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AWARENESS OF PRIVILEGE AND OPPRESSION SCALE-2: CONSTRUCTION AND INITIAL VALIDATION

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AWARENESS OF PRIVILEGE AND OPPRESSION SCALE-2:
CONSTRUCTION AND INITIAL VALIDATION

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Education at the University of Kentucky

By
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Lexington, Kentucky

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2014

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The purpose of this study was to revise the Awareness of Privilege and Oppression Scale (Montross, 2003) and to improve upon the psychometric properties of the original instrument. The APOS-2 is a diversity training outcome measure that is designed to measure the social justice-related construct awareness of privilege and oppression. I retained 26 items from the original APOS (Montross, 2003) and utilized an expert focus group to generate new test items for the APOS-2. Feedback from an expert rater group was solicited and then incorporated into the APOS-2 to help reduce the number of items, improve item content, and evaluate content validity. The newly revised scale was then administered to a combined sample of 484 undergraduate students at a large public university through an internet-based survey. Item-analysis procedures and an exploratory factor analysis (EFA) with direct oblim oblique rotation were utilized to further reduce the number of items and then determine the psychometric properties of the final solution. The EFA of the APOS-2 data provided support for the theoretical four-factor solution. The observed Cronbach alpha reliability estimates for the final 40-item total score and subscale scores were as follows: Total score (.92), Awareness of Heterosexism (.84), Awareness of Sexism (.73), Awareness of Classism (.84), and Awareness of Racism (.86). The APOS-2 correlated low and positively ($r = .29$) with a measure of openness to diversity and negatively and close to zero ($r = -.10$) with a social desirability measure. These collective data suggest the APOS-2 may be a viable alternative to the original APOS with a stronger initial effort to link item content to the extant literature, improved subscale reliability estimates, continued support for the use of the theoretically derived subscales, and a predictable relationship with measures of convergent and discriminant validity.
KEYWORDS: Privilege and Oppression, Social Justice, Diversity Training, Awareness, Effectiveness

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A handful of pages in a dissertation is certainly not enough space to encapsulate the sacrifice, appreciation, commitment, and hard work that has occurred in order for me to actualize my goal of achieving a Ph.D. I came from very humble beginnings. I grew up poor and often relied on government assistance, charity, and the support of a few key relatives including my Aunt Linda, Uncle Daniel, and my wonderful quasi-adoptive grandparents, Doris and Buddy. These four individuals were monumental in making sure I had clothing, food, love, and often shelter over my head. There is no way I will ever be able to thank these four individuals enough for keeping me from falling through the cracks and for instilling in me the value of hard work and perseverance.

I was not always a successful student. I skipped kindergarten and then moved around a lot as a child. I struggled to learn to read by the end of first grade and failed second grade on my first attempt. I sputtered along as a student until two wonderful and caring foster parents took me in and provided the stability and encouragement I needed at a key moment in my life. Al and Patty taught me that I could be a successful student if I only applied myself and they made me believe I could be anything in life if I set my mind to it. Thanks to Al, Patty, and all of the other foster parents out there who often engulf themselves in challenging and difficult situations for the benefit of others.

The financial costs of college were overwhelming for me as a potential first-generation college student. My high school biology teacher and her husband (Cindy and Sherman) were very instrumental in helping me survive high school and believe that I could actually go to college. Cindy was an amazing cheerleader and mentor for me. She often believed in me even when I didn’t even believe in myself. She was someone I
could talk to when I felt like no one else would listen and her encouragement and mentorship made me never give up on my dream of going to college. Cindy and Sherman introduced me to Berea College, my eventual alma mater, and took me to visit the campus. These two educators went above and beyond their everyday work as teachers and gave me the courage I needed to become a first-generation college student. Thank you to Cindy and Sherman and all of the teachers out there who push, prod, encourage, and go above and beyond what is expected of them in order to help people like me reach for their dreams.

I fit in as a first generation college student at Berea College and it was a perfect fit for me. I, however, struggled to find my niche in academia and to find a major that suited me. College was hard and I wasn’t prepared in many ways for the intensity of college academic work. Dr. Bill Best, my college swim coach, took me under his wing just when I needed someone the most. I could only dog pedal when he allowed me to try out for the swim team. His patience and willingness to work with me led me from a group of swimmers who couldn’t swim well enough to make the traveling team all of the way to our national championships in a few short years. Bill and the swim team kept me involved and motivated me to stay in school. Without Bill’s patience and mentorship, I believe I would have thrown in the towel during the darkest moments in college when I struggled to find my way.

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I needed it the most. I am absolutely looking forward to the life we build together after I am done with school and I am filled with hope and promise for our future together.

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Caleb’s wisdom, ingenuity, kindness, and ability to touch the hearts of others suggest there is nothing he cannot accomplish in life. Kiera is so smart and mentally tough that I believe she will make a wonderful leader someday. It is my sincere hope that you two will look at this accomplishment as a source of pride, motivation, and see it as a push for you to find your own dreams to go after. I believe in you and I know you two can be successful at whatever you set your mind to do. My journey to this Ph.D. has not been easy and it was fraught with obstacles and challenges at many junctures. I have not done this alone, and I sincerely thank all of the wonderful people, named and un-named, who have made this Ph.D. possible.
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Chapter One: Introduction

The need for diversity training will grow as the demographic make-up of the U.S. population becomes more diverse and researchers are predicting dramatic demographic shifts will occur over the next century (Bernstein & Roberts, 2008; Hays, 2005; Pendry, Driscoll, & Field, 2007; U.S. Census Bureau, n.d.). Racial and ethnic population distributions represent one area where considerable change is predicted (Bernstein & Roberts, 2008; U.S. Census Bureau, n.d.). Bernstein and Roberts estimate that racial and ethnic minority group members currently make-up 33% of the U.S. population. This focal group is expected to grow to 54% of the population by the year 2050 (Bernstein & Roberts, 2008) and 60% by the year 2100 (U.S. Census Bureau, n.d.).

These projected demographic shifts may be challenging for both socially privileged and oppressed groups. Worell and Remer (2003) defined privileged groups as those that hold dominant power within a given society and have access to valued community resources (e.g., leadership positions in the workplace). Oppressed groups are those defined (by the dominant group) as inferior, undeserving, or different and are systematically denied access to valued societal resources (Worell & Remer, 2003). Privileged groups (e.g., Caucasians) will continue to see their majority status shrink and find it necessary to live and work in a more diverse environment in which they are forced to share access to valued community resources. Oppressed group members (e.g., racial and ethnic minorities) will also find these population shifts challenging as they continue to work to gain access to valued community resources (e.g., leadership positions in the workplace) that have historically been held by privileged group members who seek to maintain systemic power (Goodman, 2000). More effort needs to be made to prepare our
future citizens for this rapidly evolving and more culturally diverse environment.

Social justice-focused diversity training can play an active role in easing the challenges privileged and oppressed group members will face during this period of immense social change (Pendry et al., 1998). Social justice training refers to instructional seminars, workshops, or academic courses that promote the following six instructional goals: “(a) ongoing self-examination (of cultural stereotypes and personal biases), (b) sharing power (with those who lack power), (c) giving voice (to those who lack power), (d) facilitating consciousness raising (which includes gaining awareness of systemic privilege and oppression), (e) building on (intrapersonal) strengths, and (f) leaving clients with (the intellectual and experiential) tools needed to work toward social change” (Goodman et al., 2004, p. 793). This form of training encourages trainees to participate in social change projects aimed at reducing or eliminating systemic privilege and oppression at the individual, institutional, and societal levels (Goodman et al., 2004; Packard, 2009; Speight & Vera, 2004; Vera & Speight, 2003).

Several positive trainee outcomes have been attributed to participation in diversity training. Goodman (2000) noted that individuals who develop social justice skills often experience enhanced feelings of personal morality, are often better prepared to interact with other individuals who are culturally different from themselves, and are better prepared to gain and maintain employment in diverse work environments. In addition, Chavez and Weisinger (2008) noted that diversity training is also routinely employed in workplace settings to improve staff productivity and customer service skills. Despite these positive outcomes, few empirical outcome studies describing the specific benefits of participation in social justice training are found in the literature. Furthermore, this
body of research has been criticized due to its lack of methodological sophistication (Hays, 2005; Montross, 2003; O’Meara, 2001; Remer, 2008).

Hays, (2005), Montross (2003), O’Meara (2001), and Remer (2008) highlighted four fundamental problems with social justice training research. First, diversity training outcome studies are often plagued by poor design (e.g., use of convenience samples, posttest only design, use of strictly qualitative measures, use of psychometrically unproven measurement tools) (O’Meara, 2001; Remer, 2008). Second, there is a shortage of diversity training measures with basic psychometric evidence (i.e., evidence of test score reliability and validity) available to researchers who are interested in conducting empirical research in this area (O’Meara, 2001; Remer, 2008). Third, a shortage of construct-relevant measurement tools exists, so diversity training outcome researchers are often forced to settle for measurement approaches that are less than satisfactory (Hays; Montross). Finally, existing instruments routinely utilize specific sample groups (e.g., preservice teacher or counseling trainees) and, therefore, the instrument scores for these measures may lack validity across subject populations or testing environments (Montross, 2003; Remer, 2008).

Collectively, these four problems serve as obstacles for diversity training researchers and educators who are interested in conducting methodologically sophisticated, empirical, social justice-focused research. Sound methodology and instrument score reliability and validity are vital to the advancement of diversity training outcome research because researchers need to be certain the outcome measures they select reliably measure the target constructs these instruments purport to measure. Furthermore, it is clear that more work needs to be done to develop psychometrically
desirable, social justice-focused measurement tools that can be utilized with a variety of diversity trainee populations.

One social justice construct that has regularly appeared in the literature is awareness of privilege and oppression (Goodman, 2001; Hays, 2005; Montross, 2003). Awareness of privilege and oppression is a key social justice construct because it is a foundational step that must occur before an individual can move from a less to a more advanced level in many social identity development models (Cass, 1979; Helms, 1990; Sue & Sue, 1990, 1999; Worell & Remer, 2003). Identity development models are routinely employed in diversity training outcome research because these models provide detailed information on how an individual progresses from one stage or level of social identity development to another (O’Meara, 2001; Remer, 2008). For example, in Worell and Remer’s Social Identity Development Model an individual must gain awareness of systemic privilege and oppression (e.g., that sexual minorities are frequently the victim of discrimination while heterosexual individuals benefit from this situation) before that individual can move from level 1 (Pre-Awareness) to level 2 (Awareness) where that individual begins to recognize how personal and societal biases and stereotypes about others (e.g., gay men or lesbian women) may be contributing to the systemic discrimination of others.

The Awareness of Privilege and Oppression Scale (APOS; Montross, 2003) was specifically designed to measure the important theoretical transition point in Worell and Remer’s (2003) model where an individual begins to gain awareness of systemic privilege and oppression. The APOS is a 50-item, Likert-type, self-report scale that measures an individual’s awareness of privilege and oppression in four areas: (a) race, (b)
gender, (c) sexual orientation, and (d) socioeconomic status (SES)-based privilege and oppression (Montross, 2003). Cronbach alpha reliability estimates were provided for the APOS total score (.83) and subscale scores (range from .46 to .75) and are based on a sample of 257 undergraduate students (Montross, 2003). In a follow up study utilizing 278 undergraduate students from a broad variety of academic backgrounds, Remer (2008) reported pre (.91) and post (.93) Cronbach alpha reliability estimates for the APOS total score, but no reliability evidence was provided for the subscales.

Test score validity for the APOS is described in two separate studies (Montross, 2003; Remer, 2008). Montross utilized a known groups validation model and found that undergraduate students scored significantly lower ($t(383) = 27.51, p < .000$) than a sample of psychology professionals attending a national conference on diversity issues. In addition, Montross (2003) provided evidence of convergent and discriminant validity. In a separate study, Remer (2008) incorporated the APOS into a pre-post, control vs. treatment group design to evaluate the effectiveness of diversity training in a sample of undergraduate students. Remer reported significant post-test differences between the treatment groups who received social justice-focused diversity training and the control groups who did not receive the training suggesting the APOS may be utilized as a social justice-focused diversity training outcome measure.

There are six reasons that the APOS represents a valuable tool to social justice-focused diversity trainers and researchers. The first four reasons are because the APOS directly addresses all four of the diversity training literature problems noted by Hays (2005), Montross (2003), O’Meara (2001), and Remer (2008). First, the APOS specifically measures the social justice training construct of awareness of privilege and
oppression, so the instrument is construct-relevant. Second, Montross and Remer provided acceptable theoretical and empirical evidence for test score reliability and validity. This evidence allows researchers and educators who are interested in utilizing the measure in research to judge the merits of the instrument based on psychometric properties rather than a weaker method of selection based on an instrument's assumed content validity. Third, the APOS is the only measure that has been demonstrated to effectively measure social justice training outcomes in a methodologically sophisticated pre-post, control vs. treatment design (see Remer) which suggests that social justice trainers and researchers can utilize the instrument to effectively measure social justice training outcome. Fourth, the APOS has been utilized with a broad range of undergraduate students and a group of psychology professionals. This broad range suggests the instrument may be more generalizable to researchers and educators who seek to examine a broad group of trainees rather than other instruments with more limited sample groups (e.g., instruments utilized exclusively with preservice teachers). Fifth, the APOS is the only outcome instrument that measures awareness of SES-based privilege and oppression. Finally, the four subscales included in the APOS (i.e., racism, sexism, heterosexism, and classism) represent the most common topical areas covered in social justice training programs (Flammer, 2001; Montross, 2003); therefore, the APOS has the potential to be utilized as an outcome measure in a significant percentage of current diversity training courses.

The data noted by Montross (2003) and Remer (2008), however, highlight a number of psychometric problems with the APOS that need to be addressed before the instrument can live up to its full potential. First, only the total score reliability estimates
provided by Montross (.83) and Remer (.91) demonstrate acceptable reliability using Nunnally’s (1978) recommendation that Cronbach alpha coefficients be .80 to greater than .90 to be considered acceptable. Second, Montross did not establish a factor loading cut-off score for evaluating the instrument’s factor loading structure (e.g., the factor loading for item 20 was -.187). Scott (1968) suggests using a minimal cut off score of .30 during item analysis procedures which means that items with factor loadings less than .30 would be eliminated and items with factor loadings of .30 or higher would be retained and included in future drafts of the measure. Third, Montross found that many of the subscale items loaded on unintended factors. These problematic items either need to be altered or discarded from the measure entirely in order to ensure the APOS’ items fully represent the intended subconstructs of specific types of privilege and oppression. Collectively, more work needs to be done to improve the problematic APOS items, subscale score reliability estimates, and item factor loading properties before the APOS can live up to its full potential as a valuable assessment tool for social justice-focused researchers and educators.

Although the APOS total score currently demonstrates important elements of reliability and validity (Montross, 2003; Remer, 2008), the work of Flammer (2001), Hays (2005), and Hays, Chang, and Decker (2007) suggest that the APOS falls short of its full potential because of the lack in clarity attributed to its low subscale score reliability estimates. Higher APOS subscale score reliability estimates would allow the APOS to be used to provide diversity trainers and researchers with more specific information regarding individual and group progress. For example, a diversity trainer could examine the subscale scores from pre to post-treatment to gauge the effectiveness
with course material related to gender privilege and oppression and then use this information to make decisions about whether future course content needs to be added, removed, or adapted in some way to better meet the needs of students. It is also possible that instructors could use subscale pre-data from diversity training course participants to identify overall course cohort weakness (e.g., lower awareness of privilege and oppression) and then tailor course content to better address awareness of gender, SES, sexual orientation, or racial privilege and oppression as needed. Further, psychometrically acceptable subscale scores (i.e., in terms of reliability and validity) could be utilized by researchers to better define variables that contribute to or inhibit learning outcomes for diversity training.

The overall goal of this research project was to highlight the need for and then carry out an extensive and empirically-based revision project on the APOS. In Chapter Two, relevant background information concerning the construct of awareness of privilege and oppression, diversity training outcome measurement, social identity development, and test construction methodology are presented to provide a theoretical and empirical basis for the revision project. Chapter Three describes the methodological steps that were taken as part of the initial development and validation study of the revised APOS. Finally, the results of the revision project and a discussion of the significance of the findings are described in the fourth and fifth chapters respectively.

The APOS revision project was extensive in nature with the goal of revising, eliminating, or adding new items to the measure in hopes of improving subscale score reliability estimates and item factor loading properties. The current project utilized Montross’ (2003) original data to identify and eliminate items that did not perform well
during her final analysis of the measure. New items were then written based on a review of the extant literature in order to improve the overall measure. The revised APOS was then presented to a focus group trained in item analysis and construction techniques and with direct research experience with the original APOS for an evaluation of the items. Focus group feedback was then incorporated into the measure and the revised APOS was then sent to a group of experts with knowledge of one or more subscale content areas for additional feedback purposes. Finally, the revised APOS and a group of comparison measures were administered to a combined sample of university students in order to provide the initial reliability and validity evidence included in this study. A review of the extant literature is provided next in Chapter Two.
Chapter Two: Review of the Selected Literature

This chapter provides a review of the literature relevant to the revision of the Awareness of Privilege and Oppression Scale (APOS; Montross, 2003). The rationale for a revised APOS and a description of the need for an empirically-based revision process were provided in Chapter One. This second chapter begins with a review of test construction methodology. It is advantageous to utilize empirically-based test construction methodology in order to maximize the potential benefits and minimize any potential methodological flaws in a test-revision project. The consensus of the test construction models discussed in this chapter suggested a comprehensive review of the extant literature was necessary during the APOS revision process. As a result, subsequent sections in this chapter highlight and critique the theoretical context of the APOS (i.e., social justice vs. cultural competency instructional methods), the identity development literature (this is often linked to the measurement of diversity training outcome), and the social justice-focused diversity training outcome measurement literature. Finally, the literature relevant to the four specific forms of privilege and oppression represented in the APOS (i.e., racism, sexism, heterosexism, and classism) are reviewed in order to accentuate the research base that was utilized during the construction of new items for the revised measure. A review of the test construction methodology literature is provided first in order to detail the structure that was utilized in the current project.

Test Construction Methodology

Test construction is a thriving and complex component of educational and psychological practice. Clark and Watson (1995) identified 1,726 published articles
related to test construction or test refinement over a 6-year period in English-language journals alone. Eighty-two percent of the articles reviewed by Clark and Watson introduced one or more new instruments and another 10% focused on the refinement of existing instruments. Thorndike (2004) noted that 2,780 published tests are available for purchase in English-language catalogues and added that many researchers and clinicians have access to thousands of additional unpublished and out of print measures. These data suggest the test construction field is robust and is likely to continue to grow.

Many considerations must be made before an instrument is ready to be used for clinical or research purposes including theoretical relevance, psychometric properties, cultural appropriateness, and social consequences (Knight, Tein, Prost, & Gonzales, 2002; Thorndike, 2004; Messick, 1989a, 1989b, 1995). Scale development involves numerous steps and test authors should expect to complete two or more iterations before a measure is deemed acceptable for use (Benson, 1998; Clark & Watson, 1995; Downing, 2006; Thorndike, 2004). Further, Clark and Watson suggested there are no guarantees that any test will ultimately produce meaningful score interpretations. Test construction methodology that is based on best practices is vital to creating test scores with meaningful interpretive capabilities (Clark & Watson, 1995).

There is evidence that some of the methodological practices found in published test construction or refinement articles are weak (Buckendahl & Plake, 2006; Hubley & Zumbo, 1996; Smith & McCarthy, 1995). Hubley and Zumbo (1996) indicated many test authors provide inadequate statistical evidence for test consumers (e.g., only demonstrating evidence of content validity or failing to provide evidence of discriminant validity). Incomplete statistical evidence can weaken validity and cast doubt on an
individual’s ability to make accurate interpretations from test scores (Benson, 1998). Smith and McCarthy discussed a number of observed underreporting practices. Their observations included inappropriate use of statistical techniques, failure to replicate findings on independent samples, and sparse reporting of discriminant validity evidence (among others) (Smith & McCarthy, 1995).

A number of professional organizations including the American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurements in Education (NCME) all have established procedural and statistical standards to address test development (American Educational Research Association, American Psychological Association, & National Council on Measurements in Education, 1999; American Psychological Association, 2002; Wilkinson & the American Psychological Association Task Force on Statistical Inference, 1999). These organizations, however, do not currently have any enforcement mechanisms in place to monitor test construction and refinement practices, so test developers are often left to monitor themselves (Buchenwald & Plake, 2006). Self-regulation is not an ideal situation because it allows the biased views of the test author to play a role in reporting practices and may thus lead to the data underreporting practices observed in published articles (Buchenwald & Plake, 2006).

The concerns about test construction practices seem warranted and scale developers must meticulously understand and commit to uphold current norms and best practices or risk creating unreliable instruments that may fail to measure intended constructs in target populations (Clark & Watson, 1995; Knight et al., 2002). It is important that any revision of the APOS must be based on accepted methodology to give
the instrument the best opportunity for success and to avoid contributing fruitlessly to the plethora of psychometric instruments that are currently available. The analysis of test construction methodology begins with a review of three models. Test construction models created by Downing (2006), Smith and McCarthy (1995), and Clark and Watson are reviewed in the subsections that follow.

**Downing’s test construction model.** Downing (2006) offers a comprehensive 12-step scale development model that is descriptively geared toward the creation of achievement oriented tests. The 12 steps are as follows: (a) develop an overall plan for the assessment, (b) identify content definition, (c) develop test specifications, (d) item development, (e) test design and assembly, (f) test production, (g) test administration, (h) scoring test responses, (i) passing scores, (j) reporting test results, (k) item banking, and (l) test technical support (Downing, 2006). The advantages and disadvantages of this model are discussed below.

The Downing (2006) model is advantageous for two reasons. First, the model spans the test construction process from concept development through the revision, administration, and scoring processes. A second advantage of the Downing model is that the author links 11 of the 12 steps to relevant AERA, APA, and NCME (1999) standards which serves as a check for test developers that each step is based in best practices. The Downing model, however, has limitations. First, this model is intended for the creation of new instruments. The APOS revision project, however, will involve building off of an existing measure rather than creating a new instrument. Therefore, the use of the Downing model with the APOS revision project would require extensive adaptation to reflect the work that has been completed and any new work that remains. A second
disadvantage of the Downing model is that no studies were found demonstrating the practical application of this model, so there are no practical applications of this model for test developers to evaluate at this time. Finally, the Downing model refers to the creation of computer-adaptive assessments where items can be delivered to participants based on actual response patterns once the participant has begun the test (e.g., items that the computer deems more or less difficult for the individual participant may be presented to a participant based on his or her previous response). The APOS is not designed to be a computer-adapted test, such as, the item banking step simply does not apply. As a result, the specific aspects of each of the 12 steps will not be covered in more detail in this review.

**Smith and McCarty’s test refinement model.** Smith and McCarthy (1995) suggested instrument revisions are a normal, necessary, and often neglected component of the test development process. The authors provided a 5-step model designed to guide test developers who are attempting to revise an existing instrument. Smith and McCarthy’s five-step model includes the following: (a) identification of the measure’s aggregational or hierarchical structure, (b) identifying internal consistency estimates for each unidimensional construct, (c) determining the content homogeneity for each unidimensional construct, (d) including items that discriminate among participants at the desired level of intensity of the attribute, and (e) replicating findings. The model assumes the items and measure have previously been created through a formal and substantive test construction process. That construction process may include initial developmental or statistical techniques such as utilizing expert raters in the construction of the instrument, pilot testing, conducting an item analysis, and determining internal consistency estimates.
for the measure (among others) (Smith & McCarthy, 1995). In other words, the model assumes that decisions about item retention or elimination from the existing item pool are the only steps in the process that remain in the development of the measure.

The Smith and McCarthy (1995) model offers advantages and disadvantages. The advantage of this model is that it focuses on the test refinement process by providing a step by step process for item selection and psychometric evaluation purposes. Scales that need minor revisions including determining which items to retain or delete, additional analysis of factor structure, and further evidence of scale or subscale reliability estimates would benefit from this model. The Smith and McCarthy model demonstrates a key limitation that is relevant to the refinement of the APOS. A revised APOS will require extensive item rewriting, the development of a new item pool, pilot testing, and refinement steps that are not detailed in the Smith and McCarthy model. A model that more closely encompasses the work that needs to be done to the APOS would be more desirable because such a model would require few adaptations for the current project. As a result, specific aspects of the five-step model will not be covered in more detail here.

**Clark and Watson’s test construction model.** Clark and Watson (1995) offer a six-step model for test construction. The six steps are as follows: (a) conceptualization and initial item pool development, (b) literature review, (c) creation of an item pool, (d) structural validity, (e) initial data collection, and (f) psychometric evaluation. There are three advantages of the Clark and Watson model. First, the model has all of the steps needed for a full test construction project, which makes it more easily adaptable (i.e., unneeded steps or processes included in the model can simply be omitted) than either the Downing (2006) or Smith and McCarthy (1995) models. Second, this model is designed
to address the creation of new, self-report, attitudinal measures so the language provided in the model is specifically geared toward Likert-scale-type instruments such as the APOS. Further, the Clark and Watson model is the most cited test construction model reviewed for this project. The disadvantage of the Clark and Watson model is that it must be adapted in order to address the revision of existing measures, but this limitation is overshadowed by the advantages of the model. As a result, the Clark and Watson model appears to be more appropriate for the current revision project than either the Downing or the Smith and McCarthy models. The six steps of this model are discussed in more detail in the subsections below.

**Step 1.** The first step in Clark and Watson’s (1995) model is to clarify the theoretical conceptualization of the target construct and develop the initial item pool. This step is intended to identify, describe, and explore the target construct and its relationship to other relevant constructs. Clark and Watson noted it is not necessary to begin the scale development process with a fully described set of interrelationships between the target construct and other relevant constructs located in the surrounding nomonological net. However, any thought given to the theoretical underpinnings of the scale prior to the construction process “increases the likelihood that the resulting scale will make a substantial contribution to the psychological literature” (Clark & Watson, 1995, p. 310). This quote suggests the initial step in the APOS revision project must involve identifying, defining, and describing the target constructs associated with the instrument including theories and constructs. These constructs and theories will be explored in greater detail during the next step.
**Step 2.** The second step in Clark and Watson’s (1995) test construction model is to conduct a review of the literature for the target construct and any subconstructs identified during step 1. The review should include an investigation of existing scales (similar and dissimilar to the intended scale), as well as, any theoretical or empirical evidence associated with the construct. Clark and Watson noted that “unless the prospective test developer can clearly articulate ways in which the proposed scale will represent either a theoretical or an empirical improvement over existing measures, it is preferable to avoid contributing to the needless proliferation of assessment instruments” (p. 311). Therefore, the APOS revision project must involve a significant review of the awareness of privilege and oppression construct, any subconstructs that are included in the scale, and provide background information that will describe the context of the instrument.

**Step 3.** Clark and Watson’s (1995) third step in the scale development process is to create a representative item pool. The item pool should include content from all known or hypothesized theoretical and content areas that encapsulate the full range of the putative trait. In addition, these items should include content from any alternative theories of the target construct in order to span the range of current perspectives (Clark & Watson, 1995). Two key inferences can be drawn from this process of theoretical and content over-inclusion. First, the initial item pool ought to be “broader and more comprehensive than one’s own theoretical view of the target construct” (Clark & Watson, 1995, p. 311). Second, it is acceptable for the initial item pool to diverge from the target construct being studied. Statistical techniques can be utilized after item testing to help eliminate items that may be unrelated or that fall outside of desirable psychometric
standards (Clark & Watson, 1995).

The item construction process may “involve several periods of item writing, followed in each case by conceptual and psychometric analysis” (Clark & Watson, 1995, p. 311). Clark and Watson identified three recommendations for the item writing process (Kline, 1986, also provides a list of guidelines and recommendations for item writers). First, encourage item writers to use language that is clear, succinct, and suitable for the reading level of the intended population. Second, item writers should avoid double-barreled questions that are so complex that these items tap two or more separate characteristics. Items that become too complicated may inadvertently tap more than one intended construct and there is no definitive way to know exactly which construct the item is measuring. Third, item developers must choose response formats and labels that seem appropriate for the specific instrument. The original version of the APOS utilized a 4-point, Likert-type response scale. Clark and Watson noted that no single format is preferable over the other when this format is used intelligently, but a more recent study suggests that response categories may be more important than previously known (see Weng, 2004).

Weng (2004) studied the effects of varying numbers of Likert-type response categories on internal consistency and test-retest reliability and found that “scales with more categories have a better chance of attaining higher reliability” (p. 969). Weng noted that rating scales with “fewer than five scale points should…be discouraged if possible” (Weng, 2004, p. 969) and identified scales with six or seven response categories as ideal for college students when seeking to obtain “reliable and consistent participant responses” (p. 969). The initial version of the APOS (Montross, 2003) utilized a four-
point Likert-type scale and one of the primary concerns of the instrument’s subscales is low reliability estimates. Two other scales that measure awareness of privilege and oppression, the Privilege and Oppression Inventory (POI; Hays, 2005) and the Social Privilege Measure (SPM; Black, Stone, Hutchinson, & Suarez, 2007), utilize 5- and 6-point Likert-types rating scales respectively. A revised APOS should include an increase in the number of response categories from the current four response categories to a new six response categories in order to comply with Weng’s recommendations and to bring the APOS in line with its competitors (i.e., the POI and the SPM).

**Step 4.** The fourth step in Clark and Watson’s (1995) model instructed test developers to identify and develop the structural validity strategies that will be utilized once the test construction data have been obtained. Two classical test theory statistical techniques that are frequently utilized as test construction strategies include internal consistency and exploratory factor analysis (Clark & Watson, 1995). Internal consistency is the “single most widely used method for item selection” (Clark & Watson, 1995, p. 313). This technique involves identifying the corrected item-total correlations and coefficient alpha for the scale and any theoretically derived subscales and then evaluating these statistical characteristics to determine whether the test or subtests will be improved by retaining or eliminating items. Researchers also commonly use exploratory factor analysis during the test development process (Clark & Watson, 1995). Factor analytic strategies typically involve utilizing theoretical and content knowledge to make assumptions about the structure of a measure and then examining item factor loading characteristics to make educated decisions about whether to keep or discard items. Clark and Watson suggested that test developers consider both internal consistency and factor
structure when making decisions about item retention since retaining or eliminating test items often impacts both reliability and factor structure.

**Step 5.** The fifth step in Clark and Watson’s (1995) model is to perform the initial data collection. Test items should be reviewed by an initial group of individuals to explore item formats, get feedback on the clarity of items, and obtain feedback on the test as a whole. This feedback can then be utilized to make any needed changes to the measure prior to larger-scale data collection efforts. Clark and Watson suggested the first major testing should include a minimum of 300 respondents and include other scales that are expected to demonstrate discriminant or convergent validity.

**Step 6.** The sixth and final step in Clark and Watson’s (1995) test construction model is to perform a psychometric evaluation of the obtained data. This process consists of (a) examining item response distributions to look for items with limited response variability, (b) assessing internal consistency and corrected item total correlations, (c) conducting an exploratory factor analysis; and (d) determining the applicability of subscales (Clark & Watson, 1995). The purpose of this process is to identify test items that will be eliminated or retained.

Test developers begin by analyzing the item response distributions for all of the items included in the measure to look for items with limited or no variability (e.g., items in which all participants responded “strongly agree”) (Clark & Watson, 1995). Items with limited variability are undesirable for three reasons. First, these items divulge little information that will help researchers assess minute and nuanced differences between individual test participants who exhibit varying levels of the target construct. Second, items with limited variability “are likely to correlate weakly with other items in the pool...
and therefore will fare poorly in subsequent structural analyses” (Clark & Watson, 1995, p. 315). Third, items with weak correlations serve to destabilize the overall internal consistency of the measure. Items with limited or no variability should be eliminated from the measure. Conversely, items with high variability should be retained because these items provide maximum information about minute differences between test participants (Clark & Watson, 1995).

Next, test developers should assess the inter-item correlations and coefficient alpha to look for evidence of internal consistency (Clark & Watson, 1995). Test developers hope to observe low to moderate inter-item correlations ranging from .15 to .50 with a majority of inter-item correlations falling close to the mean because these correlations provide evidence that the items are sufficiently related. In addition, test developers should evaluate the internal consistency of the measure by looking at coefficient alpha (Clark and Watson, 1995). Nunnally (1978) suggested that instruments should exhibit Cronbach alpha coefficients of .80 or higher for a test to demonstrate acceptable internal consistency.

Test developers should also examine the structural validity of a new or revised measure by conducting an exploratory factor analysis on the data (Clark and Watson, 1995). Factor analytic techniques are utilized to determine the dimensionality or factor structure of a measure. Montross (2003) asserted that the APOS was made up of an overarching construct of awareness of privilege and oppression and subconstructs of more specific racial, gender, heterosexual, and socioeconomic (SES)-based awareness of privilege and oppression. Exploratory factor analytic techniques alone cannot confirm Montross’ assertions, but this technique can provide some support for the construct
validity of the APOS. Clark and Watson suggested dropping items with weak factor loadings below .35, however, the process of selecting a cutoff value is often arbitrary and numerous standards exist within the literature. Scott’s (1968) less stringent standard of eliminating items with factor loadings coefficients below .30 is frequently employed in test construction methodology. In addition, Clark and Watson recommended dropping items that load heavily on multiple factors.

The final statistical properties of the target measure can be identified once the item retention and elimination process has concluded and a final factor structure solution is identified (assuming that a final solution is identified) (Clark & Watson, 1995). It is important that test developers report internal consistency estimates for the scale and any applicable subscales for the final scale. Then the data from the target measure can be compared with other measures included in the study to provide evidence of discriminant and convergent validity (Clark & Watson, 1995).

**Test construction methodology summary.** Test construction methodology is an important step in the development and refinement of measurement tools. Clark and Watson (1995) point out that utilizing best practices does not ensure that a newly constructed or revised measure will produce interpretable scores, but this process provides structure and credibility to the test construction and refinement industry in an era where industry standards are largely self-enforced. In this section, three test construction or refinement models were considered to serve as a guide to the current revision project for the APOS. The Clark and Watson model stands out as the most appropriate and easily adaptable of the models for the APOS revision given the extensive work that needs to be completed on the measure. The first two steps in the Clark and
Watson model suggest the initial process of test development should involve a thorough review of the theoretical underpinnings of the intended measure and a review of existing instruments. The remaining sections included in this second chapter discuss important background information relevant to the theoretical and empirical underpinnings of the APOS revision project. Next, the distinctions between the two predominant theories of diversity training instructional models are discussed in greater detail to better define the theoretical background of the APOS.

**Social Justice vs. Multicultural Competency Training**

The counselor and teacher education-focused diversity training literature reveals two primary educational models: social justice (Goodman, 2001) and multicultural competency (Ali & Ancis, 2005). Montross (2003) specifically identified the APOS as a social justice measure so it is important to understand the differences or similarities between these two educational approaches to fully understand the context of the instrument. Social justice and multicultural competency training differ primarily in instructional goals, but there is some overlap between the two types of training. These differences and similarities are discussed in greater detail below.

First, Goodman et al. (2004) described the following six goals of social justice training: “(a) ongoing self-examination (of cultural stereotypes and personal biases), (b) sharing power (with those who lack power), (c) giving voice (to those who lack power), (d) facilitating consciousness raising (which includes gaining awareness of systemic privilege and oppression), (e) building on (intrapersonal) strengths, and (f) leaving clients with (the intellectual and experiential) tools needed to work toward social change” (p. 793).
Goodman (2001) describes two important components, which define social justice training and distinguish it from other forms of diversity training. First, social justice training purports that all individuals have a personal role in the maintenance of societal privilege and oppression. Second, social justice training emphasizes social advocacy or the importance of adopting a change agent mentality, which actively works to reduce systemic privilege and oppression at individual, community, institutional, and societal levels. Social justice training seeks “to establish a more equitable distribution of power and resources so that all people can live with dignity, self-determination, and physical safety” (Goodman, 2001, p. 4). This focus on social justice, advocacy, and shifting the balance of societal power and resources sets social justice training apart from most forms of the second or multicultural competency approach to diversity training.

Ali and Ancis (2005) identify the following five distinct multicultural competency training approaches: (a) Exceptional and Culturally Different, (b) Human Relations, (c) Single Studies, (d) Multicultural Education, and (e) Multicultural and Social Reconstruction. First, the Exceptional and Culturally Different approach strives to facilitate academic achievement for diverse students by teaching these individuals assimilation skills designed to help them integrate into the mainstream culture. This approach focuses on students with disabilities and individuals from diverse cultural groups who “have not achieved because their home and cultural environments are different from mainstream American (U.S.) environments” (Ali & Ancis, 2005, p. 70). Second, the Human Relations approach seeks to improve tolerance and positive relationships between members of different cultural groups by reducing stereotypes and building intercultural knowledge (Ali & Ancis, 2005). Students who participate in
Human Relations type training are presented with accurate information about different cultural groups and engage diverse individuals through cooperative learning methods such as role-playing exercises and community projects.

The emphasis in these first two multicultural competency approaches rests largely upon building intercultural knowledge, communication skills, and awareness of personal stereotypes and biases. A number of authors (Albee, 2006; Goodman, 2001; Speight & Vera, 2004; Vera & Speight, 2003) have criticized multicultural competency approaches that do not focus on social justice. These authors suggest non-social justice-focused multicultural competency approaches limit the impact of diversity education to the individual student who participates in training and, therefore, fail to prepare students to implement institutional and societal-level changes that will have a meaningful impact on socially disadvantaged cultural groups (Speight & Vera, 2004; Vera & Speight, 2003).

The third through fifth multicultural competency approaches noted by Ali and Ancis (2005) do not focus exclusively on building intercultural knowledge, communication skills, and self-analysis of personal stereotypes or biases. Instead, these three models place varying degrees of emphasis on social justice-related principles; similar to the social justice training presented by Goodman (2001) and Goodman et al. (2004). The third or Single Studies approach described by Ali and Ancis strives to educate individuals about the lack of social, economic, and political power of specific cultural groups (e.g., African American) and seeks to liberate disadvantaged groups from systemic oppression. Next, the fourth or Multicultural Education approach “describes methods that promote human rights, social justice, equal opportunity, cultural diversity, and the equitable distribution of power for oppressed groups” (Ali & Ancis, 2005, p. 73).
Finally, the fifth or Multicultural and Social Reconstructionist approach works to enact personal and structural equality by providing a critical analysis of all isms (e.g., racism, heterosexism), teaching students to be social change agents, utilizing personal experience as a means to evaluate privilege and oppression, and motivating students to make a positive difference within their communities through social advocacy (Ali & Ancis, 2005). The Single Studies, Multicultural Education, and Multicultural and Social Reconstructionist approaches subsumed under the multicultural competency training model all place greater emphasis on social justice and advocacy than the Human Relations and Exceptional and Culturally Different approaches. The Multicultural and Social Reconstruction approach, however, is remarkably similar to the social justice-focused diversity training model advocated by Goodman (2001) and Goodman et al. (2004). As a result, the Multicultural and Social Reconstruction approach and the social justice model will both, from this point forward, be referred to as social justice perspectives for the sake of brevity and in light of the fact that both perspectives share similar goals. Next, the theoretical discussion will examine the significance of identity development to diversity training outcome measurement.

**Identity Development Theory**

Diversity training outcome measurement is often theoretically linked to identity development models (Montross, 2003; O’Meara, 2001; Remer, 2008). Identity development models describe the “developmental process and suggest ways to influence and measure it” (Remer, 2008, p. 18). These models often outline the growth continuum an individual travels as he or she becomes more aware of his or her own social identity and the cultural power differentials that relate to that social identity within a given
society. Goodman (2001) indicated that raising a student’s awareness of negative cultural power differentials and the collective impact of these power differentials on oppressed and privileged groups is an important goal of social justice-focused diversity training.

Identity development models have been created to explain racial (Helms, 1990; Sabnani, Ponterotto, & Bordovsky, 1991; Sue & Sue, 1990, 1999), gender (Downing & Roush, 1985), sexual orientation (Cass, 1979, 1984; McCarn & Fassinger, 1996; Troiden, 1989), and social identity development (Worell & Remer, 2003) (among others). Montross (2003) reviewed a number of identity development models during the initial construction of the APOS before ultimately utilizing specific aspects of Worell and Remer’s Social Identity Model as the theoretical basis for the instrument. Relevant feminist, sexual minority, racial, and social identity development models are discussed below because these models directly relate to the four APOS subscales. Please see O’Meara (2001) and Montross for a broader review of identity development models as they relate to diversity training, or McCarn and Fassinger (1996) for a chapter review and synthesis of sexual minority identity development models. Downing and Roush’s Feminist Identity Development Model is discussed first.

**Downing and Roush’s Feminist Identity Development model.** Downing and Roush (1985) presented a feminist identity development model for women. The Downing and Roush model contained the following five stages: (a) *Passive Acceptance*, (b) *Revelation*, (c) *Embeddedness-Emanation*, (d) *Synthesis*, and (e) *Active Commitment*. The Passive Acceptance stage is marked by the passive acceptance of traditional gender roles for women. Women in this stage may deny or lack awareness of the pervasive
individual and systemic oppression against them, perceive traditional gender-roles as advantageous toward women, and view men as superior to women (Downing & Roush, 1985).

Downing and Roush’s (1985) second or Revelation stage begins when a woman recognizes that all women are victims of prejudice and discrimination. This revelation often results from a negative life experience (e.g., realization of discrimination against a female child) in which the individual woman can no longer deny the existence of societal oppression toward women. Women who enter this stage often experience a range of emotions. Women feel anger toward men for the unequal power dynamic associated collectively with male and female relationships, guilt for their own individual previous acceptance of this oppression, and a newfound sense of respect for other women who have been exposed to systemic oppression (Downing & Roush, 1985).

Women begin to better understand the complex nature of their relationships with men in the third or Embeddedness-Emanation stage (Downing & Roush, 1985). Females find it difficult to completely withdraw from male and female interactions due to the intricate role women play with men as spouses, mothers, daughters, sisters, and lovers. Women often feel connected to other women and seek others who will affirm their new identity. The anger experienced during the second stage begins to subside and is replaced by cautious interaction with men.

Downing and Roush’s (1985) Synthesis or fourth stage is marked by women’s newfound ability to accurately distinguish between “oppression-related explanations for (sexist) events and other causal factors” (p. 702). Females develop a truce with the world whereby they are able to “channel their energies productively, but also to respond
appropriately to experiences of oppression and discrimination” (p. 702). Women are no
longer angry with all men and begin to evaluate men on an individual basis.

Women are more certain about their individual feminist identity and continue to
have a positive view of women in the fifth or Active Commitment stage of Downing and
Roush’s (1985) feminist identity development model. Men are deemed equal to and, yet,
different from women. Women also make a commitment to meaningfully confront and
address sexism with the goal of living in a non-sexist world. Troiden’s (1989)
Homosexual Identity model is similar to the Downing and Roush model because the two
models focus exclusively on the development of oppressed group members.

**Troiden’s Homosexual Identity model.** Troiden’s (1989) model of homosexual
identity development contains the following four stages: (a) Sensitization, (b) Identity
Confusion, (c) Identity Assumption, and (d) Commitment. According to Troiden,
homosexual identity development begins prior to puberty with the Sensitization stage.
This first stage is distinguished by feelings of marginalization due to self-perceptions that
the individual is different from other same-sex peers. Males and females in the
Sensitization stage often describe a historical lack of shared interests (e.g., sports) with
other same-sex peers which lead to feelings of marginalization during interactions with
other same-sex peers. Gay and lesbian individuals often report these repeated feelings of
marginalization helped them realize and cope with the notion that they are homosexual
(Troiden, 1989).

The second or Identity Confusion stage often occurs during adolescence (Troiden,
1989). During this stage, individuals begin to recognize that their affective and/or
behavioral experiences may be viewed as homosexual. The Identity Confusion results
from an internal struggle intended to rectify previously held self-perceptions of heterosexuality with the growing suspicion that they are homosexual. Negative societal stigma over homosexuality and a lack of accurate personal understanding of homosexuality add to the inner struggle that gay and lesbian individuals face in this stage. A fear of societal censure may result in feelings of guilt and solitude which ultimately serve to limit sexual expression and dialogue with other homosexual individuals (Troiden, 1989).

Troiden’s (1989) third stage of homosexual identity development is Identity Assumption. This stage may occur sometime during late adolescence or adulthood. Troiden notes “the earmarks of this stage are self-definition as homosexual, identity tolerance and acceptance, regular association with other homosexuals, sexual experimentation, and exploration of the homosexual subculture” (p. 59).

A homosexual individual enters the final or Commitment stage in Troiden’s (1989) identity development model when he or she commits him or herself to a loving same-sex relationship. It is at this stage of development when a gay male or lesbian determines that the internal benefits associated with living externally as a heterosexual are no longer worth the internal costs to him or herself. Self-acceptance and internal peace with the individuals’ homosexual identity occurs (Troiden, 1989). Helms’ (1990) Black and White identity development models are presented next and offer both oppressed and privileged group perspectives on development.

**Helms’ Black and White Identity models.** Helms (1990) presents two stage models entitled the Black Racial Identity Development Model and the White Racial Identity Development Model. The Black Racial Identity Model details four stages and
the White Racial Identity Model contains six stages. The two models will be discussed separately below because of the lack of direct overlap between the stages of the two models. The information on the Black identity development model will be presented first and then followed by a description of the White identity development model.

**Black Racial Identity model.** Helms’ (1990) Black Racial Identity Model contains the following four stages: (a) Pre-Encounter, (b) Encounter, (c) Immersion/Emersion, and (d) Internalization. In the Pre-Encounter stage, African Americans share and value White cultural standards and strive to gain acceptance by the dominant culture. In the second or Encounter stage, Black individuals are exposed to negative events (e.g., they learn about racist acts or are personally victimized by racism) that force them to become aware of the power differentials that exist in society. This awareness of the existence of privileged and oppressed groups may foster acrimony among African Americans for having valued a majority culture that is now seen as oppressive. This acrimony may lead to the third stage of identity development that Helms labels Immersion/Emersion. In this third stage, Black group members immerse themselves in African American heritage and adopt more favorable views of themselves than in earlier stages. In the fourth or Internalization stage, African Americans maintain positive views of their cultural heritage while the acrimony toward Caucasians experienced during earlier stages fades so that members of the White majority group are now seen as simply different from African Americans. Black individuals, in the fourth stage, are more aware of the impact of culture on individual attitudes and behaviors and understand that there are some positive aspects among the dominant cultural group.
**White Racial Identity model.** Helms’ (1990) White Racial Identity Model contains the following six stages: (a) *Contact*, (b) *Disintegration*, (c) *Reintegration*, (d) *Pseudo-Independence*, (e) *Immersion/Emersion*, and (f) *Autonomy*. In the first or Contact stage, White individuals are unaware of their own racial identity and the benefits that are inherently associated with being a member of the dominant culture. Caucasians enter the Contact stage when they are first exposed to Black individuals and may exhibit curiosity or anxiety related to inter-cultural interactions. In the second or Disintegration stage, White individuals gain awareness of differential power dynamics between Caucasians and African Americans and begin to struggle with the moral dilemma of inequitable power structures. In the third or Reintegration stage, Caucasians acknowledge there are power inequities within U.S. society, but attribute the positive effects of privilege and the negative effects of oppression to natural causes (Helms, 1990). For example, Whites may view the privileges associated with being the dominant cultural group to hard work and perceive that Black individuals, as a group, do not share these advantages because they have not earned them.

