute to psychologists' understanding of how people come to know various parts of their identity. If you would like to receive a summary of the results of this study, please write your name and address on a separate sheet of paper. Include this paper with your questionnaires. This summary will be available beginning in Winter 1993.

Your choice to participate in this study is totally up to you, and you can decide to withdraw at any time. In order to keep the information provided confidential, you are not asked for your name or any other identifying information (see exception below*). Each packet is identified by an identification number. Your consent to participate in this study will be made known by the fact that you return the surveys to me.

Should you have any questions or concerns about any part of the study, feel free to contact Todd D. Sevig at (313) 434-6486.

*An important part of a study such as this one is what is called “test-retest reliability”. This means that it is important to have some of the participants in this study complete the forms again in about 2-3 weeks. If you would be willing to be a part of this group, please write your name and address below and send back this sheet with your questionnaires. I will keep the names and information completely confidential; after I have the identification numbers matched (between your first set and your second set) and mail you the second questionnaires, I will destroy your name and address. Important: If you agree to this, please write your subject number (found at top right of next page) on this page by your name.

ID# __________
APPENDIX H
SII ITEMS AND ITEM NUMBERS
1. People in this country are hostile toward my group.

2. I have never met a white male who I fully trust.

3. All people, including those who oppress others, are to be accepted since they reflect part of the collective consciousness.

4. How I feel about myself as a member of my group is how I feel about myself in general.

5. I define myself through my ancestors, generations to come, nature, and the community.

6. I have never discriminated against anybody.

7. I accept people who are different from me, although I don't have many friends who are members of different groups.

8. I hurt for the oppression I experience and for the oppression that all people feel because this violates the spiritual connection in all of us.

9. Everybody, even people who oppress others, are to be accepted.

10. People with disabilities should only work in their own special workshops.

11. Some forms of oppression (e.g., racism) are worse than other types of oppression (e.g., sexism).

12. The different "isms" in this country (e.g., racism, classism, sexism) are all connected.

13. My standards for accepting others who are different from me has expanded.

14. I have developed a deep spiritual sense of inner peace by allowing things to happen rather than making them happen.

15. I have developed a deep sense of inner peace through self-examination and self-acceptance.

16. I don't feel comfortable showing some people who I really am.

17. Rapists need to be accepted and understood too.
18. I feel good about most, but not all, parts of myself.

19. I am more tolerant of people who are different than me than I used to be, although I have trouble forgiving those who oppress others.

20. I don't have much interest in interpreting the actions of others.

21. When it comes down to it, all people are really the same.

22. I'm beginning to realize that certain parts of my identity aren't valued by society.

23. I am proud of parts of myself that I didn't used to accept.

24. Being a member of my group does not totally define who I am.

25. I have recently seen the depth to which oppression affects many groups.

26. There is very little prejudice among members of my group.

27. If it goes against my personal beliefs, it's OK not to fully affirm some groups who are discriminated against.

28. I trust in the love I give to, and receive from, God (or, Higher Power), myself, and others to sustain me.

29. I see myself in all others, including criminals and all oppressors, because we are part of the same collective spirit.

30. My view of myself has not changed much over time.

31. People in the U.S. have been socialized to be oppressive.

32. I choose to primarily have friends who are members of my group.

33. I accept some differences in people, though not all differences.

34. When I hurt others, I am hurting myself.

35. Personally knowing people in other oppressed groups, I see how much we have in common.
36. I believe all experiences are necessary for enhancing knowledge of myself, so there are no "good" and "bad" things that happen.

37. I believe that if I could fully know myself, I would know God (or Higher Power).

38. I have worth because I exist.

39. The forces of socialization in this country have a strong impact on who we are as people.

40. My identity as a member of my group is the most important part of who I am.

41. I see there are many parts of my identity, including parts others don't like.

42. Rocks and streams and all parts of the earth have spirits.

43. The spirit within all connects us.

44. Even though we are different on the outside, inside we are the same because we share the same spirit.

45. I believe that men who oppress women don't understand how they, as men, are oppressed, too.

46. I have recently realized that society devalues parts of who I am.

47. I realize that men are oppressed too.

48. I focus most of my time and efforts on issues facing my group.

49. People who have had a mental illness should not be lawyers.

50. I do not understand what social activist groups are trying to accomplish.

51. I only feel a sense of belonging when I am with members of my group.

52. Right now being a member of my group is painful.
53. I feel intense excitement and pride when I think about my group.

54. If a child of mine decided he was gay, I would tolerate his choice if he wasn't too effeminate.

55. My sense of community has recently expanded because I fully accept other people.

56. I accept that everyone, including myself, oppresses others.

57. I feel most comfortable when I am with my group.

58. It is the spiritual connection among all people and all living things that makes us the same.

59. People who hurt others do so because they don't feel an inner spiritual connection with all people.

60. While I appreciate differences among people, I prefer to spend most of my time with people from my group.

61. Issues facing my group are the most important in this country.

62. Some groups (e.g., racial groups) are more oppressed than others (e.g., people with disabilities).

63. I love and forgive those who oppress me.

64. I value all forms of life as being sacred.

65. It would not bother me if a family member had a disability.

66. I recently have started to accept more people different from me because I feel good about myself.

67. I'm starting to realize that it is easier to be a white male, as compared to other groups, in this society.

68. Being with people from my group helps me feel better about myself.

69. It is better for people to retire at age 65 and have fun.

70. I recently realized I don't have to like every person in my group.
71. At times, I am so enraged at how people in this society treat members of my group, that I sometimes want to be violent.

72. While I read a lot of books about different cultures, I don't have any friends who are from groups different than mine.

73. I am just starting to see that certain people are expected to act in certain ways.

74. Although I may not understand it, order exists in the universe that allows me to live in peace and harmony, regardless of the situations I confront.

75. As I see the commonalities among groups, I am more fully able to celebrate their differences.

76. I feel sad when people tell jokes about oppressed groups because I know how these jokes hurt people in those groups.

77. Recently, it has been easier for me to accept other people for who they are because I accept myself for who I am.

78. The socialization process in this country creates oppression rather than a particular group, such as white males.

79. I feel conflicted with regard to the parts of my identity.

80. I have not been oppressed or discriminated against.

81. Gay males and lesbians have a right to be who they are.

82. People in the dominant culture just don't appreciate my group.

83. My relationships with others have been enhanced, now that I see the commonalities among us.

84. Whenever anyone tells a joke that puts downs any group (e.g., gays, Jews, Native Americans, Poles, Italians), I voice my objections.

85. It's great for a woman to have a career, as long as she doesn't forget her responsibilities as a homemaker, wife, and mother.

86. I hate to follow the rules or norms of this society.
87. Oppression exists because we aren't in touch with what connects us to each other.

88. I feel most connected to members of my group.

89. Different oppressed groups have had many common experiences.

90. Nothing from which good comes can be bad.

91. Sexism is a thing of the past and does not exist today.

92. I know that I fully accept others who are different because I no longer judge them.

93. I can identify with the struggles of all people who are oppressed, such as gays, the elderly, white males, and the disabled.

94. I am just starting to see that everyone is expected to follow the same rules even if they don't seem to be right for everyone.

95. Lately, I've been involved in more activities, like rallies, marches, and meetings.

96. People who commit hate crimes are also victims of oppression.

97. I have a strong sense of inner security that comes from fully affirming all people.

98. The physical world and the spiritual world are inseparable.

99. I am starting to see that people from some groups are treated differently in this society.

100. My oppressed identity does not primarily define who I am as it did in the past.

101. Discrimination is not really a problem in this country.

102. I would feel most comfortable working for a boss/supervisor who is a white male.

103. I'm impatient with members of my group who are not involved in social activism and trying to change society.
104. I have overwhelming feelings of connectedness with others and with nature.

105. Given my inner spiritual peace, I tend to think and act spontaneously, rather than act on fears based on past experiences.