The fourth or Pseudo-Independent stage of Helms’ (1990) model is marked by the abandonment of the viewpoint that Whites are superior and African Americans are inferior. White individuals in this stage no longer have a positive view of White culture, but they also often lack role models with whom they can compare or contrast themselves to. In the fifth or Immersion/Emersion stage, Caucasians redefine their White identity and alter their focus toward changing the negative viewpoints of other Caucasians about race. White individuals may begin to seek enrollment in diversity-related classes or other activities that increase awareness of privilege and oppression. In the final or Autonomy
stage, the White individual begins to internalize, foster, and enact the newly evolved definition of Whiteness. This final stage in Helms’ model is viewed as an ongoing process in which Caucasians continue to seek knowledge and understanding about race-related issues. In addition, White individuals in this last stage may begin to notice other forms of privilege and oppression (e.g., sexism, homonegativity). The Sue and Sue (1990, 1999) models of minority and White racial identity development also provide developmental perspectives for both oppressed and privileged group members. The Sue and Sue models are presented next.

**Sue and Sue’s Racial/Cultural Identity models.** Sue and Sue (1990, 1999) created two stage models for racial and cultural identity development. One model focuses broadly on racial minority group member identity development and the other model focuses more specifically on White racial and cultural development. The Racial Minority Group Member Identity model is more encompassing than Helms’ (1990) Black Racial Identity model because Sue and Sue group all People of Color into their model, whereas, Helms focused specifically on Black racial identity. The Racial Minority Group Member and White Racial/Cultural Identity models both contain the following five stages: (a) **Conformity**, (b) **Dissonance**, (c) **Resistance and Immersion**, (d) **Introspection**, and (e) **Integrative Awareness**. These models will be presented separately below with the stage model for racial minority group members discussed first and then followed by the stage model for the White racial group members.

**Racial minority group member development.** Racial minority group members in Sue and Sue’s (1990, 1999) first or Conformity stage of their Racial/Cultural Identity model value dominant cultural values more than their own racial group values. White
cultural values may be seen by minority group members in this stage as superior to the values of other cultural groups and racial minorities may engage in discriminatory behavior toward other People of Color who do not share White cultural values. These individuals may be self-deprecating and hold negative views of other People of Color.

Sue and Sue’s (1990, 1999) second or Dissonance stage for People of Color occurs when a minority group member is either personally or vicariously exposed to negative life events (e.g., such as witnessing a racist act being perpetrated on another minority group member) that challenge dominant cultural viewpoints on race (e.g., the view that we live in a just world). This newfound awareness of power differentials causes the minority group member to question White cultural values, as well as, the self and group deprecating behaviors that were exhibited in the first stage.

The third stage in Sue and Sue’s (1990, 1999) Racial/Cultural Identity model is the Resistance and Immersion stage. This stage is marked by feelings of guilt, shame, and anger for racial minority group members. These individuals feel guilt and shame for previous self and group deprecating behavior. In addition, People of Color may experience anger toward the dominant cultural group and the oppressive environment racial minority group members endure. Minority group members reject White cultural values and immerse themselves into their own cultural heritage.

Racial minority group members who are in Sue and Sue’s (1990, 1999) fourth or Introspective stage may find the intensity of their anger toward the dominant culture to be a great burden to maintain. As a result, the feelings of anger are softened as the devotion to racial heritage and values experienced during the previous stage begins to bring conflict. This conflict stems from the realization that the individuals’ specific cultural
group values do not always agree with the individuals’ own personal value and belief system. For example, an Asian American individual may realize that, as an individual, he or she is more individualistic than his or her parents who value collectivist behaviors.

The fifth stage in Sue and Sue’s (1990, 1999) model is named Integrative Awareness. People of Color who are in this stage recognize there are good and bad aspects in all cultural value-sets. Minority individuals have a greater sense of self-worth and a high sense of autonomy within various cultural groups. These individuals also work actively to eliminate other forms of societal oppression (e.g., sexism). Next, a description of Sue and Sue’s Racial/Cultural Identity Development model for White individuals is presented.

**White racial group member development.** White individuals who are in Sue and Sue’s (1990, 1999) first or Conformity stage may be unaware of themselves as racial beings (i.e., make assumptions that their value-set is universally adopted by other cultural groups). These individuals have limited exposure to other cultural groups and lack accurate cultural group information when interactions do occur. White individuals will hold views of White superiority and see racial minority group members as inferior in this stage.

Sue and Sue’s (1990, 1999) second stage of their Racial/Cultural Identity model is Dissonance. White individuals gain awareness of unequal racial power dynamics through observations of racist acts or behaviors that challenge the individual’s current world view. For example, a Caucasian who holds the belief that people are inherently equal may become aware that they are experiencing feelings of anger or fear when the individual learns that a Latino family may be moving next door to them. The resulting
internal conflict may result in the White individual retrenching back into dominant, White cultural values or the person may move forward into the Resistance and Immersion stage.

Caucasians who are in Sue and Sue’s (1990, 1999) third or Resistance and Immersion stage of racial or cultural development begin to revisit or challenge personal acts of racism that they have committed against other cultural groups and may experience anger, guilt, and shame toward their individual role in perpetuating racism. The White individual becomes more aware of the pervasiveness of oppression within U.S. society and may become angry with family members or educational systems that have taught them racist values and messages.

Sue and Sue’s (1990, 1999) fourth or Introspective stage of racial/cultural identity development is marked by the act of reexamining deep-seated personal views for White individuals. Caucasians may seek to find neutral ground between the extremes of unconditionally supporting White, racist cultural values to the rebellion against these values observed in earlier stages of this model. Caucasians begin to think more deeply about who they are as cultural beings. They may experience a lack of connection between themselves and other White individuals, but also understand they may not ever be able to fully comprehend the negative experiences of oppression faced by racial minority group members.

The fifth stage in Sue and Sue’s (1990, 1999) model is Integrative Awareness. White individuals, in this stage, become aware of social, institutional, and societal circumstances that reinforce various forms of oppression. They understand themselves as cultural beings and experience an elevated commitment to eliminate systemic privilege
and oppression. Worell and Remer (2003) offer a unified model in which oppressed and privileged group member development are presented simultaneously in a single model by level. The Worell and Remer model can also be broadly applied to multiple social identities (i.e., not just gender, sexual orientation, or race) in which there are power imbalances. This model is presented next.

**Worell and Remer’s Personal/Social Identity model.** Worell and Remer (2003) developed the Personal/Social Identity Development model. This feminist and social justice-based model presents descriptions of identity development from both the oppressed and privileged group perspectives. This broader focus on dominant and non-dominant social identity rather than on specific social identities allows the model to flexibly be adapted to multiple areas of privilege and oppression (i.e., race, sexual orientation, gender, and SES). Worell and Remer’s (2003) model contains the following four levels: (a) *level 1* or *Preawareness*, (b) *level 2* or *Encounter*, (c) *level 3* or *Immersion*, and (d) *level 4* or *Integration and Activism*. Worell and Remer described separate developmental paths for privileged and oppressed group members during the first three levels and provided one unified description for dominant and non-dominant group members in level 4. The authors intentionally utilized the term *levels* instead of stages because they saw the process “as a graded set of dimensions, each of which varies from low to high in terms of how an individual might be categorized or conceptualized” (Worell & Remer, 2003, p. 35). In addition, Worell and Remer believed “a person may identify with components of each dimension, rather than being located at only one stage” (p. 35). In other words, individuals may be able to relate to aspects of each level at varying intensities over time and depending upon which social identity the model is being
used to examine. The four levels of this model are presented next by level. The developmental path of oppressed group members is presented first and then followed by privileged group member development for each level (except for level 4 where the oppressed and privileged group member development is combined).

Level 1 of Worell and Remer’s (2003) Personal/Social Identity Development model is Preawareness. At this level, oppressed group members subscribe to majority group values and beliefs. They may often engage in self and group deprecating behavior and affirm negative stereotypes that are directed at their own social identities. Oppressed group members in this level have low access to valued societal resources and believe that good things happen to those who deserve them. On the other hand, privileged group members have also adopted majority group values and beliefs. They believe dominant group values and beliefs are the norm for society. Privileged group members are not consciously aware of and ultimately deny their own privileged status within society. They may believe their own identity group is superior to other groups and support the view that their group deserves any advantages they have within society.

Worell and Remer’s (2003) second level is Encounter. Oppressed group members who are in this level grow aware of their own oppressed status within society and begin to experience conflicting views of themselves and others. This conflict stems from the incongruence between valuing themselves and maintaining the values of the privileged group members. Oppressed group members grow angry at the effects of subjugation on themselves and their group. Privileged group members in level 2 begin to recognize that they have advantages over other groups and that privilege and oppression exist. This realization causes feelings of guilt, shame, and internal conflict.
Level 3 or the Immersion level is marked by individuals from both oppressed and privileged groups seeking knowledge. Oppressed group members immerse themselves in same group activities that focus on their own social identity heritage in an effort to gain more knowledge about their own group. These individuals gain a newfound appreciation for themselves and for their fellow oppressed group members. On the other hand, privileged group members initiate contact with oppressed group members to gain better understanding of the negative effects of oppression. Privileged group members learn to appreciate the positive attributes, values, and beliefs of the oppressed group and begin to understand their role in the maintenance of societal privilege and oppression.

Level 4 of Worell and Remer’s (2003) model is named Integration and Activism. In this level, the experience of both oppressed and privileged group members are combined into one description for both groups. In the integration and activism level, both the disadvantaged and advantaged group members are willing to equitably distribute valued societal resources and are comfortable in engaging both privileged and oppressed group members. These individuals are able to see the positive attributes of all groups and work actively in social justice work. Individuals from both the privileged and oppressed groups also better understand the institutional and systemic environment for both groups and feel empowered to confront acts of oppression within their environments.

Montross (2003) chose to utilize specific aspects of Worell and Remer’s (2003) model as the guiding theoretical framework for the APOS. Pinning the APOS to Worell and Remer’s social identity development model has three advantages. First, the model can be broadly used with each of the social identities included in the APOS (i.e., race, gender, sexual orientation, and SES). Second, the model describes the levels of social
identity development for both privileged and oppressed group members. Third, the model is additionally flexible because it allows for individuals to both progress and regress along the developmental continuum which may help researchers and educators explain score fluctuations in participant responses.

**Summary of identity development models.** The Helms (1990), Sue and Sue (1990, 1999), and Worell and Remer (2003) models of identity development share certain similarities and a major difference. All three models present identity development in terms of a continuum whereby an individual group member initially lacks understanding about the pervasive privilege and oppression that exists in society. Individuals in each model are then exposed to activities or events, which lead them to become aware of privilege and oppression. An individual then continues to gain awareness during a period of self and own group reflection until they reach the fully developed stage in which he or she better understands the existence of privilege and oppression, personal social identity, and appreciation for own and other groups. The primary difference between these three models is not vast, but it is important. The three models do not agree on the number of steps an individual must traverse to obtain a fully developed social identity (Helms, 1990, six stages; Sue & Sue, 1990, 1999, five stages; Worell and Remer, 2003, four levels). This lack of uniformity between models creates seemingly insurmountable challenges for test developers who wish to create psychometrically desirable instruments aimed at the measurement of individual identity development. These measurement challenges will be discussed in more detail in the next section which focuses on a review of diversity training outcome measurement strategies.
Diversity Training Outcome Measurement

As noted in Chapter One, the diversity training outcome measurement literature has been criticized for its lack of methodological sophistication. Clark and Watson (1995) suggest a literature review should include an investigation of existing scales that are both similar and dissimilar to the intended scale. The purpose of the current section is two-fold. First, in this section I will highlight measurement models that have been utilized to measure diversity training outcomes. Three measurement-related construct areas have been prominent within the literature: (a) measurement of identity development, (b) measurement of multicultural competency, and (c) measurement of awareness of privilege and oppression (a social justice construct). A brief overview of the identity development and multicultural competency models will be presented to highlight the differences and overlap with the social justice construct. The second purpose of this section is to provide an in-depth review and analysis of the three instruments that have been developed specifically to measure the social justice construct of awareness of privilege and oppression: (a) the Social Privilege Measure (SPM; Black et al., 2007), the Privilege and Oppression Inventory (POI; Hays, 2005; Hays et al., 2007), and the APOS (Montross, 2003). There are distinct advantages to measuring awareness of privilege and oppression when compared to the identity development and cultural competency measurement models and these benefits will be discussed. The measurement of identity development is considered next.

The identity development measurement approach. The lack of agreement between identity development models has created difficult challenges for test developers who have sought to accurately and consistently gauge identity development (O’Meara,
An inventory would need to consistently measure and be able to locate an individual in a specific stage or level of identity development for a given social location in order to reliably measure the construct (O’Meara, 2001). O’Meara (2001) examined the literature for the most widely-used measures of identity development and found reliability estimates ranging from .50 to .96. In addition, O’Meara noted that the actual factor structure demonstrated by identity development measures often fails to adhere to the theorized factor structure of the model used to design the measure (i.e., the factor structure demonstrated during statistical analysis of the measure differs from the factor structure of the model used to design the measure). Low reliability estimates and inconsistent factor structure findings suggest that other measurement approaches are needed to help researchers and educators gauge diversity training outcome.

A benefit of the APOS and other instruments that are designed to measure awareness of privilege and oppression is that these instruments do not seek to ultimately place an individual into a specific identity development stage or level (Montross, 2003). As a result, these instruments avoid the measurement problems noted by O’Meara (2001). Awareness of privilege and oppression is a common component of identity development and this awareness appears to grow as an individual advances from one stage or level to another (Hays, 2005; Montross, 2003). It can, therefore, be logically reasoned that increasing levels of awareness of privilege and oppression may help social justice-focused diversity trainers and researchers measure identity development indirectly by allowing them to look for increasing levels of awareness in participants. Furthermore, Goodman (2001) has previously identified awareness of privilege and oppression as a social justice training goal or construct. Finally, because individuals who are moving
from level 1 to level 2 in Worell and Remer’s (2003) model are becoming aware of systemic privilege and oppression, it can be reasoned that instruments may need items that measure both overt and subtle forms of racial, gender, sexual orientation, and SES privilege and oppression awareness. Individuals who are in level 1 may initially not recognize privilege and oppression or may only begin to obtain awareness when they are made aware of more overt discriminatory behaviors (e.g., name calling) that are associated with systemic privilege and oppression. On the other hand, individuals who are in level 2 should possess awareness of overt forms of privilege and oppression and may be more capable of recognizing more subtle forms of discriminatory behaviors (e.g., failing to visit local convenience stores owned by minority group members because of the owner’s minority group status) as they continue to move throughout the levels. Next, the multicultural competency measurement approach is discussed.

**The multicultural competency measurement approach.** A number of instruments have been developed to measure multicultural competency. This body of measurement research has demonstrated acceptable reliability and validity collectively. For example, the Multicultural Awareness, Knowledge, and Skills Survey – Revised (MAKSS-R; Kim, Cartwright, Asay, & D’Andrea, 2003) is a 33-item scale that measures general multicultural awareness, knowledge, and skills and offers a total score and three subscale scores, which include Awareness-Revised, Knowledge-Revised, and Skills-Revised. Kim et al. studied the psychometric properties of the MAKSS and reported Cronbach alpha reliability estimates for the total score (.82), and the three subscale scores (Awareness-Revised, .71; Knowledge-Revised, .85; and Skills-Revised, .87). In addition, the authors found support for the three factor solution through both exploratory and
confirmatory factor analyses, as well as, evidence of convergent, discriminant, and criterion-related validity. The primary criticism of the multicultural competency movement, however, is that this approach does not teach trainees the knowledge and skills they need to adopt social justice principles and engage in social action. Social action is needed to reduce systemic oppression. More work is needed to develop instruments that measure social justice constructs.

The social justice measurement approach. One social justice construct that has regularly appeared in the literature is awareness of privilege and oppression (Goodman, 2001; Hays, 2005; Montross, 2003). Awareness of privilege and oppression is a key social justice construct because it is both a foundational step that must occur before an individual can move from an initial to a more advanced level in many social identity development models (Cass, 1979; Helms, 1990; Sue & Sue, 1990, 1999; Worell & Remer, 2003). In addition, Worell and Remer identified awareness of privilege and oppression as a foundational step to reduce societal oppression.

Awareness of privilege and oppression has consistently been identified as a multidimensional construct with a hierarchical factor structure (Flammer, 2001; Hays, 2005; Hays et al., 2007; Montross, 2003). Montross, Hays, and Hays et al. each separately studied the factor structure of instruments designed to measure this construct and found that awareness of privilege and oppression is best represented by a two-tiered, hierarchical factor structure. In the two-tiered model, overall awareness of privilege and oppression (tier 1) is made up of subconstructs of specific types of awareness (tier 2; e.g., awareness of heterosexism). This two-tiered model is supported both by high correlations between items for specific types of awareness (e.g., awareness of sexual
orientation privilege and oppression) and low to moderate correlations between items that measure different types of awareness (e.g., awareness of sexual orientation privilege and oppression vs. awareness of gender privilege and oppression) and through factor analytic techniques.

Flammer (2001) found evidence suggesting awareness of privilege and oppression (tier 1) might be best represented by a three-tiered hierarchical factor structure. In Flammer’s study, awareness of racial privilege and oppression (tier 2) was found to be made up of subfactors of specific types of awareness of racial privilege and oppression (tier 3). It is important to note that neither the Montross (2003), Hays (2005), nor Hays et al. (2007) studies supported Flammer’s three-tiered structural model, but the instruments Montross, Hays, and Hays et al. utilized in their studies were all brief measures. It is possible these measures did not contain enough items on each subscale to examine tier 3.

A review of the literature revealed three instruments that are designed to measure an individual’s awareness of privilege and/or oppression. These instruments are as follows: (a) the SPM (Black et al., 2007); the POI (Hays, 2005; Hays, et al., 2007); and the APOS (Montross, 2003). More information about these measures is provided next.

The SPM. The SPM (Black et al., 2007) is a 25-item, Likert-type, self-report scale that measures an individual’s awareness of racial privilege. The instrument provides a total score and five subscale scores including (a) Personal Credibility, (b) Visibility, (c) Penalty, (d) Environmental Predictability, and (e) Protection. Cronbach alpha reliability estimates for the total score (.92) and subscale scores (range of .66 to .88) were provided by the authors based on a sample of 312 graduate counseling and psychology students. Exploratory (EFA) and confirmatory (CFA) factor analytic studies
were conducted and a hierarchical factor structure in which each subscale was related to the overall construct of racial privilege was best supported by the data (Black et al., 2007).

The SPM partly addresses two of the four criticisms noted by Hays (2005), Montross (2003), O’Meara (2001), and Remer (2008). First, the SPM provides mixed psychometric evidence of test score reliability and validity. This mixed evidence suggests the measures total score may be viable for use by researchers and educators to improve diversity training outcome measurement studies. Second, the SPM measures awareness of racial privilege, which is a construct broadly associated with social justice training. However, four notes of caution must be observed before considering this measure. First, a follow-up review of the literature found no evidence that the SPM has been utilized as an outcome measure for social justice training; therefore, more work needs to be done to test the viability of the measure in outcome studies. Second, the SPM is only designed to measure awareness of racial privilege on graduate counseling and psychology trainees, so the results of this initial validation study may not be generalizable to a broader range of trainees outside of the counseling and psychology areas. Third, not all of the SPM’s subscales have sufficient reliability for use in research. For example, the subscale reliability estimates for the Penalty and Environmental Predictability subscales were .61 and .64 respectively (Black et al., 2007). Finally, the SPM is limited to gathering data on only one form of privilege (e.g., racial privilege) and, therefore, the measures value in more substantial social justice training courses, which examine multiple forms of privilege and oppression may be limited.
**The POI.** Next, the POI (Hays, 2005; Hays et al., 2007) is a 39-item, Likert-type, self-report inventory that measures an individual’s awareness of privilege and oppression based on four forms of privilege and oppression. The instrument provides a total score and four subscale scores including (a) *White Privilege Awareness*, (b) *Heterosexism Awareness*, (c) *Christian Privilege Awareness*, and (d) *Sexism Awareness*. Cronbach alpha reliability estimates for the total score (.95) and subscale scores (range of .79 to .92) are based on a sample of 428 counseling-related trainees (Hays). Convergent validity of the test scores has been demonstrated based on moderate and predicted correlations between the POI and measures of comfort and acceptance with cultural similarities and differences and attitudes towards racial diversity and gender equality (Hays, 2005). Discriminant validity evidence has been demonstrated by evidence that POI scores are unrelated to measures of social desirability (Hays, 2005). Finally, theoretical evidence for the test design and scoring structure has been demonstrated through EFA and CFA (Hays et al., 2007).

The POI addresses two of the four problems with diversity training research noted by Hays (2005), Montross (2003), O’Meara (2001), and Remer (2008). First, the POI specifically measures the social justice training construct of awareness of privilege and oppression. Second, the POI authors have provided acceptable theoretical and empirical evidence for test score reliability and validity so social justice-focused researchers and educators can utilize this information to make informed decisions about the value of utilizing the measure. A follow-up literature review, however, revealed no studies in which the POI had been utilized as an outcome measure for social justice training. As a result, more studies are needed to determine whether the POI can be utilized to measure
learning outcome. In addition, the POI has only been utilized with graduate students in counseling training programs and further research needs to be done to determine whether the POI scores can demonstrate acceptable levels of reliability and validity with broader trainee populations. Finally, the POI represents an improvement over the SPM in that the POI measures awareness of privilege and oppression in multiple forms (i.e., White privilege, heterosexism, Christian privilege, and sexism) and, therefore, this instrument may be more useful in evaluating social justice training where multiple forms of privilege and oppression are addressed.

*The APOS.* The third and final measure of awareness of privilege or oppression found in the literature is the APOS (Montross, 2003). The APOS is a 50-item, Likert-type, self-report scale that measures an individual’s awareness of privilege and oppression in four areas: (a) race, (b) gender, (c) sexual orientation, and (d) socioeconomic status (Montross, 2003). This scale is theoretically based on an important transition point in Worell and Remer’s (2003) feminist, Social Identity Development model in which an individual gains awareness of the existence of privilege and oppression. In this model, an individual’s awareness of privilege and oppression represents a foundational step for the individual to move between level 1 (i.e., Pre-Awareness) and level 2 (i.e., Encounter) and this awareness continues to grow throughout the developmental process (Worell & Remer, 2003). Cronbach alpha reliability estimates are provided for the APOS total score (.83) and subscale scores (range from .46 to .75) and are based on a sample of 257 undergraduate students (Montross, 2003).

Evidence for APOS test score validity has been presented in two separate studies (Montross, 2003; Remer, 2008). Montross used known groups validation and found that
undergraduate students scored significantly lower ($t(383) = 27.51, p < .000$) than a sample of psychology professionals attending a national conference on diversity issues and provided evidence of convergent and discriminant validity. Remer employed the APOS in a pre-post, control vs. treatment group design to evaluate the effectiveness of diversity training in a sample of undergraduate students. The author reported significant differences between the treatment groups who received social justice-focused diversity training in a variety of undergraduate courses and the control groups who did not receive the training when comparing pretest and posttest scores suggesting the APOS may be utilized as an outcome measure for diversity training. Remer reported pre (.91) and post-test (.93) Cronbach alpha reliability estimates for the APOS total scores, but no subscale score reliability estimates were provided.

The APOS is the only awareness of privilege and oppression measure that addresses all four of the diversity training literature problems noted by Hays (2005), Montross (2003), O’Meara (2001), and Remer (2008). First, the APOS specifically measures the social justice training construct of awareness of privilege and oppression, so the instrument is construct-relevant. Second, Montross and Remer have provided acceptable theoretical and empirical evidence for test score reliability and validity which allows researchers and educators who are interested in utilizing the measure to judge the instrument based on the measure’s psychometric properties. Third, the APOS is the only awareness of privilege and oppression instrument that has been demonstrated to effectively measure social justice training outcomes in a methodologically sophisticated pretest posttest, control versus treatment design (see Remer, 2008) which suggests that social justice trainers and researchers can utilize the instrument to effectively measure
social justice training outcomes. Finally, the APOS has been utilized with a broad range of undergraduate students; the instrument currently has more demonstrated generalizability to a broader range of trainee populations than either the SPM or the POI.

The data noted in Montross (2003) and Remer (2008), however, highlight three problems with the APOS that need to be addressed in order to improve this measure. First, only the total score reliability estimates provided by Montross (.83) and Remer (.91) demonstrate acceptable reliability using Nunnally’s (1978) recommendation that Cronbach alpha coefficients be .80 to greater than .90 to be considered acceptable. Second, Montross did not establish a factor loading coefficient cut-off score for evaluating factor loadings for item inclusion or elimination during her analysis (e.g., the factor loading for item 20 was -.187). Scott (1968), Clark and Watson (1995), and Cronbach and Meehl (1955) suggested using a minimal cut off score of .30 during item analysis procedures, which means that items with factor loadings less than .30 would be eliminated and items with factor loadings of .30 or higher would be retained and included in future drafts of the measure. Third, Montross found that many of the subscale items loaded on unintended factors. Eliminating APOS items from the existing measure with factor loadings below .30 and items that failed to load on intended subconstructs would eliminate 24 of the original 50 APOS items from the measure (see Appendix A for a list of the original APOS items with notations identifying which items would be eliminated based on the second and third problems). More work is required to improve the subscale score reliability estimates and the item factor loading properties of the APOS. Furthermore, the revision of the APOS will need to involve eliminating problematic items and generating new items.
Clark and Watson (1995) suggested the item pool for a measure that is under construction include an abundance of all potential content areas that make up the putative trait. These items should also include content from any alternative theories of the construct that were not considered during the development of the original item pool in order to span the range of current perspectives on item content (Clark & Watson, 1995). An updated review of the literature of the specific forms of privilege and oppression included in the APOS (i.e., race, gender, sexual orientation, and socioeconomic status) is, therefore, warranted to provide an evidence-based rationale for item content inclusion in the revised measure. An updated review of the specific forms of privilege and oppression addressed in the APOS is provided next.

Manifestations of Privilege and Oppression

The literature on each of the four forms of awareness of privilege and oppression represented in the APOS (race, gender, sexual orientation, and socioeconomic status) are reviewed separately in the subsections that follow. This content was utilized to generate new items for the current revision project. The review of each specific form will include a review of Montross’ (2003) original operational definitions and the updated operational definitions proposed for the current study, what is known about the dimensionality of each subconstruct, and evidence of specific manifestations of each subconstruct. Then, a practical demonstration of how this content will be utilized in the item construction process will be included in the socioeconomic status privilege and oppression subsection which will be presented last. A review of the awareness of racial privilege and oppression literature is considered first.
Racial privilege and oppression. Montross (2003) defined awareness of racial privilege and oppression as an individual’s “knowledge of how People of Color experience oppression and how Whites are afforded advantages in this society” (p. 49). An individual’s awareness of racial privilege and oppression is measured with the APOS by calculating the total score for the subscale. Montross previously reported reliability estimates for this subscale at .712 which is below Nunnally’s (1978) recommendation of .80 for acceptable reliability. In addition, several items from the Awareness of Racial Privilege and Oppression subscale of the APOS failed to load on the intended factor identified by the author. These collective findings suggest additional work is needed to better define the subconstruct and improve the representativeness of item content on this subscale.

The remaining subsections for awareness of racial privilege and oppression provide new content material beyond what was previously provided by Montross (2003). The literature commonly refers to racial privilege and oppression as racism. The definition and dimensionality of racism are described first. Then, five specific manifestations of racism in U.S. society are discussed to provide updated item content material that is necessary to revise the Awareness of Racial Privilege and Oppression subscale. Then, the discussion will shift to the awareness of gender privilege and oppression subconstruct.

Defining racism. Dovidio, Gartner, and Kawakami (2010) define racism as “a form of intergroup reaction (including thoughts, feelings, and behaviors) that systematically advantages… (one group)…and/or disadvantages another group defined by racial difference” (p. 312). Racism is a socially constructed form of privilege and
oppression (Worell & Remer, 2003) that occurs at the individual, institutional, and systemic levels within U.S. society (American Psychological Association, 2001; Trepagnier, 2006). Dovidio et al. suggest that systemic racism is allowed to continue due to three primary beliefs or mechanisms within society. These three mechanisms or beliefs are as follows: (a) the belief that racial groups are genetically different from each other, (b) the belief that perceived racial differences render one or more racial groups inferior when compared to other racial groups, and (c) the existing hierarchical and social power imbalances that make it difficult for both privileged and oppressed group members to challenge oppressive conditions. In the U.S., racism predominantly benefits Caucasians at the expense of People of Color (Goodman, 2001; Worell & Remer, 2003). For the purposes of the revised APOS, the following amalgam of the Dovidio et al. and Worell and Remer descriptions of racism will serve as the definition for the updated Awareness of Racial Privilege and Oppression subscale: Racism is the awareness of the socially constructed form of intergroup reaction (including thoughts, feelings, and behaviors) based on race that systematically advantages one group (Caucasians in the example of the U.S.) and/or disadvantages another group (racial minorities) at the individual, institutional, and systemic levels within U.S. society. The complexity and dimensionality of racism is discussed next.

**Dimensionality of racism.** Racism is more complex than whether a person has black or white skin color and the literature describes important dimensionality based on skin tone and the specific type of racism that is addressed (Dovidio et al., 2010; Frazier, 1957; Keith & Herring, 1991). The effects of racism may be more severe for People of Color with darker skin tones when compared to People of Color with lighter skins.
pigmentation (Frazier, 1957; Keith & Herring, 1991). For example, Frazier conducted a series of studies on the African American middle class and noted that African Americans with darker shades of skin color experience greater economic and employment obstacles than Black or mixed-race individuals with lighter skin tone experience. In another study, Keith and Herring examined a national dataset obtained from Black Americans and found that skin tone is a significant predictor of occupation and income within the Black community. Keith and Herring found that light-skinned African Americans are more likely to obtain higher status employment positions and earn higher salaries than African Americans who reported darker skin tone.

Type of racism is another dimension described in the literature (Dovidio et al., 2010; Jacobson, 1985; Trepagnier, 2006) and two forms are described in this body of research. Both forms are referred to by a number of different terms and both are harmful because they result in systemic privilege and oppression. The older form is referred to within the literature as explicit, overt, old-fashioned, traditional, or blatant racism and is often exemplified through bigoted comments or other behaviors that openly espouse racial superiority/inferiority. The historical and open refusal of vendors to offer service to People of Color is an example of overt racism. Trepagnier indicates this category of racism is often within the awareness of the racist individual and is perpetrated intentionally. The author notes this form of racism, however, is no longer politically acceptable within mainstream U.S. society and such overt behavior is often met with condemnation from community members. This form of racism will heretofore be referred to as explicit racism for simplicity.

The second and more recently identified category of racism is referred to in the
literature as implicit, silent, new, modern, symbolic, aversive, or subtle racism (Dovidio et al., 2010; Jacobson, 1985; Trepagnier, 2006). This category of racism refers to “unspoken negative thoughts, emotions, and assumptions” (Trepagnier, 2006, p. 15) about racial minority group members by individuals who subscribe to dominant group values. Trepagnier noted this form of racism differs from explicit racism because it is often perpetuated by well-meaning individuals who do not believe they harbor racist views. This form of racism is often viewed as more socially acceptable by individuals who share mainstream values and is, therefore, less likely to elicit the type or level of condemnation often experienced by explicit racist behavior (Trepagnier, 2006). For example, an individual might vote against a local school redistricting plan that would allow children from an underperforming, predominantly African American-attended elementary school to attend a well-performing, predominantly White-attended school and rationalize the decision as a transportation issue. The impact of the voter’s decision is that children from the underperforming school will be denied the opportunity to gain access to the learning opportunities at the target school, but the vote does not raise the condemnation of others because the voter does not utilize language that would bring condemnation from local community members. This second form of racism will heretofore be referred to as implicit racism for simplicity.

The psychometric evidence suggests that implicit measures of racism have greater predictive power when compared to measures of explicit racism (Dovidio et al., 2010; Jacobson, 1985). Jacobson conducted a study to examine the predictive power of explicit versus implicit measures of racism on attitudes toward affirmative action. The author found that both measures are significant predictors of attitudes toward affirmative action,
but observed higher beta weights for the implicit measure of racism (.31 vs. .13) suggesting implicit measures may be stronger predictors of negative attitudes toward affirmative action than explicit measures. Greenwald, Poehlman, Uhlmann, and Banaji (2009) obtained similar results from a meta-analysis of implicit versus explicit measures of racial issues. The authors found that implicit measures (e.g., Implicit Association Test) demonstrated higher predictive validity (average $r = .24$) when compared to explicit measures (average $r = .12$) of racial issues, but these findings were not significant.

The APOS is designed to measure awareness of privilege and oppression as trainees move from level 1 of Worell and Remer’s (2003) model and students at this level may lack the skills to notice more subtle forms of racism when compared to more explicit forms. In level 1 of Worell and Remer’s model, oppressed group members subscribe to majority group values and beliefs and may often engage in self and group deprecating behavior or affirm negative stereotypes that are directed at their own social identities. Privileged group members have also adopted majority group values and beliefs, but they are not consciously aware or may even deny the existence of their own privileged status within society. It is not until privileged and oppressed group members gain awareness of and begin to accept the existence of privilege and oppression that members of either group begin to transition to level 2. As a result of the lack of awareness of racial-based privilege and oppression within society as a whole, explicit expression of privilege and oppression may be more obvious to individuals who are in the process of transitioning from level 1 to level 2. Furthermore, it can be reasoned that individuals who gain awareness and transition to level 2 may be more prone to recognize both explicit and subtle forms of privilege and oppression and this awareness may continue to grow as the
individual moves to higher levels of development. Next, specific expressions of racism in U.S. society are presented to further define the content areas in which implicit racism negatively impacts U.S. society.

**Manifestations of racism.** The American Psychological Association (2001) identifies five key manifestations of racism in the document *Resolution on Racism and Racial Discrimination*. These manifestations represent areas of life in which privileged individuals benefit at the expense of the oppressed. The five specific manifestations of racism include evidence of racism in (a) employment, (b) education, (c) politics, (d) the legal system, and (e) the healthcare system.

**The manifestation of racism in employment.** First, racism is observed in employment settings (American Psychological Association, 2001; Feagin & Imani, 1994; McConahay, 1983). McConahay found that White individuals who score high on measures of modern racism are significantly more likely to hire a White job candidate and rate a Black candidate as less desirable when both White and Black candidates were depicted with identical resumes. Son Hing, Chung-Yan, Hamilton, and Zanna (2008), likewise, found that participants who scored higher on measures of implicit racism were significantly less likely to support hiring an Asian candidate with moderate qualifications when compared to a White job candidate. Telles (1994) looked more broadly at racial inequality across the statistical properties of those Black and White individuals who are already employed. The author found no differences in racial inequality (i.e., the proportions of Black vs. White employees) across blue-collar occupations, but noted greater racial inequality across higher status white-collar positions. These findings suggest that career opportunities for minority group members may be more challenging at
higher employment positions than lower status positions.

Racial inequalities are, however, not limited to minority group members who work for others. Feagin and Imani (1994) identified the challenges faced by many Black entrepreneurs. These authors studied racial discrimination in the construction industry and found that “…racial discrimination in unions, in White general contractors’ contracting and bidding processes, in construction project conditions, and in the bonding, lending, supplier networks critical to a successful construction business” (p. 562) often limit the success of minority-owned businesses. Lower access to employment and less opportunity for growth and advancement ultimately limit the economic power of minority group members and benefit dominant group members.

The manifestation of racism in education. Second, racism is manifested in the educational system (American Psychological Association, 2001; Mattison & Abner, 2007). Ethnic minority students graduating from high school generally exhibit lower average reading, math, and science scores (Campbell, Hambo, & Mazzeo, 1999; Campbell, Pungello, Ramey, Miller, & Burchinal, 2001) and score lower on standardized college admission tests (Ford, 1990) than Caucasian students. Minority children are suspended from school more frequently than White children (Costenbater & Markson, 1998) with African American students being suspended at rates of two to three times more frequently than Caucasian students (Center on Juvenile and Criminal Justice, 2000). In addition, Black and Hispanic students drop out at higher rates than other students (Ford, 1990).

Researchers have examined these achievement gaps and behavioral discrepancies in an attempt to explain these differences. Verma (1999) noted that ethnic minority
students are often confronted with “stereotyped attitudes of teachers; low expectations among teachers; the lack of relevance of the curriculum to ethnic minorities; a Eurocentric/Anglocentric curriculum; (and) biased assessment and testing procedures [sic]” (p. 8) at school and suggests these conditions have an enduring effect on student performance. School systems with larger than average minority populations are often faced with lack of funding and lack of access to computers and other important academic resources (Ford, 1990; Loewen, 1998). Racial climate has also been utilized to explain achievement and behavioral gaps in education. Mattison and Aber (2007) examined the relationship between school racial climate and school academic or disciplinary outcomes to explain racial disparities. Minority student behavior and academic achievement in the study were negatively impacted when students perceived the school environment to be discriminatory or unfair in nature. Farrell and Jones (1988) provided an overview of the racial climate on a predominantly White college campus. The authors state “of all problems faced by minority students on predominantly white campuses, those of isolation, alienation, and lack of peer support appear to be the most serious” (p. 212) for People of Color. Furthermore, research suggests that college campuses are facing an increase in reports of acts of racially-motivated violence and the use of racial slurs on college campuses (McCormack, 1995). This evidence suggests that more work is needed to improve the racial climate in academic environments.

White students are also detrimentally affected by racism at school. Garriot, Love, and Tyler (2008) noted that White students who overtly express racist behaviors exhibit lower levels of social adjustment and self-esteem when compared to other students. Further, Goodman (2001) suggested that White students experience feelings of guilt,
anxiety, and fear as a result of racism.

*The manifestation of racism in politics.* Third, racism is manifested in the political system (American Psychological Association, 2001; Downey, 2000; Edge, 2010). Downey identified contemporary race attitudes as those that have developed in the post-Civil Rights era. According to Downey, this era has been marked by “consistent declines in the expression of traditional racist attitudes (such as belief in biological superiority and support for segregation) and increases in support for racial equality” (p. 92). However, Downey also notes that despite Whites’ growing support for racial equality, Whites have exhibited “a simultaneous reticence to support policies designed to bring it about” (p. 92). Downey found a lack of support among Whites for affirmative action, government support for Blacks, and racial preference for Blacks.

There is also evidence that political candidates are negatively affected by racism. Moskowitz and Stroh (1994) studied the attitudes of Black and White voters on fictitious Black and White political candidates with the same political and personal issues. The authors found that Black political candidates experience higher \( t = 2.12, p < .05 \) levels of racial resentment on personality judgments than White candidates. This finding suggests Black candidates are more negatively evaluated than White candidates. In a more recent example, Edge (2010) asserts the election of Barack Obama to the presidency of the United States may have a negative impact on post-Civil Rights era political strategy. According to Edge, these strategists argue that (a) the election of a Black president could not take place within a nation unless it is free of racism, (b) any attempts to continue social change policies enacted after the civil rights era will ultimately cause more racial tension and lead to racism against Caucasian Americans, and
President Obama’s election will now be used as both an example of the progress America has made by the same individuals who are challenging the president’s nationality and his right to be president.

_The manifestation of racism in the legal system._ Fourth, racism is expressed in the legal system (Abramowitz, 2006; American Psychological Association, 2001; Williams, 2008). There is evidence suggesting that People of Color are less receptive to and trusting of law enforcement (Lai & Zhao, 2010; Matsueda & Drakulich, 2009) than Caucasian individuals. Lai and Zhao surveyed 756 participants in a large Texas town and observed significantly lower levels of general positive attitudes toward police officers by Hispanic \(p < .01\) and Black \(p < .001\) individuals and Black participants were significantly less trusting \(p < .001\) of the police when compared to White participants. These findings may be related to the collective experiences faced by People of Color.

There is evidence suggesting that People of Color are targeted for criminal behavior (Kowalski & Lundman, 2007), treated unfairly in the legal process (Dean, Wayne, Mack, & Thomas, 2000; Matsueda & Drakulich, 2009), are more likely to receive a death penalty verdict (Butler, 2007), and face higher rates of incarceration (Williams, 2008) than Caucasians. Statistical evidence suggests that minority groups experience racial profiling by law enforcement officials (Kowalski & Lundman, 2007). Racial profiling is the disproportionate targeting of members of specific racial groups as suspects of crimes (Kowalski & Lundman, 2007). Kowalski and Lundman found that African American men are stopped for traffic violations at higher rates than all other racial groups. There is also evidence that People of Color are negatively impacted by racism during the legal process (Dean et al., 2000; Matsueda & Drakulich, 2009). Dean
et al. studied the impact of gender and race on the likelihood of guilty ratings using mock jurors. The authors found defendants are more likely to be found guilty if the victim was White and the defendant was a minority group member. There is evidence that individuals who score higher on measures of symbolic racism (Matsueda & Drakulich, 2009) and modern racism (Butler, 2007) are more likely to favor use of the death penalty in capital punishment cases. These findings suggest the presence of racism in the jury room may have unfair implications for minority group members who are involved in legal proceedings.

Williams (2008) suggested that minority group members are also disproportionately incarcerated. The author notes that “more than 8% of African American males between the ages of 25 and 29 were incarcerated in State or Federal prison as compared to 1.1 % of their White counterparts” (pp. 78-79) in 2005. Williams further noted that African American males made up “about 40% of this country’s total inmate population with jail terms greater than one year” despite the fact that African Americans comprise “just over 12% of the total United States population” (p. 79). In addition, African American females are three times more likely to be incarcerated when compared to Caucasian women (Williams, 2008). Next, the expression of racism in healthcare is explored.

*The manifestation of racism in healthcare.* Finally, racism is expressed in the healthcare system (American Psychological Association, 2001; Nelson, 2002; Smedley, Stith, & Nelson, 2003). The Board of Health Sciences Policy for the U.S. Institute of Medicine (IOM) was commissioned by the U.S. Congress in 1999 to report on the depth of health care disparities in the country (Nelson, 2002; Smedley et al., 2003). Racial and
ethnic disparities refers to whether or not health care outcomes are different for one or more racial or ethnic groups; a system in which all racial or ethnic group members have the same outcome is desirable (Smedley et al., 2003).

The IOM released a report in 2002 titled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (Nelson, 2002) in which the national organization’s first conclusion in the report was that “racial and ethnic disparities in healthcare exist, and because they are associated with worse outcomes in many cases, are unacceptable” (Smedley et al., 2003, p. 6). Nelson summarized the major findings of this report by noting “the real challenge lies not in debating whether disparities exist, because the evidence is overwhelming, but in the developing and implementing of strategies to reduce and eliminate them” (p. 667). Furthermore, these disparities exist despite the finding that most Americans believe that African Americans received “the same or better quality of healthcare as the average White patient” and approximately “70% of physicians believed that minorities are rarely or never treated unfairly in healthcare systems” (Alliance for Health Reform, 2004, p. 436).

Nelson (2002) noted that “racial and ethnic disparities in health care exist even when insurance status, income, age, and severity of conditions are comparable, and because death rates from cancer, heart disease, and diabetes are significantly higher in racial and ethnic minorities than in whites” (p. 666). Racial and ethnic minorities “receive lesser amounts of care, and lower quality of care, for the same illness” (Alliance for Health Reform, 2004, p. 436) and have lower life expectancies (Jackson, Knight, & Rafferty, 2010) when compared to Whites. These disparities may be attributable to discrimination and stereotyping by health care providers (e.g., assuming a Person of
Color will not understand a conversation about a cardiac procedure), access to quality health insurance, economic and geographic concerns, and lack of communication between doctor and patient (among others) (Alliance for Health Reform, 2004; Nelson, 2002; Peek et al., 2010; Smedley et al., 2003). For example, the Alliance for Health Reform found that “20.2% of African Americans and 32.4% of Hispanics/Latinos were uninsured, compared to 11.75% of whites [sic]” (p. 437). In this example, People of Color are uninsured at rates disproportionate to Whites and the lack of access to health insurance has been identified as the most significant obstacles to eliminating health care disparities (Smedley et al., 2003).

There is also evidence that racial and ethnic disparities exist within the mental health care industry (American Psychological Association, 2001; Jackson et al., 2010; Jones, 2002). Racism is associated with increased psychological distress for racial and ethnic minority group members (Jones, 2002; Nelson, 2003; Okazaki, 2009). The literature suggests that the high psychological distress faced by racial and ethnic minority group members is associated with higher occurrence rates of depression or depressive-type symptoms including anxiety, low self-esteem, poor physical health, and trauma-like responses including hypervigilence (Jackson et al., 2010; Okazaki, 2009) in People of Color. The collective findings on the manifestation of racism are summarized below.

**Summary of racism section content.** Racism is a form of privilege and oppression that systematically advantages individuals with White or light complexion and creates individual, institutional, and societal disadvantages for People of Color (Dovidio et al., 2010; Worrell & Remer, 2003). Two forms of racism are noted in the literature including explicit and implicit racism, but the literature suggests that implicit forms of
racism are currently more socially acceptable and prevalent (Jacobson, 1985). Leading national organizations in the fields of medicine (e.g., IOM) and psychology (e.g., American Psychological Association, 2001) acknowledge that racism is both prevalent and pervasive in U.S. society (American Psychological Association, 2001; Smedley et al., 2003). Furthermore, racism is manifested in employment, educational, political, legal, and health care settings throughout the nation (American Psychological Association, 2001). The items included in a revised Awareness of Racial Privilege and Oppression subscale must reflect the content described in this section in order meet Clark and Watson’s (1995) test revision recommendations. Next, the subconstruct of awareness of gender privilege and oppression is explored.