106. I feel connected to people from different groups.

107. I base reality on my spiritual awareness, irrespective of any religious affiliation I might have.

108. Although it is painful, I am exploring the hurt I am experiencing as a member of my group.

109. I am not as angry as I used to be about oppression.

110. Whether male, female, Black, gay, disabled, poor, etc., we are all oppressed by society.

111. Sometimes I get tired of people complaining about racism.

112. Lately I've had lots of feelings of confusion, anger, and sadness about who I am.

113. White males are victims of society.

114. I mostly read books or listen to music created by people of my group.

115. I don't always do what my group expects me to, although I did so in the recent past.

116. All people can succeed in this country, if they work hard enough.

117. Being a member of my group is only one part of who I am.

118. I would have as a life partner a person of a different race.

119. I have recently become more involved in group activities with people from my group.

120. While I know that oppression exists, I really haven't done anything about it.
121. I spend most of my time and energy with people from my group.

122. I recognize that many groups in this society are discriminated against, but I don't see how white men are oppressed in this society.

123. For me to achieve success, I can learn most from those who have made it in this society.

124. It is all right for a man to "flirt" with a woman even when she does not like it.

125. Regardless of their views or political party, I support members of my group who run for political office.

126. I feel uneasy about some of the beliefs I have about people who are different from me.

127. I recently realized there are many parts of my identity and I have accepted them as important parts of who I am.

128. People are basically good because we are each unique creations of a Higher Power.

129. The world can be divided into two separate groups: the oppressed and the oppressors.

130. I am starting to feel angry about the discrimination in this country.

131. I rarely say anything when people make jokes about somebody different from me, even though it makes me uncomfortable.

132. I recently have felt better about who I am because my group identity is clearer to me.

133. I feel uncomfortable because I don't fit some of society's standards.

134. I rarely question how others see me.

135. I have close friendships with people across race, sexual preference, age, religious beliefs, social class, and physical ability.
136. I am just starting to see how my different identities affect me.

137. Although I am concerned about other groups who are discriminated against, I'm mostly concerned about my own.

138. All people have the same opportunities in this country.

139. The different parts of my identity (e.g., race, sex) do not really affect who I am.

140. I have recently learned a lot about myself by focusing on my group identity.

141. I rarely question the policies of this country.

142. I feel angry at members of my group who let others oppress them.

143. I primarily focus my political awareness and activity on issues facing members of my group.

144. I accept people in groups different than mine, although not all people within a group.

145. I am starting to realize I don't agree with some of society's standards.

146. I don't limit myself to activities of my own group.

147. I have not really examined in depth how I view the world.

148. I do what is right for me, even if it conflicts with what my group says is right.

149. People in the dominant culture just don't know who we are.

150. I feel isolated because I don't seem to fit in.

151. I am who I am, so I don't think much about my identity.

152. All of life is connected.

153. I recently have started to question some of the values I grew up with.

154. Everyone is treated equally in this country.
155. I "hide" parts of myself at times.
156. One goal of mine is to accept people who don't like me.
157. I have difficulty trusting anyone outside of my group.
158. I withdraw from mainstream activities because of what society stands for.
159. People in my group experience the most discrimination in this country.
160. Most of my beliefs and views are similar to ones I grew up with.
161. There are parts of my identity that I haven't really explored before.
162. Sometimes, I wonder who I am.
163. It is all right when people tell jokes that are discriminatory as long as they are meant to be funny and don't hurt anyone.
164. Because I share my humanness with all people everywhere, whatever affects them affects me.
165. I accept some, but not all, people who are different from me.
166. I value my connections with other people above all else (e.g., job status, money, material possessions).
167. I actively support the rights of all oppressed groups (e.g., Jews, gays, Asian-Americans, the elderly, people with disabilities, Native Americans).
168. I am just beginning to realize that society doesn't value people who are "different".
169. Members of my group are better than other people.
170. Because the Earth is a living, spiritual being, I am sad we are destroying her.
171. I believe there is justice for all in the United States.
172. I enjoy each moment to the fullest.
173. A person can be oppressed and also be an oppressor.

174. I understand more about the "isms" (e.g., racism, sexism, heterosexism, classism, ableism) than I ever did before.

175. I am not very clear about the role of my group identity in my life.

176. I like meeting and getting to know people from groups other than mine.

177. I rarely talk about my group identity with other people even though it affects me.

178. My group's way of knowing and doing things is better than any other group.

179. True discrimination occurs only rarely in this country.

180. Some parts of my group's experiences apply to me, others don't.

181. What people do in private is their own business, but I wish gays and lesbians would keep their personal lives to themselves.