**Gender privilege and oppression.** Montross (2003) identified awareness of gender privilege and oppression in the APOS as an individual’s “understanding of how men and women differ in relation to societal privilege and oppression” (p. 49). This definition does not overtly suggest which group is privileged or oppressed, but the items contained in the Gender subscale of the APOS clearly infer that a patriarchal societal structure exists in which men are the dominant group and women are viewed as the subordinate group. Montross operationally defined an individual’s awareness of gender-based privilege and oppression as the total score for the Gender subscale on the APOS. An update of the Awareness of Gender Privilege and Oppression subscale is warranted due to the low subtest score reliability estimate (.456, \( n = 247 \)) for this subscale and the undesirable factor loading properties exhibited by this subscale in the original APOS (Montross, 2003). Additional work is needed to better define the subconstruct and improve the representativeness of item content on this subscale.
The remaining subsections in the awareness of gender privilege and oppression provide more clarity to the subconstruct of awareness of gender privilege and oppression than previously provided by Montross (2003). The literature commonly refers to gender privilege and oppression as sexism. The definition and dimensionality of sexism are described first. Glick and Fiske’s (1996, 1999) theory of ambivalent sexism toward women will be presented as a central model of sexism because the model has been empirically supported and appears to broadly cover the target construct. Finally, four specific manifestations of sexism are explored in order to identify new item content for the revised Awareness of Gender Privilege and Oppression subscale.

**Defining sexism.** The literature defines sexism similarly. All definitions noted in this review describe the outcome of sexism as the subordination of women. Montross (2003) utilized Worell and Remer’s (2003) framework of social identity development to guide the construction of the APOS. Worell and Remer defined sexism as a socially constructed form of oppression that subordinates women by forcing them into restrictive gender roles. Gender roles are learned behaviors that ultimately reinforce the patriarchal structures that maintain sexist attitudes and behaviors toward women (Worell & Remer, 2003). Sexism is globally pervasive across cultures (Cudd & Jones, 2005) and occurs at the interpersonal, institutional, and structural levels (Pincus, 1996). It is this collective definition (see Cudd & Jones, 2005; Worell & Remer, 2003; Pincus, 1996) that is used to frame the perspective of sexism associated with the current revision of the APOS. In addition, it is this updated definition, which will serve as the definition of sexism in the Awareness of Gender Privilege and Oppression subscale of the revised APOS. Gender bias is similar to other forms of oppression including racism because all forms of
oppression cause detrimental psychological and social consequences for subordinate
groups (Cudd & Jones, 2005).

**Dimensionality of sexism.** Ellemers and Barreto (2009) described earlier or *old fashioned* forms of sexism as overt beliefs and expressions that convey the message that women are inferior to men. Overt expressions of sexism provoke anger in modern society and individuals who express sexism in this manner are more likely to be confronted or discredited by others. Modern sexism maintains the same beliefs as traditional sexism, but individuals express these beliefs in a more socially acceptable manner. Instead, modern sexists deny the existence of systematic disadvantages for women and believe that any perceived disadvantages are the result of female deficiencies (Ellemers & Barreto, 2009; Glick & Fiske, 2001). A model by Glick and Fiske (1996, 1999) represents an evolution from previous theories of sexism.

Ambivalent Sexism Theory (Glick & Fiske, 1996, 1999) is currently the predominant theory researchers are utilizing to conceptualize sexism. Ambivalent sexism recognizes both the structural power that is afforded to men through patriarchy and the dyadic power that is afforded to women because men (in heterosexual relationships) are dependent upon women as romantic partners, wives, and mothers (Glick & Fiske, 1996, 1999). According to the theory, gender bias is made up of four separate yet related components of sexism; hostile and benevolent sexism toward women and hostile and benevolent sexism toward men. The current revision of the APOS will focus exclusively on sexism as it is expressed toward women in order to stay consistent with the amalgam definition noted earlier in this section in which the subjugation of women represents the vast majority of incidents of sexism that occur within U.S. society. This decision does
not imply that discrimination against men is less harmful to a single individual or condoned by me. Rather, limiting the scope of the APOS to awareness of sexism directed toward women represents an attempt to limit the scope of the APOS to items that will resonate with the vast majority of participants who may eventually be administered this measure. This decision to narrow the scope of this subscale may also lessen the potential for confusion when writing items that are reverse-scored and intended to measure aspects of either privilege or oppression. For the sake of brevity, further reference to either hostile or benevolent sexism will refer to sexism in which women are the target of subjugation.

Glick and Fiske (1996, 1999) have provided both theoretical and empirical evidence for the multidimensionality of their Ambivalent Sexism Theory. Glick and Fiske (2001) described the dual factor structure (e.g., hostile vs. benevolent) of ambivalent sexism by using the analogy of the “stick and carrot” approach. Hostile sexism or the “stick” punishes individuals who do not behave in a manner that is consistent with traditional gender roles (Chapleau, Oswald, & Russell, 2007). Benevolent sexism or the “carrot” rewards individuals who conform to traditional gender role behaviors (Chapleau et al., 2007). Hostile and benevolent sexism are each separately composed of three dimensions: Paternalism, gender differentiation, and heterosexual relations (Glick & Fiske, 1996, 1999). The three forms of hostile sexism will be discussed first and then followed by the three forms of benevolent sexism.

Hostile sexism is made up of three components: Dominative paternalism, competitive gender differentiation, and heterosexual hostility (Glick & Fiske, 1996). Dominative paternalism “is the belief that women ought to be controlled by men” (Glick
In competitive gender differentiation, individuals believe negative stereotypes of women are true. Men specifically use these stereotypes to both confirm men’s beliefs about women and to boost men’s self-confidence. “Heterosexual hostility reflects the tendency to view women merely as sexual objects, as well as the fear by men that women may use sexual attraction to gain power over men (because men’s sexual attraction is a major source of women’s dyadic power)” (Glick & Fiske, 1996, p. 122).

Benevolent sexism toward women is made up of three components: Protective paternalism, complementary gender differentiation, and intimate heterosexuality (Glick & Fiske, 1996). Protective paternalism is an ideology, which dictates that men must protect and provide for women because men are stronger and command higher levels of authority within a patriarchal society. Glick and Fiske (1996) suggest this view will be more observable within families where men are dependent upon the dyadic power of women and where men believe they are obligated to serve in authoritative roles over women in the family home. Complementary gender differentiation is the ideology that men and women must fit into traditional gender roles (Glick & Fiske, 1996). Men respect and reward women who maintain assigned gender roles as a way to reinforce behavior. In intimate heterosexuality, men romantically view women as sexual objects that are necessary for a man to live a fulfilling life (Glick & Fiske, 1996 p. 122). Men who engage in intimate heterosexuality may get the door for women, buy flowers, or act in other romantic ways to find and win the affection of intimate partners.

Glick and Fiske’s (1996, 1999) theory has been supported across studies and with various cultures in more than 12 countries (Chapleau et al., 2007; Feather & Boeckmann,
linked hostile sexism toward women to rape myth acceptance in research examining rape myth acceptance and ambivalent sexism toward women and men. In a sample of predominantly White (85.7%), female (65.2%) college students, the authors found positive correlations between hostile sexism toward women and rape myth acceptance. Chapleau et al. also found positive correlations between benevolent sexism toward men and rape myth acceptance. These results suggest that men who devalue women in a “hostile” manner and women who believe women are less intelligent than men, believe men need nurturance, and believe women need the love of a man in order to be complete are more likely to accept rape myths than others (Chapleau et al., 2007). The discussion now shifts to four specific manifestations of sexism noted in the literature.

**Manifestations of sexism.** Sexism is manifested within U.S. society in four ways: (a) violence against women, (b) employment, (c) language, and (d) the media. These four manifestations of sexism are discussed in order in the subsections that follow. The evidence supporting the existence of sexism as evidenced by violence against women is discussed first.

*The manifestation of sexism in violence against women.* Sexual assault and other forms of violence are primarily perpetrated against women by men (Catalano, Smith, Snyder, & Rand, 2009; Rennison, 2003). Catalano, Smith, Snyder, and Rand (2009) found rates as high as 430 victimizations per 100,000 women and 8 victimizations per 100,000 men using a national Department of Justice dataset. Rennison (2003) also reported high rates of victimizations among women noting 85% of physical intimate partner assaults in the study were perpetrated against women. Sexual violence broadly
encompasses a variety of non-consensual activities that are perpetrated by familial members, friends, acquaintances, partners, and strangers (Worell & Remer, 2003). Women ages 16 to 24 are four times more likely to experience rape than all other age groups for women (Humphrey & Kahn, 2000) and 57% of sexual assaults against women are perpetrated by someone they know (Catalano et al., 2009). Rape, however, is not limited to those who are young; it is an act of power and violence that occurs across the life span of women (Worell & Remer, 2003).

*The manifestation of sexism in employment.* Worell and Remer (2003) described four pieces of evidence that signify gender stereotypes negatively impact women’s careers. The unequal proportions of women when compared to men in a variety of work settings, the fact that women receive lower workplace compensation than men, the unequal attainment of females in leadership positions, and the disproportional victimization of women in workplace sexual harassment claims are all evidence that women are more negatively affected by gender stereotypes when compared to men (Worell and Remer, 2003). Wiener et al. (2010) studied complainant behavioral tone, ambivalent sexism, and perceptions of sexual harassment in a sample of full-time employees. The authors found that employees who observed a video in which a woman was portrayed as aggressive found less evidence of sexual harassment than in a second scenario depicting a woman who is portrayed in a submissive or neutral manner. This finding suggests that women are often rewarded for behaving in traditional gender roles and punished when they do not behave in traditionally prescribed manners (i.e., the belief that women should be submissive and not aggressive) (Glick & Fiske, 1996).
The manifestation of sexism in language. Rakow and Wackwitz (1998) and Worell and Remer (2003) both noted the pervasiveness of sexism that is communicated through language. Terms such as stewardess and policeman exist and display inherent gender role messages (i.e., service staff members on airplanes are women and police officers are men) (Worell & Remer, 2003). In addition, sexism is also communicated through word usages such as using the term “man” to generally describe both women and men (Rakow & Wackwitz, 1998). In addition, Rackow and Wackwitz noted that courtesy titles that are used to convey respect are different for men and women. Men are often referred to using “Mr.” whereas there are two titles to convey respect for women; “Miss” and “Mrs.” The use of the term “Mr.” may be intentionally ambiguous because it does not convey marital status. On the other hand, women have been socialized to use specific titles to denote marital status (i.e., “Miss” vs. “Mrs.”). The next subsection describes the manifestation of sexism in the media.

The manifestation of sexism in the media. Mass media outlets including news organizations, advertising agencies, magazines, and television entertainment commonly portray women in negative and stereotypical ways (Rakow & Wackwitz, 1998). Rakow and Wackwitz pointed out women are often referenced as secondary or consequential sources of information, whereas men are commonly utilized as primary sources of information. Worell and Remer (2003) noted that women in the media are often portrayed stereotypically as submissive, inactive, and not as intelligent as men. In addition, the media often depicts women as unrealistically thin and beautiful (Worell & Remer, 2003). These misrepresentations in the media shape the beliefs of men and
women in ways that further embed stereotypes as more media images are observed (Worell & Remer, 2003).

**Summary of gender section content.** Sexism is defined as a globally pervasive form of oppression that subordinates women while simultaneously privileging and empowering men at the interpersonal, institutional, and structural levels. This form of oppression forces women to conform to socially constructed gender roles that are generally devalued by men (Worell & Remer, 2003). Sexism is a multidimensional construct that appears best explained (theoretically and empirically) by Glick and Fisk’s (1996, 1999) Ambivalent Sexism Theory in which three forms of sexism including paternalistic, gender differentiated, and heterosexual relations sexism are each expressed through both hostile and benevolent means. Sexism is manifested in the U.S. through violence against women, employment, language, and the media. The revised Awareness of Gender Privilege and Oppression subscale must reflect this updated content. Sexual orientation privilege and oppression is discussed next.

**Sexual orientation privilege and oppression.** Montross (2003) identified awareness of sexual orientation privilege and oppression in the APOS as an individual’s “understanding pertaining to how heterosexuals and homosexuals are granted different privileges in society” (p. 49). This definition does not overtly suggest which group is privileged or oppressed, but the items contained in the Sexual Orientation subscale of the APOS clearly infer that a heterosexually dominant societal structure exists in which heterosexual men and women represent the dominant group and homosexual men and women are viewed as the subordinate group. Montross operationally defined an individual’s awareness of sexual orientation-based privilege and oppression as the total
score for the Sexual Orientation subscale on the APOS. Montross found the reliability estimate for this subscale to be .748 ($n = 244$) and the subscale contained items that failed to load on the sexual orientation factor. More work is needed to better define this subconstruct and new item content is needed.

The subsections below provide more clarity to the subconstruct of awareness of sexual orientation privilege and oppression than previously provided by Montross (2003). The literature commonly refers to sexual orientation-based privilege and oppression as heterosexism. The definition and dimensionality of heterosexism are described first. Finally, four specific manifestations of heterosexism observed in U.S. society are explored in order to identify necessary content material for inclusion in an updated Awareness of Sexual Orientation Privilege and Oppression subscale.

**Defining heterosexism.** Researchers’ have utilized the term heterosexism to describe the systematic privilege of heterosexual individuals and oppression of non-heterosexual individuals since the 1970’s (Herek, 2004, see Herek for a detailed account of the history of terminology utilized in this area of research). Sexual minority individuals are those who are physically and emotionally attracted to same-gender individuals (e.g., gay men, lesbian women, bisexual individuals) and heterosexual individuals are those who are solely, physically, and emotionally attracted to opposite-gender individuals (e.g., females attracted to males or vice versa) (Hebl, Law, & King, 2010). Hebl et al. noted the term heterosexism encompasses the study of homophobia (e.g., feeling repulsion or fear toward gay men), stereotyping (e.g., believing most lesbians are masculine), discrimination (e.g., firing a lesbian worker based solely on the worker’s sexual orientation), and prejudice (e.g., believing gay men should not work with
The literature defines heterosexism similarly with only slight differences in variation. Herek (1992) defined heterosexism as “an ideological system that denies, denigrates, and stigmatizes any non-heterosexual form of behavior, identity, relationship, or community” (p. 89). Hebl et al.’s (2010) definition effectively mirrors Herek’s earlier definition by defining heterosexism as “an ideological system that reinforces the denigration of non-heterosexual identity, behavior, relationship, or community” (p. 345). The differences between the Herek and Hebl et al.’s definitions are not substantive and the Hebl et al. definition appears to be a simple rearrangement of wording from Herek’s earlier work. Walls (2008) criticized Herek’s earlier definition by suggesting it refers solely to the study of negatively valenced content (e.g., the belief that all lesbians dress in traditionally masculine attire) and suggests researchers should also consider positively valenced aspects (e.g., the belief that gay men are intelligent) of this form of privilege and oppression when examining the construct.

Walls’ (2008) more inclusive definition offers the following slight variation of the original Herek (1992) definition: Heterosexism is “an ideological system that denies, denigrates, stigmatizes (or segregates) any non-heterosexual form of behavior, identity, relationship, or community” (pp. 26-27). The author’s addition of the wording ‘or segregates’ to Herek’s original definition allows the conceptualization to more fully capture “the primary manner in which theory suggests that both positive stereotypes and paternalistic heterosexism function to maintain stratification” (Walls, 2008, p. 27). Walls provided evidence to supports his theory and definition of heterosexism, as well as, the dimensionality of the construct through his development and psychometric evaluation of
the Multidimensional Heterosexism Inventory (MHI) (discussed in the next subsection on dimensionality). As a result of this evidence, Walls definition of heterosexism is utilized as the basis for the current revision of the APOS.

**Dimensionality of heterosexism.** The research literature on heterosexism has offered varying conceptualizations of the dimensionality of this construct. Flammer (2001) studied the dimensionality of racism, sexism, classism, and heterosexism. Her study contributed two findings to the literature on the dimensionality of heterosexism that are relevant to the current project. First, Flammer found that heterosexism is a distinct construct considered within the context of other forms of privilege and oppression. In other words, items designed to measure heterosexism loaded specifically on a heterosexism factor when compared to other forms of privilege and oppression measured in Flammer’s study. This finding has also been supported by other authors (Hays, 2005; Hays et al., 2007; Montross, 2003) who have compared heterosexism to other forms of privilege and oppression including awareness of racial, gender, class-related, and Christian identity. Second, Flammer found that heterosexism is a unidimensional construct. Flammer, however, based her findings on the unidimensionality of the construct on four to five demographic items that were included in the study. This small number of items might make it difficult to empirically detect a multidimensional construct in which various forms of heterosexism could exist if the construct was more fully represented by test items.

Waldo (1999) theorized and described two types of heterosexism. First, explicit or direct heterosexism involves overt comments or actions (e.g., antigay jokes or posting an antigay sign) that convey the message that heterosexuality is the only permissible form
of sexual orientation within society. Second implicit or indirect heterosexism involves more ambiguous comments or actions. Waldo offered the example of an individual repeatedly asking another individual why he or she is not married. The ultimate message conveyed by implicit heterosexism is the same (i.e., that heterosexuality is the only acceptable form of sexual orientation), but this message is presented in a less antigay manner than observed in explicit heterosexism. Waldo suggested both types of heterosexism are believed to cause stress for sexual minority group members, and noted that modern expressions of heterosexism are more implicit in nature.

Other studies have also demonstrated the multidimensionality of heterosexism (Morrison & Morrison, 2002; Szymanski, 2004; Walls, 2008; Worthington, Dillon, & Becker-Schutte, 2005). Morrison and Morrison developed and psychometrically evaluated the Modern Homonegativity Scale, which was designed to measure negative, subtle, and non-religious or conservative attitudes directed towards gay men and lesbian women. The authors evaluated the measure using measures of old-fashioned heterosexism which included items designed to detect more explicit heterosexism through items that reflect political conservatism and religiosity. Morrison and Morrison found two distinct dimensions of heterosexism: modern heterosexism and old-fashioned heterosexism. This finding appears to provide support for Waldo’s (1999) theory of the presence of old-fashioned or explicit heterosexism and modern or implicit heterosexism. Other studies have expanded the dimensionality of heterosexism and have identified additional sub-dimensions of the construct (Walls, 2008; Worthington et al., 2005).

Worthington et al. (2005) conducted four studies during the development of the Lesbian, Gay, and Bisexual Knowledge and Attitudes Scale for Heterosexuals. These
authors found the following five dimensions of heterosexism and the included respective items within the scale: (a) Hate (e.g., “LGB people deserve the hatred they receive”); (b) Knowledge of Lesbian, Gay, and Bisexual (LGB) History, Symbols, and Community (e.g., “I am knowledgeable about the history and mission of the PFLAG organization”); (c) LGB Civil Rights (e.g., “I think marriage should be legal for same-sex couples”); (d) Religious Conflict (e.g., “I keep my religious views to myself in order to accept LGB people”); and (e) Internalized Affirmativeness (e.g., “feeling attracted to another person of the same sex would not make me uncomfortable”) (Worthington et al., 2005, p. 109). These factors reflect both negatively valenced dimensions (e.g., the Hate factor) and positively valenced dimensions (e.g., the Internalized Affirmativeness factor) as advocated by Walls (2008, see the earlier subsection on the definition of heterosexism). The authors provided data from exploratory and confirmatory factor analyses, reliability estimates, and other measures of validity to support the findings.

Walls (2008) also found heterosexism to be a multidimensional construct. Walls borrowed heavily from Glick and Fisk’s (2001) benevolent sexism during the development of his theory of heterosexism and the MHI. Walls hypothesized and provided empirical support for the following four dimensions of heterosexism: (a) Aversive Heterosexism, (b) Amnestic Heterosexism, (c) Paternalistic Heterosexism, and (d) Positive Stereotypic Heterosexism. First, Walls defined Aversive Heterosexism as the “attitudes, myths, and beliefs that dismiss, belittle, or disregard the impact of sexual orientation on life chances by denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (p. 46). An example of an aversive heterosexism item Walls utilized in the measure is
“gay men should stop shoving their lifestyle down everyone’s throat” (p. 48). Second, amnestic heterosexism is defined as the “attitudes, myths and beliefs that deny the impact of sexual orientation on life chances by denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (Walls, 2008, pp. 46-47). An example of an amnestic heterosexism item from Walls scale is as follows: “Discrimination against lesbians is virtually nonexistent in today’s society” (p. 49).

Third, Walls (2008) defined paternalistic heterosexism as the “subjectively neutral or positive attitudes, myths and beliefs that express concern for the physical, emotional or cognitive well-being of non-heterosexual persons while concurrently denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (pp. 27-28). An example of a paternalistic heterosexism item Walls included in the MHI is “I would prefer my daughter not be homosexual because she would unfairly be stopped from adopting children” (p. 48).

Finally, positive stereotypic heterosexism is defined as “subjectively positive attitudes, myths, and beliefs that express appreciation of stereotypic characteristics often attributed to lesbian women and gay men which function by denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (Walls, 2008, p. 28). An example of a positive stereotypic heterosexism item included in Walls MHI measure is “gay men are more compassionate than heterosexual men” (p. 49). Walls provided empirical support for his theory through three exploratory factor analyses, reliability estimates, convergent and discriminant validity estimates, and regression analysis during the validation and testing phase of the MHI.
**The manifestation of heterosexism.** Heterosexism is a pervasive component of U.S. culture (Herek, 2004). Herek describes the scope and nature of heterosexism:

Heterosexism is inherent in cultural institutions, such as language and the law, through which it expresses and perpetuates a set of hierarchical relations. In that hierarchy of power and status, everything homosexual is devalued and considered inferior to what is heterosexual. Homosexual and bisexual people, same-sex relationships, and communities of sexual minorities are kept invisible and, when acknowledged, are denigrated as sick, immoral, criminal or, at best, suboptimal. (p. 16)

Herek (2004) notes that heterosexism is culturally embedded within both language and laws suggesting that conformity to heterosexist values in U.S. society is expected, automatic, and regulated to some extent. For example, there is currently a debate within this country concerning the right for same-sex couples to marry. Most states currently narrowly define or permit marriage as a legal union between a man and a woman. The discriminatory ramifications for this established legal doctrine are that same-sex couples have no right to marry under the law and the use of the term ‘marriage’ often refers uniquely to heterosexual relationships.

Four broad areas of U.S. culture in which heterosexism is manifested are presented below. The literature suggests that heterosexism is observed in U.S. (a) educational, (b) employment, (c) religious, and (d) mental and medical healthcare settings. These broad expression areas are discussed below in order to provide updated content material that may be utilized in the revision or construction of new items for the Awareness of Sexual Orientation Privilege and Oppression subscale.
The manifestation of heterosexism in education. Heterosexism is manifested in educational settings through peer to peer sexual harassment (Fineran, 2002; Kosciw, Greytak, Diaz, & Bartkiewicz, 2010; Szalacha, 2001). Fineran provides examples of the types of negative and homophobic behaviors that both heterosexual and non-heterosexual high school students report being exposed to. These behaviors include, but are not limited to the following: Sexual comments; sexually derogatory jokes, gestures or looks that demean non-heterosexual individuals; sexual messages written on bathroom walls, sexual rumors, being called derogatory terms (e.g., “fag” or “lessie”); and being touched, fondled, grabbed, or rubbed up against in an unwanted sexual way. There is evidence that these negative behaviors are directed more frequently at non-heterosexual individuals.

Kosciw et al. (2010) conducted a national survey of 7,261 middle and high school students and found high levels of harassment directed at lesbian, gay, bisexual, and transgender (LGBT) students. Approximately 72% of participants in the study reported hearing homophobic remarks (e.g., “dyke” or “faggot”) often or frequently at school. The study found that 84.6% of lesbian, gay, bisexual, or transgendered (LGBT) students reported being verbally harassed, 40.1% reported being physically harassed, and 18.8% reported being physically assaulted at school in the past year due to the individual’s sexual orientation. These collective findings appear to undermine LGBT individuals’ ability to feel safe at school. In the study, 61.1% of LGBT students reported feeling unsafe in school due to the individual’s personal sexual orientation while 8% of heterosexual students expressed the same concern (Kosciw et al, 2010).

Kosciw et al. (2010) observed lower levels of school attendance and lower grade
point averages among students who experienced high levels of harassment. Thirty percent of LGBT students in the sample reported missing one or more day of school in the past month because of safety concerns stemming from the individuals non-heterosexual orientation compared to 6.7% of heterosexual students surveyed. Finally, the study found that students who reported frequent harassment due to sexual orientation had grade point averages approximately half a grade lower than for students who reported being harassed less frequently (2.7 vs. 3.1). Heterosexism, however, does not appear to stop once an individual leaves the educational system. This form of privilege and oppression is also observed in the work-lives of adults.

*The manifestation of heterosexism in employment.* Heterosexist ideology and attitudes appear to continue once an individual leaves the educational system and obtains employment. Heterosexism is expressed in employment settings through corporate discriminatory hiring practices, stressful or hostile working environments, and differential salary awards (Badgett, 1995; Flojo, 2005; Hebl, Foster, Mannix, & Dovidio, 2002; Levine & Leonard, 1984; Pichler, Varma, & Bruce, 2010). Two key studies highlight the challenges non-heterosexual individuals face when attempting to gain employment. Pichler et al. (2010) studied the suitability ratings assigned to non-heterosexual individuals by heterosexual individuals, heterosexual raters’ attitudes toward non-heterosexual individuals, and the relationship between social dominance orientation to suitability ratings and hiring practices. The authors noted the following information in the study: (a) that male raters consistently rated gay men lower on measures of suitability for employment compared to other employment candidates; (b) participants with more negative attitudes toward homosexuality were more likely to rate
non-heterosexual individuals as unsuitable for employment when compared to other candidates; and (c) participants with higher levels of social dominance orientation (i.e., belief that privileged groups rightfully obtain power because they are more dominant) are more likely to rate non-heterosexual individuals low on suitability for employment (Pichler et al., 2010). These findings suggest that negative attitudes or beliefs about non-heterosexual individuals may negatively impact the employment opportunities for non-heterosexual individuals.

Hebl et al. (2002) also studied the discriminatory hiring practices of corporations toward non-heterosexual individuals in actual employment settings. The authors utilized confederates who attempted to seek employment while portraying themselves as either openly non-heterosexual or heterosexual and studied job offers, length of interactions, and perceptions of bias. Hebl et al. found no significant difference in non-heterosexual or heterosexual confederates on employment offers in this study, which suggest that employers may be able to limit discriminatory behavior in formal employment practices. However, the study noted employers spent less time, were verbally more negative, and utilized fewer words when interacting with non-heterosexual confederate job applicants. These informal discriminatory practices suggest that non-heterosexual job candidates may experience a less welcoming environment when these individuals are out during the hiring process.

Levin and Leonard (1984) examined the work environment and work experience of 100 lesbian women to look for evidence of discriminatory behavior in the workplace. Sixty percent of the participants in the study indicated they expected to be discriminated against, 75% feared problems with an immediate supervisor, and 90% predicted
coworkers would react negatively toward them at work if they were open with others about participant sexual orientation. Seventy-seven percent of participants reported they were either partially out at work or not out at all at work, while 23% indicated they were openly out to all of the staff at work. One conclusion that Levin and Leonard draw from these data is that fear or uncertainty about being openly non-heterosexual at work results in fewer workers who feel comfortable being themselves while at work and this forces some non-heterosexuals to adopt two personal identities (i.e., a non-heterosexual home identity and a non-representative and vaguely heterosexual work identity). These authors also found evidence of both formal and informal bias toward these women at work. In the study, 29% of lesbian women reported acts of formal discrimination because they were not hired or were fired or forced to resign from a previous position, 10% noted they were not promoted at work, and 4% noted they were denied raises due to the respondent’s sexual orientation (Levin & Leonard, 1984). The participants reported the following acts of informal discrimination based on the non-heterosexual individual’s sexual orientation: Verbal harassment by other workers (75%); non-verbal stares, ostracism, or intentional damage to personal belongings (33%); and physical harassment or violence (10%).

Finally, the extant literature also provides evidence of pay discrepancies among heterosexuals and sexual minorities (Badgett, 1995). Badgett compared the pay of gay men, lesbian women, and bisexual men and women to heterosexual men and women utilizing data from a national dataset. The author found that sexual minority men and women earn approximately 11-27% less than heterosexual men and women when experience, education, occupation, geographic region, and marital status are all controlled. These findings suggest that the lifetime earning potential of sexual minorities
is less than income figures for heterosexuals. Heterosexism can also be observed in the spiritual practices of society (Morrow, 2003; Van Loon, 2003).

The manifestation of heterosexism in religion. Heterosexism is manifested overtly in the religious aspect of people’s lives through religious doctrines and the impact these teachings have on the attitudes, values, and beliefs of members of society (Appleby, 2001; Johnson, Brems, & Alford-Keating, 1997; Miller, 2007; Morrow, 2003; Van Loon, 2003; Wilkinson, 2004). Many world religions including (but not limited to) Christianity, Hinduism, Islam, and Judaism teach that homosexuality or bisexuality is sinful or immoral (Halstead, 2005; Hunsberger, 1996; Morrow, 2003; Van Loon, 2003). Sexual minorities are negatively impacted by these dogmatic teachings directly when they are either affiliated with a religious organization or exposed to other individuals who subscribe to religious values, attitudes, and beliefs (Appleby, 2001; Morrow, 2003; Van Loon, 2003). One construct utilized to study the impact of religion on the values, attitudes, and beliefs of individuals is religiosity. Studies have consistently shown that higher levels of religiosity are associated with increased heterosexism, homophobia, more biased beliefs about the origins of non-heterosexual identity, greater discomfort around sexual minority members, and lower support for extending civil liberties to sexual minority groups (Johnson et al., 1997; Wilkinson, 2004).

The manifestation of heterosexism in health care. Sexual minorities exhibit higher rates of depression, eating disorders, generalized anxiety disorder, attention deficit hyperactivity disorder, alcohol dependence, low self-esteem, stress, self-hatred, and low social support (Frisell, Lichtenstein, Rahman, & Langstrom, 2010; Jones & Hill, 2002; Meyer, 2003; O’Hanlan, Cabaj, Schatz, Lock, & Nemrow, 1997; Spencer & Patrick,
2009; Szymanski & Kashubeck-West, 2008; Szymanski, Kashubeck-West, & Meyer, 2008a, 2008b) when compared to heterosexual populations. These data suggest the well-being of sexual minority group members is disproportionately low when compared to heterosexual individuals. Despite these discrepancies in mental and physical health, there is evidence that sexual minority group members may be further victimized when these individuals seek treatment from health care providers.

Sexual minorities are victimized through the health care system when these individuals encounter negative practitioner attitudes and denial of services due to the individuals' sexual orientation (Kass, Faden, Fox, & Dudley, 1992; O’Hanlan et al., 1997). Eliason and Randall (1991) examined the attitudes of nursing school faculty members and found that 8% of respondents thought a lesbian was unfit to be a registered nurse, 17% believed lesbians molest children, 17% believed lesbianism to be a disease, 23% consider being a lesbian immoral, and 52% believe that lesbianism is unnatural. In addition, more than half of the nursing faculty members surveyed indicated they did not intend to discuss lesbian issues in the classroom. In another study, Mathews, Booth, Turner, and Kessler (1986) studied homophobia in a sample of 930 physician members of a California medical society. The study found that 40% of participants reported feeling uncomfortable administering care to sexual minority patients and approximately 33% endorsed items acknowledging having hostile attitudes toward gay and lesbian patients.

There is also evidence that some medical professionals act upon these negative attitudes toward sexual minority group members. Schatz and O’Hanlan (1994) surveyed 711 members of the Gay and Lesbian Medical Association. The researchers found that over 50% of the physicians surveyed reported observing other physicians deny or offer
substandard care to gay or lesbian patients because of the patient’s sexual orientation and 64% believed that a gay or lesbian patient who discloses his or her sexual orientation to a physician will receive substandard care. In addition, 88% of the physicians surveyed reported overhearing other doctors make verbal anti-gay remarks. Kass et al. (1992) also reported on the denial of medical services to gay or bisexual men. In the Kass et al. study, 18% of the participants reported being refused treatment by a physician or dentist. O’Hanlan et al. (1997) theorized that additional damage to the patient-client relationship is caused when health care providers subtly communicate negative attitudes to sexual minority patients through non-verbal or indirect messages (e.g., using judgmental language, failing to smile at patients, or avoiding contact with patients). O’Hanlan et al. suggests that practitioner disdain may lead to the underutilization of services or higher mortality rates for sexual minority patients when these individuals fail to seek services.

**Summary of heterosexism content section.** These collective findings on the dimensionality of heterosexism offer information relevant to an item revision for the APOS. First, the preponderance of empirical evidence suggests that heterosexism is a multidimensional construct (Morrison & Morrison, 2002; Szymanski, 2004; Waldo, 1999; Walls, 2008; Worthington et al., 2005) and the Sexual Orientation subscale of the APOS should reflect these data. First, there is evidence that heterosexism may be explicit or implicit in nature, and modern heterosexism is expressed in more implicit or subtle ways (Morrison & Morrison, 2002; Waldo, 1999). Second, heterosexism items should be able to assess awareness of the strong hateful feelings, lack of basic knowledge or understanding that exists for sexual minority populations, an individual’s understanding of the absence of basic civil rights for sexual minority populations, the religious conflict
that exists for sexual minority individuals, and the presence of internalized affirmativeness that exists in privileged individuals (Worthington et al., 2005). Finally, the Awareness of Sexual Orientation Privilege and Oppression subscale of the APOS should evaluate heterosexism based on the presence or absence of the following attitudes, beliefs, and myths: Those that (a) dismiss, belittle, disregard (aversive), or deny (amnestic) the impact of heterosexism; (b) express paternalistic patterns of thought about non-heterosexual individuals (paternalism); and (c) express appreciation of stereotypic characteristics often attributed to lesbians and gay men (positive stereotypic, Walls, 2008). These attitudes, beliefs, and myths serve only to continue to perpetuate the cycle of privilege and oppression (Walls, 2008). A review of the sub-construct of awareness of SES privilege and oppression is provided next.

**Socioeconomic status privilege and oppression.** The Awareness of Socioeconomic Status (SES) Privilege and Oppression subscale is the fourth and final subscale included in the APOS (Montross, 2003). Montross defined awareness of SES privilege and oppression as an individual’s “awareness of how social class can lead to relative privilege and oppression in American society” (p. 49). An individual’s awareness of class-based privilege and oppression is measured by calculating the total score for the SES subscale. Montross found evidence of low subscale reliability (.564, n = 243) and noted that many SES subscale items incorrectly loaded on other subscales included in the APOS. As a result, a revision of this subscale is necessary to further clarify the subconstruct of awareness of SES privilege and oppression and to identify new item content.

The remaining subsections for awareness of SES privilege and oppression provide
new content material beyond what was previously provided by Montross (2003). The literature commonly refers to SES privilege and oppression as classism. The definition and dimensionality of classism are discussed first. Then, four specific manifestations of classism observed in U.S. society are explored in order to identify new content material for inclusion in an updated Awareness of SES Privilege and Oppression subscale. Examples are provided during the discussion of the four specific manifestations of classism in order to illustrate the process of utilizing information from the literature review to write new test items. Next, classism is defined.

**Defining classism.** The American Psychological Association (APA, 2006) provides a comprehensive definition of classism. The APA defines classism as the “network of attitudes, beliefs, behaviors, and institutional practices that maintain and legitimize class-based power differences that privilege middle and higher income groups at the expense of the poor and working classes” (p. 7). These power differences are associated with a lack of access to valued resources such as education, healthcare, employment, housing, legal assistance, and political influence for poor individuals (American Psychological Association, 2006; Lott, 2002; Ritz, 2009). This lack of access to valued community resources leads to the structural recreation of wealth and power for the non-poor because impoverished groups lack the power to overturn the classist system (American Psychological Association, 2006). The definition provided by the APA will be utilized as the definition of classism provided in the updated Awareness of SES Privilege and Oppression subscale.

**Dimensionality of classism.** Classism is a difficult issue to study because the literature suggests the construct varies across demographic variables including income,
race, and the confounding nature of intersecting social identities (American Psychological Association, 2006; Kluegel & Smith, 1986; Risman, 2004). First, Kluegel and Smith found that privileged and oppressed groups differ on beliefs about the cause of poverty. These authors examined the difference between poor and non-poor groups and found that privileged individuals (e.g., the middle class) are more likely to attribute the cause of poverty to detrimental personal characteristics (e.g., laziness), whereas oppressed individuals (e.g., individuals with low income) often fault institutional disadvantages as the cause of sustained poverty. Another potential confound to scholarly research on classism can be noted in the intersectionality of multiple social identities (American Psychological Association, 2006; Risman, 2004; Worell & Remer, 2003). Risman wrote “there is now considerable consensus that one must always take into consideration multiple axes of oppression; to do otherwise presumes the whiteness of women, the maleness of People of Color, and the heterosexuality of everyone” (p. 442).

These collective findings indicate it may be challenging to create test items for the construct of classism because different groups may respond differently to items. Knight et al. (2002) suggested it is generally important for groups to respond similarly across items because variable response styles between groups may introduce systematic error into the test scores. The challenge in item construction for a classism scale may lie in the ability to create test items that will provide a consistent score across cultural groups. Knight et al. indicated there may be instances in which it is acceptable to have different response styles for different groups if this is warranted by the construct. More studies are needed to better assess the relationship between demographic variables and the measurement of classism. These studies are needed to better determine the
dimensionality of the construct and to ascertain whether there is underlying content that could consistently be measured across groups. The manifestations of classism are discussed next.

**Manifestations of classism.** Four specific manifestations of classism are discussed in the subsections below. Those four expressions include (a) education, (b) healthcare, (c) employment, and (d) housing. Each manifestation is negatively impacted by unfavorable stereotypes against individuals with low SES. These stereotypes often “attribute poverty to personal failings rather than socioeconomic structures and systems that ignore strengths and competencies in these groups” (American Psychological Association, 2000, p. 4). Negative stereotypes of the poor include beliefs that individuals with low SES are uneducated, lazy, unpleasant, stupid, financially inept, unmotivated, dirty, immoral, criminally inclined, alcoholic, abusive, angry, and violent (Coazzarelli, Wilkinson, & Tagler, 2001; Lott, 2002; Ritz, 2009). Cozzarelli et al. (2001) found that negative stereotypes exist for middle class individuals too, but found the stereotypes for individuals with low SES were significantly more negative than stereotypes for the middle class. The specific manifestations of classism are discussed next.

**The manifestation of classism in education.** Classism is manifested in the educational system through inequity in the learning environment, learning opportunities, and economic resources (American Psychological Association, 2006; Hochschild, 2003; Lott, 2002). Lott (2002) described a two-tier educational environment in the United States that is designed to benefit the privileged and disadvantage the oppressed. Top-tier schools are composed primarily of suburban, middle-class students of privilege. These schools are often well-funded, well-maintained, and well-equipped and provide valuable
opportunities for learning (Lott, 2002). Bottom-tier schools, on the other hand, are primarily made up of students from lower SES backgrounds. These schools are often poorly-maintained, underfunded, and lack access to basic necessities (e.g., textbooks) that ultimately limit students educational potential (Lott, 2002).

Inequity in environmental resources leads to disadvantages in educational opportunities. Hochschild (2003) and the APA (2006) both noted there is a strong link between SES and academic performance. Lott (2002) pointed out that bottom-tier schools often rely heavily upon minimally trained teacher’s aides (i.e., only 10% possess a bachelor’s degree) suggesting that low income students do not have equal access to high quality instruction when compared to top-tier schools.

Margolin (1993, 1994) suggested that gifted education programs may inadvertently reinforce classism. Gifted programs are often composed predominantly of middle class students and therefore segregate these students from students with low SES. As a result, gifted education students have access to advanced learning opportunities and better learning environments than lower income students (Margolin, 1993, 1994). Schools inevitably reproduce inequitable social structures because students from privileged backgrounds learn that they have voices and students from oppressed backgrounds learn to be silent (Smith, 2000). There are clear educational advantages to attending top-tier schools and equally clear disadvantages to attending bottom-tier schools.

The lack of economic resources disadvantages low income families and provides advantages to middle and upper class families (Lott, 2002). Lott pointed out that a college education is not always a realistic option for low income students because college
tuition is often unaffordable. Lott indicated that college tuition costs in the year 2000 would consume the following percentages of family budgets: lower class, 62%; middle class, 16%; and upper class, 7%. These percentages highlight the difficult choices that the poor must face when considering higher education.

Ritz (2009) conducted a qualitative study of victims of classism. Victims in the study identified teachers and classmates as perpetrators of classist views suggesting that low SES students are disenfranchised by both their peers and by administrators. The low income students included in the study reported experiencing the following negative behaviors from other students: Uncomfortable stares, exclusion from participatory activities, disparaging and derogatory remarks, and negative or condescending attitudes. Stereotypes for low income individuals such as low motivation, laziness, disagreeableness, and being stupid only serve to maintain the inequities observed in the educational system by causing teachers and students to devalue and distance themselves from low income students (Ritz, 2009). Ultimately, this educational imbalance affords privilege to those with economic resources and oppresses those who lack resources.

In summing this section, classism is expressed in the educational system through inequity in the learning environment, learning opportunities, and economic resources. These disparities afford middle and upper class students privileges that students with low SES do not have. One privilege and one oppression item for the suggested revision of the APOS that addresses the education-related manifestation of classism are included in Table 1 (see items 1 and 2). Next, the focus shifts to the manifestation of classism in healthcare.
The manifestation of classism in healthcare. A second area in which classism is manifested is the healthcare system. The United States lags behind other nations that spend less on healthcare (World Health Organization, 2000). Individuals with low SES often suffer at higher rates from psychological and medical disorders than individuals with higher SES. A World Health Organization (WHO) report indicated that in 2000 the United States ranked 37th out of 191 industrialized nations despite spending more money compared to its gross domestic product than any other country. The WHO suggests this low rating was warranted because of the high volume of low income individuals who are not covered under healthcare systems. The report states “the poor are treated with less respect, given less choice of service providers and offered lower-quality amenities” (p. 1) when referring to Americans with low SES. In addition, the report notes “in trying to buy health from their own pockets, they pay and become poorer” (p. 1).

Individuals from low SES backgrounds are more likely to suffer from psychological issues than other people (American Psychological Association, 2000). Individuals who live in poverty suffer from diagnosable mental disorders at a rate two to five times higher than non-poor individuals (American Psychological Association, 2000). Hatch and Dohrenwend (2007) reviewed the literature on trauma and other stressful life events and found that individuals with low SES suffer from higher rates of traumatic and other stressful life events. There is also evidence that children with low SES have higher rates of family disruption, schizophrenia, mood disorders, personality disorders, and substance abuse than youth from higher SES families (McClellan, Werry, & Ham, 1993). The APA (2006) indicated that maladaptive parental responses to environmental stressors have negative consequences for the mental health of children. Challenging and stressful
environments may promote hostility, anger, depression, and other maladaptive affective responses that negatively affect children’s health (American Psychological Association, 2000).

Individuals with low SES also face more dire medical outcomes than individuals with higher SES (American Psychological Association, 2000; Verkooijen et al., 2009; Zell et al., 2008). Mortality rates for the poor are higher for infants, adults, and older adults than any other social strata (American Psychological Association, 2000). Verkooijen et al. studied women diagnosed with breast cancer and found that women of lower SES faced higher risks of death than women from middle or upper SES. Zell et al. studied skin cancer in patients diagnosed with cutaneous melanoma and found that low SES predicted poor outcome (i.e., low survival rate). Denvir et al. (2006) studied different SES groups who were recovering from heart surgery. This author found that patients with low SES had higher rates of hospital readmission and lower quality-of-life ratings than individuals from other SES groups. People with low SES identified doctors, secretaries, and nurses within the healthcare system as instigators of classist behaviors ranging from differential treatment, bad or no services, hurtful remarks, and condescending attitudes (Ritz, 2009). Further, there is evidence that healthcare providers may not provide individuals with low SES adequate information concerning diagnoses because the clinicians believe low SES clients do not have the intellectual capacity to understand the information (American Psychological Association, 2006).

In summing this manifestation of classism, the poor often face challenging or overwhelming healthcare systems due to limited financial resources. Individuals from low SES backgrounds are three times more likely to be uninsured and this group lacks the
financial resources needed to pay for services (American Psychological Association, 2000). Further, individuals with low SES who are able to obtain treatment for psychological or medical conditions often face poor treatment outcomes and higher death rates than the non-poor. Negative stereotypes have dire consequences on the care that individuals with low SES receive (American Psychological Association, 2006). One potential privilege and one oppression item for the suggested revision of the APOS are included in Table 1 (see items 3 and 4). The negative health consequences associated with being poor may also negatively impact individuals in employment settings.

*The manifestation of classism in employment.* Employment is the third manifestation of classism. Disadvantages such as inadequate educational opportunities and healthcare issues are compounded by negative employment prospects for victims of classism (American Psychological Association, 2006). The APA (2006) states that “lower SES jobs are generally more physically hazardous, provide less autonomy, more often involve shift work, and can be routine and monotonous” (p. 10). Williams (2003) studied men with low SES and found these individuals often have little control over working conditions, face high workloads with little reward for effort, and experience high levels of stress. Williams noted that high work stress levels were associated with insomnia, obesity, poor diet, and decreased physical activity. Further, Williams found that men with lower SES constituted approximate 90% of the work-related fatalities suggesting that impoverished men are more likely to work in dangerous conditions. On the other hand, workers with high SES are more often involved in jobs that have more control over working conditions, provide mental challenges, and require workers to utilize their full range of abilities (American Psychological Association, 2006).
Low income participants in the Ritz (2009) study reported experiencing classism both while seeking employment and while at work. The victims reported experiencing condescending attitudes and negative treatment from potential employers when compared with higher SES workers. The participants with low SES also reported exposure to the following classist behaviors while at work: glaring, staring, and condescending attitudes. In summing this expression of classism, individuals with low SES face challenges both in obtaining work and while on the job. The working poor are often confronted with menial work and poor working conditions. One privilege and one oppression item for the suggested revision of the APOS are included in Table 1 (see items 5 and 6).

*The manifestation of classism in housing.* Housing is the fourth and final manifestation of classism explored in this review. Individuals with low SES face hardships whether they are homeless or not (Phelan, Link, Moore, & Stueve, 1997). Homeless individuals face hardships by the nature of their individual living conditions. Phelan et al. evaluated the stigmatization of the homeless in a study that allowed participants to read and then respond to a hypothetical case vignette involving a 30-year-old man who was applying for work. The participants were given two separate versions of the vignette; in one the man in the vignette was described as homeless and in the second the man was described as living in a small apartment. Participants rated the homeless man more negatively and demonstrated greater social distancing behaviors toward the homeless individual than when the man was described as living in an apartment (Phelan et al., 1997). Additionally, Barnett, Quackenbush, and Pierce (1997) found that people are generally fearful and angry toward the homeless. Further, these individuals were more likely to attribute homelessness to negative individual
characteristics such as laziness or low intellectual ability than institutional causes (Barnett et al., 1997).

Limited financial resources make it difficult for people with low SES to obtain adequate housing. Kirby (1999) found that homeowners and college students rated hypothetical new neighbors more negatively if the new neighbors were described as welfare recipients when compared with a hypothetical family that earned or inherited their income. In general, individuals who receive public assistance are characterized as dependent, lazy, unsophisticated, promiscuous, and untrustworthy (Bullock, 1995). Lott (2002) noted a practice called gentrification and urban renewal whereby landlords in cities routinely reject applications from individuals seeking subsidized housing with the goal of keeping properties available so that landlords can market the properties to businesses seeking to relocate to urban areas.

Those individuals with low SES who obtain housing often live in difficult conditions (Halpern, 1993; Moon & Rolison, 1998). Halpern noted that low-income families often live in neighborhoods that are both geographically and socially isolated from middle and upper class neighborhoods. The author identified this segregation of the poor as a form of cognitive and geographic distancing. Moon and Rolison identified a third form of distancing behavior that is perpetrated by individuals from the middle and upper class; language. The authors suggested words such as *White trash* are often used to refer to low-income individuals who live in *trailer parks*, whereas non-poor individuals who reside in similar dwellings live in *mobile home communities*. Moon and Rolison noted that middle class families live in *high rise apartments*, whereas low-income families live in *housing projects*. The authors suggested the differences in language are
minute, but clearly convey this behavior as another form of distancing.

Low-income individuals are also more apt to live in communities that present environmental dangers (Lott, 2002; Stretesky & Hogan, 1998). Stretesky and Hogan studied 53 communities that surrounded hazardous waste cleanup sites and found a significantly higher representation of low-income Hispanics and African American families living in those neighborhoods. Pinderhughes (1996) suggested that low-income families lack the political power and resources that are needed to fight hazardous industrial companies that are attempting to locate in their communities. In addition, Pinderhughes argued that leasing and rental rates are often lower in low SES neighborhoods and so industrial businesses seek out these neighborhoods to reduce costs. Bullard and Johnson (2000) suggested the overrepresentation of hazardous industries in low income neighborhoods is an example of disparate and biased governmental systems in which high income communities receive environmental protections that are not afforded to low income communities.

In summing this section, it is important to note that individuals with low SES face difficult and even harsh living conditions. Limited financial resources make it challenging for the homeless to finding housing and low income individuals who seek housing report experiences of discrimination. In addition, poor individuals are more likely to live in neighborhoods with environmental safety issues. Collectively, negative stereotypes about the poor have a direct bearing on the lives of these individuals who are often dependent upon others for help and support. One privilege and one oppression item for the suggested revision of the APOS are included in Table 1 (see items 7 and 8).
Summary of classism section content. In concluding this section, classism was broadly defined as a form of privilege and oppression in which the poor are oppressed by the privileged non-poor. This bias is manifested in the educational, healthcare, employment, and housing domains within the United States. In addition, two items (one privilege and one oppression item) were presented for each of the four manifestations (eight total items, see Table 1).

The Present Study

The present study involved the initial construction and validation work for the revised APOS (hereafter referred to as the APOS-2). The APOS-2 validation study involved a substantial revision of the original version of the measure. Underperforming items from the original measure were not transferred over to the revised measure and new items were added to each subscale. The items retained from the original APOS and all new items were evaluated for content validity by two groups consisting of a focus group and a group of expert raters. Then, all of the items included in the current study were administered to a combined group of 484 university students over the summer 8-week and fall terms of 2013. The resulting data were analyzed to look for evidence that the items were normally distributed. Then a process involving assessing internal consistency and exploratory factor analysis was utilized to make decisions about whether or not items were retained or eliminated from the APOS-2. Finally, the statistical properties of the final solution are examined to look for evidence of construct validity. The specific methodological aspects of the study are presented in Chapter Three.

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Table 1

Suggested New Items for the Awareness of Classism Subscale of the APOS-2

<table>
<thead>
<tr>
<th>Item Type</th>
<th>Item Number</th>
<th>Suggested Item</th>
<th>Reverse Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privilege</td>
<td>1</td>
<td>Having access to learning opportunities such as zoos provide important advantages over other students who cannot afford this type of experience.</td>
<td>No</td>
</tr>
<tr>
<td>Oppression</td>
<td>2</td>
<td>Public schools provide equal opportunities to learn when compared to private schools.</td>
<td>No</td>
</tr>
<tr>
<td>Privilege</td>
<td>3</td>
<td>Everyone has equal access to good quality health insurance if they want it.</td>
<td>Yes</td>
</tr>
<tr>
<td>Oppression</td>
<td>4</td>
<td>People who are poor are more likely to suffer from mental illness because of the way society treats them.</td>
<td>No</td>
</tr>
<tr>
<td>Privilege</td>
<td>5</td>
<td>Growing up in a middle class family does not improve your chances for obtaining a job that will be satisfying.</td>
<td>Yes</td>
</tr>
<tr>
<td>Oppression</td>
<td>6</td>
<td>Growing up in a lower class family hurts a person’s chances for obtaining a job that will make them happy.</td>
<td>No</td>
</tr>
<tr>
<td>Privilege</td>
<td>7</td>
<td>People who live on the good side of town are less likely to become ill from industrial plants than other people.</td>
<td>No</td>
</tr>
<tr>
<td>Oppression</td>
<td>8</td>
<td>People who are on welfare do not make good neighbors.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note. The scoring and response categories for the APOS-2 are as follows: 1 (Strongly Disagree), 2 (Disagree), 3 (Slightly Disagree), 4 (Slightly Agree), 5 (Agree), and 6 (Strongly Agree).*
Chapter Three: Methods

In this chapter, I describe the methodology and research design for the revision of the Awareness of Privilege and Oppression Scale (APOS; Montross, 2003). The revised measure will be referred to as the APOS-2. This chapter is structured into five stages that represent an adapted and expanded version of Clark and Watson’s (1995) test construction model. The five stages are as follows: Stage 1, elimination and retention of original APOS items; stage 2, new item development; stage 3, expert rater feedback; stage 4, validation of revised APOS-2; and stage 5, data analysis. The participants, procedures, instruments, and materials for each stage are discussed by stage when applicable.

Stage 1: Elimination and Retention of the Original APOS Items

The first stage of this project involved making decisions regarding which of Montross’ (2003) original 50 items were retained or eliminated. I used Montross’ original output data during the decision-making process. This section begins with a description of the participant demographic data generated during the original APOS validation study and then describes the procedures that were utilized for evaluating the original APOS items.

Participants. The participant group Montross (2003) utilized during the factor analytic and reliability portion of her study was obtained from a group of 257 undergraduate students “who had minimal knowledge of people who were different with regard to race, gender, socioeconomic status, or sexual orientation” (p. 38). This participant sample had a mean age of 21.09 years (range = 18-51 years, $SD = 3.60$ years).
Seventy-six percent (\(n = 195\)) of the participants were female and 24% (\(n = 62\)) were male. Ninety-seven percent (\(n = 249\)) of the sample was “exclusively heterosexual” and 91% (\(n = 229\)) earned $15,000 per year or less. The racial make-up of the group was predominantly Caucasian (92%, \(n = 232\)) with minor representation from the following additional groups: 6% African American (\(n = 14\)), 2% Asian (\(n = 4\)), and < 1% Hispanic (\(n = 1\)). Finally, the religious affiliation of the sample was as follows: 89% Christian (\(n = 226\)), 9% reported they were not religiously affiliated (\(n = 24\)), < 1% Muslim (\(n = 1\)), and < 1% agnostic (\(n = 1\)).

**Procedures.** Montross’ (2003) original output data were utilized as the primary source of data for determining which items were retained or eliminated from the original APOS during stage 1. A two-step process was utilized for eliminating inadequate items. Inadequate items were defined as items that failed to load on a factor at or above .30 based on Montross’ factor analytic data and items that unexpectedly loaded on a factor that did not make sense theoretically. In step 1, items with factor loading coefficients below .30 as observed in Montross’ output data were eliminated based on the recommendations provided in Scott (1968), Clark and Watson (1995), and Cronbach and Meehl (1955). Seven of the 50 original APOS items were eliminated from the scale based on this criterion. In step 2, all items that failed to load on each item’s theoretically derived factor during Montross’ exploratory factor analysis were eliminated from the measure. Twenty-two items from the original APOS failed to load on the factor the items were designed to measure and thus were eliminated. This two-step process eliminated a net total of 24 items from the original APOS (five items met criteria for elimination in both steps reducing the total number of actual items eliminated from the measure from 29
if the two steps did not overlap to 24) and 26 total items were retained for inclusion in the APOS-2 (see Appendix A for a list of the 50 original APOS items that identifies items that were retained and eliminated from the current measure using this two-step process).

Stage 2: New Item Development

The purpose of stage 2 was to complete the initial draft of the APOS-2 items which included both items that were retained from the original APOS and new items that were generated specifically for the APOS-2. The 26 original APOS items retained during stage 1 served as a starting point for the initial draft of the APOS-2. Then, new items were created by a focus group that consisted of researchers with specific expertise related both to social justice issues and research involving the original APOS. The new items were then added to the revised measure prior to stage 3.

Participants. The focus group consisted of four members (myself included) of an ongoing diversity training outcome research team that was actively involved in both social justice-focused diversity training and research that utilized the original APOS as an outcome measure for more than two years at the time the focus group was convened. This focus group was utilized for item creation because the individuals in the group had a unique expertise related to the original APOS, were knowledgeable about the limitations of the original measure, were motivated to help improve the instrument in an effort to better the group's research, had specific training and expertise related to social justice issues and diversity training, and were familiar with the construct of awareness of privilege and oppression through their research and training experiences (see Appendix B, C, and D, and my Vita at the end of this manuscript for curriculum vitas for the four focus group members). This research team was composed of one doctoral-level
university staff member and three doctoral students (including the author of this manuscript) in a graduate psychology program at a large, public university located in the Southeast. Collectively, this research team produced four poster presentations at national conferences using data gathered from the original APOS.

**Materials.** Focus group members were provided a training packet containing various handouts (see Appendix E for copies of the handouts included in the training packet) during a focus group training session. This training packet included a form that outlined common item writing strategies such as strategy number 4 (see Appendix E) that indicates “each item must ask only one question or make one statement (avoid double-barreled items).” This item writing handout supplemented and summarized the information covered during the focus group training that taught group members how to look for and identify potentially problematic items. The training packet also included a brief summary of each type of awareness of privilege and oppression included in the APOS-2 (see Appendix E).

**Procedures.** I evaluated the 26 items retained from the original APOS to determine whether or not the items contained content referenced in Chapter Two, recruited and organized the focus group that created the new items for the APOS-2, trained the focus group participants, and prepared the initial draft of the APOS-2 for the expert rater group discussed in stage 3. All 26 of the items retained from the original APOS coincidentally contained content that was consistent with the content detailed in Chapter Two. This finding suggested the items fit well with Clark and Watson’s (1995) recommendation that item content be consistent with the extant literature in order to avoid creating measures that are based entirely upon intuition rather than current research.
The focus group members were recruited via personal communication and these individuals constructed the new items generated for the APOS-2. I trained all focus group members in both item-writing strategies and the content detailed in Chapter Two during one, two-hour information and practice session (see Appendix E for copies of the handouts provided to focus group members). First, the item-writing strategies were discussed and then focus group members were presented with practice examples to verify their understanding of each topic. Next, I presented an outline of the content from Chapter Two.

This focus group training session was followed by an item-writing session two days after the training. All new items were generated during the item-writing session and were based on content provided in Chapter Two in order to satisfy Clark and Watson’s (1995) recommendation that all test items be linked to the extant literature. The item-writing session began with a brief review of the information from Chapter Two (e.g., the findings on evidence supporting the existence of racism in the legal system). Then, this review was followed by four brainstorming sessions (one each for racism, sexism, heterosexism, and classism) in which all focus group members spontaneously and verbally generated new items while I took notes. After each brainstorming session, the focus group members reviewed the list of items to look for item clarity, item wording, grammatical issues, and common item writing mistakes. In addition, the focus group members checked to verify that the items in each proposed subscale area (e.g., racism) reflected the range of topic content discussed in Chapter Two. After the item-writing session, I typed the newly generated items in preparation for a final feedback session with
Finally, focus group members participated in an item feedback, revision, and elimination session. The focus group members were presented with the list of items that contained all 26 items retained from the original APOS and the new items generated specifically for the APOS-2. These items were organized and presented by subscale (e.g., classism) with all original APOS items in bold and all newly created items in plain text in order to facilitate discussion on the overall content of each subscale. All newly created items were reviewed again to ensure these items spanned the range of content provided in Chapter Two.

Several additional considerations were given to determining the list of items that were retained for use in stage 3 during the focus group’s feedback, revision, and elimination session. First, special attention was given to approximate a balanced number of items from each of the four types of awareness included in the measure (i.e., racism, sexism, heterosexism, and classism) in order to avoid providing an unfair advantage to one intended subscale over another. Second, a combination of both forward (where a higher item score represents a greater level of the measured trait) and reverse-scored items (where a higher item score represents a lower level of the measured trait) were included in the measure to reduce the potential threat of response bias. Finally, items included in the initial draft incorporated content outlined in the literature review (see Chapter Two). For example, the extant literature for awareness of racial privilege and oppression suggests racism is manifested in employment, education, politics, the legal system, and in healthcare (see Chapter Two). As a result, the initial draft of the APOS-2 contained items that spanned the range of data provided on these five manifestations of
racism. This literature-driven process resulted in an initial draft of the APOS-2 that contained 107 total items divided among the four subscales (see Appendix F for a list of the 107 items developed by the focus group).

Stage 3: Expert Rater Feedback

The purpose of stage 3 was to obtain feedback from a volunteer group of experts with extensive knowledge of one or more of the specific areas of awareness of privilege and oppression included in the APOS-2 (racism, sexism, heterosexism, and classism). The feedback was then incorporated into the measure and served as the basis for the second draft of the measure that was administered to research participants for data collection and analysis purposes during stage 4 of the revision project. The participants and procedures utilized in stage 3 are described next.

Participants. Expert raters were recruited based upon their attainment of one or more of the following criteria: A history of at least two publications relevant to one or more of the specific content areas included in the APOS-2 (i.e., racism, sexism, heterosexism, and classism), practical experience teaching social justice-focused diversity training, or experience with social justice-focused advocacy work that included at least one of the specific content areas included in the APOS-2 (e.g., racism). All of the expert raters selected for the study had accomplished one or more of these criteria. All expert raters were invited to review the four APOS-2 subscales. However, due to the time constraints of individual participants, some expert raters were only available to review one or two of the subscales while other raters reviewed all of the subscales (see Appendix G for an expert rater assignment list that summarizes which raters reviewed which subscales). The following eight expert raters participated in this project: (a) Sonja Feist-
Price, Ph.D.; (b) Ann R. Fischer, Ph.D.; (c) Katherine Hahn Oh, Ph.D.; (d) William Ming Liu, Ph.D.; (e) Marguerite K. Rivage-Seul, Ed.D.; (f) Sharon Scales Rostosky, Ph.D.; (g) Laura Smith, Ph.D.; and (h) Melba J. T. Vasquez, Ph.D., ABPP (see Appendices H through O for abbreviated curriculum vitae for the expert raters).

Sonja Feist-Price, Rh.D., Ph.D. is a faculty member in the Department of Special Education and Rehabilitation Counseling at the University of Kentucky (see Appendix H for an abbreviated copy of her curriculum vita). While at the University of Kentucky, Dr. Feist-Price has served as the director of the African American Studies and Research Program and she has co-chaired the Task force for Inclusiveness for the College of Education. Her research interests include cross-cultural issues and she has published numerous articles relevant to healthcare disparities for women, race, and national origin. Dr. Feist-Price reviewed the Awareness of Racism subscale items.

Ann R. Fischer, Ph.D. is currently an associate professor of psychology with a cross-appointment in the department of Women, Gender, and Sexuality Studies at Southern Illinois University at Carbondale (see Appendix I for an abbreviated copy of her curriculum vita). She teaches courses related to the psychology of women and multicultural issues. In addition, Dr. Fischer has published over 50 articles, book chapters, and conference presentations relevant to feminist issues, sexism, heterosexism, racism, and multicultural issues. She reviewed the Awareness of Sexism and Heterosexism subscale items.

Katherine Hahn Oh, Ph.D. is currently a staff psychologist in the Counseling Center at Oberlin College and she has worked previously as an advocate at a spousal abuse center for women (see Appendix J for an abbreviated copy of her curriculum vita).
Dr. Oh’s research interests include feminist and race-related issues and she has published over 30 articles, book chapters, and conference presentations during her career. She is also an active participant in national organizations that promote multicultural issues including the American Psychological Association where she served in leadership roles related to feminist and social class issues. For example, Dr. Oh served as a member of a task force responsible for incorporating social class into the psychology curriculum. Dr. Oh reviewed all of the subscales for the APOS-2.

William Ming Liu, Ph.D. is currently a professor of counseling psychology at the University of Iowa (see Appendix K for an abbreviated copy of his curriculum vita). He has taught numerous courses related to multicultural issues and multicultural counseling in his various academic appointments. His research interests include classism, race, multicultural issues, and multicultural counseling; he has published over 80 articles, book chapters, and conference presentations relevant to these issues. Additionally, Dr. Liu developed and published a psychometric instrument related to classism and he has served in numerous leadership roles within national organizations including the American Psychological Association where he served as a committee member on the Task Force on Socioeconomic Status and the National Multicultural Summit and Conference where he has served as the Programming Committee Chair. He reviewed all of the subscales for the APOS-2.

Marguerite K. Rivage-Seul, Ed.D. is currently a professor and the director of the Women’s Studies program at Berea College where she teaches courses related to women’s issues and social justice (see Appendix L for an abbreviated copy of her curriculum vita). Dr. Rivage-Seul’s research interests include feminist issues and the
Appalachian culture and she has published over 30 articles, book chapters, and conference presentations related to these issues. She currently serves as the Director of the Intern Program at the Center for Global Justice in San Miguel de Allende, Mexico. She has previously served on the National Women’s Studies Association Governing Council and locally as the chair of the Race and Diversity Committee for the Berea School System in Berea, Kentucky. Dr. Rivage-Seul reviewed all of the subscales for the APOS-2.

Sharon Scales Rostosky, Ph.D. is currently a professor in the Department of Educational, School, and Counseling Psychology at the University of Kentucky (see Appendix M for an abbreviated copy of her curriculum vita). Dr. Rostosky teaches courses related to lifespan and gender development issues and research methods with sexual minority populations. Her research interests include feminist and sexual minority issues and she has published over 90 articles, book chapters, and conference publications related to these topical areas. Dr. Rostosky reviewed the Awareness of Sexism and Heterosexism subscales.

Laura Smith, Ph.D. is currently an assistant professor of Psychology and Education in the Department of Counseling and Clinical Psychology at Columbia University (see Appendix N for an abbreviated copy of her curriculum vita). Dr. Smith teaches a course in racial and cultural counseling and is actively involved in social justice work through her on-campus involvement with the Task Force on Race, Culture, and Diversity at Columbia University’s Teachers College. Her research interests include feminist, class, and cultural issues and she has published over 70 articles, book chapters, and conference presentations related to these issues. She is currently the chair of the
Task Force on Socioeconomic Status for the American Psychological Association. Dr. Smith reviewed the Awareness of Classism subscale.

Melba J. T. Vasquez, Ph.D., ABPP is currently an independent practice psychologist and the director of Vasquez and Associates Mental Health Services in Austin Texas (see Appendix O for an abbreviated copy of her curriculum vita). Dr. Vasquez’s research interests include feminist and multicultural issues and she has published over 70 journal articles, book chapters, and conference presentations related to these issues. She served as the president of the American Psychological Association in 2011 and she is a cofounder of the National Multicultural Summit and Conference. Dr. Vasquez has also previously taught graduate courses in multicultural counseling at The University of Texas. She reviewed all of the subscales for the APOS-2.

Materials. The item review process was facilitated using an electronic survey program entitled Qualtrics. Qualtrics is an internet-based, data collection, research tool that utilizes Secure Sockets Layer (SSL) protocol to collect and protect participant data. This data collection tool was sponsored by the University of Kentucky and is intended for research purposes.

Procedures. The initial draft of the APOS-2 generated at the end of stage 2 and all feedback questions described in this subsection were entered into the Qualtrics program prior to distribution to the expert raters. The expert raters were all recruited through email communication. Each expert rater was invited to review all of the APOS-2 subscales, but any expert rater who was hesitant about the time involved in the project was offered the option of reviewing a reduced number of subscales (see Appendix G for a list of which expert raters reviewed which subscales). The expert raters were sent a
secure link via email which allowed them to log into the Qualtrics program, review the specific subscales they had agreed to review, and provide feedback via an encrypted internet connection. The expert raters were also sent a digital copy of Chapter Two of the current manuscript that describes the literature on racism, sexism, heterosexism, and classism in order to provide background information for reference purposes. Feedback was sought from the expert raters at the item level, at the subscale level, and at the instrument level. At the item level, expert raters were asked three questions. First, expert raters were asked if each item was appropriately categorized into one of the four content areas (awareness of racism, sexism, heterosexism, or classism). For example, raters assessed whether an item that was designed to measure awareness of racism was appropriately categorized after reading the item content. The raters indicated either “yes” or “no” to this first question. Second, expert raters were asked to categorize each item as measuring either “privilege” or “oppression.” Then, each rater was asked to provide any recommended word or content changes, comments about the item, or to simply recommend that the item be deleted from the measure.

At the subscale level, expert raters were asked one or two questions. First, raters were asked “do you feel the items associated with this type of awareness of privilege and oppression adequately cover the range of content material for this construct?” If the participant believed the subscale as a whole did not adequately cover the range of content, the following question was presented: “If you responded “no” to the follow-up question immediately above [sic], do you have any specific recommendations for content that should be eliminated or additional content material that you suggest should be added to the measure in order to improve the spectrum of content representing awareness
of...(insert the specific name for the type of awareness)?” This question was altered to reflect the specific form of awareness addressed by that particular subscale (i.e., racism, sexism, heterosexism, or classism).

Finally, expert raters who reviewed all of the subscales were asked to provide feedback on the overall measure after all of the test items from all of the four subscales had been reviewed. More specifically, raters were asked “do you have any specific feedback related to the overall measure that you have not already provided on this feedback form and that you feel would be helpful in improving the measure?” Once each expert rater completed the feedback protocol, the Qualtrics program closed and all data were stored in the program database.

The collective feedback gathered during the expert rater process was entered into an Excel spreadsheet to aid in the item retention, elimination, and alteration decision-making process (see Appendix P for an example of the data summarized in the spreadsheet including the outcome of the decision-making process). Incorporation of the feedback was based on the guidelines that follow. First, specific feedback provided by two or more expert raters was automatically incorporated into the measure. Then, specific feedback provided by only one expert rater was incorporated at my discretion. Special attention was given to generally balance the number of items across subscales. Appendix P provides an example of the decision-making process for three of the APOS-2 items that were evaluated using the spreadsheet, including one item that was retained, one that was retained with changes, and one that was deleted from the measure altogether. In total, 28 items were eliminated from the list of 107 items generated by the focus group members in stage 2 based on expert rater feedback leaving a total of 79 items.
seven of the 79 items were revised after reviewing the expert rater feedback and were retained. The final list of 79 items were then randomly rearranged within the measure prior to administering the measure to research participants in stage 4. Stage 4 is discussed next.

**Stage 4: Validation of Revised APOS-2**

Stage 4 involved collecting the initial validation data for the 79-item draft of the APOS-2 from a sample of undergraduate college students. Data were collected through an internet-based survey protocol. Research has consistently demonstrated no significant difference between the psychometric properties of measures that are administered in internet versus paper and pencil methods of data collection (De Beuckelaer & Lievens, 2009; Howell, Rodzon, Kurai, & Sanchez, 2010; Lewis, Watson, & White, 2009). Participants were administered the demographic questionnaire (see Appendix Q), the Openness to Diversity/Challenge Scale (ODS; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996, see Appendix R), the 79-item draft of the APOS-2 (see Appendix S), and the Marlowe-Crowne Social Desirability Scale-Short Form 1 (MC-1; Strahan & Gerbasi, 1972, see Appendix T) in order to evaluate the reliability and validity of the APOS-2. The data analyses conducted on these data are described later in stage 5 and the results of this study are discussed in Chapter Four. The stage 4 subsections that follow describe the research participant pool, materials, procedures, and relevant operational definitions involved in the participant recruitment and data collection process for the current study.

**Participants.** The participants for this research study were approached through email communication over the summer 8-week term and fall term of 2013 at a large
public university in the Southeast. A list of 1,539 email addresses which a representative from the Registrar’s Office reported contained a randomly selected and approximately equal representation of freshmen, sophomore, junior, and senior undergraduate students from the university at large were obtained through the university’s Registrar’s Office prior to the start date for the summer term. Each of the 1,539 students were sent a recruitment email (see Appendix U for a copy of the recruitment email sent to research participants) on the first day of the 8-week summer term. Research participants were given an 8-week window of time in which to complete the survey and participants who did not complete the survey were sent reminder emails (see Appendix V for a copy of the reminder email) after weeks 1, 3, and 6 of the study administration period. One-hundred thirty-seven participants followed the link provided in the recruitment and reminder emails and logged into the survey. Of those 137 participants, 97 provided informed consent to participate in the research project, completed approximately 90% of each survey instruments, and were retained for data analyses purposes. Clark and Watson (1995) suggested that a sample size of 200 to 300 participants are needed for scale development studies and Comfrey and Lee (1992) recommend the following sample size guidelines when evaluating the structural validity of a measure: 50 = very poor, 100 = poor, 200 = fair; 300 = good, 500 = very good, and 1,000 or more = excellent. As a result of these recommendations, the sample size of 97 obtained from the summer 8-week session was determined to be insufficient for this study and a second round of the study was completed in the fall of 2013 at the same host institution.

A list of 4,000 email addresses was obtained from the Registrar’s Office which included randomly selected and equal numbers (1,000 each) of freshmen, sophomore,
junior, and senior students prior to the start of the fall 2013 term. The list was checked to eliminate any duplicate email addresses that were repeated from the summer term. Two-hundred twenty-eight of the 4,000 potential participants were eliminated because of duplicate email addresses that were resampled for the fall administration leaving a list of 3,772 students for the fall recruitment. Each of the 3,772 students were sent a recruitment email (see Appendix U for a copy of the recruitment email sent to research participants) on the first day of the fall 2013 term. Research participants were given a 10-week window of time in which to complete the survey and participants who did not complete the survey were sent reminder emails (see Appendix V for a copy of the reminder email) after weeks 1, 2, and 4 of the study administration period. The shorter duration between reminder emails during this second administration was the result of a decision to capitalize on the recency effect and in light of the fact that more participants completed the survey within the first few weeks of the summer administration than over the course of the survey period. Five-hundred fourteen participants followed the link provided in the recruitment and reminder emails and logged into the survey. Of those 514 participants, 387 provided informed consent to participate in the research project, completed approximately 90% of each survey instrument, and were retained for data analyses purposes.

**Materials.** The item review process was facilitated using an electronic survey program entitled Qualtrics. Qualtrics is an internet-based, data collection, research tool that utilizes Secure Sockets Layer (SSL) protocol to collect and protect participant data. This data collection tool was sponsored by the University of Kentucky and is intended for research purposes.
Instruments. Four measures were utilized in this study. These measures included the demographic questionnaire (see Appendix Q), the ODS (see Appendix R), the 79-item draft of the APOS-2 (see Appendix S), and the MC-1 (Strahan & Gerbasi, 1972; see Appendix T). The demographic questionnaire was utilized to provide data on the sample characteristics of research participants. The 79-item draft of the APOS-2 was administered to provide data for the item evaluation, internal consistency, and factor analytic portions of this study. Finally, the MC-1 and the ODS were administered to provide evidence of the discriminant and convergent validity of the APOS-2 test scores respectively.

Demographic Questionnaire. A demographic survey (see Appendix Q) was administered to all participants. The measure asked students questions regarding their gender, age, ethnicity, year in school, whether or not they received free or reduced lunch in high school, cultural experiences, academic course work, previous diversity training received, and parents’ levels of education. This questionnaire was adapted (i.e., the number of items was reduced because all of the items were not needed for analyses included in this study) from the demographic questionnaires utilized in Montross (2003) and Remer (2008).

Awareness of Privilege and Oppression Scale (APOS). This section provides information on the original version of the APOS (see Appendix A) and the 79-item draft of the APOS-2 (see Appendix S) that was administered to the research participants during stage 4. The available data on Montross’ original version of the APOS were provided first to highlight certain procedural aspects and observed psychometric properties of the instrument. Then a description of the third draft of the APOS-2 that was provided to
research participants during the current study is provided.

*The original APOS.* Montross' (2003) original version of the APOS (see Appendix A for a list of the original APOS items) is a 50-item, Likert-type scale that measures an individual’s awareness of privilege and oppression in four areas: (a) race, (b) sexual orientation, (c) gender, and (d) socioeconomic status (SES). This scale is theoretically based on an important transition point in Worell and Remer's (2003) feminist, Social Identity Development Model in which an individual gains awareness of the existence of privilege and oppression (Montross, 2003). In this model, an individual’s awareness of privilege and oppression represents a foundational step for the individual to move between level 1 (i.e., Pre-Awareness) and level 2 (i.e., Encounter). This awareness continues to increase throughout identity development. Participants respond to each item using a 4-point Likert scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). Higher total scores represent greater awareness of privilege and oppression with the range of total scores ranging from 0 to 150. A higher score on a particular subscale suggests greater awareness of privilege and oppression for race, sexual orientation, gender, or SES specifically.

Montross (2003) administered the measure to two known groups including 257 undergraduate students and 133 psychology professionals who attended a national conference on multicultural issues in order to establish criterion-related validity evidence. The APOS was able to discriminate (*t*(383) = 27.51, *p* < .000) between the two known groups (Montross, 2003). Evidence for convergent and discriminant validity was obtained using the short form of the Attitudes Toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973) and the Marlowe-Crowne Social Desirability Scale (MCSD;
Montross reported a moderate correlation with the AWS \(r = .32, p < .000\) and a negative correlation \(r = -.06, p = .34\) with the MCSD. The author utilized expert judges to establish test score content-related validity during the development of the instrument and then used the data obtained from the judges to modify and shorten the instrument from an initial item pool of 71 items to the current 50-item measure.

Using a sample of undergraduates, Montross (2003) reported internal consistency estimates for the total score, and four subscale scores. Cronbach alpha reliability estimates were as follows: Total score \(N = 227\), Sexual Orientation awareness \(N = 244\), Racial awareness \(N = 242\), SES awareness \(N = 243\), and Gender awareness \(N = 247\). Only the total score reliability estimate demonstrated acceptable reliability using Nunnally’s (1978) recommendation that Cronbach alpha coefficients should be .80 to greater than .90.

Montross (2003) also provided factor structure-related validity evidence for the APOS. She utilized principle components analysis and found the proposed four-component structure was supported with eigenvalues ranging from 6.27 to 2.15. Montross observed factor loading scores during her analysis that ranged from -.187 item 20) to -.718 (item 23); authors, such as Scott (1968), have suggested using a minimal cut off score of .30 when deciding to retain or eliminate items. This means that items with factor loadings less than .30 should be eliminated and items with factor loadings of .30 or higher should be retained and included in the measure. Montross also reported undesirable item loading characteristics based on the results of the factor analysis. More specifically, Montross found that items from each of the subscales failed to load on their
intended factors (e.g., item 40, “for many women, it is often a struggle to assert their authority in the workplace,” an item intended to load on the awareness of sexism subscale, instead loaded on the awareness of racism subscale). Montross did not utilize the predicted vs. actual factor loading patterns to make decisions about retaining or eliminating items.

In a later study, Remer (2008) provided evidentiary support for utilizing the APOS as a social justice-focused diversity training outcome measure. Remer employed the APOS in a pre-post, control vs. treatment group design to evaluate the effectiveness of diversity training for undergraduates. She reported significant differences between the treatment groups who received social justice-focused diversity training and the control groups who did not receive the training at posttest suggesting the APOS may be utilized as an outcome measure for diversity training. Remer reported pre (.908) and post (.925) Cronbach alpha reliability estimates for the APOS total scores, but no subscale score reliability estimates were provided. As hypothesized, the author reported moderate, positive, and significant correlations when comparing the APOS to other dependent variables in the study including measures of openness to diversity and ethnocultural empathy. The APOS pre-test total scores correlated .469 with the pre-test ODS (Pascarella et al., 1996) total scores and .525 with the pre-test Scale of Ethnocultural Empathy (SEE; Wang et al., 2003) total scores in this study.

The APOS-2. The 79-item draft of the APOS-2 (see Appendix S) is also intended to measure an individual's awareness of privilege and oppression in four areas: (a) racism, (b) sexism, (c) heterosexism, and (d) classism. The revised scale continues to utilize Worell and Remer’s (2003) identity development model as the theoretical basis for
the instrument. More specifically, the goal of the instrument is to measure increases in awareness of racism, sexism, heterosexism, or classism-based privilege and oppression associated with moving from level 1 (Pre-Awareness) to level 2 (Encounter) and the other levels of the Worell and Remer identity development model. The examination of the reliability and validity properties of the APOS-2 scores are the cornerstone of the current study.

The 79-item draft of the APOS-2 features three types of revisions. These three revisions included new items, an expanded group of item response categories, and new subscale names. First, the new items were intentionally generated based on subject matter described in Chapter Two of the current manuscript. Second, the number of item response categories was expanded from four response categories in the original APOS to six response categories in the revised measure. The six response categories and the number of points each response earns for the revised measure are as follows: 0 (strongly disagree), 1 (disagree), 2 (slightly disagree), 3 (slightly agree), 4 (agree), and 5 (strongly agree). This response category expansion brings the APOS rating scale in line with the rating scales of the POI (Hays, 2005, 5-point rating scale) and the SPM (Black et al., 2007, 6-point rating scale) that both utilize more than four response categories.

The third revision to the APOS-2 focused on the names of the four subscales. The names of the four subscales were shortened for convenience and ease of use. The Awareness of Racial Privilege and Oppression subscale was changed to the Awareness of Racism subscale. The Awareness of Gender Privilege and Oppression subscale is now referred to as the Awareness of Sexism subscale. The Awareness of Sexual Orientation Privilege and Oppression subscale was changed to the Awareness of Heterosexism.
subscale. Finally, the Awareness of Socioeconomic Status Privilege and Oppression subscale is now referred to as the Awareness of Classism subscale. These new names more accurately reflect the manner in which each scale is described in the extant literature. For example, studies related to racial privilege and oppression are typically grouped together under the umbrella of the term racism within the literature, so awareness of racism more accurately reflects the reference to this construct within the research literature when compared to the descriptor awareness of racial privilege and oppression.

The 79-item draft of the APOS-2 (see Appendix S) was administered to research participants in the current study. This draft contains 26 items from the original APOS and 53 new items generated by a focus group with previous research experience with the original APOS. All of the items were reviewed by an expert rater group with specific knowledge of the content areas covered in this measure (i.e., racism, sexism, heterosexism, and classism). The 79 items consist of 21 items that represent awareness of racism, 20 items that represent awareness of classism, 20 items related to sexism, and 18 items related to heterosexism. The number of heterosexism items in the third draft of the APOS-2 was relatively fewer than the other subscales because this subscale was Montross’ (2003) most reliable subscale for the original APOS (.748) and more items were retained from the original APOS Awareness of Sexual Orientation subscale during stage 1 of the current study.

*Marlowe-Crowne Social Desirability Scale – Short Form 1 (MC-1).* The MC-1 (Strahan & Gerbasi, 1972, see Appendix T) is a short form of the original Marlowe-Crowne Social Desirability Scale (MCSD; Crowne & Marlowe, 1960). The MCSD has
been used abundantly since it was first published and a search on a popular on-line academic database yielded more than 1,000 published citations for this measure and a search using the same database found 94 published studies utilizing short forms of the measure. Typically, the MCSD or the MC-1 are used in studies as a comparison measure where it is predicted there will be a weak correlation between the focal instrument of the study and the MCSD. This weak correlation is desired because researchers seek to utilize variables that measure the presence of a given trait in research participants. A score on an instrument that is strongly correlated with the MCSD or MC-1 suggests the instrument is measuring a participant’s desire for other individuals to perceive him or her as a good person rather than measuring his or her actual level of the target trait. Weak correlations with the MCSD implies that a participant’s score on the target measure is not related to that individual’s desire to be liked by others.

The MC-1 is a 10-item scale on which participants respond to items that pertain to socially desirable or undesirable behaviors by circling true or false (Strahan & Gerbasi, 1972). The MC-1 includes items such as “I like to gossip at times,” “I’m always willing to admit it when I make a mistake,” and “I always try to practice what I preach.” Five of the items are scored in the true direction (i.e., the participant is given one point if they respond true to the item) and 5 items are reverse-scored so the respondent earns credit for items responded to in a false direction (see Appendix T for a list of which items are scored in a true vs. false direction). The total score for this measure ranges from 0-10, with higher scores indicating higher levels of impression management.

Crowne and Marlowe (1960) initially evaluated the full 33-item measure on a small group of 39 college students. Reliability coefficients for the initial study were
reported using the KR-20 statistic were .88. Crowne and Marlowe found test-retest reliability estimates to be .89, but no time length between measurements was described. Strahan and Gerbasi (1972) funneled the 10 items included in the MC-1 into a separate and shorter scale from the 33-item full scale MCSD based on the 10 items loading primarily on the first factor of the MCSD. The KR-20 reliability estimates for the MC-1 ranged from .61 to .70 in three samples of 228 university students and the shortened measure correlated in the “80’s or .90’s” with the full scale MCSD for each of the three sample administrations (Strahan & Gerbasi, 1972).

**The Openness to Diversity/Challenge Scale (ODS).** The ODS (Pascarella et al., 1996, see Appendix R) is an eight-item self-rating scale that measures an individual’s appreciation of racial, cultural, and value differences, as well as, the desire to be intellectually challenged by different ideas, values, and perspectives. Participants respond to each item using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) points. Higher total scores represent greater openness to diversity and challenge with the range of total scores spanning from 8 to 40 and none of the eight items are reverse-scored. Pascarella et al. provided initial validity evidence for the measure based on a sample of 3,331 first-year college students. The authors reported two separate factor analyses performed during a pilot study and a subsequent study which provided evidence of a single underlying construct. Pascarella et al. also provided initial reliability evidence for the ODS. Inter-item correlations ranged from .48 to .67 and the internal consistency of the total score was .83. Other studies (Ervin, 2001; Remer, 2008; Summers, Svinicki, Gorin, & Sullivan, 2002; Whitt, Edison, Pascarella, Terenzini, &
Nora, 2001) have utilized the ODS as a dependent measure, but did not report new validity or reliability evidence.

**Procedures.** The demographic questionnaire and all of the survey instruments were entered into the Qualtrics survey program. Then the lists of email addresses provided by Registrar’s Office were entered into the Qualtrics program to facilitate participant recruitment for both terms. The prospective participants initially received a recruitment email (see Appendix U) containing an individualized link to the survey. Participants who clicked on the link were directed to the informed consent page of the survey. Participants who chose the option indicating they do not consent to participate in the study were directed to a thank you screen and none of their data were utilized in the current study. Participants who provided informed consent by clicking on a button that indicated they were 18 years or older and provided informed consent by clicking on a button labeled “yes” were directed to the demographics survey, the ODS, the 79-item draft of the APOS-2, the MC-1, a raffle screen where they could choose whether or not to participate in a raffle, and finally a thank you screen. The survey instruments and screens were intended to facilitate the data gathering process required to perform the initial reliability, validity, and factor structure analyses for the APOS-2. Participants who clicked *yes* on the raffle screen were then asked to provide a valid email address. Only participants who chose to participate in the raffle and who provided a valid email address were eligible to participate in the raffle. Participants who clicked *no* on the informed consent page or emailed the author of this manuscript asking to be removed from the study were not sent any additional reminder emails.

The research data collected from the summer and fall samples were downloaded
into two separate files. First, a data file was downloaded for the purpose of determining which participant(s) won the raffle. All variables except for the participant email addresses of those individuals who elected to participate in the raffle were immediately deleted from this initial file and then a winner or the winners were randomly selected using the random number generator feature provided in the statistical analysis software program entitled SPSS. In total, 424 participants elected to participate in the raffle and four winners were selected based on the criteria included in the recruitment email which was one winner would be selected for every 125 participants who participated in the raffle. Each of the four winners won a $25 Wal-Mart gift card. The data file used for the raffle was manually encrypted using a program that also required a password to access the file while the raffle winners were located. The raffle data file was then deleted once all winners picked up their gift cards.

A second data file was downloaded for data analysis purposes in order to determine the reliability and validity of the APOS-2. All personally identifiable information including email addresses or IP addresses were removed from the data analysis file immediately after the file was downloaded and prior to any data analyses in order to protect participant confidentiality. The file was then manually encrypted using a program that also required a password to access the file. This security protocol was implemented in order to protect participant data responses and confidentiality.

Stage 5: Data Analyses

The purpose of stage 5 was to conduct the initial reliability and validity analyses of the 79-item draft of the APOS-2 and reduce the number of items to a final solution. The sections that follow detail the research design and procedures that were utilized in
the study. This process began with a series of checks to make sure the data were appropriate for analysis. Then measures of item response distributions, internal consistency, and outcome data from an exploratory factor analysis were utilized to reduce the number of items and then evaluate the reliability, factor structure, and convergent and discriminant validity of the final draft of the APOS-2. Stage 5 concludes with a discussion of the statistical hypotheses of this study.

**Research design and procedures.** The data analysis procedures utilized in this study were based upon an adapted version of Clark and Watson's (1995) test development model. This section explains the following: (a) operational definitions and coding, (b) the statistical hypotheses of the study, (c) the missing values analysis and subsequent imputation of values for missing data, (d) analysis of response distributions, (e) assessment of internal consistency and corrected item total correlations; (f) exploratory factor analysis; and (g) the assessment of the statistical properties of the final solution. The purpose of this process was item reduction and determining a final solution.

**Operational definitions and coding.** This section contains operational definitions that are specific to the current research project and represent the last section in stage 5. The goal in providing this information is to identify important constructs and to clarify their meaning. These operational definitions are encountered in the body and appendices of this manuscript.

**Awareness of privilege and oppression.** Awareness of privilege and oppression is defined as an individual’s overall level of knowledge of the existence of the pervasive and systemic discrimination that exists throughout U.S. society in which privileged
individuals benefit from the subjugation of others who are defined socially as less in some way than privileged individuals. Awareness of privilege and oppression is a key social justice construct because it is a foundational step that must occur before an individual can move from a less to a more advanced level in many social identity development models. A participant’s awareness of societal privilege and oppression was operationally defined as his or her total score on the APOS-2 (see Appendix S). Higher scores on the 79-item draft of the APOS-2 represent greater awareness of privilege and oppression and scores can range from 79 to 474 for the total score.

**Awareness of racism.** Awareness of racism is a specific form of awareness of privilege and oppression in which an individual possesses some level of understanding that racism exists. Racism is a socially constructed form of intergroup reaction (including thoughts, feelings, and behaviors) based on race that systematically advantages one group (Caucasians or individuals with light skin tone in the example of the U.S.) and disadvantages another group (racial minorities or individuals with darker or black skin tone) at the individual, institutional, and systemic levels within U.S. society. A participant’s awareness of racism was operationally defined as his or her total score on the Awareness of Racism subscale. Higher scores on the Awareness of Racism subscale for the third draft of the APOS-2 represent greater awareness of this form of privilege and oppression and scores can range from 21 to 126.

**Awareness of sexism.** Awareness of sexism is a specific form of awareness of privilege and oppression in which an individual possesses some level of understanding that sexism exists. Sexism is a socially constructed form of oppression that predominantly discriminates against women, demands strict adherence by individuals to
societally-based gender roles, and reinforces patriarchal structures that maintain sexist attitudes and behaviors toward women at the individual, institutional, and structural levels. A participant’s awareness of sexism was operationally defined as his or her total score on the Awareness of Sexism subscale. Higher scores on the Awareness of Sexism subscale for the third draft of the APOS-2 represent greater awareness of this form of privilege and oppression and scores range from 20 to 120.

Awareness of heterosexism. Awareness of heterosexism is a specific form of awareness of privilege and oppression in which an individual possesses some level of understanding that heterosexism exists. Heterosexism is “an ideological system that denies, denigrates, stigmatizes (or segregates) any non-heterosexual form of behavior, identity, relationship, or community” (Walls, 2008, pp. 26-27). A participant’s awareness of heterosexism was operationally defined as their total score on the Awareness of Heterosexism subscale. Higher scores on the Awareness of Heterosexism subscale for the third draft of the APOS-2 represent greater awareness of this form of privilege and oppression and scores can range from 18 to 108.

Awareness of classism. Awareness of classism is a specific form of awareness of privilege and oppression in which an individual possesses some level of understanding that classism exists. The American Psychological Association (2006) defines classism as the “network of attitudes, beliefs, behaviors, and institutional practices that maintain and legitimize class-based power differences that privilege middle and higher income groups at the expense of the poor and working classes” (p. 7). A participant’s awareness of classism will be operationally defined as their total score on the Awareness of Classism subscale. Higher scores on the Awareness of Classism subscale for the third draft of the
APOS-2 represent greater awareness of this form of privilege and oppression and scores can range from 20 to 120.

**Social desirability.** Social desirability was defined as the desire for an individual to be perceived as “good” by his or her peers. Participants’ need to appear socially appropriate was operationalized by their total score on the MC-1 (Strahan & Gerbasi, 1972, see Appendix T). Higher scores on this scale suggested a greater level of impression management or need for approval. Scores on the MC-1 scale range from 0 to 10.

**Openness to diversity.** Openness to diversity was defined as an individual’s openness to cultural, racial, and value diversity as well as the extent to which the individual likes being challenged by alternative ideas, values, and perspectives (Pascarella et al., 1996, see Appendix R). Participants’ openness to diversity was operationally defined as their total score on the ODS (Pascarella et al., 1996). Higher scores on the ODS represent greater openness to diversity. Each of the eight items included in this measure are rated on a 5-point, Likert scale with total scores ranging from 8 to 40 on this measure.

**Gender.** Each research participant was asked to indicate his or her gender. A text box was provided where participants could type in their response. Responses fell into three categories and were coded 1 for *female*, 2 for *male*, and 3 for *transgender*.