182. I recently realized for the first time that I was a target of discrimination and it hurt.

183. I have a high degree of inner peace that comes from knowing we're all in this together.

184. I have a deep understanding of myself that comes from examining the different parts of my identity.

185. I would be happy if a member of my family chose a gay/lesbian/bisexual lifestyle, regardless of my sexual orientation.

186. A lot of the time, I don't feel very good about myself.

187. I'm not as angry at people outside my group as I used to be, but I still don't socialize much with these people.

188. People who oppress others are victims also.
189. I am *starting* to see that people from some groups are limited in the opportunities available to them.

190. My self-esteem is not based on outer appearance, such as how I look or how much I weigh.

191. I feel insecure and conflicted about who I am.

192. I am *just beginning* to realize that society doesn't value people like me.

193. No one is free until everyone is free because we are all so deeply connected.

194. I admire members of different cultures who adapt to the American way of life.

195. Although I can accept men based on their individual character, I don’t see how they are oppressed.
APPENDIX I
OTAID PHASE CONCEPTS AND SII ITEMS
INDIVIDUATION

1. I do not understand what social activist groups are trying to accomplish. (50); 7

2. I have not been oppressed or discriminated against. (80); 4,5

3. It's great for a woman to have a career, as long as she doesn't forget her responsibilities as a homemaker, wife, and mother. (85); 6

4. I would feel most comfortable working for a boss/supervisor who is a white male. (102); 6,7

5. Sometimes I get tired of people complaining about racism. (111); 7

6. All people can succeed in this country, if they work hard enough. (116); 6,7

7. The different parts of my identity (e.g., race, sex) do not really affect who I am. (139); 1,2, 4

8. I have not really examined in depth how I view the world. (147); 1,2

9. I am who I am, so I don't think much about my identity. (151); 1,2

10. Most of my beliefs and views are similar to ones I grew up with. (160); 3

11. It is all right when people tell jokes that are discriminatory as long as they are meant to be funny and don't hurt anyone. (163); 6,7

12. I believe there is justice for all in the United States. (171); 7

13. What people do in private is their own business, but I wish gays and lesbians would keep their personal lives to themselves. (181); 6

14. I admire members of different cultures who adapt to the American way of life. (194); 6,7
DISSONANCE

1. I have recently realized that society devalues parts of who I am. (46); 4, 5, 6, 10
2. I am just starting to see that certain people are expected to act in certain ways. (73); 10
3. I am just starting to see that everyone is expected to follow the same rules even if they don't seem to be right for everyone. (94); 10
4. I am starting to see that people from some groups are treated differently in this society. (99); 10
5. I am starting to feel angry about the discrimination in this country. (130); 3
6. I am just starting to see how my different identities affect me. (136); 6
7. I am starting to realize I don't agree with some of society's standards. (145); 7, 10
8. I recently have started to question some of the values I grew up with. (153); 2, 8
9. I am just beginning to realize that society doesn't value people who are "different". (168); 10
10. I recently realized for the first time that I was a target of discrimination and it hurt. (182); 1, 2, 9
11. I am just beginning to realize that society doesn't value people like me. (192); 1, 4, 5, 6, 10

IMMERSION

1. My identity as a member of my group is the most important part of who I am. (40); 3, 7
2. I focus most of my time and efforts on issues facing my group. (48); 3
3. I feel intense excitement and pride when I think about my group. (53); 2, 4