**Age.** Each research participant was asked to proclaim his or her current age in years and a text box was provided for participants to type in a response. It was anticipated that a majority of participants were between 18 and 30 years of age, however, allowing the item response to be typed in by each participant allowed for a broad range of
participant ages. Participants who entered values under 18 years were excluded from the study because participants were expected to be of legal age to provide consent. No fractional values were provided by participants, but it was expected that factional values would be rounded down to the nearest who number (e.g., 18.6 years) would have been rounded down to the nearest whole number (e.g., 18 years).

Race. Each research participant was asked “what is your race or ethnicity?” A text box was provided to allow each participant the freedom to label his or her own individual racial or ethnic identity. For example, an individual with an African American mother and a Hispanic father was able to write in both racial identities rather than being forced to choose one racial identity over the other. Responses to these items were grouped together and coded as follows: 1 (Caucasian), 2 (African American), 3 (Hispanic), 4 (Asian American), 5 (Pacific Islander), 6 (Turkish American), 7 (Native American), 8 (International), 9 (Multiracial), and 10 (Caribbean American).

Religious affiliation. Each participant was asked to describe his or her religious affiliation. A text box was included to allow each participant the freedom of designating a religious affiliation without the typical constraints of checking a box that may only closely approximate his or her religious affiliation. Instead, each participant had the option of providing an accurate description of his or her religious identity. For example, an individual who most closely identified with the Buddhist faith or perhaps identified with multiple religious groups (for example) was able to provide this designation. Responses to these items were grouped together for coding purposes. Grouped religious affiliation categories were coded as follows: 1 (Christian), 2 (Jewish), 3 (Muslim), 4 (Hindu), 5 (Buddhist), 6 (polytheistic), 7 (undecided), and 8 (atheist).
Sexual orientation. Each participant was asked to describe his or her sexual orientation. The available response options were as follows: Exclusively heterosexual, somewhat heterosexual/somewhat homosexual, and exclusively homosexual. These responses were coded as follows: 1 (Exclusively heterosexual), 2 (somewhat heterosexual/somewhat homosexual), and 3 (exclusively homosexual).

Student classification. Each participant was asked to designate his or her student classification. The available response options were as follows: Freshmen, sophomore, junior, senior, and graduate/professional. These responses were coded 1 (freshmen), 2 (sophomore), 3 (junior), 4 (senior), and 5 (graduate/professional). Only undergraduate students were recruited for the current study, so individuals who identified as a graduate/professional student were excluded from the study.

Current student status. Each participant was asked to designate his or her current educational status. The available response options and the values utilized to code these responses were as follows: 1 (full-time student), 2 (part-time student), and 3 (not currently enrolled). The Registrar’s Office provided lists of currently enrolled students at the start of the summer and fall terms; individuals who were not enrolled were excluded from the study.

Academic major and college. Each participant was asked to identify his or her current academic major. A text box was provided to allow each participant to type in his or her specific major. Responses to these items were grouped together for coding purposes. In total, 75 separate academic majors were reported by the participants and it was determined that statistical comparisons would not be useful, so the majors were grouped into the colleges where each represented academic major was affiliated. In total,
the data were coded into the following 13 options under college: Majors subsumed under
the College of Agriculture, Food, and Environment were coded 1; those subsumed under
the College of Arts and Sciences were coded 2; the College of Business and Economics
was coded 3; the College of Communication and Information was coded 4; the College of
Design was coded 5; the College of Education was coded 6; the College of Engineering
was coded 7; the College of Fine Arts was coded 8; the College of Health Sciences was
coded 9; the College of Nursing was coded 10; the College of Social Work was coded 11;
participants with multiple majors were coded 12; and participants who were undecided on
their major were coded 13.

Current cumulative grade point average. Each participant was asked to identify
his or her current cumulative grade point average. A text box was provided to allow each
participant to type in his or her specific grade point average (GPA). Each participant’s
GPA was recorded to the nearest one-hundredth of a point (e.g., 2.16).

Political affiliation. Each participant was asked to identify his or her political
affiliation. The available response options and the value these responses were coded in
this study are as follows: 1 (Democrat), 2 (Republican), 3 (Independent), and a text box
was provided for individuals who endorsed other. The typed participant responses for the
other category were then coded further into the following additional categories: 4
(Libertarian), 5 (other), and 6 (non-political).

Free lunch. Each participant was asked to identify whether or not he or she
received free or reduced lunch during high school. The available options were no and
yes. Individuals who responded no to this item may have had the financial resources to
pay for lunch while in high school. Individuals who endorsed yes would have been
expected to meet familial low income guidelines in order to qualify for the free or reduced lunch program. Yes was coded 1 and no was coded 2.

*Parental figure number 1’s highest level of educational completed.* Each participant was asked to describe his or her parental figure number 1’s highest level of education completed. The term parental figure was utilized to allow for the fact that not all individuals were raised by their biological parents. The response options and how these responses were coded are as follows: Some high school was coded 1, completed high school was coded 2, some college was coded 3, completed college was coded 4, some advanced degree was coded 5, and completed advanced degree was coded 6.

*Parental figure number 2’s highest level of educational completed.* Each participant was asked to describe his or her parental figure number 2’s highest level of education completed. The term parental figure was utilized to allow for the fact that not all individuals were raised by their biological parents. The response options and how these responses were coded are as follows: Some high school was coded 1, completed high school was coded 2, some college was coded 3, completed college was coded 4, some advanced degree was coded 5, and completed advanced degree was coded 6.

*Exposure to diversity training.* Each participant was asked to best describe his or her exposure to diversity training that focused on topics such as race, gender, sexual orientation, or other forms of individual difference. The available response options were coded as follows: 0 (I’ve not had any formal diversity training), 1 (I’ve completed a formal diversity training workshop through work or school), 2 (I’ve completed numerous formal diversity training workshops through work or school), 3 (I’ve completed a college course related to diversity training), and 4 (I’ve completed numerous college courses
related to diversity training). Participants were permitted to click more than one selection.

*Interaction with people of a different race.* Each participant was asked “how would you rate the amount of interaction you have had with people who are of a different race than yourself?” Responses were solicited based on a 5-point scale with 1 representing (*not much interaction*) and 5 representing (*a lot of interaction*).

*Interaction with people of a different gender.* Each participant was asked “how would you rate the amount of interaction you have had with people who are of a different gender than yourself?” Responses were solicited based on a 5-point scale with 1 representing (*not much interaction*) and 5 representing (*a lot of interaction*).

*Interaction with people of a different sexual orientation.* Each participant was asked “how would you rate the amount of interaction you have had with people who are of a different sexual orientation than yourself?” Responses were solicited based on a 5-point scale with 1 representing (*not much interaction*) and 5 representing (*a lot of interaction*).

*Interaction with people of a different social class.* Each participant were asked “how would you rate the amount of interaction you have had with people who are of a different social class than yourself?” Responses were solicited based on a 5-point scale with 1 representing (*not much interaction*) and 5 representing (*a lot of interaction*).

*Travel abroad.* The final operational definition for this study was travel abroad. Each participant was asked whether or not he or she has previously traveled abroad. Two response options were available. *Yes* was be coded 1 and *no* was coded 2. The
discussion now shifts to the handling of missing data. The statistical hypotheses of the study are presented next.

**Statistical hypotheses.** Two experimental and statistical hypotheses related to the initial validation process of the APOS-2 were addressed. Both hypotheses are based on correlational data. Taylor (1990) classified correlations as follows: 0.00 to 0.35 (*low or weak*), 0.36 to 0.67 (*modest or moderate*), and 0.68 to 1 (*strong or high*). These classifications will be used to evaluate the empirical findings in this study.

**Hypothesis one.** The first research hypothesis was that the Openness to Diversity/Challenge Scale (ODS) would have a correlation with the APOS-2 that was greater than zero. The null hypothesis was that the ODS would have a correlation with the APOS-2 equal to zero. Remer (2008) found that the original APOS (Montross, 2003) demonstrated moderate correlations of .47 to .50 with the ODS. Remer’s finding seems theoretically reasonable given that being open to the diversity of others seems to logically be a precondition for being able to understand and gain awareness of systemic privilege and oppression. For example, item 5 on the ODS asks a participant to indicate whether or not he or she agrees with the following statement: “I enjoy taking courses that challenge my beliefs and values.” Individuals who enjoy taking courses that challenge values and beliefs might generally be more inclined to identify an act of heterosexism and be willing to alter his or her beliefs about the existence of heterosexism. The original APOS, however, went beyond the item content provided in the ODS. For example, item 8 on the original APOS asks a participant whether or not he or she agrees with the following statement: “When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their lifestyle.” The knowledge and
comprehension involved in understanding the perspective of gay men and lesbian women requires an individual to be open to different perspectives, but the APOS item goes much deeper into the actual recognition and understanding of the societal privilege and oppression surrounding heterosexism. Hence, a low to moderate correlation was projected between the ODS and the APOS-2.

\[ H_0: \rho_{\text{APOS-2, ODS}} = 0 \]

\[ H_1: \rho_{\text{APOS-2, ODS}} > 0 \]

**Hypothesis two.** Finally, the Marlowe-Crowne Social Desirability Scale – Short Form 1 (MC-1) was projected to have no significant relationship to the APOS-2 because participant scores on the APOS-2 should not be strongly attributed to people’s need for social approval. Hence, a low correlation was projected between the MC-1 and the APOS-2.

\[ H_0: \rho_{\text{APOS-2, MC-1}} = 0 \]

\[ H_1: \rho_{\text{APOS-2, MC-1}} \neq 0 \]

**Missing data and imputation.** A missing value analysis was performed on the ODS, the MC-1, and each of the subscales of the APOS-2 individually to determine the acceptability of imputing data for any missing values. Little’s (1988) Chi-square statistic was used to determine whether the missing ODS, MC-1, and APOS-2 values were missing completely at random (MCAR). This statistical test has the null hypothesis that the values in the dataset are MCAR.

Multiple imputation techniques using the expectation maximization (EM) method were utilized for the missing values of the ODS, the MC-1, and the four subscales of the APOS-2 separately since all of these data were determined to be MCAR. An overall
summary of missing values output was then obtained from the statistical software program SPSS for the ODS, the MC-1, and the four subscales of the APOS-2 to confirm that the imputation was successful. The EM imputation method leaves values with decimal places, so all values with decimal places were rounded up or down to the nearest whole number. The dataset with the imputed variables was then utilized for data analysis purposes.

**Analysis of response distributions.** The data were screened to look for data entry errors produced during the coding process prior to conducting any psychometric analysis. Then, the data were evaluated to look for items with limited response variability. This evaluation was performed through two mechanisms. First, the APOS-2 data were examined to look for evidence of skewness and kurtosis. Kline (1986) noted that skewness values < 3 and kurtosis values < 8 data should be considered to reflect a fairly normal distribution. None of the APOS-2 items skewness or kurtosis values exceeded Kline’s recommendations and no items were subsequently deleted from the measure during this process. Next, an evaluation of the graphical response distributions and means for each item within each of the four subscales were examined to look for items with limited or no response variability. Items with limited response variability were then noted and evaluated within the context of the internal consistency, corrected item-total correlations, and factor analytic evidence that is discussed next for further consideration for deletion.

**Internal consistency and corrected item-total correlations.** Revised APOS items that appeared to be normally distributed were then further analyzed to look for evidence of internal consistency by examining the corrected item-total correlations for the total
scale and the proposed subscales. Clark and Watson (1995) suggested that low to moderate corrected item-total correlations ranging from .15 to .50 are desirable. Nunnally and Bernstein (1994) argued that corrected item-total correlations should be above .30 to be desirable and Spector (1992) indicated that items with the lowest corrected item-total correlations should be considered for deletion if items must be eliminated. Clark and Watson’s, Nunnally and Bernstein’s, and Spector’s recommendations were considered and items with the lowest corrected item-total correlations or items with correlations below .15 were considered for elimination at both the subscale and total scale levels. The measures of internal consistency were then utilized in conjunction with the results from an exploratory factor analysis to make decisions about retaining or eliminating items.

**Exploratory factor analysis.** The data were tested for multivariate normality using the KMO and Bartlett’s test to determine whether factor analysis of the data was appropriate. A principle component analysis was then utilized initially to determine the appropriate number of components needed to explain the largest percentage of variance in the data based on the Kaiser rule which suggests all factors with eigenvalues > 1 should be retained. A scree plot was also utilized to determine the appropriate number of components to retain.

An exploratory factor analysis (EFA) was performed using the Maximum Likelihood factor extraction technique because the KMO and Bartlett’s test suggested the data were multivariate normal and appropriate for factor analysis. Oblique Direct Oblimin rotation was utilized because previous researchers (Flammer, 2001; Hays, 2005; Montross, 2003) suggest that awareness of privilege and oppression has a hierarchical
structure in which overall awareness of privilege and oppression is made up of distinct, yet overlapping subconstructs of specific types of awareness of privilege and oppression (i.e., awareness of racism, sexism, heterosexism, or classism). An analysis of the resulting factor analytic data was utilized to determine the factor loading properties of the items and as additional information in the item retention and elimination decision-making process.

**Item retention and elimination decision-making.** A number of criteria were considered in unison when determining which items to eliminate from the measure. First, items with limited response variability based on the item means and the graphical item response distributions (e.g., most participants responded strongly agree) were considered for deletion. Second, items with low item-total correlations in which the deletion of the item appeared to improve the subscale or measure’s reliability were considered for deletion. Third, items with factor loading coefficients < .30 were considered for deletion from the measure and items with cross-loadings on multiple factors which were less than .15 in difference from the factor with the highest loading were considered for deletion (Worthington & Whittaker, 2006). Fourth, items that loaded on factors where no theoretical link could be determined that would explain the individual item’s loading coefficient were considered for deletion. Finally, all decisions about item retention or deletion were considered within the context of how the deletion or retention of the individual item impacted both internal consistency and the overall factor structure of the measure. The process of determining which items to retain or eliminate was iterative and often involved removing one or two items at a time until a tenable solution was identified.
that appeared both theoretically and practically interpretable, as well as, psychometrically desirable.

Assessing the statistical properties of the final solution. Additional reliability and validity analyses were performed after a final tenable solution was obtained from the exploratory factor analysis process. Internal consistency estimates were calculated for the total scale and for any applicable factors or subscales. Next, the evidence of convergent validity was evaluated by obtaining a Pearson correlation between the revised APOS and the ODS. Finally, evidence of discriminant validity was evaluated by obtaining a Pearson correlation between the revised APOS and the MC-1.

Summary

In summary, the current chapter outlined the methods and research design for the development and initial psychometric evaluation of the APOS-2. Key revisions incorporated into the APOS-2 included the addition of new items that were specifically linked both to theory and empirical data, expanded response categories intended to bring the revised measure in line with other measures of the same construct and improve reliability, and updated subscale names that have been shortened to better reflect current terminology identified in the extant literature. The APOS-2 was evaluated by both a focus group and an expert rater group that provided feedback to help shape the development of the instrument and provide evidence of content validity. Then, a demographic questionnaire, the ODS, the third draft of the APOS-2, and the MC-1 were administered to a group of undergraduate students. Finally, these data were analyzed to aid in the item retention and elimination process. Item response distributions, item means, internal consistency estimates, and exploratory factor analysis were utilized to
reduce the number of items included in the final draft of the APOS-2 to a more manageable number and then correlational data between the final version of the APOS-2, the MC-1, and the ODS were utilized to estimate the discriminant and convergent validity of the measure. The results of this study are discussed next in Chapter Four.
Chapter Four: Results

This chapter contains the results and empirical findings related to the construction and initial validation of the APOS-2. The chapter begins with the results of the participant recruitment process and the statistical comparisons performed between the summer 8-week and fall 2013 term samples. These statistical comparisons were conducted to aid in the decision-making process utilized to determine the tenability of combining the two samples. Second, an overview of the treatment of missing data and the results of the imputation process are reported. Third, the outcome of the item retention and elimination process that was used to aid in the scale construction process is described. Fourth, the statistical properties of the final draft of the APOS-2 are reported. Finally, the convergent and discriminant validity evidence utilized to test Hypotheses 1 and 2 of this research project are reported.

Participant Recruitment and Statistical Comparisons of the Samples

In total, 5,309 emails were sent to prospective participants during the recruitment process. Six-hundred fifty-one participants followed the link provided in the recruitment email and responded to the informed consent question resulting in an initial response rate of 12.26%. One-hundred sixty-seven participants were eliminated from the study due to at least one of the following criteria: (a) failure to provide informed consent, (b) graduate student status (undergraduate student status was a pre-condition of participating in this study), or (c) failure to complete at least 90% of the measures included in this study. Four-hundred eighty-four participants were retained for data analytic purposes for an overall response rate of 9.11%. Ninety-seven of those participants were from the summer 8-week 2013 participant group and 387 were from the fall 2013 participant group. The
summer 8-week recruitment period spanned from June 3, 2013 to August 2, 2013. The fall 2013 recruitment period spanned from September 2, 2013 to November 1, 2013.

Statistical comparisons including Fisher’s chi-square, Pearson’s chi-square, and independent samples t–tests were performed on the data for 18 of the 19 demographic variables obtained from participants recruited during the summer 8-week and fall 2013 terms. A statistical comparison was not performed on the academic major variable because of the high number of response categories (76 different academic majors were represented); however, these data were further grouped and are reported by academic colleges in Table 2. Table 2 presents the demographic characteristics of the summer, fall, and combined sample participants on the 19 demographic variables and the results of the statistical testing performed between the summer and fall groups.

The following demographic variables were recoded for statistical comparison purposes: Race, religious affiliation, political affiliation, and participation in diversity training. Race was recoded as follows for statistical purposes: 1 (Caucasian) and 2 (other). The religious affiliation variable was recoded as 1 for Christian (Protestant and Catholic faiths) and 2 for non-Christian for simplicity. Political affiliation was recoded as follows: 1 (Democrat), 2 (Republican), and 3 (other). Participation in diversity training was recoded so that individuals with no previous diversity training were coded 0 and those who had previously participated in any type of formal diversity training were coded 1. These recoded demographic variables are listed in Table 2 in both originally gathered and recoded forms to show both the results of the statistical testing and the expanded demographic information originally provided by participants.

The results of the statistical comparisons between the summer and fall samples
are summarized below. The two samples were not statistically different on the following
demographic variables: (a) gender, (b) race, (c) religious affiliation, (d) sexual
orientation, (e) political affiliation, (f) parental figure # 1’s highest level of education, (g)
parental figure # 2’s highest level of education, (h) free lunch in high school, (i)
interaction with individuals of another gender, (j) interaction with individuals of another
sexual orientation, and (k) interaction with individuals of another social class. In general,
however, the two samples could be described as follows: They were predominantly
female; Caucasian; Christian; heterosexual; conservative; had educated parents; paid for
lunch in high school; and had similar levels of interaction with individuals of a different
gender, sexual orientation, and social class.

The summer and fall samples were statistically different on seven variables.
Those seven variables were as follows: (a) age, (b) student classification, (c) student
status, (d) GPA, (e) previous participation in diversity training, (f) interaction with
individuals of a different race, and (g) previous experience traveling abroad. More
specifically, the following significant differences were observed when the summer group
was compared to the fall group: The summer group was older, more upper class, more
likely to be part-time, had lower GPA’s, and were more likely to have traveled abroad.

The decision to combine the summer and fall samples was made for four reasons.
First, the two samples were gathered during a similar time period within the same year.
The fall sample was collected in the next available term after the initial data gathering
period (summer 2013). Second, the two samples were determined to be statistically
similar in terms of gender, race, sexual orientation, and a history of free lunch in high
school. These four demographic variables are all indicators that can be linked to the four
subscales of the APOS-2 (i.e., sexism, racism, heterosexism, and classism). A more
detailed presentation of the demographic characteristics of the summer, fall, and
combined samples, as well as the findings of the statistical comparisons between the
summer and fall samples is provided in Table 2. Third, the combined sample was
determined to be more diverse based on age, student status, exposure to diversity training,
interaction with someone from a different race, and exposure to travel abroad. For
example, the combined sample contained relatively equal numbers of participants who
were freshmen, sophomores, juniors, and seniors when compared to either of the
individual samples (see Table 2). Finally, the higher sample size of the combined
participant group \((N = 484)\) was considered more desirable based on Comfrey and Lee’s
(1992) recommendations that sample sizes around 500 are very good for structural
analyses.

The combined sample consisted of 484 undergraduate students gathered during
the summer and fall terms of 2013 at a large, public university located in the Southeast.
Ninety-seven participants or 20% completed the study during the summer term and 387
participants or 80% completed the study during the fall term. The participants in the
combined sample were predominantly female. Three-hundred nine participants (63.8%) from
the two samples were female, 171 (35.3%) were male, and 4 (.8%) reported they
were transgender. The mean age for the combined sample was 20.72 years \((N =
483, SD = 4.08 \text{ years}, \text{range } 18-59 \text{ years})\). The combined sample was also predominantly
Caucasian \((n = 392, 81\%)\) with 6.2% representing international students \((n = 30), 4.8%\)
identified as multiracial \((n = 23), 4.1\%\) African American \((n = 20), 2.9\%\) Hispanic \((n =\)
14), .4% Native American (n = 2), .2% Turkish American (n = 1), and .2% Pacific Islander (n = 1).

The combined sample was slightly more Non-Christian and largely heterosexual in makeup. When the religious affiliation variable for the combined sample was recoded into Christian and non-Christian, 49.2% (n = 238) of the participants reported they were Christian and 50.8% (n = 246) reported they were non-Christian. The range of religious affiliation reported by the combined sample was as follows: Christian (n = 312, 64.5%), Atheist (n = 101, 20.9%), Religious but Undecided (n = 53, 11%), Jewish (n = 6, 1.2%), Muslim (n = 6, 1.2%), Buddhist (n = 3, .6%), Hindu (n = 2, .4%), and Polytheistic (n = 1, .2%). The participants in the combined sample were predominantly heterosexual with the following representation reported: 88.4% were exclusively heterosexual (n = 427), 6.5% were somewhat heterosexual/somewhat homosexual (n = 36), and 4.1% were exclusively homosexual (n = 20).

The combined participant group was slightly more upperclassmen and senior. Upperclassmen made up 55.6% of the participants in the combined group (n = 269) and lowerclassmen made up 44.4% (n = 215). The student classifications reported by participants in the combined group were as follows: Freshmen 26.4% (n = 128), sophomores 18% (n = 87), juniors 25.6% (n = 124), and seniors 30% (n = 145).

Construction of the APOS-2

Little’s (1988) Chi-square test and a missing values analysis was conducted prior to analyzing the data on the dependent measures. Little’s Chi-square test was not significant at the .05 level ($\chi^2 = 14.624, df = 8, p = .067$) for the ODS and the MC-1 ($\chi^2 = 13.379, df = 10, p = .203$) suggesting that the missing values in the data were MCAR and
were appropriate for imputation. Next, Little’s Chi-square test was performed on each of the subscales of the APOS-2 to determine whether the data were appropriate for imputation techniques. The Little’s Chi-square tests were not significant at the .05 level for the Awareness of Racism ($\chi^2 = 454.042, df = 450, p = .438$), Awareness of Sexism ($\chi^2 = 305.757, df = 302, p = .429$), Awareness of Heterosexism ($\chi^2 = 52.841, df = 42, p = .122$), and Awareness of Classism ($\chi^2 = 30.118, df = 20, p = .068$) subscales suggesting these data were MCAR and were appropriate for imputation. None of the variables for the dependent measures were missing more than 5% of the data prior to the imputation process. Values were substituted for the missing data using the expectation maximization (EM) method. This process resulted in 484 complete cases that were utilized for data analysis purposes. In the sections below, the results of the data analysis process for the APOS-2 and the other measures utilized in this study are discussed.

**APOS-2 item decision-making process.** The decision-making process included the analysis of response distributions, estimates of internal consistency at the subscale and total scale levels, and an exploratory factor analysis (EFA). The final draft of the APOS-2 was developed through an iterative process that often involved evaluating the data in unison with pertinent theory to select items that would be retained or eliminated. The analysis of response distributions is discussed first.

**Analysis of response distributions.** The data were evaluated to look for items with limited response variability using individual item means, measures of item skewness and kurtosis, and graphical response distributions. First, the data were examined to look for evidence of skewness and kurtosis. None of the items exceeded Kline’s (1986) recommendations that skewness values should be $< 3$ and kurtosis values should be $< 8$. 
(See Table 3 for a list of item skewness and kurtosis values) suggesting the responses for each item were generally normally distributed.

Next, an evaluation of the item means and graphical response distributions for each item within each of the four subscales were examined to look for items with limited response variability. The item means and a subjective judgment of the level of skewness of the response distribution for each item were entered into an Excel spreadsheet (see Table 4 for an example of this spreadsheet). The subjective response distribution judgments ranged from skewed left extreme (SL Extreme) to skewed right extreme (SR Extreme). The item means and judgments about response distributions were entered in conjunction with the internal consistency estimates and exploratory factor analysis (EFA) that are described below for item retention and elimination purposes.

**Internal consistency and corrected item-total correlations.** Next, estimates of internal consistency and corrected item-total correlations were obtained for each of the four subscales and the total score. The reliability estimate for the 79-item total scale was .94. Measures of internal consistency for the four subscales were as follows: Awareness of Racism (.88), Awareness of Heterosexism (.83), Awareness of Sexism (.76), and Awareness of Classism (.87). The corrected item-total correlations and the alpha if item deleted correlations for each subscale were entered into the item decision-making spreadsheet (see Table 4). The measures of internal consistency were then utilized in conjunction with the results from the item response distributions and an exploratory factor analysis to make decisions about retaining or eliminating items.

**Initial exploratory factor analysis.** The data were tested for multivariate normality using both the KMO and Bartlett's Test of Sphericity to determine whether a
principle components analysis (PCA) and an exploratory factor analysis (EFA) of the data were appropriate. The Bartlett’s Test has the null hypothesis that the inter-correlation matrix comes from a population in which the variables are not correlated; this suggests the use PCA or EFA is not appropriate. The Bartlett’s test on the 79-item, APOS-2 data was significant at the .05 level ($\chi^2 = 7301.627$, $df = 780$, $p = .000$). This finding indicates the null hypothesis is rejected and suggests that the data were appropriate for PCA and EFA because at least some of the original variables are correlated. The KMO value of .925 also suggests sampling adequacy was *good* and the use of PCA and EFA are appropriate.

A PCA and a scree plot were utilized initially to determine the appropriate number of components needed to explain the largest percentage of variance in the data based on the Kaiser rule that suggests that factors with eigenvalues > 1 should be retained. The Total Variance Explained table (see Table 5 that shows the results of the PCA) shows that eight components have eigenvalues > 1 with those eight components explaining 55.48% of the variance in the APOS-2 data. A scree plot was also utilized to determine the appropriate number of components to retain (see Figure 1). The scree plot suggests four (42.96% of the total variance explained as noted in Table 5) or five components (47.08% of the total variance explained as noted in Table 5) should be extracted.

An EFA was performed using the Maximum Likelihood factor extraction technique because Bartlett’s Test and the KMO value both suggested the data were multivariate normal and appropriate for factor analysis. Oblique Direct Oblimin rotation was utilized because previous research (Flammer, 2001; Hays, 2005; Montross, 2003)
suggests that awareness of privilege and oppression has a hierarchical structure in which overall awareness of privilege and oppression is made up of distinct, but related, subconstructs of specific types of awareness of privilege and oppression (e.g., awareness of racism, sexism, heterosexism, or classism). Initially four and then five factors were extracted based on the scree plot (see Figure 1) and results of the Total Variance Explained table (see Table 5). However, a four factor solution emerged from the data and fit best with the theoretically-based construction of the APOS-2. The factor loading properties of the items for the four-factor solution were utilized in the item retention and elimination decision-making process.

**Item retention and elimination decision-making.** The item retention and elimination spreadsheet (see Table 4) containing the summary of the item means, analysis of response distributions, and internal consistency estimates was then utilized in conjunction with the results of the EFA for item decision-making purposes, with one exception. One item, item 77, was removed from the measure prior to the decision-making process. Item 77, which reads “anyone can get health insurance if they really want to” was eliminated from the APOS-2 due the passage of the Affordable Care Act. This piece of legislation, if it endures, ensures and mandates healthcare coverage for most people who live in the United States. The passing of this legislation brought the item content and its meaning into question and, therefore, the item was dropped from consideration for retention in the final draft of the APOS-2.

Thirty-one iterations were required to reach a final solution with the APOS-2 (see Table 6 for a list of the 31 steps). Items were removed from the measure one to three at a time based on undesirable item characteristics. For example, in the seventh step, items
10 and 29 were removed from the classism subscale due to limited response variability. Item 10 was eliminated because it represented the lowest mean on the subscale ($M = 2.15$) with a response distribution that was skewed left and item 29 was removed because it represented the highest mean on the subscale ($M = 5.09$) with a response distribution that was skewed right. In another example, in step 15, item 56 was eliminated due to low inter-item correlation with the subscale (.117), low communality (.093), and failing to load heavily on any specific factor.

My goal in this elimination process was to reduce the number of items in the measure while retaining as many of the original psychometric properties of the 79-item measure as possible. Course instructors, researchers, and clinicians are more apt to select and utilize measurement tools with known and desirable psychometric properties that can be quickly administered to participants. I did not set out with a target goal of a specific number of items or psychometric properties. Rather, I attempted to eliminate items in a balanced fashion across the subscales while keeping a frequent check on measures of reliability and factor loading properties in order to make sure that the consequences of the subtraction were subjectively tolerable.

A four-factor solution in which items generally loaded on the proposed theoretical factors (i.e., sexism items loaded generally on a factor with other items that were constructed to measure awareness of sexism) emerged during step 17 of the iteration process (see Table 6 for the iteration process and see Table 7 for the four-factor solution) after a number of items with undesirable psychometric properties were eliminated. The iterative process continued after a tenable factor solution was reached in order to reduce the number of items included in the final solution. In total, 38 of the 79 items

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administered to participants were eliminated through this iterative process before a final solution was reached. One item, item 77, was also removed due to the passage of the Affordable Care Act. I discontinued the item elimination process at 40 remaining items on the scale because I was beginning to eliminate content from the measure that seemed pertinent to the subscales in the literature review process and because eliminating items beyond the final 40 items appeared to reduce the psychometric qualities beyond a level I felt comfortable with. The psychometric properties of the 40-item final solution are presented next.

The APOS-2 Final Solution

The psychometric properties of the final solution of the APOS-2 are included below. The results of the EFA, internal consistency, and scoring findings are reported. A clean copy of the final product that has been randomly reordered from 1 to 40 for use in future research is provided in Appendix W.

**Final exploratory factor analysis.** The four-factor solution that emerged from the APOS-2 data using maximum likelihood estimation and oblim rotation in step 17 (see Table 7) was evaluated to determine the acceptability of the solution. The KMO and Bartlett’s Test of Sphericity were reevaluated to determine whether the (EFA) of the data was appropriate. The Bartlett’s test on the reduced 40-item, APOS-2 data was significant ($\chi^2 = 12446.051, df = 1953, p = .000 < .05$), which indicates the null hypothesis is rejected and suggests that the data were appropriate for EFA because at least some of the original variables were correlated. The KMO value of .924 also suggested the use of EFA was appropriate. The four-factor solution accounted for 33.42% of the total variance explained (see Table 8 for a visual representation of the total variances
explained).

The four factors were utilized to form the four subscales of the APOS-2. Factor 1 produced an eigenvalue of 14.44 and accounted for 22.92% of the variance using the extraction sum of squared loadings (see Table 8). Factor 1 generally represented awareness of heterosexism items such as “gay men and lesbian women often have fears about kissing their partners in public.” These items were utilized to formulate the Awareness of Heterosexism subscale. The final draft of the APOS-2 contains 10 awareness of heterosexism items.

Factor 2 produced an eigenvalue of 3.15 and accounted for 5% of the variance (see Table 8). The second factor generally contained items that represented awareness of sexism such as “Women are better-suited to stay at home to raise children than men.” These items were used to formulate the Awareness of Sexism subscale. The final draft of the APOS-2 contains nine awareness of sexism items.

Factor 3 produced an eigenvalue of 1.85 and accounted for 2.93% of the variance (see Table 8). The third factor generally represented awareness of classism items such as “being poor has no bearing on a person’s opportunity to earn a college degree.” These items were used to formulate the Awareness of Classism subscale. The final draft of the APOS-2 contains 10 awareness of classism items.

Factor 4 produced an eigenvalue of 1.62 and accounted for 2.57% of the variance (see Table 8). The fourth factor generally contained items that represented awareness of racism such as “people of color experience high levels of stress because of the discrimination they face.” These items were used to form the Awareness of Racism subscale of the APOS-2. The final draft of the APOS-2 contains 11 awareness of racism
items.

The inter-factor correlation matrix for the final APOS-2 solution is depicted in Table 9. The average inter-factor correlation coefficient for the subscale scores was 0.48 (see Table 9). The average subscale to total score correlation coefficient was 0.78.

**Internal consistency.** A reliability analysis of the final, 40-item APOS-2 and each of the four subscale was performed using the combined sample of 484 participants. The Cronbach alpha reliability estimate for the 40-item total score was .92. Item-total correlations ranged from .20 to .62 with a mean item-total correlation of .46. The four APOS-2 subscales demonstrated the following satisfactory internal consistency estimates for each subscale: Awareness of Heterosexism (.84), Awareness of Sexism (.73), Awareness of Classism (.84), and Awareness of Racism (.86). The mean inter-item total correlations for each of the four subscales was as follows: Awareness of Heterosexism (.51), Awareness of Sexism (.30), Awareness of Classism (.48), and Awareness of Racism (.52).

**Scoring.** All of the items on the APOS-2 were scored from 1 to 6. The means and scoring ranges included below were calculated after applicable items were reverse-scored (see Table 10 for a list of the final 40 APOS-2 items retained that includes notations indicating which items were reverse scored). Scoring means were calculated for the combined sample of 484 participants. The mean total score for the 40-item APOS-2 was 162.42 ($SD = 24.46$, actual range 80 – 237, possible range 40 – 240). The number of subscale items, subscale means, standard deviations, actual ranges, and possible ranges for each of the four subscales were as follows: Awareness of Heterosexism (10 items, $M = 43.04$, $SD = 7.26$, actual range 15 – 60, possible range 10 –
), Awareness of Sexism (nine items, $M = 39.20$, $SD = 6.69$, actual range $20 - 54$, possible range $9 - 54$), Awareness of Classism (10 items, $M = 41.21$, $SD = 8.08$, actual range $18 - 60$, possible range $10 - 60$), and Awareness of Racism (11 items, $M = 38.97$, $SD = 9.04$, actual range $11 - 66$, possible range $11 - 66$).

Convergent and Discriminant Validity

The data were evaluated to look for evidence of convergent and discriminant validity using the MC-1 and the ODS. The Cronbach alpha reliability estimates for the comparison measure for convergent validity, the ODS, was .83, which would be classified as acceptable by Nunnally (1978). The discriminant validity was evaluated using the MC-1. The reliability estimate for the MC-1 was .52, which would not be classified as acceptable by Nunnally. The MC-1’s reliability estimate in the current study was also lower than the range of .61 to .70 reported by Strahan and Gerbasi (1972) in three college student samples. Next, Pearson’s correlations were calculated to test the two hypotheses of the current study.

Hypothesis one. Hypothesis one was intended to evaluate the convergent validity of the APOS-2 by comparing the instrument to the ODS. Higher scores on the ODS imply greater openness to diversity. It was hypothesized that the ODS would be moderately and positively related to the APOS-2. Remer (2008) found that the original APOS (Montross, 2003) demonstrated a moderate correlation with the ODS. The observed Pearson’s correlation between the APOS-2 and the ODS was positive and low ($r = .29$). These data suggest Hypothesis one was supported by the data and the low correlation suggests that participants tended to score higher on the APOS-2 when those participants also scored higher on the ODS. This further suggests that high scores on the
APOS-2 may at least partially reflect individuals who are more open to diversity.

**Hypothesis two.** The purpose of Hypothesis two was to evaluate the discriminant validity of the APOS-2 utilizing the MC-1 as a comparison measure. The MC-1 was projected to have a low correlation when compared to the APOS-2 because participant scores on the APOS-2 should not be strongly attributed to people’s need for social approval. The observed Pearson’s correlation between the APOS-2 and the MC-1 was low, negative, and close to zero ($r = -.10$). These findings suggest Hypothesis two was supported by the data. The low correlation between the two measures suggests that participants who scored high on the APOS-2 did not generally produce high scores on the measure of social desirability (i.e., the MC-1). This finding may also suggest that participants were not responding to the APOS-2 in a socially desirable manner, which is preferable. The implications of these collective results are now discussed in Chapter Five.
Table 2

Demographic Characteristics for the Summer, Fall, and Combined Samples and Statistical Comparison Results Between the Summer and Fall Samples

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Summer Participants</th>
<th>Fall Participants</th>
<th>Combined Participants</th>
<th>Statistical Test</th>
<th>p</th>
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<tbody>
<tr>
<td></td>
<td>N = 97</td>
<td>N = 387</td>
<td>N = 484</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>Fischer's</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56 (57.7%)</td>
<td>253 (65.4%)</td>
<td>309 (63.8%)</td>
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<tr>
<td>Male</td>
<td>41 (42.3%)</td>
<td>130 (33.6%)</td>
<td>171 (35.3%)</td>
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<tr>
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<td>4 (0.9%)</td>
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<td>Age</td>
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<td>Standard deviation</td>
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<td>4.08</td>
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<td>18-59 Years</td>
<td>18-59 Years</td>
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<td>Sexual Orientation</td>
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<td>Fischer's</td>
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<tr>
<td>Exclusively heterosexual</td>
<td>83 (85.6%)</td>
<td>344 (89.1%)</td>
<td>427 (88.4%)</td>
<td>Exact $\chi^2(0)$</td>
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<tr>
<td>Somewhat heterosexual/somewhat homosexual</td>
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<td>25 (06.5%)</td>
<td>36 (07.5%)</td>
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<tr>
<td>Exclusively homosexual</td>
<td>3 (03.1%)</td>
<td>17 (04.4%)</td>
<td>20 (04.1%)</td>
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Table 2 continues
Table 2 continued

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<th>Demographic Variable</th>
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<th>Fall Participants</th>
<th>Combined Participants</th>
<th>Statistical Test</th>
<th>$p$</th>
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<tbody>
<tr>
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<td>$N = 97$</td>
<td>$N = 387$</td>
<td>$N = 484$</td>
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<tr>
<td>Race/Ethnicity Recoded</td>
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<td>Caucasian</td>
<td>80 (82.5%)</td>
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<tr>
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<td>Turkish American</td>
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<td>Multiracial</td>
<td>8 (08.3%)</td>
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<td>$N = 484$</td>
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<tr>
<td>Full-time</td>
<td>85 (87.6%)</td>
<td>384 (99.2%)</td>
<td>469 (96.9%)</td>
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<tr>
<td>Part-time</td>
<td>12 (12.4%)</td>
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<td>Summer Participants</td>
<td>Fall Participants</td>
<td>Combined Participants</td>
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<td>Jewish</td>
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<td>6 (01.2%)</td>
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<td>Muslin</td>
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<td>6 (01.2%)</td>
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<tr>
<td>Hindu</td>
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<td>1 (00.2%)</td>
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<tr>
<td>Undecided</td>
<td>15 (15.5%)</td>
<td>38 (09.8%)</td>
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<tr>
<td>Atheist</td>
<td>21 (21.6%)</td>
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### Table 2 continued

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<th>Fall Participants</th>
<th>Combined Participants</th>
<th>Statistical Test</th>
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<tbody>
<tr>
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<td>N = 97</td>
<td>N = 387</td>
<td>N = 484</td>
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<td><strong>Student Classification</strong></td>
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<td>Fischer's</td>
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<td>Freshmen</td>
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<td>Sophomore</td>
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<td>74 (19.1%)</td>
<td>87 (18.0%)</td>
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<tr>
<td>Junior</td>
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<td>3.45</td>
<td>3.42</td>
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<td>19 (19.6%)</td>
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<td>No</td>
<td>78 (80.4%)</td>
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<td>414 (85.5%)</td>
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<th>Fall Participants $N = 387$</th>
<th>Combined Participants $N = 484$</th>
<th>Statistical Test</th>
<th>$p$</th>
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<td>Agriculture</td>
<td>9 (09.1%)</td>
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<td>Business and Economics</td>
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<td>Communication</td>
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<td>Multiple Colleges</td>
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<tr>
<td>Undecided</td>
<td>1 (01.0%)</td>
<td>33 (08.5%)</td>
<td>34 (07.0%)</td>
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<tr>
<td>Demographic Variable</td>
<td>Summer Participants</td>
<td>Fall Participants</td>
<td>Combined Participants</td>
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<td><strong>Political Affiliation Recoded</strong></td>
<td>( N = 97 )</td>
<td>( N = 387 )</td>
<td>( N = 484 )</td>
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<td>Democrat</td>
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<tr>
<td>Republican</td>
<td>34 (35.1%)</td>
<td>140 (36.2%)</td>
<td>174 (36.0%)</td>
<td>0.043</td>
<td>0.979</td>
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<tr>
<td>Other</td>
<td>30 (30.9%)</td>
<td>118 (30.5%)</td>
<td>148 (30.5%)</td>
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<td>0.979</td>
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<td>( N = 387 )</td>
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<tr>
<td>Democrat</td>
<td>33 (34.0%)</td>
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<td>162 (33.5%)</td>
<td>13.723</td>
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<td>Republican</td>
<td>34 (35.1%)</td>
<td>140 (36.2%)</td>
<td>174 (36.0%)</td>
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<td>Independent</td>
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<td>Libertarian</td>
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<tr>
<td>Other</td>
<td>3 (03.1%)</td>
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<td>Non-political</td>
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<td>10 (02.6%)</td>
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<td>Yes</td>
<td>67 (69.1%)</td>
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<td>No</td>
<td>30 (30.9%)</td>
<td>298 (51.9%)</td>
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Table 2 continues
Table 2 continued

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<th>Combined Participants</th>
<th>Statistical Test</th>
<th>(p)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>97</td>
<td>387</td>
<td>484</td>
<td>(\chi^2(0))</td>
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<tr>
<td>Parent Figure # 1’s Education</td>
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<tr>
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<td>Completed college</td>
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<tr>
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<tr>
<td>Completed advanced degree</td>
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Table 2 continued

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Table 2 continues
Table 2 continued

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Table 3
*Item Means, Skewness, and Kurtosis Values for 79-Item APOS-2 by Subscale*

<table>
<thead>
<tr>
<th>Awareness of Racism Item</th>
<th>N = 484</th>
<th>M</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
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<tbody>
<tr>
<td>06. Most People of Color who are enrolled in a predominantly White university were...</td>
<td></td>
<td>4.08</td>
<td>-0.37</td>
<td>-0.61</td>
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<tr>
<td>08. When selling a home, White people can rest assured that most people would want</td>
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<td>3.36</td>
<td>-0.08</td>
<td>-0.80</td>
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<tr>
<td>12. People of Color receive less medical information from their physicians when...</td>
<td></td>
<td>2.53</td>
<td>0.75</td>
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<tr>
<td>21. White people can easily find a hairdresser who knows how to cut their hair correctly.</td>
<td></td>
<td>3.91</td>
<td>-0.45</td>
<td>-0.60</td>
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<tr>
<td>33. People of Color and White people have to worry equally about their credibility...</td>
<td></td>
<td>3.40</td>
<td>0.13</td>
<td>-0.77</td>
</tr>
<tr>
<td>35. African Americans with lighter skin color are more likely to be promoted within...</td>
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<td>3.29</td>
<td>0.06</td>
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<tr>
<td>36. People of Color can easily find greeting cards that represent people of their race.</td>
<td></td>
<td>3.76</td>
<td>-0.31</td>
<td>-0.50</td>
</tr>
<tr>
<td>42. People of Color experience high levels of stress because of the discrimination they...</td>
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<td>3.43</td>
<td>0.04</td>
<td>-0.62</td>
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<tr>
<td>54. People of Color can readily find mentors or role models of their race who can...</td>
<td></td>
<td>3.18</td>
<td>0.36</td>
<td>-0.61</td>
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<tr>
<td>55. People of color can ask to speak to the “person in charge” at a store and be...</td>
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<td>4.34</td>
<td>-0.41</td>
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<tr>
<td>60. Racism continues to play a prominent role in society.</td>
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<tr>
<td>62. It’s okay to make racial jokes around friends of the same race.</td>
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<td>4.04</td>
<td>-0.29</td>
<td>-0.84</td>
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<tr>
<td>63. Most history books don’t accurately show how People of Color helped America...</td>
<td></td>
<td>3.74</td>
<td>-0.20</td>
<td>-0.92</td>
</tr>
<tr>
<td>67. African American political candidates are generally less likely to be accepted...</td>
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<td>3.67</td>
<td>-0.15</td>
<td>-0.80</td>
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<tr>
<td>68. White individuals generally live longer than people of any other race.</td>
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<td>3.16</td>
<td>0.17</td>
<td>-0.95</td>
</tr>
<tr>
<td>69. Most White individuals have a harder time obtaining a college degree when...</td>
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<td>4.75</td>
<td>-1.09</td>
<td>1.76</td>
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<tr>
<td>70. I initially picture a White person as the politician when I read a story that involves an...</td>
<td></td>
<td>4.27</td>
<td>-0.79</td>
<td>0.17</td>
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<td>73. People of Color often notice if they are outnumbered at professional meetings.</td>
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<td>4.17</td>
<td>-0.56</td>
<td>0.29</td>
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<tr>
<td>74. White individuals don’t have to think about educating their children on racism in...</td>
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<td>0.02</td>
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<td>75. White defendants generally receive shorter jail sentences for the same crime when...</td>
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<td>3.63</td>
<td>-0.11</td>
<td>-1.04</td>
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<tr>
<td>78. People of Color are more likely to live in neighborhoods associated with the best...</td>
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<td>4.36</td>
<td>-0.30</td>
<td>0.67</td>
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</tbody>
</table>