4. I feel most comfortable when I am with my group. (57); 4

5. Issues facing my group are the most important in this country. (61); 9

6. Being with people from my group helps me feel better about myself. (68); 2, 4, 10

7. I feel most connected to members of my group. (88); 1

8. I primarily focus my political awareness and activity on issues facing members of my group. (143); 3, 9

9. I have difficulty trusting anyone outside of my group. (157); 5, 6, 8, 9

10. People in my group experience the most discrimination in this country. (159); 9, 5

INTERNALIZATION

1. I am proud of parts of myself that I didn't used to accept. (23); 1, 2, 11

2. I have recently seen the depth to which oppression affects many groups. (25); 6, 7

3. I recently have started to accept more people different from me because I feel good about myself. (66); 4, 8

4. I recently realized I don't have to like every person in my group. (70); 6

5. My oppressed identity does not primarily define who I am as it did in the past. (100); 3, 5

6. I don't always do what my group expects me to, although I did so in the recent past. (115); 6

7. I recently realized there are many parts of my identity and I have accepted them as important parts of who I am. (127); 3

8. I recently have felt better about who I am because my group identity is clearer to me. (132); 1, 11
9. Although I am concerned about other groups who are discriminated against, I'm mostly concerned about my own. (137); 7,8,9

10. I'm not as angry at people outside my group as I used to be, but I still don't socialize much with these people. (187); 8,9

INTEGRATION

1. People in the U.S. have been socialized to be oppressive. (31); 3,4,6

2. Personally knowing people in other oppressed groups, I see how much we have in common. (35); 2,7,8

3. I feel sad when people tell jokes about oppressed groups because I know how these jokes hurt people in those groups. (76); 7

4. My relationships with others have been enhanced, now that I see the commonalities among us. (83); 1,2,7

5. Whenever anyone tells a joke that puts downs any group (e.g., gays, Jews, Native Americans, Poles, Italians), I voice my objections. (84); 7

6. I have a strong sense of inner security that comes from fully affirming all people. (97); 1,7

7. I feel connected to people from different groups. (106); 1,2,5

8. I would have as a life partner a person of a different race. (118); 2

9. I actively support the rights of all oppressed groups (e.g., Jews, gays, Asian-Americans, the elderly, people with disabilities, Native Americans). (167); 7

10. I have a deep understanding of myself that comes from examining the different parts of my identity. (184); 1

11. I would be happy if a member of my family chose a gay/lesbian/bisexual lifestyle, regardless of my sexual orientation. (185); 7,8
TRANSFORMATION

1. I hurt for the oppression I experience and for the oppression that all people feel because this violates the spiritual connection in all of us. (8); 3

2. I see myself in all others, including criminals and all oppressors, because we are part of the same collective spirit. (29); 2,6,7,9,10

3. I believe that if I could fully know myself, I would know God (or Higher Power). (37); 3

4. Rocks and streams and all parts of the earth have spirits. (42); 7

5. The spirit within all connects us. (43); 2,3,4

6. People who hurt others do so because they don't feel an inner spiritual connection with all people. (59); 3

7. Although I may not understand it, order exists in the universe that allows me to live in peace and harmony, regardless of the situations I confront. (74); 5

8. Oppression exists because we aren't in touch with what connects us to each other. (87); 3,4

9. The physical world and the spiritual world are inseparable. (98); 3

10. I have overwhelming feelings of connectedness with others and with nature. (104); 2,4,7

11. I base reality on my spiritual awareness, irrespective of any religious affiliation I might have. (107); 3

12. All of life is connected. (152); 2,5,7

13. Because I share my humanness with all people everywhere, whatever affects them affects me. (164); 2,4,8

14. Because the Earth is a living, spiritual being, I am sad we are destroying her. (170); 1,2,7

15. No one is free until everyone is free because we are all members of the same spiritual body. (193); 4,8
APPENDIX J
SII SOCIAL DESIRABILITY SCALE
SII Social Desirability Scale

* 1. I don't feel comfortable showing people who I really am. (16)

2. I love and forgive those who oppress me. (63)

3. Given my inner spiritual peace, I tend to think and act spontaneously, rather than act of fears based on past experiences. (105)

* 4. Lately I've had lots of feelings of confusion, anger, and sadness about who I am. (112)

* 5. I feel isolated because I don't seem to fit in. (150)

6. I enjoy each moment to the fullest. (172)

* 7. A lot of the time, I don't feel very good about myself. (186)

8. My self-esteem is not based on outer appearance, such as how I look or how much I weigh. (190)

* 9. I feel insecure and conflicted about who I am. (191)

*items are negatively scored.
LIST OF REFERENCES