Table 3 continues
<table>
<thead>
<tr>
<th>Awareness of Heterosexism Item</th>
<th>N = 484</th>
</tr>
</thead>
<tbody>
<tr>
<td>02. Gay men are more at risk for being terminated from a job than heterosexual men...</td>
<td>4.02</td>
</tr>
<tr>
<td>07. Gay men and lesbian women can be confident that their parents will not be upset...</td>
<td>2.54</td>
</tr>
<tr>
<td>15. Heterosexual individuals tend to receive better medical treatment when compared...</td>
<td>2.87</td>
</tr>
<tr>
<td>19. Being heterosexual makes it easier to participate in a religious organization.</td>
<td>4.70</td>
</tr>
<tr>
<td>28. Gay men and lesbian women can easily have marriage ceremonies if they want to...</td>
<td>4.37</td>
</tr>
<tr>
<td>31. Gay couples can be pretty sure their neighbors will be accepting of their...</td>
<td>4.40</td>
</tr>
<tr>
<td>43. Gay men and lesbian women often have concerns about kissing their partners in...</td>
<td>4.26</td>
</tr>
<tr>
<td>44. The fear of being rejected by one’s parents is very real for gay men and lesbian...</td>
<td>5.13</td>
</tr>
<tr>
<td>47. Teenagers who identify as gay or lesbian in school are at a greater risk for being...</td>
<td>4.62</td>
</tr>
<tr>
<td>50. Some hiring officials may not hire gay or lesbian workers to avoid negative...</td>
<td>4.26</td>
</tr>
<tr>
<td>57. In many workplaces, some employees would have concerns about hiring a gay...</td>
<td>4.21</td>
</tr>
<tr>
<td>58. It is socially easier to be attracted to a partner of the opposite sex.</td>
<td>5.13</td>
</tr>
<tr>
<td>59. For many gay men and lesbian women, the choice about where to vacation can...</td>
<td>4.22</td>
</tr>
<tr>
<td>61. Sexual minority members are rarely allowed to make medical decisions about same...</td>
<td>3.95</td>
</tr>
<tr>
<td>64. Having a heterosexual boss would make most employees uncomfortable.</td>
<td>5.07</td>
</tr>
<tr>
<td>66. When meeting new people, gay men and lesbian women have to spend extra time...</td>
<td>4.39</td>
</tr>
<tr>
<td>76. Getting beat up is not a concern for gay men or lesbian women.</td>
<td>4.87</td>
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</tbody>
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Table 3 continued

<table>
<thead>
<tr>
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<th>$M$</th>
<th>Skewness</th>
<th>Kurtosis</th>
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<tbody>
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<td>01. Men often earn more money than women when performing the same job.</td>
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<td>-0.85</td>
<td>0.64</td>
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<td>11. Women are just as capable to serve in leadership positions as men.</td>
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<td>-1.82</td>
<td>3.83</td>
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<tr>
<td>13. Most men are concerned about being raped or assaulted whenever walking alone…</td>
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<td>4.98</td>
<td>-1.35</td>
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<td>16. Men and women face the same level of pressure from society to be physically…</td>
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<td>3.57</td>
<td>-0.06</td>
<td>-1.20</td>
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<tr>
<td>18. The focus on men’s bodies is just as strong as it is on women’s.</td>
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<td>3.82</td>
<td>-0.31</td>
<td>-0.90</td>
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<tr>
<td>22. Men are judged just as harshly about their attractiveness as women.</td>
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<td>-0.26</td>
<td>-0.98</td>
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<tr>
<td>23. Women often mean 'yes' when they say 'no' to a man's advances.</td>
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<td>4.89</td>
<td>-1.01</td>
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<tr>
<td>24. Men in power are assumed to have earned their position, women may be suspected…</td>
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<td>3.43</td>
<td>-0.08</td>
<td>-0.97</td>
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<tr>
<td>30. Women are better suited to stay at home to raise children than men.</td>
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<td>4.07</td>
<td>-0.23</td>
<td>-1.19</td>
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<tr>
<td>39. Women who dress provocatively want men to approach them for sex.</td>
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<td>4.28</td>
<td>-0.28</td>
<td>-0.89</td>
</tr>
<tr>
<td>40. It is socially easier to be attracted to a partner of the same sex.</td>
<td></td>
<td>4.83</td>
<td>-1.28</td>
<td>0.94</td>
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<tr>
<td>41. Women are better suited as entry-level employees when compared to men.</td>
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<td>4.56</td>
<td>-0.57</td>
<td>-0.27</td>
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<td>45. Many women are systematically denied access to leadership positions.</td>
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<td>3.84</td>
<td>-0.22</td>
<td>-0.54</td>
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<tr>
<td>48. Women exert more energy to prevent being victimized than men.</td>
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<td>4.44</td>
<td>-0.53</td>
<td>0.36</td>
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<tr>
<td>49. It is acceptable to most people to use vocabulary terms that end in &quot;man&quot; or…</td>
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<td>0.70</td>
<td>-0.08</td>
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<td>52. Men are better leaders than women.</td>
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<td>4.62</td>
<td>-0.61</td>
<td>-0.60</td>
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<tr>
<td>53. I find myself assuming a manager in a story is a man if the story does not specifically…</td>
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<td>3.83</td>
<td>-0.57</td>
<td>-0.61</td>
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<tr>
<td>56. It is okay for men to have multiple sexual partners when compared to women.</td>
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<td>71. Men are considered more attractive as they get older when compared to women.</td>
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<td>72. Men should do less house cleaning than their female partners.</td>
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Table 3 continues
Table 3 continued

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<tr>
<th>Awareness of Classism Item</th>
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<th>Skewness</th>
<th>Kurtosis</th>
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<tr>
<td>Poor individuals are more likely to suffer from mental illness because of the way...</td>
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<td>-0.83</td>
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<td>The stress associated with being poor can cause health problems.</td>
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<td>0.61</td>
<td>-0.83</td>
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<tr>
<td>This country would be a better place if welfare were eliminated.</td>
<td>4.01</td>
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<td>-0.59</td>
<td>-0.83</td>
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<td>Growing up in a low-income family hurts a person’s chances for obtaining a job that...</td>
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<td>0.28</td>
<td>-0.93</td>
<td>-0.83</td>
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<td>If anyone works hard enough they will be successful.</td>
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<td>1.17</td>
<td>0.59</td>
<td>-0.83</td>
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<td>Children from lower-income families are more likely to be teased about their clothing...</td>
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<td>-0.80</td>
<td>0.26</td>
<td>-0.83</td>
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<tr>
<td>Having access to learning opportunities such as zoos provides advantages over other...</td>
<td>4.19</td>
<td>-0.56</td>
<td>0.03</td>
<td>-0.83</td>
</tr>
<tr>
<td>Growing up in a middle class family improves your chances for obtaining a job that...</td>
<td>4.04</td>
<td>-0.69</td>
<td>0.04</td>
<td>-0.83</td>
</tr>
<tr>
<td>Having money can lead to instant respect in business settings.</td>
<td>4.36</td>
<td>-0.71</td>
<td>0.33</td>
<td>-0.83</td>
</tr>
<tr>
<td>A person from an affluent family has a greater chance to earn a college degree...</td>
<td>4.61</td>
<td>-0.94</td>
<td>0.60</td>
<td>-0.83</td>
</tr>
<tr>
<td>Being poor has no bearing on a person’s opportunity to earn a college degree.</td>
<td>4.00</td>
<td>-0.51</td>
<td>0.63</td>
<td>-0.83</td>
</tr>
<tr>
<td>Moderate to high-income individuals are more likely to live in neighborhoods...</td>
<td>5.09</td>
<td>-1.33</td>
<td>3.57</td>
<td>-0.83</td>
</tr>
<tr>
<td>Individuals with parents who went to college are more likely to go to college than an...</td>
<td>4.73</td>
<td>-1.18</td>
<td>1.67</td>
<td>-0.83</td>
</tr>
<tr>
<td>Lower-income people are just as likely to be hard-working, or more so, as people...</td>
<td>4.80</td>
<td>-0.95</td>
<td>0.51</td>
<td>-0.83</td>
</tr>
<tr>
<td>People who work for minimum wage make enough money to meet basic needs.</td>
<td>4.70</td>
<td>-0.84</td>
<td>0.04</td>
<td>-0.83</td>
</tr>
<tr>
<td>Public schools in low-income districts provide an equivalent education to public...</td>
<td>4.66</td>
<td>-0.79</td>
<td>0.09</td>
<td>-0.83</td>
</tr>
<tr>
<td>Homeless people don’t deserve to get money from hard-working folks.</td>
<td>4.18</td>
<td>-0.42</td>
<td>-0.36</td>
<td>-0.83</td>
</tr>
<tr>
<td>People who have money are more likely to live longer than people who do not...</td>
<td>4.13</td>
<td>-0.52</td>
<td>-0.49</td>
<td>-0.83</td>
</tr>
<tr>
<td>People who live on the “good” side of town are less likely to become ill from...</td>
<td>4.06</td>
<td>-0.39</td>
<td>-0.59</td>
<td>-0.83</td>
</tr>
<tr>
<td>Anyone can get health insurance if they really want to.</td>
<td>3.20</td>
<td>0.06</td>
<td>-1.04</td>
<td>-0.83</td>
</tr>
<tr>
<td>If a woman gets a man sexually aroused on a date she is obligated to have sex.</td>
<td>5.36</td>
<td>-1.73</td>
<td>2.84</td>
<td>-0.83</td>
</tr>
</tbody>
</table>
### Table 4

**APOS-2 Item Retention and Elimination Decision-Making Chart Organized by Subscale**

<table>
<thead>
<tr>
<th>Awareness of Racism Subscale Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Frequency Distribution</th>
<th>Mean Rank Highest to Lowest</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>06. Most People of Color who are enrolled in a predominantly White university were admitted due...</td>
<td>4.08</td>
<td>1.24</td>
<td>Good</td>
<td>7</td>
<td>.07</td>
<td>.88</td>
</tr>
<tr>
<td>08. When selling a home, White people can rest assured that most people would want to buy...</td>
<td>3.36</td>
<td>1.29</td>
<td>Good</td>
<td>17</td>
<td>.33</td>
<td>.88</td>
</tr>
<tr>
<td>12. People of Color receive less medical information from their physicians when compared to White in...</td>
<td>2.53</td>
<td>1.25</td>
<td>SL</td>
<td>21</td>
<td>.61</td>
<td>.87</td>
</tr>
<tr>
<td>21. White people can easily find a hairdresser who...</td>
<td>3.91</td>
<td>1.36</td>
<td>SR</td>
<td>9</td>
<td>.41</td>
<td>.87</td>
</tr>
<tr>
<td>33. People of Color and White people have to worry equally about their credibility when addressing a...</td>
<td>3.40</td>
<td>1.30</td>
<td>Good</td>
<td>16</td>
<td>.54</td>
<td>.87</td>
</tr>
<tr>
<td>35. African Americans with lighter skin color are more likely to be promoted within corporations than...</td>
<td>3.29</td>
<td>1.32</td>
<td>Good</td>
<td>18</td>
<td>.64</td>
<td>.87</td>
</tr>
<tr>
<td>36. People of Color can easily find greeting cards...</td>
<td>3.76</td>
<td>1.20</td>
<td>Good</td>
<td>10</td>
<td>.52</td>
<td>.87</td>
</tr>
<tr>
<td>42. People of Color experience high levels of stress...</td>
<td>3.43</td>
<td>1.21</td>
<td>Good</td>
<td>15</td>
<td>.62</td>
<td>.87</td>
</tr>
<tr>
<td>54. People of Color can readily find mentors or role models of their race who can advise them profes...</td>
<td>3.18</td>
<td>1.17</td>
<td>Good</td>
<td>19</td>
<td>.54</td>
<td>.87</td>
</tr>
<tr>
<td>55. People of color can ask to speak to the “person in charge” at a store and be confident that the...</td>
<td>4.34</td>
<td>0.91</td>
<td>SR high</td>
<td>3</td>
<td>.48</td>
<td>.87</td>
</tr>
</tbody>
</table>

*Note.* SL = skew left; Good = normal distribution; SR = skew right; SR high = skew right high; SR extreme = skew right extreme.

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<th>Mean Rank</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>60. Racism continues to play a prominent role in...</td>
<td>4.20</td>
<td>1.31</td>
<td>SR</td>
<td>5</td>
<td>.51</td>
<td>.87</td>
</tr>
<tr>
<td>62. It’s okay to make racial jokes around friends of the same race.</td>
<td>4.04</td>
<td>1.38</td>
<td>Good</td>
<td>8</td>
<td>.12</td>
<td>.88</td>
</tr>
<tr>
<td>63. Most history books don’t accurately show how People of Color helped America become the...</td>
<td>3.74</td>
<td>1.45</td>
<td>Good</td>
<td>11</td>
<td>.60</td>
<td>.87</td>
</tr>
<tr>
<td>67. African American political candidates are generally less likely to be accepted by White...</td>
<td>3.67</td>
<td>1.33</td>
<td>Good</td>
<td>12</td>
<td>.69</td>
<td>.86</td>
</tr>
<tr>
<td>68. White individuals generally live longer than people of any other race.</td>
<td>3.16</td>
<td>1.35</td>
<td>Good</td>
<td>20</td>
<td>.46</td>
<td>.87</td>
</tr>
<tr>
<td>69. Most White individuals have a harder time obtaining a college degree when compared to...</td>
<td>4.75</td>
<td>1.02</td>
<td>SR extreme</td>
<td>1</td>
<td>.34</td>
<td>.88</td>
</tr>
<tr>
<td>70. I initially picture a White person as the politician when I read a story that involves an uniden...</td>
<td>4.27</td>
<td>1.19</td>
<td>SR high</td>
<td>4</td>
<td>.36</td>
<td>.87</td>
</tr>
<tr>
<td>73. People of Color often notice if they are outnumbered at professional meetings.</td>
<td>4.17</td>
<td>1.07</td>
<td>SR high</td>
<td>6</td>
<td>.55</td>
<td>.87</td>
</tr>
<tr>
<td>74. White individuals don’t have to think about educating their children on racism in order to keep...</td>
<td>3.45</td>
<td>1.35</td>
<td>Good</td>
<td>14</td>
<td>.43</td>
<td>.87</td>
</tr>
<tr>
<td>75. White defendants generally receive shorter jail...</td>
<td>3.63</td>
<td>1.49</td>
<td>Good</td>
<td>13</td>
<td>.70</td>
<td>.86</td>
</tr>
<tr>
<td>78. People of Color are more likely to live in neighborhoods associated with the best school...</td>
<td>4.36</td>
<td>0.87</td>
<td>SR extreme</td>
<td>2</td>
<td>.44</td>
<td>.87</td>
</tr>
</tbody>
</table>

Note. SL = skew left; Good = normal distribution; SR = skew right; SR high = skew right high; SR extreme = skew right extreme.
Table 4 continued

<table>
<thead>
<tr>
<th>Awareness of Heterosexism Subscale Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Frequency Distribution Judgment</th>
<th>Mean Rank Highest to Lowest</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>02. Gay men are more at risk for being terminated from a job than heterosexual men based soley on...</td>
<td>4.02</td>
<td>1.30</td>
<td>SR</td>
<td>15</td>
<td>.55</td>
<td>.81</td>
</tr>
<tr>
<td>07. Gay men and lesbian women can be confident...</td>
<td>2.54</td>
<td>1.11</td>
<td>SL</td>
<td>18</td>
<td>.38</td>
<td>.86</td>
</tr>
<tr>
<td>15. Heterosexual individuals tend to receive better medical treatment when compared to openly gay or...</td>
<td>2.87</td>
<td>1.28</td>
<td>Good</td>
<td>17</td>
<td>.50</td>
<td>.81</td>
</tr>
<tr>
<td>19. Being heterosexual makes it easier to participate in a religious organization.</td>
<td>4.70</td>
<td>1.14</td>
<td>SR high</td>
<td>6</td>
<td>.47</td>
<td>.82</td>
</tr>
<tr>
<td>28. Gay men and lesbian women can easily have marriage ceremonies if they want to formalize...</td>
<td>4.37</td>
<td>1.27</td>
<td>SR high</td>
<td>10</td>
<td>.39</td>
<td>.82</td>
</tr>
<tr>
<td>31. Gay couples can be pretty sure their neighbors will be accepting of their relationship.</td>
<td>4.40</td>
<td>0.97</td>
<td>SR</td>
<td>8</td>
<td>.48</td>
<td>.82</td>
</tr>
<tr>
<td>40. It is socially easier to be attracted to a partner...</td>
<td>4.83</td>
<td>1.28</td>
<td>SR extemre</td>
<td>5</td>
<td>.18</td>
<td>.83</td>
</tr>
<tr>
<td>43. Gay men and lesbian women often have concerns about kissing their partners in public.</td>
<td>4.26</td>
<td>1.16</td>
<td>SR</td>
<td>12</td>
<td>.51</td>
<td>.81</td>
</tr>
<tr>
<td>44. The fear of being rejected by one’s parents is very real for gay men and lesbian women.</td>
<td>5.13</td>
<td>0.90</td>
<td>SR extemre</td>
<td>1</td>
<td>.51</td>
<td>.81</td>
</tr>
<tr>
<td>47. Teenagers who identify as gay or lesbian in school are at a greater risk for being physically as...</td>
<td>4.62</td>
<td>1.07</td>
<td>SR</td>
<td>7</td>
<td>.54</td>
<td>.81</td>
</tr>
</tbody>
</table>

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<th>Mean Rank Highest to Lowest</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>50. Some hiring officials may not hire gay or lesbian workers to avoid negative reactions from custo...</td>
<td>4.26</td>
<td>1.06</td>
<td>SR high</td>
<td>11</td>
<td>.61</td>
<td>.81</td>
</tr>
<tr>
<td>57. In many workplaces, some employees would have concerns about hiring a gay or lesbian...</td>
<td>4.21</td>
<td>1.06</td>
<td>SR</td>
<td>14</td>
<td>.66</td>
<td>.81</td>
</tr>
<tr>
<td>58. It is socially easier to be attracted to a partner of the opposite sex.</td>
<td>5.13</td>
<td>1.17</td>
<td>SR extreme</td>
<td>2</td>
<td>.38</td>
<td>.82</td>
</tr>
<tr>
<td>59. For many gay men and lesbian women, the choice about where to vacation can depend on how open a...</td>
<td>4.22</td>
<td>1.16</td>
<td>SR high</td>
<td>13</td>
<td>.52</td>
<td>.81</td>
</tr>
<tr>
<td>61. Sexual minority members are rarely allowed to make medical decisions about same gender partners.</td>
<td>3.95</td>
<td>1.24</td>
<td>Good</td>
<td>16</td>
<td>.44</td>
<td>.82</td>
</tr>
<tr>
<td>64. Having a heterosexual boss would make most employees uncomfortable.</td>
<td>5.07</td>
<td>0.99</td>
<td>SR extreme</td>
<td>3</td>
<td>.20</td>
<td>.83</td>
</tr>
<tr>
<td>66. When meeting new people, gay men and lesbian women have to spend extra time trying to figure out...</td>
<td>4.39</td>
<td>1.07</td>
<td>SR high</td>
<td>9</td>
<td>.62</td>
<td>.81</td>
</tr>
<tr>
<td>76. Getting beat up is not a concern for gay men or lesbian women.</td>
<td>4.87</td>
<td>1.00</td>
<td>SR high</td>
<td>4</td>
<td>.46</td>
<td>.82</td>
</tr>
</tbody>
</table>

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<tr>
<th>Awareness of Sexism Subscale Items</th>
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<th>Std. Deviation</th>
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<th>Mean Rank Highest to Lowest</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Men often earn more money than women when performing the same job.</td>
<td>4.33</td>
<td>1.21</td>
<td>SR</td>
<td>10</td>
<td>.41</td>
<td>.74</td>
</tr>
<tr>
<td>11. Women are just as capable to serve in leadership positions as men.</td>
<td>5.47</td>
<td>0.81</td>
<td>SR extreme</td>
<td>1</td>
<td>.35</td>
<td>.75</td>
</tr>
<tr>
<td>13. Most men are concerned about being raped or assaulted whenever walking alone, just as women are.</td>
<td>4.98</td>
<td>1.03</td>
<td>SR extreme</td>
<td>3</td>
<td>.27</td>
<td>.75</td>
</tr>
<tr>
<td>16. Men and women face the same level of pressure from society to be physically attractive.</td>
<td>3.57</td>
<td>1.56</td>
<td>Good</td>
<td>18</td>
<td>.37</td>
<td>.75</td>
</tr>
<tr>
<td>18. The focus on men's bodies is just as strong as it...</td>
<td>3.82</td>
<td>1.47</td>
<td>Good</td>
<td>16</td>
<td>.39</td>
<td>.74</td>
</tr>
<tr>
<td>22. Men are judged just as harshly about their attractiveness as women.</td>
<td>3.74</td>
<td>1.45</td>
<td>Good</td>
<td>17</td>
<td>.44</td>
<td>.74</td>
</tr>
<tr>
<td>23. Women often mean 'yes' when they say 'no' to a man's advances.</td>
<td>4.89</td>
<td>1.32</td>
<td>SR high</td>
<td>4</td>
<td>.36</td>
<td>.75</td>
</tr>
<tr>
<td>24. Men in power are assumed to have earned their position, women may be suspected of having “slept...</td>
<td>3.43</td>
<td>1.46</td>
<td>Good</td>
<td>19</td>
<td>.27</td>
<td>.75</td>
</tr>
<tr>
<td>30. Women are better suited to stay at home to raise...</td>
<td>4.07</td>
<td>1.47</td>
<td>Good</td>
<td>13</td>
<td>.42</td>
<td>.74</td>
</tr>
<tr>
<td>39. Women who dress provocatively want men to approach them for sex.</td>
<td>4.28</td>
<td>1.30</td>
<td>Good</td>
<td>11</td>
<td>.48</td>
<td>.74</td>
</tr>
</tbody>
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</tr>
</thead>
<tbody>
<tr>
<td>41. Women are better suited as entry-level employees when compared to men.</td>
<td>4.56</td>
<td>1.17</td>
<td>SR</td>
<td>8</td>
<td>.31</td>
<td>.75</td>
</tr>
<tr>
<td>45. Many women are systematically denied access to leadership positions.</td>
<td>3.84</td>
<td>1.25</td>
<td>Good</td>
<td>14</td>
<td>.44</td>
<td>.74</td>
</tr>
<tr>
<td>48. Women exert more energy to prevent being victimized than men.</td>
<td>4.44</td>
<td>0.98</td>
<td>SR</td>
<td>9</td>
<td>.42</td>
<td>.75</td>
</tr>
<tr>
<td>49. It is acceptable to most people to use vocabulary terms that end in &quot;man&quot; or &quot;men&quot; such as polic...</td>
<td>2.77</td>
<td>1.19</td>
<td>SL</td>
<td>20</td>
<td>.04</td>
<td>.77</td>
</tr>
<tr>
<td>52. Men are better leaders than women.</td>
<td>4.62</td>
<td>1.26</td>
<td>SR</td>
<td>7</td>
<td>.50</td>
<td>.74</td>
</tr>
<tr>
<td>53. I find myself assuming a manager in a story is a man if the story does not specifically identify...</td>
<td>3.83</td>
<td>1.26</td>
<td>SR</td>
<td>15</td>
<td>-.10</td>
<td>.78</td>
</tr>
<tr>
<td>56. It is okay for men to have multiple sexual partners when compared to women.</td>
<td>4.82</td>
<td>1.34</td>
<td>SR extreme</td>
<td>6</td>
<td>.12</td>
<td>.77</td>
</tr>
<tr>
<td>71. Men are considered more attractive as they get older when compared to women.</td>
<td>4.10</td>
<td>1.29</td>
<td>SR high</td>
<td>12</td>
<td>.17</td>
<td>.76</td>
</tr>
<tr>
<td>72. Men should do less house cleaning than their...</td>
<td>4.88</td>
<td>1.14</td>
<td>SR extreme</td>
<td>5</td>
<td>.47</td>
<td>.74</td>
</tr>
<tr>
<td>79. If a woman gets a man sexually aroused on a date she is obligated to have sex.</td>
<td>5.36</td>
<td>0.96</td>
<td>SR extreme</td>
<td>2</td>
<td>.42</td>
<td>.75</td>
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</tr>
</thead>
<tbody>
<tr>
<td>03. Poor individuals are more likely to suffer from mental illness because of the way society treats...</td>
<td>3.37</td>
<td>1.35</td>
<td>Good</td>
<td>17</td>
<td>.47</td>
<td>.86</td>
</tr>
<tr>
<td>04. The stress associated with being poor can cause health problems.</td>
<td>4.54</td>
<td>1.20</td>
<td>SR high</td>
<td>7</td>
<td>.60</td>
<td>.86</td>
</tr>
<tr>
<td>05. This country would be a better place if welfare...</td>
<td>4.01</td>
<td>1.41</td>
<td>Good</td>
<td>15</td>
<td>.44</td>
<td>.86</td>
</tr>
<tr>
<td>09. Growing up in a low-income family hurts a person’s chances for obtaining a job that will make...</td>
<td>3.07</td>
<td>1.46</td>
<td>Good</td>
<td>18</td>
<td>.62</td>
<td>.86</td>
</tr>
<tr>
<td>10. If anyone works hard enough they will be...</td>
<td>2.15</td>
<td>1.34</td>
<td>SL extreme</td>
<td>19</td>
<td>.48</td>
<td>.86</td>
</tr>
<tr>
<td>14. Children from lower-income families are more likely to be teased about their clothing in school.</td>
<td>4.25</td>
<td>1.18</td>
<td>SR high</td>
<td>9</td>
<td>.49</td>
<td>.86</td>
</tr>
<tr>
<td>17. Having access to learning opportunities such as zoos provides advantages over other students who...</td>
<td>4.19</td>
<td>1.09</td>
<td>SR high</td>
<td>10</td>
<td>.46</td>
<td>.86</td>
</tr>
<tr>
<td>20. Growing up in a middle class family improves your chances for obtaining a job that will be satis...</td>
<td>4.04</td>
<td>1.19</td>
<td>SR high</td>
<td>14</td>
<td>.50</td>
<td>.86</td>
</tr>
<tr>
<td>25. Having money can lead to instant respect in business settings.</td>
<td>4.36</td>
<td>1.13</td>
<td>SR high</td>
<td>8</td>
<td>.44</td>
<td>.86</td>
</tr>
<tr>
<td>26. A person from an affluent family has a greater chance to earn a college degree than an individua...</td>
<td>4.61</td>
<td>1.20</td>
<td>SR high</td>
<td>6</td>
<td>.66</td>
<td>.86</td>
</tr>
</tbody>
</table>

*Note.* SL = skew left; Good = normal distribution; SR = skew right; SR high = skew right high; SR extreme = skew right extreme.
<table>
<thead>
<tr>
<th>Awareness of Classism Subscale Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Frequency Distribution</th>
<th>Mean Rank Highest to Lowest</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. Being poor has no bearing on a person’s opportunity to earn a college degree.</td>
<td>4.00</td>
<td>1.47</td>
<td>SR high</td>
<td>16</td>
<td>.57</td>
<td>.86</td>
</tr>
<tr>
<td>29. Moderate to high-income individuals are more likely to live in neighborhoods associated with...</td>
<td>5.09</td>
<td>0.81</td>
<td>SR extreme</td>
<td>1</td>
<td>.44</td>
<td>.86</td>
</tr>
<tr>
<td>32. Individuals with parents who went to college are more likely to go to college than an individual...</td>
<td>4.73</td>
<td>1.03</td>
<td>SR high</td>
<td>3</td>
<td>.44</td>
<td>.86</td>
</tr>
<tr>
<td>34. Lower-income people are just as likely to be hard-working, or more so, as people who grew up wea...</td>
<td>4.80</td>
<td>1.11</td>
<td>SR high</td>
<td>2</td>
<td>.14</td>
<td>.87</td>
</tr>
<tr>
<td>37. People who work for minimum wage make enough money to meet basic needs.</td>
<td>4.70</td>
<td>1.22</td>
<td>SR high</td>
<td>4</td>
<td>.40</td>
<td>.87</td>
</tr>
<tr>
<td>38. Public schools in low-income districts provide an equivalent education to public schools in midd...</td>
<td>4.66</td>
<td>1.14</td>
<td>SR high</td>
<td>5</td>
<td>.47</td>
<td>.86</td>
</tr>
<tr>
<td>46. Homeless people don’t deserve to get money from hard-working folks.</td>
<td>4.18</td>
<td>1.29</td>
<td>Good</td>
<td>11</td>
<td>.36</td>
<td>.87</td>
</tr>
<tr>
<td>51. People who have money are more likely to live longer than people who do not have much money.</td>
<td>4.13</td>
<td>1.30</td>
<td>SR</td>
<td>12</td>
<td>.49</td>
<td>.86</td>
</tr>
<tr>
<td>65. People who live on the “good” side of town are less likely to become ill from industrial plants...</td>
<td>4.06</td>
<td>1.22</td>
<td>SR</td>
<td>13</td>
<td>.54</td>
<td>.86</td>
</tr>
</tbody>
</table>

*Note.* SL = skew left; Good = normal distribution; SR = skew right; SR high = skew right high; SR extreme = skew right extreme.
Table 5

*Principle Components Analysis of the 79-Item APOS-2 Showing Total Variance Explained*

<table>
<thead>
<tr>
<th>Component</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10.94</td>
<td>27.35</td>
<td>27.35</td>
</tr>
<tr>
<td>2</td>
<td>2.37</td>
<td>5.93</td>
<td>33.27</td>
</tr>
<tr>
<td>3</td>
<td>2.03</td>
<td>5.07</td>
<td>38.34</td>
</tr>
<tr>
<td>4</td>
<td>1.83</td>
<td>4.58</td>
<td>42.92</td>
</tr>
<tr>
<td>5</td>
<td>1.67</td>
<td>4.17</td>
<td>47.08</td>
</tr>
<tr>
<td>6</td>
<td>1.27</td>
<td>3.19</td>
<td>50.27</td>
</tr>
<tr>
<td>7</td>
<td>1.05</td>
<td>2.62</td>
<td>52.89</td>
</tr>
<tr>
<td>8</td>
<td>1.01</td>
<td>2.53</td>
<td>55.42</td>
</tr>
</tbody>
</table>

Extraction Sums of Squared Loadings
Table 6

*Thirty-One Step Process Utilized to Reach a Final Solution for the APOS-2*

<table>
<thead>
<tr>
<th>Step</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Performed PCA with all variables except item 77 and decided to proceed with 4 or 5 factors.</td>
</tr>
<tr>
<td>02</td>
<td>Extracted 5 factor using maximum likelihood with oblim rotation.</td>
</tr>
<tr>
<td>03</td>
<td>Extracted 4 factor using maximum likelihood with oblim rotation.</td>
</tr>
<tr>
<td>04</td>
<td>Eliminated items 69 and 78 due to top two highest means on racism.</td>
</tr>
<tr>
<td>05</td>
<td>Eliminated items 44 and 58 due to top two highest means on heterosexism.</td>
</tr>
<tr>
<td>06</td>
<td>Eliminated items 11 and 79 due to two highest means on sexism.</td>
</tr>
<tr>
<td>07</td>
<td>Eliminated item 29 due to highest mean and item 10 due to lowest mean and skewed left on classism.</td>
</tr>
<tr>
<td>08</td>
<td>Eliminated items 16, 18, and 22 on sexism due to similarity of items and tendency to load on separate factor from other sexism items.</td>
</tr>
<tr>
<td>09</td>
<td>Eliminated item 40 from heterosexism due to high mean, low communality, failed to load on a factor.</td>
</tr>
<tr>
<td>10</td>
<td>Eliminated item 6 on racism due to low corrected item total correlation, .070, and loading on separate factor from other racism items.</td>
</tr>
<tr>
<td>11</td>
<td>Eliminated item 34 on classism due to skewed right high distribution, high mean, and low inter-item correlation.</td>
</tr>
<tr>
<td>12</td>
<td>Eliminated item 64 on heterosexism due skewed right extreme distribution, high mean, low inter-item total correlation, and failure to load on a consistent factor.</td>
</tr>
<tr>
<td>13</td>
<td>Eliminated item 13 on classism due to skewed right extreme distribution, high mean, and failure to load strongly on a factor.</td>
</tr>
<tr>
<td>14</td>
<td>Added items 18 and 22 back to sexism due to low subscale reliability and improved reliability with the items.</td>
</tr>
<tr>
<td>15</td>
<td>Eliminated item 56 due to low inter-item correlation, low communality, and failing to load heavily on any specific factor.</td>
</tr>
<tr>
<td>16</td>
<td>Eliminated item 8 from racism due to loading on different factor than the other racism items.</td>
</tr>
<tr>
<td>17</td>
<td>Eliminated item 8 on racism due to item loading on different factor from rest of racism items.</td>
</tr>
<tr>
<td>18</td>
<td>Re-computed the reliability analysis on the racism subscale.</td>
</tr>
<tr>
<td>19</td>
<td>Eliminated item 21 on racism due to not loading on a specific factor and alpha if item deleted moving from .863 to .864.</td>
</tr>
<tr>
<td>20</td>
<td>Re-computed the reliability analysis on the heterosexism subscale.</td>
</tr>
</tbody>
</table>

Table 6 continues
Table 6 continued

<table>
<thead>
<tr>
<th>Step</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Eliminated item 7 on heterosexism due to alpha if item deleted going from .822 to .864.</td>
</tr>
<tr>
<td>22</td>
<td>Eliminated item 76 on heterosexism despite slight drop in alpha from .864 to .857 due to close loading with other factors.</td>
</tr>
<tr>
<td>23</td>
<td>Eliminated item 15 on heterosexism despite slight drop in alpha from .857 to .844 due to close loading with other factors.</td>
</tr>
<tr>
<td>24</td>
<td>Eliminated item 28 on heterosexism despite slight drop in alpha from .857 to .844 due to close loading with other factors.</td>
</tr>
<tr>
<td>25</td>
<td>Eliminated item 49 on sexism due to low corrected item total correlation of .059.</td>
</tr>
<tr>
<td>26</td>
<td>Eliminated item 53 on sexism due to low corrected item total correlation of -.164 and alpha if item deleted going from correlation going from .674 to .734.</td>
</tr>
<tr>
<td>27</td>
<td>Re-computed reliability analysis of classism.</td>
</tr>
<tr>
<td>28</td>
<td>Eliminated item 25 on classism due to loading ambiguously on multiple factors and minimal alpha drop from .866 to .860.</td>
</tr>
<tr>
<td>29</td>
<td>Eliminated item 10 on classism due to minimal alpha drop from .853 to .848 and low mean/sl extreme frequency distribution.</td>
</tr>
<tr>
<td>30</td>
<td>Eliminated item 17 due to minimal alpha drop from .848 to .840, frequency dist show sr high, mean 4.19</td>
</tr>
<tr>
<td>31</td>
<td>Re-computed reliability analysis for total scale.</td>
</tr>
</tbody>
</table>
Table 7

*Factor Pattern Matrix for the Four-Factor Solution of the APOS-2*

<table>
<thead>
<tr>
<th>Awareness of Racism Subscale Items</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. People of Color receive less medical information from their physicians when compared to White individuals.</td>
<td>.12</td>
<td>-.09</td>
<td>.29</td>
<td>-.50</td>
</tr>
<tr>
<td>21. White people can easily find a hairdresser who knows how to cut their hair correctly.</td>
<td>.18</td>
<td>-.20</td>
<td>.27</td>
<td>-.12</td>
</tr>
<tr>
<td>33. People of Color and White people have to worry equally about their credibility when addressing a group. *</td>
<td>.15</td>
<td>.11</td>
<td>.19</td>
<td>-.33</td>
</tr>
<tr>
<td>35. African Americans with lighter skin color are more likely to be promoted within corporations than African Americans with darker skin color.</td>
<td>.23</td>
<td>-.12</td>
<td>.25</td>
<td>-.46</td>
</tr>
<tr>
<td>36. People of Color can easily find greeting cards that represent people of their race. *</td>
<td>.22</td>
<td>.08</td>
<td>.13</td>
<td>-.30</td>
</tr>
<tr>
<td>42. People of Color experience high levels of stress because of the discrimination they face.</td>
<td>.15</td>
<td>.05</td>
<td>.15</td>
<td>-.59</td>
</tr>
<tr>
<td>54. People of Color can readily find mentors or role models of their race who can... *</td>
<td>.00</td>
<td>.00</td>
<td>.35</td>
<td>-.36</td>
</tr>
<tr>
<td>55. People of color can ask to speak to the “person in charge” at a store and be confident that the person will also be a Person of Color. *</td>
<td>.28</td>
<td>.06</td>
<td>.18</td>
<td>-.10</td>
</tr>
<tr>
<td>60. Racism continues to play a prominent role in society.</td>
<td>.25</td>
<td>.06</td>
<td>.02</td>
<td>-.47</td>
</tr>
<tr>
<td>62. It’s okay to make racial jokes around friends of the same race. *</td>
<td>.04</td>
<td>.50</td>
<td>-.12</td>
<td>-.16</td>
</tr>
<tr>
<td>63. Most history books don’t accurately show how People of Color helped America...</td>
<td>.19</td>
<td>.08</td>
<td>.12</td>
<td>-.51</td>
</tr>
<tr>
<td>67. African American political candidates are generally less likely to be accepted by White constituents in their districts.</td>
<td>.33</td>
<td>-.11</td>
<td>.21</td>
<td>-.41</td>
</tr>
<tr>
<td>68. White individuals generally live longer than people of any other race.</td>
<td>.03</td>
<td>-.17</td>
<td>.47</td>
<td>-.20</td>
</tr>
</tbody>
</table>

*Note.* Highest factor loading for each item is bolded. * = reverse-scored item. Factor 1 = Heterosexism; Factor 2 = Sexism; Factor 3 = Classism; Factor 4 = Racism.
Table 7 continued

<table>
<thead>
<tr>
<th>Awareness of Racism Subscale Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>70. I initially picture a White person as the politician when I read a story that involves an unidentified political figure.</td>
<td>.40</td>
<td>-.18</td>
<td>.12</td>
<td>.00</td>
</tr>
<tr>
<td>73. People of Color often notice if they are outnumbered at professional meetings.</td>
<td>.44</td>
<td>-.04</td>
<td>.14</td>
<td>-.19</td>
</tr>
<tr>
<td>74. White individuals don’t have to think about educating their children on racism in order to keep them from danger.</td>
<td>.26</td>
<td>-.13</td>
<td>.13</td>
<td>-.22</td>
</tr>
<tr>
<td>75. White defendants generally receive shorter jail sentences for the same crime when compared to People of Color.</td>
<td>.22</td>
<td>-.03</td>
<td>.25</td>
<td>-.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Awareness of Heterosexism Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Gay men are more at risk for being terminated from a job than heterosexual men based solely on sexual orientation.</td>
<td>.54</td>
<td>.06</td>
<td>-.01</td>
<td>-.21</td>
</tr>
<tr>
<td>7. Gay men and lesbian women can be confident that their parents will not be upset when they talk about the gender of their new partner.</td>
<td>-.41</td>
<td>.01</td>
<td>-.12</td>
<td>-.20</td>
</tr>
<tr>
<td>15. Heterosexual individuals tend to receive better medical treatment when compared to openly gay or lesbian patients.</td>
<td>.39</td>
<td>-.06</td>
<td>.10</td>
<td>-.38</td>
</tr>
<tr>
<td>19. Being heterosexual makes it easier to participate in a religious organization.</td>
<td>.42</td>
<td>.01</td>
<td>.17</td>
<td>.02</td>
</tr>
<tr>
<td>28. Gay men and lesbian women can easily have marriage ceremonies if they want to formalize their relationship. *</td>
<td>.34</td>
<td>.17</td>
<td>.10</td>
<td>.00</td>
</tr>
<tr>
<td>31. Gay couples can be pretty sure their neighbors will be accepting of their relationship. *</td>
<td>.59</td>
<td>.11</td>
<td>-.07</td>
<td>.03</td>
</tr>
<tr>
<td>43. Gay men and lesbian women often have concerns about kissing their partners in public.</td>
<td>.49</td>
<td>.06</td>
<td>-.01</td>
<td>-.13</td>
</tr>
</tbody>
</table>

*Note.* Highest factor loading for each item is bolded. * = reverse-scored item. Factor 1 = Heterosexism; Factor 2 = Sexism; Factor 3 = Classism; Factor 4 = Racism.
Table 7 continued

<table>
<thead>
<tr>
<th>Awareness of Heterosexism Subscale Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>47. Teenagers who identify as gay or lesbian in school are at a greater risk for being physically assaulted than heterosexual teens.</td>
<td>0.39</td>
<td>0.18</td>
<td>0.19</td>
<td>-0.10</td>
</tr>
<tr>
<td>50. Some hiring officials may not hire gay or lesbian workers to avoid negative reactions from customers.</td>
<td>0.79</td>
<td>-0.07</td>
<td>-0.15</td>
<td>-0.08</td>
</tr>
<tr>
<td>57. In many workplaces, some employees would have concerns about hiring a gay or lesbian employee rather than a heterosexual employee.</td>
<td>0.89</td>
<td>-0.06</td>
<td>-0.22</td>
<td>-0.06</td>
</tr>
<tr>
<td>59. For many gay men and lesbian women, the choice about where to vacation can depend on how open a city is to homosexuality.</td>
<td>0.51</td>
<td>0.10</td>
<td>0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td>61. Sexual minority members are rarely allowed to make medical decisions about same...</td>
<td>0.23</td>
<td>0.18</td>
<td>0.19</td>
<td>-0.13</td>
</tr>
<tr>
<td>66. When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their sexual orientation.</td>
<td>0.64</td>
<td>-0.03</td>
<td>0.04</td>
<td>-0.05</td>
</tr>
<tr>
<td>76. Getting beat up is not a concern for gay men or lesbian women. *</td>
<td>0.31</td>
<td>0.30</td>
<td>0.06</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Awareness of Sexism Subscale Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Men often earn more money than women when performing the same job.</td>
<td>0.24</td>
<td>0.16</td>
<td>0.16</td>
<td>-0.13</td>
</tr>
<tr>
<td>18. The focus on men’s bodies is just as strong as it is on women’s. *</td>
<td>0.20</td>
<td>0.14</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>22. Men are judged just as harshly about their attractiveness as women. *</td>
<td>0.20</td>
<td>0.15</td>
<td>0.09</td>
<td>0.06</td>
</tr>
<tr>
<td>23. Women often mean 'yes' when they say 'no' to a man's advances. *</td>
<td>-0.01</td>
<td>0.43</td>
<td>0.18</td>
<td>0.13</td>
</tr>
<tr>
<td>24. Men in power are assumed to have earned their position, women may be suspected of having “slept their way to the top.”</td>
<td>0.37</td>
<td>0.05</td>
<td>-0.05</td>
<td>-0.26</td>
</tr>
<tr>
<td>30. Women are better suited to stay at home to raise children than men. *</td>
<td>0.06</td>
<td>0.67</td>
<td>-0.11</td>
<td>-0.11</td>
</tr>
</tbody>
</table>

Note. Highest factor loading for each item is bolded. * = reverse-scored item. Factor 1 = Heterosexism; Factor 2 = Sexism; Factor 3 = Classism; Factor 4 = Racism.
Table 7 continued

### Awareness of Sexism Subscale Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. Women who dress provocatively want men to approach them for sex.*</td>
<td>.12</td>
<td>.52</td>
<td>.05</td>
<td>-.04</td>
</tr>
<tr>
<td>41. Women are better suited as entry-level employees when compared to men.*</td>
<td>.05</td>
<td>.43</td>
<td>.13</td>
<td>.20</td>
</tr>
<tr>
<td>45. Many women are systematically denied access to leadership positions.</td>
<td>.37</td>
<td>.19</td>
<td>.03</td>
<td>-.39</td>
</tr>
<tr>
<td>48. Women exert more energy to prevent being victimized than men.</td>
<td>.36</td>
<td>.14</td>
<td>.15</td>
<td>-.03</td>
</tr>
<tr>
<td>49. It is acceptable to most people to use vocabulary terms that end in &quot;man&quot; or &quot;men&quot; such as policeman when referring to a female in that line of work.*</td>
<td>-.11</td>
<td>.15</td>
<td>-.10</td>
<td>-.20</td>
</tr>
<tr>
<td>52. Men are better leaders than women.*</td>
<td>.13</td>
<td>.66</td>
<td>-.12</td>
<td>-.06</td>
</tr>
<tr>
<td>53. I find myself assuming a manager in a story is a man if the story does not specifically identify the person’s gender.</td>
<td>.21</td>
<td>-.33</td>
<td>.13</td>
<td>.06</td>
</tr>
<tr>
<td>71. Men are considered more attractive as they get older when compared to women.</td>
<td>.34</td>
<td>-.06</td>
<td>.15</td>
<td>.07</td>
</tr>
<tr>
<td>72. Men should do less house cleaning than their female partners.*</td>
<td>.07</td>
<td>.63</td>
<td>.04</td>
<td>.06</td>
</tr>
</tbody>
</table>

### Awareness of Classism Subscale Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Poor individuals are more likely to suffer from mental illness because of the way society...</td>
<td>.03</td>
<td>-.03</td>
<td>.37</td>
<td>-.26</td>
</tr>
<tr>
<td>4. The stress associated with being poor can cause health problems.</td>
<td>.12</td>
<td>.23</td>
<td>.39</td>
<td>-.08</td>
</tr>
<tr>
<td>5. This country would be a better place if welfare were eliminated.*</td>
<td>-.09</td>
<td>.33</td>
<td>.27</td>
<td>-.29</td>
</tr>
<tr>
<td>9. Growing up in a low-income family hurts a person’s chances for obtaining a job that will make them happy.</td>
<td>.00</td>
<td>-.04</td>
<td>.66</td>
<td>-.16</td>
</tr>
<tr>
<td>10. If anyone works hard enough they will be successful.*</td>
<td>-.08</td>
<td>.17</td>
<td>.49</td>
<td>-.14</td>
</tr>
<tr>
<td>14. Children from lower-income families are more likely to be teased about their clothing...</td>
<td>.26</td>
<td>.16</td>
<td>.25</td>
<td>-.07</td>
</tr>
</tbody>
</table>

*Note.* Highest factor loading for each item is bolded. * = reverse-scored item. Factor 1 = Heterosexism; Factor 2 = Sexism; Factor 3 = Classism; Factor 4 = Racism.
Table 7 continued

<table>
<thead>
<tr>
<th>Awareness of Classism Subscale Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Having access to learning opportunities such as zoos provides advantages over other students who cannot afford this type of experience.</td>
<td>.09</td>
<td>.08</td>
<td>.35</td>
<td>-.07</td>
</tr>
<tr>
<td>20. Growing up in a middle class family improves your chances for obtaining a job that will be satisfying.</td>
<td>.16</td>
<td>-.19</td>
<td>.46</td>
<td>-.16</td>
</tr>
<tr>
<td>25. Having money can lead to instant respect in business settings.</td>
<td>.29</td>
<td>-.13</td>
<td>.30</td>
<td>-.09</td>
</tr>
<tr>
<td>26. A person from an affluent family has a greater chance to earn a college degree than an individual from a poor family.</td>
<td>.02</td>
<td>-.03</td>
<td>.74</td>
<td>.02</td>
</tr>
<tr>
<td>27. Being poor has no bearing on a person’s opportunity to earn a college degree. *</td>
<td>-.05</td>
<td>.13</td>
<td>.67</td>
<td>.04</td>
</tr>
<tr>
<td>32. Individuals with parents who went to college are more likely to go to college than an individual whose parents did not go to college.</td>
<td>.12</td>
<td>.01</td>
<td>.49</td>
<td>.12</td>
</tr>
<tr>
<td>37. People who work for minimum wage make enough money to meet basic needs. *</td>
<td>.00</td>
<td>.37</td>
<td>.30</td>
<td>.00</td>
</tr>
<tr>
<td>38. Public schools in low-income districts provide an equivalent education to public schools in middle or high-income districts.</td>
<td>.10</td>
<td>.24</td>
<td>.36</td>
<td>.02</td>
</tr>
<tr>
<td>46. Homeless people don’t deserve to get money from hard-working folks. *</td>
<td>-.06</td>
<td>.35</td>
<td>.17</td>
<td>-.28</td>
</tr>
<tr>
<td>51. People who have money are more likely to live longer than people who do not have much money.</td>
<td>.03</td>
<td>.01</td>
<td>.63</td>
<td>.14</td>
</tr>
<tr>
<td>65. People who live on the “good” side of town are less likely to become ill from industrial plants than other people.</td>
<td>.08</td>
<td>-.04</td>
<td>.50</td>
<td>-.12</td>
</tr>
</tbody>
</table>

*Note.* Highest factor loading for each item is bolded. * = reverse-scored item. Factor 1 = Heterosexism; Factor 2 = Sexism; Factor 3 = Classism; Factor 4 = Racism.
Table 8

*Final Rotated Factor Structure and Total Variance Explained*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Extraction Sums of Squared Loadings</th>
<th></th>
<th>Rotation Sums of Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>14.44</td>
<td>22.92</td>
<td>22.92</td>
</tr>
<tr>
<td>2</td>
<td>3.15</td>
<td>5.00</td>
<td>27.93</td>
</tr>
<tr>
<td>3</td>
<td>1.85</td>
<td>2.93</td>
<td>30.86</td>
</tr>
<tr>
<td>4</td>
<td>1.62</td>
<td>2.57</td>
<td>33.43</td>
</tr>
</tbody>
</table>
Table 9

*Inter-Factor Correlation Matrix for the Final APOS-2 Solution*

<table>
<thead>
<tr>
<th></th>
<th>Factor 1: Heterosexism</th>
<th>Factor 2: Sexism</th>
<th>Factor 3: Classism</th>
<th>Factor 4: Racism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Heterosexism</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2: Sexism</td>
<td>0.37</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3: Classism</td>
<td>0.59</td>
<td>0.32</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Factor 4: Racism</td>
<td>0.66</td>
<td>0.32</td>
<td>0.61</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 10

**List of Final 40 APOS-2 Items Retained**

<table>
<thead>
<tr>
<th>APOS-2 Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. Men often earn more money than women when performing the same job.</td>
</tr>
<tr>
<td>02. Gay men are more at risk for being terminated from a job than heterosexual men based solely on sexual orientation.</td>
</tr>
<tr>
<td>03. Poor individuals are more likely to suffer from mental illness because of the way society treats them.</td>
</tr>
<tr>
<td>04. The stress associated with being poor can cause health problems.</td>
</tr>
<tr>
<td>09. Growing up in a low-income family hurts a person’s chances for obtaining a job that will make them happy.</td>
</tr>
<tr>
<td>12. People of Color receive less medical information from their physicians when compared to White individuals.</td>
</tr>
<tr>
<td>18. The focus on men’s bodies is just as strong as it is on women’s. *</td>
</tr>
<tr>
<td>19. Being heterosexual makes it easier to participate in a religious organization.</td>
</tr>
<tr>
<td>20. Growing up in a middle class family improves your chances for obtaining a job that will be satisfying.</td>
</tr>
<tr>
<td>22. Men are judged just as harshly about their attractiveness as women. *</td>
</tr>
<tr>
<td>23. Women often mean 'yes' when they say 'no' to a man's advances. *</td>
</tr>
<tr>
<td>26. A person from an affluent family has a greater chance to earn a college degree than an individual from a poor family.</td>
</tr>
<tr>
<td>27. Being poor has no bearing on a person’s opportunity to earn a college degree. *</td>
</tr>
<tr>
<td>30. Women are better suited to stay at home to raise children than men. *</td>
</tr>
<tr>
<td>31. Gay couples can be pretty sure their neighbors will be accepting of their relationship. *</td>
</tr>
<tr>
<td>32. Individuals with parents who went to college are more likely to go to college than an individual whose parents did not go to college.</td>
</tr>
<tr>
<td>33. People of Color and White people have to worry equally about their credibility when addressing a group. *</td>
</tr>
<tr>
<td>35. African Americans with lighter skin color are more likely to be promoted within corporations than African Americans with darker skin color.</td>
</tr>
<tr>
<td>36. People of Color can easily find greeting cards that represent people of their race. *</td>
</tr>
<tr>
<td>38. Public schools in low-income districts provide an equivalent education to public schools in middle or high-income districts.</td>
</tr>
<tr>
<td>39. Women who dress provocatively want men to approach them for sex. *</td>
</tr>
<tr>
<td>41. Women are better suited as entry-level employees when compared to men. *</td>
</tr>
</tbody>
</table>

*Note.* * = reverse-scored item.

Table 10 continues
Table 10 continued

<table>
<thead>
<tr>
<th>APOS-2 Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>42. People of Color experience high levels of stress because of the discrimination they face.</td>
</tr>
<tr>
<td>43. Gay men and lesbian women often have concerns about kissing their partners in public.</td>
</tr>
<tr>
<td>47. Teenagers who identify as gay or lesbian in school are at a greater risk for being physically assaulted than heterosexual teens.</td>
</tr>
<tr>
<td>50. Some hiring officials may not hire gay or lesbian workers to avoid negative reactions from customers.</td>
</tr>
<tr>
<td>51. People who have money are more likely to live longer than people who do not have much money.</td>
</tr>
<tr>
<td>52. Men are better leaders than women. *</td>
</tr>
<tr>
<td>54. People of Color can readily find mentors or role models of their race who can advise them professionally. *</td>
</tr>
<tr>
<td>55. People of color can ask to speak to the “person in charge” at a store and be confident that the person will also be a Person of Color. *</td>
</tr>
<tr>
<td>57. In many workplaces, some employees would have concerns about hiring a gay or lesbian employee rather than a heterosexual employee.</td>
</tr>
<tr>
<td>59. For many gay men and lesbian women, the choice about where to vacation can depend on how open a city is to homosexuality.</td>
</tr>
<tr>
<td>60. Racism continues to play a prominent role in society.</td>
</tr>
<tr>
<td>61. Sexual minority members are rarely allowed to make medical decisions about same gender partners.</td>
</tr>
<tr>
<td>63. Most history books don’t accurately show how People of Color helped America become the country it is.</td>
</tr>
<tr>
<td>65. People who live on the “good” side of town are less likely to become ill from industrial plants than other people.</td>
</tr>
<tr>
<td>66. When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their sexual orientation.</td>
</tr>
<tr>
<td>67. African American political candidates are generally less likely to be accepted by White constituents in their districts.</td>
</tr>
<tr>
<td>72. Men should do less house cleaning than their female partners. *</td>
</tr>
<tr>
<td>74. White individuals don’t have to think about educating their children on racism in order to keep them from danger.</td>
</tr>
</tbody>
</table>

*Note. * = reverse-scored item.
Figure 1. Scree plot utilized in the decision process to determine the appropriate number of components or factors to extract. It appears the line begins to drop off after four or five components.
Chapter Five: Discussion

The purpose of this study was to revise the Awareness of Privilege and Oppression Scale (Montross, 2003) and to improve upon the psychometric properties of the original instrument. An adapted version of Clark and Watson’s (1995) test construction model was utilized as a guide to attempt to ground the methodological aspects of the study in best practices. A primary proposition in this adapted model was the importance of creating knowledge-based test items that are tied to the extant theory and literature. A comprehensive literature review, a knowledgeable focus group, and a panel of expert reviewers with specific knowledge of the content areas included in this measure were utilized to establish the content validity of the test items of the newly revised APOS-2. The updated measure, a demographic questionnaire, and two comparison measures were administered to a group of undergraduate research participants through an internet-based study in order to gather the data needed to reduce the number of items and provide evidence of the APOS-2’s construct, convergent, and discriminant validity.

The results of this administration suggest the APOS-2 construction project was successful and that the updated instrument represents an overall improvement over the original APOS. First, the proposed four-factor, oblique factor structure of the APOS-2, which was theoretically constructed to measure awareness of heterosexism, sexism, classism, and racism, was supported by the data through an exploratory factor analysis (EFA). The original APOS was also found to be made up of four factors that measured awareness of heterosexism, sexism, classism, and racism; however, Montross (2003) utilized orthogonal factor extraction techniques rather than oblique extraction.
methods. Flammer (2001), Hays (2005), and Hays, Chang, and Decker (2007) suggest and provide empirical support for an overarching awareness of privilege and oppression that is made up of more specific types of awareness (e.g., racism or sexism) that are intercorrelated and, hence, require oblique factor rotation methods. The use of oblique factor rotation techniques with the APOS-2 better accounts for the fact that the test items within the factors are theoretically interrelated.

Second, the reliability estimates of the APOS-2 total score and the four theoretically derived subscales represent an improvement over the original APOS characteristics. The Cronbach alpha reliability estimates for the original APOS vs. the APOS-2 are as follows: The total score for the original APOS was .83 vs. .92 for the APOS-2; .75 for the heterosexism subscale of the original APOS vs. .84 for the APOS-2; .71 for the racism subscale of the original APOS vs. .86 for the APOS-2; .56 for the classism subscale of the original APOS vs. .84 for the APOS-2; and finally, .46 for the sexism subscale of the original APOS vs. .73 for the APOS-2. The alphas for all of the aspects of the APOS-2 (i.e., total score and the four, factor-based subscales) show improvement in this initial study.

Third and fourth, the response scale and the number of items included in the instrument of the instrument were changed. The new APOS-2 utilizes six response options for participants vs. four on the original APOS. The increase in the response categories has been suggested to improve scale reliability and participant response variability. The increase in response categories also brings the APOS-2 in line with other instruments that measure types of awareness of privilege and/or oppression including the POI and the SPM. In addition, the number of items administered to participants in the
APOS-2 has been reduced by 10 items (50 items in the original APOS to 40 items in the APOS-2) and the number of items from each subscale is more balanced than observed in the original APOS. The number of items included in the four subscales of the original APOS ranged from 7 to 15, whereas the number of items included in the four subscales of the APOS-2 range from 9 to 11. This increase in response categories and the shorter, more balanced APOS-2 provides advantages over the original APOS which are magnified by the initial evidence suggesting the APOS-2 scores may be more reliable.

Fifth, an intentional effort was made to improve the content validity process for the APOS-2. An individual item was only retained from the original APOS, if the item was both psychometrically desirable and included content described in Chapter Two of the current manuscript. Ultimately, 12 of the 40 items (30%) included in the APOS-2 were items that were retained in whole or adapted from the original APOS items. These carryover items brought with them empirical support that was not available to Montross (2003). The new items constructed for the APOS-2 were based in knowledge and concepts observed within the extant literature and were created by a focus group of social justice-focused researchers with specific knowledge of the content areas and with research experience utilizing the original APOS. This type of literature-driven item creation was not performed during the development of the original APOS and the focus group utilized for item construction for the APOS-2 was simply not possible during the development of the original APOS. Both the original APOS and the APOS-2 utilized a panel of expert raters to review item content. The expert rater panel included in the APOS-2 was more diverse in terms of numbers (the original APOS utilized three expert raters vs. eight in the APOS-2) and specificity (at least one expert in the subject matter
for each theoretically derived subscale provided feedback). The increased feedback provided by an expert panel with more specific knowledge of the content areas is an important distinction between the item development processes employed in the original and updated versions of the instrument. In addition, my own expert status as a researcher with in-depth knowledge of the construct of awareness of privilege and oppression, the learning inherently gained through this literature-driven process, knowledge of scale development, and with years of experience in working with the original APOS all served as advantages that were not available during the development of the original measure and add to the value of the APOS-2 when compared to other measures.

Finally, the APOS-2 continued to perform in predictable ways in terms of the instrument’s convergent and discriminant validity and in line with the statistical hypotheses formulated for the current study. Just as its’ predecessor, the APOS-2 continued to exhibit no significant relationship with the trait of social desirability. The APOS-2’s low correlation ($r = -.10$) with the MC-1 continues the trend established by the original APOS suggesting that college students generally (in a testing environment where they feel anonymous) have not responded to awareness of privilege and oppression items in a socially desirable manner. Likewise, the APOS-2 has continued the trend of responding in similar ways when compared to other measures with concepts that appear to overlap with the APOS-2’s theoretical underpinnings (i.e., based on the APOS-2 low to moderate correlation of $r = .29$ with the ODS).

**Implications for Other Social Justice Measures and Theory**

The improvements observed in the APOS-2 have several implications for scale developers and theorists. First, the results of this initial APOS-2 study provide support
for Clark and Watson’s (1995) assumption that a theory and literature-driven item
creation process that is supported by the extant literature provides the best opportunity for
a successful scale development project. Utilizing a test construction model for project
guidance does not guarantee a successful scale development project outcome; however,
such models provide the best opportunity for success when scale development projects
are built on sound theory and when the extant literature is available to extract pertinent
and item-friendly content.

The success of the original APOS and this initial study of the psychometric
properties of the APOS-2 lend support for designing measures that focus more broadly on
social justice concepts such as awareness of privilege and oppression rather than more
specific measures which focus on attempting to quantify an individual’s exact level of
social identity development. Such instruments have often exhibited low reliability
estimates (O’Meara, 2001). Awareness of privilege and oppression is a characteristic
observed in many social identity development models, so measuring the construct of
awareness of privilege and oppression may be an indirect method of measuring
components of social identity development. The success of the original APOS and now
the APOS-2 also lends support for other instruments such as the POI and SPM that are
designed to measure awareness of privilege and oppression.

Implications for Diversity Educators and Researchers

The results of this initial validation study also have positive implications for
diversity educators and researchers. The shifting population distributions over the
coming century suggest the need for social justice-focused diversity training will
continue to grow (Bernstein & Roberts, 2008; Hays, 2005; Pendry et al., 2007; U.S.
Census Bureau, n.d.). It will be important for diversity trainers and researchers to document the benefits of diversity training and the value of social-justice focused diversity training in order to make the case for this type of training. Construction projects such as this revision project, which led to the development of the APOS-2 are an important step in creating the type of instruments that educators can use when attempting to determine whether diversity training is effective and that scientists will seek out when attempting to conduct research in this area.

The APOS-2 can serve as an important tool to diversity educators, researchers, and clinicians. Remer’s (2008) work with the original APOS has shown that social-justice focused instruments can be utilized to measure the effectiveness of diversity training. Instruments such as the APOS-2 are now available with research that suggests these tools are valid and reliable measures. The APOS-2 is the best instrument that is currently available to assess awareness of privilege and oppression for the following reasons. This instrument is based in theory, constructed using evidence-based test development procedures, and contains items that are both literature-driven and were constructed with expert feedback. The APOS-2 has also shown promising psychometric characteristics in this initial study and instruments such as the POI and the SPM have provided further evidence and support for the theoretical underpinnings of the construct of awareness of privilege and oppression. In addition, the four subscales of the APOS-2 measure and evaluate the four most-common topics presented in diversity training courses (sexism, heterosexism, classism, and racism), so this instrument is inherently advantageous over all other measures of awareness of privilege and oppression.
Diversity trainers and educators should consider using the APOS-2 either as a stand-alone instrument or as part of a larger battery of instruments that assess constructs of awareness, knowledge, skills, and advocacy. Awareness of privilege and oppression is a key social justice construct and the process of gaining this awareness is an important indicator of whether or not diversity training has been successful. It is also important to assess trainee growth related to intercultural knowledge, intercultural communication skills, and whether or not trainee’s become advocates for social justice issues. The ultimate goal of social justice-focused diversity training is not for an individual to obtain awareness, knowledge, and skills only to keep this learning confined to his or her own mind. Rather, the primary goal of social justice-focused diversity training is for individuals to learn and then enact social change.

**Limitations of the Current Study**

The current study, however, was not without faults. Four limitations are discussed below. Problems with the reliability of the MC-1, the literature-driven item creation process, the response rate, and the privileged sample are all potential limitations. The low reliability estimate obtained for the MC-1 is discussed first.

An effort was made to utilize comparison measures with desirable psychometric properties; however, the use of the MC-1 was problematic. The MC-1, a short form of the MCSD, was utilized as a measure of discriminant validity. The observed reliability of the MC-1 in this study was less than .60. Reliability estimates this low are not generally desirable. Perhaps the placement of the MC-1 in the study administration protocol was problematic. The MC-1 was the last measure administered to research participants in this
study. Perhaps participants were fatigued and responded with less tenacity than the other measures which were administered earlier in the administration protocol.

Second, the literature-driven item creation process was intended to improve the content validity of the measure. Literature-driven item creation gives a test the best possible opportunity to measure the constructs the scale was intended to assess. This process, however, is not without limitations. For example, there are likely other manifestations of privilege and oppression that were not found or that have not yet been recorded within the literature. More work could be done to look for other manifestations of privilege and oppression that were not included in the current study. In addition, the wording of items in the Awareness of Sexism subscale may have also been problematic by being unclear to participants or addressed content that was simply not within the knowledge or understanding of participants in the current study. In the end, I utilized the most apparent and abundant manifestations observed in the literature and the wording of the items was reviewed by a focus group with knowledge of the content areas and previous research experience with the original instrument, an expert rater panel, and my own expertise to develop and review item wording.

Third, the response rate of the current study represents another potential limitation. An effort was made to obtain an equal number of participants from each of the different student classifications (e.g. freshmen vs. other student classifications) that was randomly selected from the pool of all undergraduate students at the host university. The response rate, however, was 12.26% \((n = 651\) of 5,311) for individuals who logged into the survey and 9.11% \((n = 484\) of 5,311) for participants who completed the study at the 90% rate. With such a low response rate, it is difficult to know whether or not the
random sampling efforts were effective or whether the participant group was representative of the pool of research participants at the host institution. It is also difficult to determine whether the responses of the current sample were reflective of the larger group of undergraduate students at other universities. These problems with the sample may negatively impact the generalizability of the sample to the larger population of college students at the host institution or other institutions who may be interested in utilizing the APOS-2.

Finally, one threat to the generalizability of the current findings can be observed in the demographic characteristics of the sample. In the current study I utilized a combined sample of 484 participants that was predominantly Caucasian (81%), female (63.8%), Christian (64.5%), heterosexual (88.4%), college-aged ($M$ age = 20.72 years), from educated parents (68.2% of parental figure # 1’s and 57.2% of parental figure # 2’s were college graduates), had traveled abroad (52.3%), and did not receive free lunch while in high school (85.5%). These characteristics are reflective of an overall privileged participant group and may not be easily generalizable to more oppressed sample groups. For example, a sample group with a higher representation of older, gay men may score differently than the current sample on the APOS-2 because of the increased life experience and the overall greater familiarity associated with experiencing this type of oppression first hand. However, in this initial study, I used a stratified, random recruitment process and obtained a sample size that was good for the statistical analyses I intended to perform. Next, ideas for future research are presented.
Future Research

There are six areas of suggestions for future research. These include replication of the current findings, confirming the factor structure of the APOS-2, future work on the Awareness of Sexism subscale, future work on the other subscales, future work on utilizing the APOS-2 in actual diversity training outcome research, and continuing to examine the discriminant and convergent validity of the APOS-2 with other comparison measures. First, it is important to replicate the findings of the current study with other participant pools both within the same host institution and expand the study to other institutions in order to confirm these collective findings and to better understand how the APOS-2 functions with other sample groups.

Second, it is recommended that future research focus on confirming the factor structure of the APOS-2 through techniques such as confirmatory factor analysis (CFA). The current study utilized EFA and an important distinction should be made here. Exploratory factor analysis is not able to confirm the factor structure of a measure or test whether or not the final solution is the best solution for the available data. Statistical techniques such as CFA can confirm the factor structure of a measure and test whether solutions such as those obtained through such techniques as EFA are the best fit for the available data. The oblique factor structure of the APOS-2 suggests the subscale scores overlap or are inter-related to some extent and lends support to the use of both subscale scores and total scores. The fact that each of the subscale scores were factor-derived suggests the subscales measure distinct facets of awareness of privilege and oppression. Further, the oblique nature of these factors or subscales suggest that combining the subscale scores into a total score allows for a broad and more comprehensive assessment
of the target construct (i.e., awareness of privilege and oppression). This assessment of the use of subscale and total scores is consistent with Hays et al.’s (2007) findings related to the factor structure of the POI. In the Hays et al. study, the authors confirmed the use of both subscale and total scores using CFA. It is essential to confirm the factor structure of the APOS-2 using CFA techniques in order to test this theory further and provide more evidence for future researchers.

A third area of potential interest for future researchers is with the Awareness of Sexism subscale. This subscale was Montross’ (2003) lowest Cronbach alpha reliability estimate of .46. In the current study, the Awareness of Sexism subscale reliability was better (.73 for the APOS-2 vs. .46 for the original APOS subscale), but it proved the most challenging of the subscales on the APOS-2 to construct. Items 16, 18, and 22 (on the 79-item draft of the APOS-2 administered to participants) all appeared redundant, however, removing more than one of these three items rendered the subscale reliability below .50. As a result, items 18 and 22 were retained on this subscale. Again, Montross (2003) also experienced difficulty constructing a usable sexism subscale. I believe my decision to limit the scope of the measure to awareness of sexism as it is directed toward women was the right decision because this is encompasses the largest proportion of sexism generated in United States.

It is possible that the multidimensionality of sexism as noted by Glick and Fiske (1996, 1999) is not well-represented in the APOS-2. The absence of or over-representation of any missing facets of the ambivalent sexism construct might be making the construction of this subscale more challenging. More effort can be made to identify the dimensionality of the Awareness of Sexism subscale and determine whether the items
included in this measure simply rely on too many or too few aspects of the sexism construct to obtain a clear sexism factor. It is advantageous to create one subscale that is similar in size to the other APOS-2 subscales so as to avoid the over-representation of the sexism construct when compared to the overall measure. It is possible that the complex nature of the sexism construct will require a greater number of items that more adequately represent the full dimensionality of the construct in order to obtain competitive reliability estimates when compared to the other subscales. If this is the case, the Awareness of Sexism subscale could either be removed from the APOS-2 to be developed independently as a separate scale, the scoring for this subscale could be scaled in some way that a larger number of items on this subscale would be weighted so that it had an equal potential impact on the total score, or this subscale could be further developed through a new round of item writing and testing and then reduced to a number of items that would be more comparable to the other APOS-2 subscales. Montross suggested future studies may need to evaluate whether removing the sexism subscale is warranted and it is my belief that this drastic measure is unwarranted. The improvement in the subscale between the original APOS and the APOS-2 presented in this initial study suggest that either more changes to this subscale may be necessary in the future or a larger subscale with weighted scoring may be needed rather than simply deleting the subscale from the overall measure altogether.

Fourth, future work might focus on the other subscales (i.e. Racism, Heterosexism, and Classism). These subscales performed well during the current study. However, the narrowing process associated with reducing the overall number of APOS-2 items for each subscale ultimately reduced the range of item content covered in Chapter
Two. It is possible that some of the poorly performing items eliminated during this study could be re-examined, revised, and then re-administered to future participants in order to determine whether or not the items were written poorly. New items could also be generated from the item content provided in Chapter Two and any new items could then be administered as part of a future study.

Fifth, future research should also utilize the APOS-2 in diversity training outcome research. Remer (2008) provided evidentiary support for utilizing the original APOS as a social justice-focused diversity training outcome measure. This type of research is vital to providing the type of empirical support necessary for gatekeepers who may approve this type of training within their universities, organizations, and schools in the future. Remer’s work focused on undergraduates and the original APOS was employed to measure progress in full-semester academic courses. These are likely the type of learning environments where change will be most significant and easier to evaluate with instruments such as the APOS-2 because these type of courses often last for extensive periods of time and cover a number of topics. However, research should also be conducted with more short-term courses and trainings as well.

Finally, more work is needed to clarify the discriminant and convergent validity of the APOS-2. How will the APOS-2 perform if compared to other social justice-related scales such as the POI or the SPM? The fact that these three scales each measure some type of awareness of privilege and oppression suggests they would be highly correlated; however, the POI and the APOS-2 measure some different types of awareness (i.e., the POI has a subscale for Christian privilege awareness and the APOS-2 does not measure that type of awareness). High to moderate correlations between these social justice
instruments would provide additional support for an awareness of privilege and oppression construct and additional factorial support or confirmation through such techniques as CFA and IRT would provide further support for a hierarchical factor structure of an overarching awareness of privilege and oppression that is made up of various and more specific types of awareness (e.g., racism awareness).

Conclusions

In conclusion, the newly revised APOS-2 is a promising new instrument that needs additional research before the scale’s true value as a social justice-focused diversity training outcome measure can be fully assessed. Improvements to scale’s content validity, total score and subscale score reliability estimates, factor loading properties, increase in the number of available response categories for participants, support for an oblique factor structure, and support for the theoretically derived subscales suggest the instrument can be a legitimate competitor to others scales that measure the same construct. There is inherent value in determining whether or not this instrument can serve as an important tool for assessing course outcomes for social justice-focused educational courses for college students. It is also possible that therapists will be able to use this measure in their clinical work by helping clients gain awareness of issues of privilege and oppression. The APOS-2 adds to the body of literature in diversity education, scale development, and awareness of privilege and oppression. Hopefully, the APOS-2 will be utilized to underscore the inherent value and need for helping U.S. society better understand it must do more to better understand and address the needs of diverse individuals.

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Appendices

Appendix A: List of Retained and Eliminated Items from the Original APOS

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coming from a wealthy background makes no difference when running for political office.</td>
<td>*, **</td>
</tr>
<tr>
<td>2</td>
<td>Minorities can easily read a paper or watch television and see people who look like them positively represented.</td>
<td>**</td>
</tr>
<tr>
<td>3</td>
<td><strong>Homeless people don’t deserve to get money from hard-working folks.</strong></td>
<td>**</td>
</tr>
<tr>
<td>4</td>
<td>Most men are concerned about being raped or assaulted whenever walking alone, just as women are.</td>
<td>**</td>
</tr>
<tr>
<td>5</td>
<td>Gay men and lesbian women often feel the need to flaunt their sexuality.</td>
<td>**</td>
</tr>
<tr>
<td>6</td>
<td>On average, women continue to earn less than men who are working the same jobs.</td>
<td>**</td>
</tr>
<tr>
<td>7</td>
<td><strong>Having money can lead to instant respect in business settings.</strong></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their lifestyle.</td>
<td>**</td>
</tr>
<tr>
<td>9</td>
<td>Homeless people may need other’s help to get back on their feet.</td>
<td>**</td>
</tr>
<tr>
<td>10</td>
<td>The use of terms like “fireman,” “salesman,” or “congressman” aren’t harmful to women because people usually know those terms can stand for both genders.</td>
<td>*, **</td>
</tr>
<tr>
<td>11</td>
<td>Something as simple as having a decent, reliable car is a luxury many can’t afford.</td>
<td>**</td>
</tr>
<tr>
<td>12</td>
<td><strong>Men in power are assumed to have earned their position, women may be suspected of having “slept their way to the top.”</strong></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Most history books don’t accurately show how people of color helped America become the country it is.</td>
<td>**</td>
</tr>
<tr>
<td>14</td>
<td>This society is mostly run by its wealthiest people.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td><strong>The fear of being rejected by one’s parents is very real for gay men, lesbian women, and bisexual people.</strong></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>This country would be a better place if welfare were eliminated.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Women often find themselves walking a fine line between looking “sexy” and looking “smart.”</td>
<td>**</td>
</tr>
<tr>
<td>18</td>
<td><strong>Men and women face the same level of pressure from society to be physically attractive.</strong></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Getting beat up is not a concern for gay men or lesbian women.</td>
<td>**</td>
</tr>
<tr>
<td>20</td>
<td>When flirting, heterosexuals don’t usually have to worry about whether the other people will be open to their type of advance.</td>
<td>*, **</td>
</tr>
<tr>
<td>21</td>
<td>People often assume those with money are intelligent.</td>
<td>**</td>
</tr>
</tbody>
</table>

Note: Bolded items were retained; * eliminated due to factor loading < .30; ** eliminated due to failure to load on intended factor.
Appendix A (Continued): List of Retained and Eliminated Items from the Original APOS

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Minorities can easily find greeting cards that represent people of their race.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>The focus on men’s bodies is just as strong as it is on women’s bodies in this society.</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>White people are often asked to speak for the opinion of all other Whites.</td>
<td>**</td>
</tr>
<tr>
<td>25</td>
<td>Whites are more widely represented in college than people of color because they earned the advantages given to them.</td>
<td>**</td>
</tr>
<tr>
<td>26</td>
<td>When selling a home, Whites can rest assured that most people would want to buy the home they lived in.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Whites don’t have to think about educating their children on racism in order to keep them from danger.</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>It is easier for children to attend college if one or more of their parents have.</td>
<td>**</td>
</tr>
<tr>
<td>29</td>
<td>Receiving insurance coverage for partners is not a problem for gay men and lesbian women.</td>
<td>**</td>
</tr>
<tr>
<td>30</td>
<td>Gay men and lesbian women can be confident that their parents will not be upset when they talk about the gender of their new partner.</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Gay men and lesbian women often have concerns about kissing their partners in public.</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Women often make deliberate choices in the way they live their lives in order to avoid being raped.</td>
<td>*</td>
</tr>
<tr>
<td>33</td>
<td>Anyone can get an education if they want to badly enough.</td>
<td>**</td>
</tr>
<tr>
<td>34</td>
<td>Women continue to bear the burden of cooking, cleaning, and caring for children in most of today’s two-income households.</td>
<td>**</td>
</tr>
<tr>
<td>35</td>
<td>White people can easily find a hairdresser who knows how to cut their hair correctly.</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Men don’t typically have to worry about whether they are being taken seriously by their co-workers.</td>
<td>**</td>
</tr>
<tr>
<td>37</td>
<td>Minorities can readily find mentors or role models of their race who can advise them professionally.</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Heterosexual and homosexual people have equal opportunities and protections under the law.</td>
<td>**</td>
</tr>
<tr>
<td>39</td>
<td>For many gay men and lesbian women, the choice about where to vacation can depend on how open a city is to homosexuality.</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>For many women, it is often a struggle to assert their authority in the workplace.</td>
<td>**</td>
</tr>
</tbody>
</table>

Note: Bolded items were retained; * eliminated due to factor loading < .30; ** eliminated due to failure to load on intended factor.
<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>People of color often notice if they are outnumbered at professional</td>
<td>* , **</td>
</tr>
<tr>
<td></td>
<td>meetings.</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Whites can usually arrange to be in the presence of other Whites most of</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>the time.</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>People who are poor have difficulty meeting role models who can advise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>them professionally.</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>People of color and Whites have to worry equally about their credibility when addressing a group.</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Gay men and lesbian women can easily have marriage ceremonies if they want to formalize their partnership.</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Heterosexuals don’t have to worry about how others will treat them if they hold hands with their partner in public.</td>
<td>* , **</td>
</tr>
<tr>
<td>47</td>
<td>People of color can ask to speak to the “person in charge” at a store and be confident that the person will also be a minority.</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Gay couples can be pretty sure their neighbors will be accepting of their relationship.</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Men are judged just as harshly about their attractiveness as women.</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Anyone can get health insurance if they really want to.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Bolded items were retained; * eliminated due to factor loading < .30; ** eliminated due to failure to load on intended factor.
Appendix B: Focus Group Curriculum Vita for Randa R. Remer, Ph.D.

Randa R. Remer

**Education**
Ph. D. University of Kentucky   Educational Psychology   2008
Dissertation: Influence of Diversity Courses on Undergraduates’ Ethnocultural Empathy, Openness to Diversity, and Awareness of Privilege and Oppression within a Mastery or Performance Classroom Context

M.S. Indiana University   Counseling   1999
B.A. Centre College   Psychology   1997

**Professional Credentials**
Licensed Professional Counselor, Commonwealth of Kentucky, November 1999-Present
Mediator, Commonwealth of Kentucky   Anticipated June 2010

**Professional Awards**
Nominee for the Sarah Bennett Holmes Award   March 2010
Advisor of the Year Nominee   February 2010

**Professional Experiences**
Assistant Dean, Office of Student Affairs, College of Health Sciences
University of Kentucky, Lexington, KY
January 1, 2011- present
Lead the Office of Student Affairs in recruitment, advising, registration, admissions, scholarship allocation, and graduation. Advise graduate and undergraduate students on program requirements. Work with faculty to devise student policies and procedures. Work with students who are experiencing challenges in their degree programs. Supervise three professional staff members. Coordinate the Student Ambassador program. Coordinate graduation activities for the college.

Leadership Director, Gatton College Of Business & Economics,
University of Kentucky, Lexington, KY
August 28, 2006-December 31, 2010
Multifaceted position in the Undergraduate Resource Center (URC). Teach courses on leadership through a social justice perspective and on transition to college. Provide mentorship training for and co-coordinate the Gatton Buddies Mentorship Program.
Appendix B: Focus Group Curriculum Vita for Randa R. Remer, Ph.D.

**Director of Residence Life, Office of Student Life**
**Georgetown College, Georgetown, KY**
**August 2002 to September 2005.**
Multifaceted position in Student Life. Supervised three Area Coordinators (Residence Life Coordinator, Greek Life Coordinator, and Diversity/International Coordinator), 16 Resident Directors, and 48 Resident Advisors. Hired and trained Area Coordinators, Residential Directors, and Resident Advisors. Developed and coordinated residential programming for students. Managed a $30,000 a year budget for residence life. Facilitated a variety of community service/service-learning events. Facilitated leadership development in students, staff, and business community members via an “Alpine Challenge Course.” Taught semester-long RA class and “Freshmen Seminar” course. Provided personal counseling to students. Advised a variety of student groups (e.g., International Students, Children with Disabilities Reach-Out). Served on Judiciary Panel and Diversity Committee. Organized and implemented New Student Orientation.

**Diversity Committee, Co-chair**
**Georgetown College, Georgetown, KY**
**August 2000 to August 2005.**
Coordinated and chaired activities surrounding diversity and multi-cultural issues on Georgetown College’s campus.

**Classes Taught**
Leadership in a Global Society
Challenges of Leadership
UK 101
Race, Class, and Gender

**Research and Program Development Experience**
**Research Team Involvement at the University of Kentucky**
“Implications of Diversity Programs” under the direction of Dr. Randa Remer

**Research Team Involvement at Indiana University**
“Racial Harassment in the Workplace” under the direction of Dr. A. Ormerod.

**Professional Presentations Given**

Appendix B (Continued): Focus Group Curriculum Vita for Randa R. Remer, Ph.D.


Remer, R., & Anderman, L. (2008, August). Influence of diversity courses on undergraduates’ Ethnocultural Empathy, Openness to Diversity, and Awareness of Privilege and Oppression within a mastery or performance classroom context. Poster presented at the American Psychological Association annual conference, Boston, MA.


Appendix C: Focus Group Curriculum Vita for Alexandra Minieri, M.S., Ed.S.

Alexandra Minieri, M.S., Ed.S.
219 Patchen Drive Apt 913
Lexington, KY 40517
alexandra.minieri@uky.edu

EDUCATION

Doctor of Philosophy in Counseling Psychology
Gender and Women’s Studies Graduate Certificate
University of Kentucky, Lexington, KY
Dissertation title: Not Just a Women’s Issue: How Male Undergraduate Students Understand their Development as Social Justice Allies for Preventing Men’s Violence against Women
(proposal accepted April, 2012)
Committee chair: Dr. Pam Remer
anticipated May 2014

Master of Science in Counseling Psychology
University of Kentucky, Lexington, KY
May 2009

Bachelor of Science in Psychology
Magna cum laude, graduated with honors in psychology
Lafayette College, Easton, PA
May 2007

PROFESSIONAL AND CLINICAL EXPERIENCE

Practicum Student Counselor
Newtown Counseling Center (community mental health center), Lexington, KY
Fall 2012-present
Supervisor: Patricia Burke, Ph.D.
Conducted structured intake assessments with clients presenting with a range of concerns, including severe and persistent mental health issues, to develop initial diagnostic impression.

Volunteer Crisis Counselor
Bluegrass Rape Crisis Center, Lexington, KY
Summer 2012-present
Supervisor: Rory Remer, Ph.D.
Provided crisis counseling to individuals who contact the crisis line for support. Served as medical advocate accompanying rape and sexual assault survivors at the hospital.

SOCIAL JUSTICE PROJECT EXPERIENCE

Outreach Workshop Leader and Consultant
Ally Development Workshop, University of Kentucky, Lexington, KY
Fall 2010, Summer 2012
Co-led experiential activity to explore heterosexism and heterosexual ally development. Facilitated small group discussions of racism, sexism, and heterosexism. Served as consultant for workshop planning committee during summer 2012.
Appendix C (Continued): Focus Group Curriculum Vita for Alexandra Minieri, M.S., Ed.S.

**Research Team Member**

**Implications of Diversity Programs**
Gatton College of Business and Economics, University of Kentucky, Lexington, KY  
*Spring 2009-present*

*Supervisor: Randa Remer, Ph.D.*

Administered pre- and post-test assessments to undergraduate students in global leadership program.  
Analyzed data for outcomes related to openness to diversity, ethnocultural empathy, and awareness of privilege and oppression using Statistical Program for the Social Sciences (SPSS).  
Evaluated extended follow-up by administering assessments to students during second year in the program.

**Diversity Trainer**
Gatton College of Business and Economics, University of Kentucky, Lexington, KY  
*Fall 2008-Fall 2009*

*Supervisor: Pamela Remer, Ph.D.*

Developed and implemented diversity-focused group activities for first-year business and engineering students in global leadership program.  
Helped raise awareness about existence of oppression and privilege through experiential and didactic activities.

**Students Educating and Empowering to Develop Safety (SEEDS) Workshop Leader**
Violence Intervention and Prevention Center, University of Kentucky, Lexington, KY  
*Spring 2008-Fall 2008*

*Supervisor: Pamela Remer, Ph.D.*

Co-led training to help raise awareness about power-based personal violence on campus and empower college students to intervene to prevent violence.  
Facilitated group discussions during a one-day, eight hour training and four weekly follow-up sessions to help students practice intervening with peers and to process their experiences intervening.

**TEACHING EXPERIENCE**

**Teaching Assistant**

Lifespan Gender Development Course  
College of Education, University of Kentucky  
*Spring 2010, Spring 2012*

Co-developed projects and syllabus for the course.  
Lectured about gender development topics including masculinity, gender stereotypes, gender and emotions, gender and relationships, sexuality education, gender and career, and ally development.  
Facilitated discussions of the intersection between gender and other identities.

**PUBLICATIONS**

Appendix C (Continued): Focus Group Curriculum Vita for Alexandra Minieri, M.S., Ed.S.


**PRESENTATIONS**


Appendix D: Focus Group Curriculum Vita for Kristin M. Miserocchi, M.S., Ed.S.

Kristin M. Miserocchi, MS, EdS
E-mail: kmmise2@g.uky.edu

EDUCATION

2009-Present  
**PhD in Counseling Psychology (anticipated graduation: May 2014)**  
University of Kentucky; Lexington, KY  
Dissertation Title: *The Effect of Therapist White Privilege Attitudes on Client Outcomes and the Therapist-Client Relationship* (Proposal accepted August 2012)  
Committee Co-chairs: Jeff Reese, PhD and Pam Remer, PhD

2007-2009  
**Masters of Science in Counseling Psychology**  
University of Kentucky; Lexington, KY

1998-2002  
**Bachelor of Arts in Music (Cum Laude)**  
Knox College; Galesburg, IL

PUBLICATIONS and CONFERENCE PRESENTATIONS


RESEARCH IN PROGRESS AND PAST RESEARCH EXPERIENCE

March 2009-Present  
**Implications of Diversity Programs Research Team**  
*PI: Randa Remer, Ph.D., University of Kentucky*  
*Study 1: Pre and Post-test survey analysis examining differences in attitudes toward openness to diversity, awareness of privilege and oppression, and ethnocultural empathy among students enrolled in diversity courses and non-diversity courses.*
Appendix D (Continued): Focus Group Curriculum Vita for Kristin M. Miserocchi, M.S., Ed.S.

Study 2: Pre and Post-test survey analysis examining how diversity infused course work and students’ perception of classroom goal structures affected their attitudes toward openness to diversity, awareness of privilege and oppression, and ethnocultural empathy.

Study 3: Pre and Post-test survey analysis examining how diversity infused course work and students’ approach to learning affected their attitudes toward openness to diversity, awareness of privilege and oppression, and ethnocultural empathy.

Study 4: Longitudinal examination of diversity infused course work and study abroad experiences on students’ attitudes toward openness to diversity, awareness of privilege and oppression, and ethnocultural empathy.

March 2011-February 2012

Wilderness Therapy For Adolescent Girls Research Team
PI: Leslie Gerrard, M.S, Ed.S., University of Kentucky
Analysis of the appropriateness of wilderness therapy with adolescent girls, especially who are trauma survivors. We will be utilizing a qualitative method of analysis called Consensual Qualitative Research (CQR).

May 2011

Item Development Team for Awareness of Privilege and Oppression Scale-2
PI: Michael McClellan, M.S., Ed.S., University of Kentucky
Assist in the development of items and subject areas for a revised version of the Awareness of Privilege and Oppression Scale

August 2010-August 2011

Self-Efficacy and Psychotherapy Outcome Research Team
PI: Jeff Reese, Ph.D., University of Kentucky
Study examining if self-efficacy is related to therapy outcome, therapeutic alliance, and client feedback utilized in supervision.

SUPERVISED CLINICAL AND SUPERVISION EXPERIENCE

August 2012-Present

Eastern State Hospital (Inpatient Psychiatric Hospital), Lexington, KY
Psychology Practicum Student, Post-Masters Practicum
Site Supervisor: David Susman, PhD, Rebecca Asher, PhD, Donald Crowe, PhD, Sean Reilley, PhD, John Scanish, PsyD

July 2011-Present

Shepherds House (Residential drug/alcohol treatment facility), Lexington, KY
August 2009-May 2010 Therapist and Group Leader, Post-Masters Practicum
Site Supervisors: Apryl Tandy, MSW, LCSW, Jason Thomas, MSW, LCSW
Faculty Supervisor: Jeff Reese, PhD, Pam Remer, PhD
Appendix D (Continued): Focus Group Curriculum Vita for Kristin M. Miserocchi, M.S., Ed.S.

September-Dec. 2012  University of Kentucky Counseling Center
August 2010-May 2011  Therapist and Group Co-Leader, Post-Masters Practicum
Site Supervisors: Di Sobel, PhD, Linda Hellmich, PhD, Susan Mathews, PhD, Mary Bolin, PhD;
Faculty Supervisor: Jeff Reese, PhD

February-May 2012  University of Kentucky Counseling Psychology Program
January-April 2011  Supervisor of Masters Students, Post-Masters Supervision Practicum
Faculty Supervisors: Sharon Rostosky PhD, Jeff Reese, PhD

PSYCHOEDUCATIONAL AND OUTREACH EXPERIENCE

October 2010  Body Image Outreach for First-Year Female Athletes
University of Kentucky Counseling Center

August 2008-December 2009  Social Justice and Diversity Group Co-Leader
University of Kentucky Gatton College of Business and Economics
Appendix E: Focus Group Training Session Handouts

**Item Writing Guidelines**
The following item writing guidelines are adapted from Kline (1986). Please review the item writing strategies below and consider these ideas as you write the items for the revised APOS.

Reduce the insight participants have into the items (try to write items in which the meaning behind the item is not too obvious).

Example: “I am sexist.”

Make each item clear and unambiguous for your target population. Ensure that each item refers to some specific behavior as far as possible.

Example: “Some races suffer more than other races in this world.”

Each item must ask only one question or make one statement (avoid double-barreled items).

Example: “I think women and gay individuals are the victims of discrimination.”

Avoid terms of frequency and other subjective words.

Example: “I always get along with people who do not have as much money.”

Items should refer to behaviors rather than feelings where possible.

Example: “I get angry when I see an act of racism.”

Ensure that the items are answered quickly.

Example: “I repudiate people who are intolerant.”

Avoid major participant response styles including acquiescence and social desirability.

Example: “I am basically against all poor people.”

Write items that are worded positively whenever possible. Use reverse scoring to reduce extreme response styles. List traits and behaviors from descriptions in the psychological literature.
Appendix E (Continued): Focus Group Training Session Handouts

**Awareness of Racism**

**Definition**

Awareness of the socially constructed form of intergroup reaction (including thoughts, feelings, and behaviors) based on race that systematically advantages one group (Caucasians in the example of the U.S.) and/or disadvantages another group (racial minorities) at the individual, institutional, and systemic levels within U.S. society. The complexity and dimensionality of racism is discussed next.

**Dimensionality**

Skin tone matters (lighter skin tone = more advantages; darker skin tone = less advantages).

The older form is referred to within the literature as explicit, overt, old-fashioned, traditional, or blatant racism and is often exemplified through bigoted comments or other behaviors that openly espouse racial superiority/inferiority.

Modern racism is referred to in the literature as implicit, silent, new, modern, symbolic, aversive, or subtle racism refers to “unspoken negative thoughts, emotions, and assumptions” (Trepagnier, p. 15) about racial minority group members by individuals who subscribe to dominant group values. Differs from explicit racism because it is often perpetuated by well-meaning individuals who do not believe they harbor racist views; viewed as more socially acceptable by individuals who share mainstream values and is, therefore, less likely to elicit the type or level of condemnation often experienced by explicit racist behavior.

**Manifestations**

Racism is evident in (see p. 54)...

(a) employment -

(b) education -

(c) politics -

(d) legal system -

(e) healthcare system –

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Appendix E (Continued): Focus Group Training Session Handouts

Awareness of Sexism

Definition

Sexism is a socially constructed form of oppression that subordinates by forcing them to adhere to gender roles that reinforce the patriarchal structures that maintain sexist attitudes and behaviors toward women at the individual, institutional, and structural levels.

Dimensionality

Ellemers and Barreto (2009) described earlier or old fashioned forms of sexism as overt beliefs and expressions that convey the message that women are inferior to men. Overt expressions of sexism provoke anger in modern society and individuals who express sexism in this manner are more likely to be confronted or discredited by others.

Modern sexism maintains the same beliefs as traditional sexism, but individuals express these beliefs in a more socially acceptable manner. Instead, modern sexists deny the existence of systematic disadvantages for women and believe that any perceived disadvantages are the result of female deficiencies (Ellemers & Barreto, 2009; Glick & Fiske, 2001).

Predominant theory since 1996 has been Glick and Fiske’s Ambivalent Sexism Theory.

Ambivalent sexism recognizes both the structural power that is afforded to men through patriarchy and the dyadic power that is afforded to women because men (in heterosexual relationships) are dependent upon women as romantic partners, wives, and mothers (Glick & Fiske, 1996, 1999). Expressed through hostile and benevolent sexism.

Benevolent sexism or the “carrot” rewards individuals who conform to traditional gender role behaviors (Chapleau et al., 2007). Three forms:

Protective paternalism is an ideology which dictates that men must protect and provide for women because men are stronger and command higher levels of authority within a patriarchal society. Glick and Fiske suggest this view will be more observable within families where men are dependent upon the dyadic power of women and where men believe they are obligated to serve in authoritative roles over women in the family home.

Complementary gender differentiation is the ideology that men and women must fit into traditional gender roles (Glick & Fiske, 1996). In intimate heterosexuality, men romantically view women as sexual objects that are necessary for a man to live a fulfilling life (Glick & Fiske, 1996, p. 122). Men who engage in intimate heterosexuality may get the door for women, buy flowers, or act in other romantic ways to find and win the affection of intimate partners.
Hostile sexism or the “stick” punishes individuals who do not behave in a manner that is consistent with traditional gender roles (Chapleau, Oswald, & Russell, 2007). Three forms: Dominative paternalism “is the belief that women ought to be controlled by men” (Glick & Fiske, 1996, p. 121). In competitive gender differentiation, individuals believe negative stereotypes of women are true. Men specifically use these stereotypes to both confirm men’s beliefs about women and to boost men’s self-confidence. “Heterosexual hostility reflects the tendency to view women merely as sexual objects, as well as the fear by men that women may use sexual attraction to gain power over men (because men’s sexual attraction is a major source of women’s dyadic power)” (Glick & Fiske, 1996, p. 122).

**Manifestations**

Sexism is manifested within U.S. society in four ways (see p. 66):

- violence against women –
- employment –
- language –
- media –
Appendix E (Continued): Focus Group Training Session Handouts

**Awareness of Heterosexism**

**Definition**

Heterosexism is “an ideological system that denies, denigrates, stigmatizes (or segregates) any non-heterosexual form of behavior, identity, relationship, or community” (Walls, 2008, pp. 26-27).

**Dimensionality**

Explicit or direct heterosexism involves overt comments or actions (e.g., antigay jokes or posting an antigay sign) that convey the message that heterosexuality is the only permissible form of sexual orientation within society (Waldo, 1999).

Implicit or indirect heterosexism involves more ambiguous comments or actions. Waldo offered the example of an individual repeatedly asking another individual why he or she is not married. The ultimate message conveyed by implicit heterosexism is the same (i.e., that heterosexuality is the only acceptable form of sexual orientation), but this message is presented in a less antigay manner than observed in explicit heterosexism (Waldo, 1999).

(a) *aversive heterosexism* - Aversive heterosexism as the “attitudes, myths, and beliefs that dismiss, belittle, or disregard the impact of sexual orientation on life chances by denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (p. 46). An example of an aversive heterosexism item Walls utilized in the measure is “gay men should stop shoving their lifestyle down everyone’s throat” (p. 48).

(b) *amnestic heterosexism* - Amnestic heterosexism is defined as the “attitudes, myths and beliefs that deny the impact of sexual orientation on life chances by denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (Walls, pp. 46-47). An example of an amnestic heterosexism item from Walls scale is as follows: “Discrimination against lesbians is virtually nonexistent in today’s society” (p. 49).

(c) *paternalistic heterosexism* - Paternalistic heterosexism as the “subjectively neutral or positive attitudes, myths and beliefs that express concern for the physical, emotional or cognitive well-being of non-heterosexual persons while concurrently denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (pp. 27-28). An example of a paternalistic heterosexism item Walls included in the MHI is “I would prefer my daughter not be homosexual because she would unfairly be stopped from adopting children” (p. 48).
Awareness of Heterosexism Continued…

(d) **positive stereotypic heterosexism** - Positive stereotypic heterosexism is defined as “subjectively positive attitudes, myths and beliefs that express appreciation of stereotypic characteristics often attributed to lesbian women and gay men which function by denying, denigrating, stigmatizing and/or segregating any non-heterosexual form of behavior, identity, relationship, or community” (Walls, p. 28). An example of a positive stereotypic heterosexism item included in Walls MHI measure is “gay men are more compassionate than heterosexual men” (p. 49).

Manifestations
Four specific areas of U.S. culture in which heterosexism is manifested are presented (see p. 75). Heterosexism is evidenced in:

(a) educational –

(b) employment –

(c) religious –

(d) mental and medical healthcare settings –
Appendix E (Continued): Focus Group Training Session Handouts

Awareness of Classism

**Definition**

The APA (2006) defines classism as the “network of attitudes, beliefs, behaviors, and institutional practices that maintain and legitimize class-based power differences that privilege middle and higher income groups at the expense of the poor and working classes” (p. 7).

**Dimensionality**

Tough nut to crack. Middle class view poverty as a laziness problem, whereas the empowered fault institutional disadvantages. Differences have also been observed across political affiliation, race, ethnicity, age, social status, and level of education. In addition, the intersectionality of SES with multiple social identities has also proven to be problematic.

No clear theories that encapsulate classism.

**Manifestations**

Four specific manifestations of classism are discussed in the subsections below. Those four expressions include the following:

(a) education –

(b) healthcare –

(c) employment –

(d) housing –
Appendix E (Continued): Focus Group Training Session Handouts

References for Focus Group Training Session


Kline (1986)


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Appendix F: List of 107 APOS-2 Items Developed by the Focus Group

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<th>Item #</th>
<th>Item</th>
<th>Privilege or Oppression Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>African Americans with lighter skin color are more likely to be promoted within corporations than African Americans with darker skin color.</td>
<td>P</td>
</tr>
<tr>
<td>2</td>
<td>It’s okay to make racial jokes around friends of the same race. *</td>
<td>P</td>
</tr>
<tr>
<td>3</td>
<td>I initially picture a White person as the politician when I read a story that involves an unidentified political figure.</td>
<td>P</td>
</tr>
<tr>
<td>4</td>
<td>People of Color get fewer medical questions answered by their physicians than White individuals.</td>
<td>O</td>
</tr>
<tr>
<td>5</td>
<td>White individuals generally live longer than people of any other race.</td>
<td>P</td>
</tr>
<tr>
<td>6</td>
<td>People of Color are more likely to live in neighborhoods associated with the best school districts.*</td>
<td>P</td>
</tr>
<tr>
<td>7</td>
<td>Black political candidates are generally less likely to be accepted by White constituents in their district.</td>
<td>O</td>
</tr>
<tr>
<td>8</td>
<td>A criminal defendant’s skin color plays a role in the severity of their prison sentence.</td>
<td>O</td>
</tr>
<tr>
<td>9</td>
<td>White defendants generally receive shorter jail sentences for the same crime when compared to People of Color.</td>
<td>P</td>
</tr>
<tr>
<td>10</td>
<td>People of Color receive less medical information from their physicians when compared to White individuals.</td>
<td>O</td>
</tr>
<tr>
<td>11</td>
<td>Being a Person of Color makes it harder to obtain a college degree.</td>
<td>O</td>
</tr>
<tr>
<td>12</td>
<td>Being White makes it harder to obtain a college degree. *</td>
<td>O</td>
</tr>
<tr>
<td>13</td>
<td>Racism continues to play a prominent role in society.</td>
<td>O</td>
</tr>
<tr>
<td>14</td>
<td>Most People of Color who are enrolled in an Ivy League college were admitted due to Affirmative Action.*</td>
<td>O</td>
</tr>
<tr>
<td>15</td>
<td>Tall African American men are expected to play basketball. *</td>
<td>O</td>
</tr>
<tr>
<td>16</td>
<td>People of Color experience high levels of stress because of the discrimination they face.</td>
<td>O</td>
</tr>
<tr>
<td>17</td>
<td>People of Color and White people have to worry equally about their credibility when addressing a group. *</td>
<td>O</td>
</tr>
<tr>
<td>18</td>
<td>People of Color can readily find mentors or role models of their race who can advise them professionally. *</td>
<td>O</td>
</tr>
<tr>
<td>19</td>
<td>White individuals don’t have to think about educating their children on racism in order to keep them from danger.</td>
<td>P</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>When selling a home, White people can rest assured that most people would want to buy the home they lived in.</td>
<td>O</td>
</tr>
<tr>
<td>21</td>
<td>People of Color often notice if they are outnumbered at professional meetings.</td>
<td>O</td>
</tr>
<tr>
<td>22</td>
<td>People of Color can easily find greeting cards that represent people of their race. *</td>
<td>O</td>
</tr>
<tr>
<td>23</td>
<td>Most history books don’t accurately show how People of Color helped America become the country it is.</td>
<td>O</td>
</tr>
<tr>
<td>24</td>
<td>People of color can ask to speak to the “person in charge” at a store and be confident that the person will also be a Person of Color. *</td>
<td>O</td>
</tr>
<tr>
<td>25</td>
<td>White people can easily find a hairdresser who knows how to cut their hair correctly.</td>
<td>P</td>
</tr>
</tbody>
</table>

Awareness of Sexism

<table>
<thead>
<tr>
<th>Item #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>It is socially acceptable for men to have multiple sexual partners before marriage.</td>
<td>P</td>
</tr>
<tr>
<td>27</td>
<td>Male news anchors are able to work later in life than female news anchors.</td>
<td>P</td>
</tr>
<tr>
<td>28</td>
<td>Men are more frequently portrayed in all shapes and sizes in the media when compared to women.</td>
<td>P</td>
</tr>
<tr>
<td>29</td>
<td>A husband is expected to be the working member of the family.</td>
<td>P</td>
</tr>
<tr>
<td>30</td>
<td>Men should hold the door for women. *</td>
<td>O</td>
</tr>
<tr>
<td>31</td>
<td>I find myself assuming a business manager in a story is a man if the story does not specifically identify the person’s gender.</td>
<td>P</td>
</tr>
<tr>
<td>32</td>
<td>Men often earn more money even when doing the same work when compared to women.</td>
<td>P</td>
</tr>
<tr>
<td>33</td>
<td>Women often earn less money than men even when doing the same type of work.</td>
<td>O</td>
</tr>
<tr>
<td>34</td>
<td>Men make better leaders when compared to women. *</td>
<td>P</td>
</tr>
<tr>
<td>35</td>
<td>It is acceptable to use vocabulary terms that end in “man” or “men” such as policeman when referring to a female in that line of work. *</td>
<td>O</td>
</tr>
<tr>
<td>36</td>
<td>A woman means “yes” when she says “no” to a man’s advances. *</td>
<td>O</td>
</tr>
<tr>
<td>37</td>
<td>If a woman gets a man sexually aroused on a date she should expect to have sex. *</td>
<td>O</td>
</tr>
<tr>
<td>38</td>
<td>Women should understand that when someone says “policemen” that they are referring to both male and female officers.</td>
<td>O</td>
</tr>
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</thead>
<tbody>
<tr>
<td>39</td>
<td>The way that women are portrayed in the media plays a big role in women’s overall low self-esteem.</td>
<td>O</td>
</tr>
<tr>
<td>40</td>
<td>Women who dress provocatively are asking for something to happen. *</td>
<td>O</td>
</tr>
<tr>
<td>41</td>
<td>Women are expected to stay at home to raise the children.</td>
<td>O</td>
</tr>
<tr>
<td>42</td>
<td>Men are expected to do less house cleaning when compared to women.</td>
<td>P</td>
</tr>
<tr>
<td>43</td>
<td>Women are better suited as entry-level employees when compared to men. *</td>
<td>O</td>
</tr>
<tr>
<td>44</td>
<td>Women have to use more energy to prevent being victimized than men.</td>
<td>O</td>
</tr>
<tr>
<td>45</td>
<td>Men who work are responsible for taking care of the children in a relationship as well. *</td>
<td>O</td>
</tr>
<tr>
<td>46</td>
<td>If an intimate partner on a date gets a man sexually aroused they should expect to have sex. *</td>
<td>P</td>
</tr>
<tr>
<td>47</td>
<td>Women who dress provocatively are asking for something to happen. *</td>
<td>O</td>
</tr>
<tr>
<td>48</td>
<td>Women are just as capable to serve in leadership positions as men.</td>
<td>P</td>
</tr>
<tr>
<td>49</td>
<td>It is not appropriate to tell a female coworker that she looks good.</td>
<td>O</td>
</tr>
<tr>
<td>50</td>
<td>Women are systematically denied access to leadership positions.</td>
<td>O</td>
</tr>
<tr>
<td>51</td>
<td>Men should be make sure they use gender neutral terms such as “hello everyone” instead of “hey guys” when they approach a group of male and female friends.</td>
<td>P</td>
</tr>
<tr>
<td>52</td>
<td>Women should understand that when someone says “policemen” that they are referring to both male and female officers. *</td>
<td>O</td>
</tr>
<tr>
<td>53</td>
<td>Men deserve to have more leadership roles in movies than women. *</td>
<td>P</td>
</tr>
<tr>
<td>54</td>
<td>The way that women are portrayed in the media plays a big role in women’s self-esteem.</td>
<td>O</td>
</tr>
<tr>
<td>55</td>
<td>The focus on men’s bodies is just as strong as it is on women’s. *</td>
<td>P</td>
</tr>
<tr>
<td>56</td>
<td>Men and women face the same level of pressure from society to be physically attractive. *</td>
<td>O</td>
</tr>
<tr>
<td>57</td>
<td>Men are judged just as harshly about their attractiveness as women. *</td>
<td>O</td>
</tr>
<tr>
<td>58</td>
<td>Most men are concerned about being raped or assaulted whenever walking alone, just as women are. *</td>
<td>P</td>
</tr>
<tr>
<td>59</td>
<td>Men in power are assumed to have earned their position, women may be suspected of having “slept their way to the top.”</td>
<td>P</td>
</tr>
</tbody>
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<tbody>
<tr>
<td></td>
<td><strong>Awareness of Heterosexism</strong></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>It is socially easier to be attracted a partner of the opposite sex.</td>
<td>P</td>
</tr>
<tr>
<td>61</td>
<td>It is socially easier to be attracted to a partner of the same sex.</td>
<td>P</td>
</tr>
<tr>
<td>62</td>
<td>Hiring a heterosexual employee rather than a gay or lesbian employee would be more comfortable for the office environment.</td>
<td>P</td>
</tr>
<tr>
<td>63</td>
<td>Being heterosexual makes it easier to live a fulfilling spiritual life.</td>
<td>P</td>
</tr>
<tr>
<td>64</td>
<td>Heterosexual individuals receive better medical treatment when compared to sexual minorities.</td>
<td>P</td>
</tr>
<tr>
<td>65</td>
<td>Having a heterosexual boss would make most employees uncomfortable.</td>
<td>O</td>
</tr>
<tr>
<td>66</td>
<td>Hiring a gay or lesbian worker might turn some customers away.</td>
<td>P</td>
</tr>
<tr>
<td>67</td>
<td>It is more challenging to live a fulfilling spiritual life when you are gay or lesbian.</td>
<td>O</td>
</tr>
<tr>
<td>68</td>
<td>It is more challenging to live a fulfilling spiritual life when you are heterosexual as compared to being gay or lesbian.</td>
<td>O</td>
</tr>
<tr>
<td>69</td>
<td>Sexual minority members are rarely allowed to make medical decisions for their partners.</td>
<td>O</td>
</tr>
<tr>
<td>70</td>
<td>Teenagers who identify as gay or lesbian are at a greater risk for being physically assaulted than heterosexual teens.</td>
<td>O</td>
</tr>
<tr>
<td>71</td>
<td>Gay men are more at risk for being terminated from a job than heterosexual men.</td>
<td>O</td>
</tr>
<tr>
<td>72</td>
<td>The fear of being rejected by one’s parents is very real for gay men and lesbian women.</td>
<td>O</td>
</tr>
<tr>
<td>73</td>
<td>Getting beat up is not a concern for gay men or lesbian women.</td>
<td>O</td>
</tr>
<tr>
<td>74</td>
<td>Gay couples can be pretty sure their neighbors will be accepting of their relationship.</td>
<td>O</td>
</tr>
<tr>
<td>75</td>
<td>For many gay men and lesbian women, the choice about where to vacation can depend on how open a city is to homosexuality.</td>
<td>O</td>
</tr>
<tr>
<td>76</td>
<td>Gay men and lesbian women can easily have marriage ceremonies if they want to formalize their relationship.</td>
<td>O</td>
</tr>
<tr>
<td>77</td>
<td>Gay men and lesbian women can be confident that their parents will not be upset when they talk about the gender of their new partner.</td>
<td>O</td>
</tr>
<tr>
<td>78</td>
<td>When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their sexual orientation.</td>
<td>O</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>79</td>
<td>Gay men and lesbian women often have concerns about kissing their partners in public.</td>
<td>O</td>
</tr>
</tbody>
</table>

**Awareness of Classism**

80. A person from a middle-class or affluent family has a greater chance to earn a college degree than an individual from a poor family. P

81. A person from a middle-class or affluent family has fewer opportunities to earn a college degree than an individual from a poor family. * P

82. Individuals with parents who went to college are more likely to go to college than an individual whose parents did not go to college. P

83. Being poor has no bearing on a person’s opportunity to earn a college degree. * P

84. Family vacations are a routine part of all Americans’ lives. P

85. Everyone has the option to eat nutritional food each day. P

86. People who work for minimum wage make enough money to meet their basic needs. * P

87. If anyone works hard enough they will be successful. * P

88. Having access to learning opportunities such as zoos provide important advantages over other students who cannot afford this type of experience. P

89. Growing up in a middle class family improves your chances for obtaining a job that will be satisfying. P

90. People who live on the “good” side of town are less likely to become ill from industrial plants than other people. P

91. Growing up in a low-income family hurts a person’s chances for obtaining a job that will make them happy. O

92. Public schools in low-income districts provide an equivalent education to public schools in middle or high-income districts. * O

93. People who are poor are more likely to suffer from mental illness because of the way society treats them. O

94. Minimum wage earners must often go without basic necessities. O

95. The stress associated with being poor can cause health problems. O

96. Moderate to high-income individuals are more likely to live in neighborhoods associated with better school districts. P

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<tbody>
<tr>
<td>97</td>
<td>People who wear tattered clothing are automatically given more respect than people who dress in business attire. *</td>
<td>O</td>
</tr>
<tr>
<td>98</td>
<td>Children from lower-income families are more likely to be teased about their clothing in school.</td>
<td>O</td>
</tr>
<tr>
<td>99</td>
<td>Lower-income people are just as likely to be hard-working as people who come from money. *</td>
<td>O</td>
</tr>
<tr>
<td>100</td>
<td>People who live in trailer parks are more likely to be successful students than other people. *</td>
<td>O</td>
</tr>
<tr>
<td>101</td>
<td>Public schools provide equal opportunities to learn when compared to private schools.</td>
<td>O</td>
</tr>
<tr>
<td>102</td>
<td>People who have money are more likely to live longer than people who do not have much money.</td>
<td>P</td>
</tr>
<tr>
<td>103</td>
<td>People who are poor are more likely to suffer from mental illness because of the way society treats them.</td>
<td>O</td>
</tr>
<tr>
<td>104</td>
<td><strong>Homeless people don’t deserve to get money from hard-working folks.</strong> *</td>
<td>O</td>
</tr>
<tr>
<td>105</td>
<td><strong>This country would be a better place if welfare were eliminated.</strong> *</td>
<td>O</td>
</tr>
<tr>
<td>106</td>
<td>Anyone can get health insurance if they really want to.</td>
<td>P</td>
</tr>
<tr>
<td>107</td>
<td><strong>Having money can lead to instant respect in business settings.</strong></td>
<td>P</td>
</tr>
</tbody>
</table>

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Appendix G: Expert Rater Assignment List

Classism
Dr. Katharine Hahn Oh
Dr. Laura Smith
Dr. Melba Vasquez
Dr. Peggy Rivage-Seul
Dr. William Ming Liu

Racism
Dr. Sonja Feist-Price
Dr. Katharine Hahn Oh
Dr. Melba Vasquez
Dr. Peggy Rivage-Seul
Dr. William Ming Liu

Heterosexism
Dr. Sharon Rostosky
Dr. Anne R. Fischer
Dr. Katharine Hahn Oh
Dr. Melba Vasquez
Dr. Peggy Rivage-Seul
Dr. William Ming Liu

Entire APOS-2
Dr. Katharine Hahn Oh
Dr. Melba Vasquez
Dr. Peggy Rivage-Seul
Dr. William Ming Liu
Appendix H: Expert Rater Vita for Sonja Feist-Price, Rh.D., Ph.D.

SONJA FEIST-PRICE, Rh.D., Ph.D.

ADDRESS
University of Kentucky
College of Education
Dept. of Special Education & Rehabilitation Counseling
Graduate Program in Rehabilitation Counseling
224 Taylor Education Building
Lexington, Kentucky 40506-0001
E-Mail: smfeis@uky.edu

EDUCATION
Doctor of Philosophy Counseling Psychology
University of Kentucky, 2006.

Doctor of Rehabilitation Rehabilitation Research & Education
Specialization: Gerontological Research
Southern Illinois University, 1992.

Master of Arts Rehabilitation Counseling Psychology
Southern University, 1990.

Bachelor of Science Psychology
McNeese State University, 1985.

PROFESSIONAL EXPERIENCE
2011–Present Academic Ombud, University of Kentucky
2007-2011 Director of Graduate Studies, Graduate Program in Rehabilitation Counseling, University of KY
2007-2011 Co-Chair, Taskforce on Inclusiveness, College of Education, University of KY
2007-2011 Director, African American Studies and Research Program, University of KY
2004–Present Professor, Dept. of Special Ed. & Rehab. Counseling, College of Education, University of KY
2010-2011 University Senate, University of Kentucky
1997-2003 Associate Professor, Department of Special Ed. & Rehabilitation Counseling, Graduate Program in Rehabilitation Counseling, Univ. of KY
Appendix H (Continued): Expert Rater Vita for Sonja Feist-Price, Rh.D., Ph.D.

2002-2004  Visiting Professor, Center on AIDS Prevention Studies, Dept. of Medicine

University of California, San Francisco, CA (May - Aug. each year)

1992-1997  Assistant Professor, Department of Educational and Counseling Psychology, Graduate Program in Rehabilitation Counseling

PRE-PhD CLINICAL EXPERIENCE

U. S. Department of Justice, Federal Bureau of Prisons, Federal Medical Center, Lexington, KY. Federal prison for male offenders. Six-month rotations in general population mental health treatment and residential drug abuse program. The residential drug abuse program (RDAP) is a nine-month comprehensive substance abuse treatment program in a therapeutic community. There is also a dual diagnosis program for mentally ill substance abusers. Pre-Doctoral Internship, APA and APPIC accredited, 2006-2007

Kentucky State Reformatory, Clinical Psychiatric Treatment Unit, LaGrange, KY, 2005-2006

Counseling Psychology Services Clinic, Counseling Psychology Program, Department of Educational & Counseling Psychology, University of KY, Lexington, 2000-2002

Counseling and Testing Center, University of Kentucky, 1998-2000

PROFESSIONAL CERTIFICATIONS

Nationally Certified Rehabilitation Counselor, 1990 – Present.
Kentucky Licensed Professional Clinical Counselor, 1996 – Present.

AWARDS

2002 Researcher of the Year Award, National Council on Rehabilitation Education
2002 Exceptional Researcher of the Year Award, College of Education
2002 & 2010 Teacher Who Made a Difference Award, College of Education
2002 Adult Black Achiever Award, YMCA of Central Kentucky Black Achievers Program

RESEARCH AND SCHOLARLY ACTIVITY

A primary research interest involves HIV prevention among persons at greatest risk, particularly women, adolescents, and persons in Sub-Saharan Africa. Secondary and tertiary research interests involve cross-cultural issues among persons with disabilities, and social support services for caregivers of persons with Alzheimers Disease.
ANN R. FISCHER

Abbreviated Curriculum Vitae (May 2012) Department of Psychology
Southern Illinois University, Carbondale, IL 62901-6502 (USA)
phone: 618/453-3560, e-mail: arf12@siu.edu

Education
Ph.D., Psychology, University of Missouri-Columbia, Department of Psychology, 1995
M.A., Psychology, University of Missouri-Columbia, Department of Psychology, 1992
B.S., Psychological Science (Minor: Classics), Ball State University, Deptment of Psychological Science, 1988

Academic Employment
Associate Professor of Psychology, Southern Illinois University-Carbondale, 2007-present (cross-appointed in Women, Gender & Sexuality Studies)
Assistant Professor of Psychology, Southern Illinois University-Carbondale, 2004-2007
Associate Professor of Psychological Science, Ball State University, 2002-2004
Associate Professor of Psychology, The University of Akron, 2000-2002
Assistant Professor of Psychology, The University of Akron, 1995-2000

Publications
Appendix I (Continued): Expert Rater Vita for Ann R. Fischer, Ph.D.


**Honors and Awards**
- Florence Denmark Distinguished Mentoring Award, Association for Women in Psychology, 2011
- Fellow of the American Psychological Association (through Division 35), elected 2005
- Oliva Espin Award for Social Justice Concerns in Feminist Psychology (with Kurt DeBord), 2009

**Editorial Service**
- **Editorial Board Memberships:**
  - *Journal of Counseling Psychology,* 2000-2006 (continuing ad hoc)
  - *Cultural Diversity & Ethnic Minority Psychology,* 2008-2009 (continuing ad hoc)
- **Ad Hoc Reviewing for numerous other scientific and professional journals**

**Teaching**
*Southern Illinois University Carbondale*
- Psyc 598 Ethics and Professional Issues
- Psyc 561 Supervision of Psychotherapy
- Psyc 594F Multicultural Practicum in Counseling Psychology
- Psyc 536 Fundamentals of Counseling
- Psyc 333 Psychology of Women
- Psyc 340 Clinical & Counseling Psychology

*Ball State University*
- PsySc 680 Research Methods
- PsySc 682 Orientation to Clinical Psychology
- PsySc 435 Survey of Clinical Psychology
- PsySc 395 Special Topics: Sociocultural Diversity
- PsySc 324 Psychology of Women
- PsySc 284 Research Methods

*The University of Akron*
- Psych 717 Issues of Diversity in Counseling Psychology
- Psych 780 Graduate Seminar: Advanced Psychology of Women
- Psych 435 Cross-Cultural Psychology

*The University of Missouri-Columbia*
- Psych 230 Individual Differences (race/gender/class focus)
KATHARINE HAHN OH  
Katharine.Hahn@oberlin.edu

OFFICE ADDRESS  
The Counseling Center, Oberlin College  
247 West Lorain Street, Suite D  
Oberlin, OH 44074-1025

EDUCATION

Counseling Psychology  
University of Kentucky, Lexington, KY  
Ph.D., May 2010.  

Major Professor: Pamela Remer, Ph.D.

English Literature  
University of Cincinnati, Cincinnati, OH  
M.A., August 1996.  

Asbury College, Wilmore, KY

CLINICAL EXPERIENCE

The Counseling Center. Oberlin College, Oberlin, OH.  
August 2009 – Present.

Staff Psychologist. Provide individual therapy for students at liberal arts college and music conservatory. Work with diverse students, including transgender, queer, and international students with a range of concerns, including self-harm, trauma, mood disorders, personality disorders, adjustment issues, and relational concerns. Co-facilitate an LGBTQ Support Group. Provide crisis counseling for students and on-call emergency consultation to college staff. Supervise doctoral-level practicum students. Consult with psychiatrists and medical staff in health center. Provide consultation and training for residence life staff.

The Counseling Center. University of Akron, Akron, OH.  

Psychology Intern. Provided brief and long-term individual, group, and couples therapy for students at an urban commuter campus with open admissions policy. Worked with diverse students, including men, African American, and LGB students with a range of concerns including PTSD, depression, social anxiety, trichotillomania, disability issues, lack of resources, and spirituality.
Appendix J (Continued): Expert Rater Vita for Katharine Hahn Oh, Ph.D.

**YWCA Spouse Abuse Center**, Lexington, KY.

Managed counseling services of domestic violence center, supervised crisis counselors and handled crises in shelter. Provided individual and group counseling for women survivors of domestic violence, working with African American, Latina, and poor women. Counseling included psycho-education about abuse, cognitive-behavioral techniques to strengthen coping skills, and trauma counseling.

**PUBLICATIONS**


SERVICE

American Psychological Association

APA Divisions Representative, Committee on Early Career Psychologists, 2011-2014. Develop initiatives to enhance opportunities for early career psychologists in APA and the divisions. Collaborate with APA Membership Committee and with divisions to develop ECP membership and leadership. Liaise with the Committee on Division/APA Relations (CODAPAR) and provide consultation to division leaders at the annual Division Leadership Conference.

American Psychological Association, Division 17, Society of Counseling Psychology

Member, Leadership Academy Special Task Group, 2010 – 2011. Develop and help facilitate leadership training program for students and early career psychologists. Assist in participant recruitment and application review.


Member, Task Force on Incorporating Social Class in the Psychology Curriculum, August 2006 – August 2008. Coordinated working group to gather current psychology syllabi that include issues of social class/SES. Participated in APA convention symposium to report task force findings.
Appendix K: Expert Rater Vita for William Ming Liu, Ph.D.

William Ming Liu, Ph.D.

Personal Information
Office Address:
Division of Psychological and Quantitative Foundations
328 Lindquist Center North
University of Iowa
Iowa City, IA 52242
William-Liu@uiowa.edu

Current Employment:
Professor, Counseling Psychology Program
Division of Psychological and Quantitative Foundations
The University of Iowa
May 2009 to present
Associate Professor, Counseling Psychology Program
Division of Psychological and Quantitative Foundations
The University of Iowa
May 2006 to May 2009

Education:
Ph.D. University of Maryland at College Park, 2000
Area: Counseling Psychology, APA Accredited
Advisor: Donald B. Pope-Davis, Ph.D.
Internship: University of Southern California Student Counseling Services, APA Accredited
August 1999 to July 2000
M.A. University of Maryland at College Park, 1995
Area: Counseling and College Student Personnel
B.A. University of California at Irvine, 1991

Academic Employment:
Courses Taught
Iowa Communications Network: Multicultural Issues in Education and Counseling
Advanced Practicum
Multicultural Competencies: Theory, Research, and Practice
Introduction to Multicultural Counseling

Research & Scholarly Activities

Books:
Appendix K (Continued): Expert Rater Vita for William Ming Liu, Ph.D.


**Journal Articles (Refereed)**


**Chapters in Books:**


Appendix K (Continued): Expert Rater Vita for William Ming Liu, Ph.D.


**Instruments:**


**Other Research Articles/Reports:**


**Professional Membership and Offices Held**

- Program Committee Chair, 5th National Multicultural Summit and Conference (2005 to 2007)
- Organizing Committee Member, 4th National Multicultural Summit and Conference (2004 to 2005)
- American Counseling Association
- Association for Multicultural Counseling and Development (AMCD)
- Association for Asian American Studies
- American Psychological Association (Member)
- Division 17, Society for Counseling Psychology, American Psychological Association
  - *Special Task Group on Privilege, Committee Member, (2009 to present)*
  - *Programming Committee member 2003-2006*
  - *Hospitality Suite Committee member 2003, 2004*
- Division 45, Ethnic Minority Issues in Psychology, American Psychological Association
  - *Treasurer (2001-2005)*
- Division 51, Men and Masculinity, American Psychological Association
  - *Member, Search Committee for Journal Editor (2009 to 2010)*
  - *Member at Large (2005 to 2007)*
Appendix L: Expert Rater Vita for Marguerite K. Rivage-Seul, Ed.D.

MARGUERITE K. RIVAGE-SEUL, Ed.D.
CPO 1963, Berea, Ky 40404
peggy_rivage-seul@berea.edu

ACADEMIC DEGREES

Ed. D.  University of Kentucky
1984  Social and Philosophical Studies in Education

M.A.  School for International Training
1978  Cross Cultural Education and Inter-
      of the Experiment in International Administration

B.A.  Central Michigan University
1972  French, Political Science, Secondary Teaching

TEACHING EXPERIENCE

1998-  Professor and Director of Women’s Studies, Berea College
2005-2008  Director of Internship Program at Center for Global Justice (San Miguel
de Allende, Mexico, with students from Cuba, Mexico and the USA)
1998-99  Fulbright Senior Lecturer, University of Zimbabwe (11months)
1995-97  Coordinator of Women's Studies, Lecturer in General Studies
1987-95  Assistant Professor in Education, Berea College

DISTINCTIONS

2011-12  Recipient of Appalachian College Association Fellowship to study food
sovereignty in the Western Cape of South Africa
2011  Invited researcher, Centro Aguapeu
2008-  Invited researcher, Council of Social Sciences, Fomento, Cuba
2006  Recipient of Appalachian College Association Fellowship to study rural
Mexican women’s cooking, Guanajuato State, Mexico

PUBLICATIONS

Books
Appendix L (Continued): Expert Rater Vita for Marguerite K. Rivage-Seul, Ed.D.

**Book Chapters and Essays**


**Journals**


“Feminist Frameworks for Women in the Global Economy,” in online *Proceedings from Women and Globalization Conference* (Center for Global Justice: San Miguel de Allende), 2005


**INTERNATIONAL COURSE DEVELOPMENT**

“Women and Globalization,” undergraduate summer course, Center for Global Justice, San Miguel de Allende, Mexico, July 2006.

“Women’s Studies: Cuban Definitions,” Berea College faculty travel seminar to University of Havana, Cuba, November, 2005.


**COMMUNITY LEADERSHIP**

Committee on Racism and Diversity for Berea School System, Chair, 1992-97

Appendix M: Expert Rater Curriculum Vita for Sharon Scales Rostosky, Ph.D.

Sharon Scales Rostosky  
Professor  
Department of Educational, School and Counseling Psychology  
University of Kentucky  
231 Dickey Hall, University of Kentucky, Lexington, KY 40506  
Phone: 859-257-7880  
Email: s.rostosky@uky.edu

EDUCATION

The University of Tennessee, Knoxville, 1998  
Ph.D. (APA accredited), Counseling Psychology  
Dissertation: Power, sex, and relationship quality in late adolescent dating relationships

Georgia State University, 1990 (CACREP accredited)  
Community Counseling

The Southern Baptist Theological Seminary, Louisville, Kentucky, 1982, Church Music

B.S. Magna cum laude Mars Hill College, Mars Hill, N.C., 1980, Piano Performance

PROFESSIONAL CREDENTIALS

Licensed Psychologist and Health Service Provider - Commonwealth of Kentucky (#1157)

EMPLOYMENT HISTORY

2009 to present, Professor, Educational, School and Counseling Psychology, University of Kentucky

2004-2009 Associate Professor, Educational and Counseling Psychology, University of Kentucky

ACADEMIC AWARDS AND DISTINCTIONS

2010 American Psychological Association Division 17 Society of Counseling Psychology Social Justice Award.

PUBLICATIONS

Peer Reviewed Journal Articles  
*denotes student co-author


Appendix M (Continued): Expert Rater Vita for Sharon Scales Rostosky, Ph.D.


**Book**


**Book Chapters**


**GRADUATE COURSES TAUGHT**

EDP 604 Lifespan Gender Development
EDP 777: Graduate Seminar: Research Methods with Sexual Minority Populations

**UNIVERSITY LEADERSHIP**

Institutional Diversity LGBT Task Force member (2011)
Women and Gender Studies Faculty Affiliate (2000 to present)
Appendix N: Expert Rater Vita for Laura Smith, Ph.D.

Curriculum Vitae
Laura Smith

Department of Clinical and Counseling Psychology
Teachers College, Columbia Univ.
525 West 120th Street, Box 102
New York, NY 10027
ls2396@columbia.edu

Education

Ph.D. in Counseling Psychology
Virginia Commonwealth University, Richmond, Virginia
Dissertation title: *Enhancing the Retention of Minority Students at Predominantly White Institutions*

M.S. in Counseling Psychology
Virginia Commonwealth University, Richmond, Virginia

B.A. in English and Psychology with High Distinction
University of Virginia, Charlottesville, Virginia

Professional Experience

Current

2007-present  Assistant Professor of Psychology and Education
Department of Counseling and Clinical Psychology
Teachers College, Columbia University, New York, New York

Publications

Book


Book Chapters


Appendix N (Continued): Expert Rater Vita for Laura Smith, Ph.D


**Peer-Reviewed Journal Articles**


**Service to the College**

2011-present  Member, Teachers College Internal Review Board
Coordinator and facilitator, TC Allies Reading Group
Member, Review Committee, Dean’s Grant for Students and the Walter Sindlinger Writing Award

2011  Member, Research Advisory Subcommittee of the Teachers College Task Force on Race, Culture, and Diversity
Speaker, *Combating Microaggressions,* Teachers College Academic Festival

249
Appendix N (Continued): Expert Rater Vita for Laura Smith, Ph.D

Presenter, Teachers College Distinguished Alumni Awards Reception, Teachers College Academic Festival.

**Service to the Profession**

<table>
<thead>
<tr>
<th>Year</th>
<th>Position and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Chair, Committee on Socioeconomic Status, American Psychological Association Editorial Board, <em>The Journal of Clinical Psychology: In Session</em></td>
</tr>
<tr>
<td>2010-present</td>
<td>Member, Committee on Socioeconomic Status, American Psychological Association</td>
</tr>
</tbody>
</table>

**Professional Licensures and Memberships**

- Licensed psychologist #011130, New York State
- Member, American Psychological Association
- Member, APA Division 9: The Society for the Psychological Study of Social Issues
- Member, APA Division 17: The Society of Counseling Psychology
- Member, APA Division 27: The Society for Community Research and Action
- Member, APA Division 35: The Society for the Psychology of Women
- Member, APA Division 45: The Society for the Study of Ethnic Minority Issues
- Member, Psychologists for Social Responsibility
- Member, American Counseling Association
Appendix O: Expert Rater Vita for Melba J. T. Vasquez, Ph.D.

MELBA J. T. VASQUEZ, PH.D ABPP

Home Address
2713 Barton's Bluff Lane
Austin, Texas 78746
MelVasquez@aol.com

Professional Address
2901 Bee Cave Road, Box N
Anderson House at Heritage Square
Austin, Texas 78746

EDUCATION
9/74 - 8/78 Ph.D., Counseling Psychology, The University of Texas, Austin, Texas (APA accredited).
6/73 - 8/74 Graduate work in Counseling and Guidance, Southwest Texas State University, San Marcos, Texas.
6/69 - 8/72 B.A. with honors, English/Political Science, Secondary Teaching Certification, Southwest Texas State University, San Marcos, Texas.

LICENSE AND CERTIFICATION
Diplomate in Counseling Psychology, #4066 American Board of Professional Psychology, 1989
National Register of Health Service Providers in Psychology, # 41679, 1991
Licensed Psychologist, Texas, #2529, January, 1983
Licensed Psychologist, Colorado, #733, January, 1982

PROFESSIONAL EXPERIENCE

PUBLICATIONS

Book Publications
Appendix O: Expert Rater Vita for Melba J. T. Vasquez, Ph.D.

Book Chapters


Journal Articles


Appendix O: Expert Rater Vita for Melba J. T. Vasquez, Ph.D.

PROFESSIONAL ORGANIZATIONS AND ACTIVITIES

American Psychological Association

President Elect, 2010; President, 2011; Past President, 2012
Member-at-Large, Board of Directors (2007-2009)

Membership and Fellow Status:
Division 1 - General Psychology (Fellow 1996)
Division 9 - Society for the Psychological Study of Social Issues (Fellow Status in Division)
Division 17 - Counseling Psychology (Fellow 1995)

President Elect, 2000-2001; President, 2001-2002; Past President, 2002-2003
Chair, Fellows Committee, 2005-2006, Member, Fellows Committee 2004-2007
Executive Committee - Council Representative - 1994-1997
Program Review Committee, 1982-84

Chairperson, Ad Hoc Committee of Ethnic Minority Affairs
Committee on Women & Section for the Advancement of Women
Workshop on Human Diversity for Division 17 Regional Conference, Houston,

Conference Planning Activities

Cofounder and Planner, National Multicultural Conference & Summit I. Co-hosted by American Psychological Association’s Divisions 17, 35, 45, and cosponsored by various other divisions and organizations. January, 1999, Newport Beach, California

Planner, National Multicultural Conference & Summit II. Co-hosted by American Psychological Association’s Divisions 17, 35, 44, 45 and cosponsored by various other divisions and organizations. January, 2001, Santa Barbara, California.

COURSES TAUGHT

Cross Cultural Counseling: Theory and Practice - The University of Texas, Spring 1983, graduate seminar, counseling psychology.
### Appendix P: Example of Expert Rater Summary Chart Used for Item Decision-Making

<table>
<thead>
<tr>
<th>APOS-2 Draft 2 Item #</th>
<th>Item</th>
<th>Appropriately Categorized by Subscale - Expert Rater</th>
<th>Intended as Privilege or Oppression Item</th>
<th>Expert Rater's Privilege or Oppression Rating</th>
<th>Expert Rater Feedback</th>
<th>Investigator's Item Decision</th>
<th>Rationale for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>It's okay to make racial jokes around friends of the same race. *</td>
<td>Yes 3/2</td>
<td>P</td>
<td>O 3/2</td>
<td>No changes suggested.</td>
<td>Retained as is.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>People of Color and White people have to worry equally about their credibility when addressing a group. *</td>
<td>Yes 3/2</td>
<td>O</td>
<td>P 3/1</td>
<td>Again, it is lack of awareness, but reflective of an attitude of privilege.</td>
<td>Retained as is.</td>
<td>Slight Wording Change to Original Item which was &quot;People of color and Whites have to worry equally about their credibility when addressing a group.&quot;</td>
</tr>
<tr>
<td></td>
<td>A criminal defendant's skin color plays a role in the severity of their prison sentence.</td>
<td>Yes 5/0</td>
<td>O</td>
<td>O 4/1</td>
<td>Another key issue pertaining to this topic has to do with the sentences for white-collar crimes vs. crimes involving crack? Or sentencing issues for cocain vs. crack. Cocain crimes are more likely related to Whites, and Crack-related crimes involve African Americans.</td>
<td>Deleted</td>
<td>Similar to item 9 and number 9 has slightly more agreement on whether the item represents privilege or oppression</td>
</tr>
</tbody>
</table>
Demographics Questionnaire

Please respond to the following questions about yourself:

1. Please describe your gender.
   - Female
   - Male
   - Transgender
   - Other ____________________

2. What is your current age in years? ____________

3. What is your race or ethnicity? ____________

4. What is your religious affiliation? ____________

5. Please identify your sexual orientation.
   - Exclusively Heterosexual
   - Somewhat Heterosexual/Somewhat Homosexual
   - Exclusively Homosexual

6. Please identify your student classification.
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate/Professional

7. What is your current student status?
   - Full-time Student
   - Part-Time Student
   - Not Currently Enrolled

8. What is your academic major? ____________

9. What is your cumulative student grade point average (GPA)? ____________

10. Please identify your political affiliation.
    - Democrat
    - Independent
    - Republican
    - Other ____________________
Appendix Q (Continued): Demographic Questionnaire

The next two questions ask about your parents or the individuals you spent the most time living with when you were growing up. If you were raised mostly by foster parents, step-parents, grandparents or other individuals, answer for them. For example, if you have both a step-mother and a natural mother, answer for the one who was most important in raising you.

11. Parental Figure # 1's Highest Level of Educational Completed
☐ Some High School
☐ Completed High School
☐ Some College
☐ Completed College
☐ Some Advanced Degree
☐ Completed Advanced Degree

12. Parental Figure # 2's Highest Level of Educational Completed
☐ Some High School
☐ Completed High School
☐ Some College
☐ Completed College
☐ Some Advanced Degree
☐ Completed Advanced Degree

13. Did you receive free or reduced lunch in high school?
☐ Yes
☐ No

14. Please rate your exposure to diversity training which focused on awareness of individual differences such as race, gender, social class, sexual orientation, or other forms of individual difference: (mark all that apply).
☐ I've not had any formal diversity training.
☐ I've completed a formal diversity training workshop through work or school.
☐ I've completed numerous formal diversity training workshops through work or school.
☐ I've completed a college course related to diversity training.
☐ I've completed numerous college courses related to diversity training.

15. How would you rate the amount of interaction you have with people who are of a different race than yourself?
☐ 1. Not much interaction
☐ 2
☐ 3
☐ 4
☐ 5. A lot of interaction
Appendix Q (Continued): Demographic Questionnaire

16. How would you rate the amount of interaction you have with people who are of a different gender than yourself?
   ○ 1. Not much interaction
   ○ 2
   ○ 3
   ○ 4
   ○ 5. A lot of interaction

17. How would you rate the amount of interaction you have with people who are of a different sexual orientation than yourself?
   ○ 1. Not much interaction
   ○ 2
   ○ 3
   ○ 4
   ○ 5. A lot of interaction

18. How would you rate the amount of interaction you have with people who are of a different social class than yourself?
   ○ 1. Not much interaction
   ○ 2
   ○ 3
   ○ 4
   ○ 5. A lot of interaction

19. Have you traveled abroad?
   ○ Yes
   ○ No
Appendix R: Openness to Diversity/Challenge Scale (ODS)

Please respond to the items in this questionnaire by clicking on one of the following five response options for each item: Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree.

1. I enjoy having discussions with people whose ideas and values are different from my own.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

2. The real value of a college education lies in being introduced to different values.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

3. I enjoy talking with people who have values different from mine because it helps me understand myself and my values better.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

4. Learning about people from different cultures is a very important part of my college education.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

5. I enjoy taking courses that challenge my beliefs and values.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree
Appendix R (Continued): Openness to Diversity/Challenge Scale (ODS)

6. The courses I enjoy the most are those that make me think about things from a different perspective.
   ○ Strongly Agree
   ○ Agree
   ○ Neutral
   ○ Disagree
   ○ Strongly Disagree

7. Contact with individuals whose background (e.g., race, national origin, sexual orientation) is different from my own is an essential part of my college education.
   ○ Strongly Agree
   ○ Agree
   ○ Neutral
   ○ Disagree
   ○ Strongly Disagree

8. I enjoy courses that are intellectually challenging.
   ○ Strongly Agree
   ○ Agree
   ○ Neutral
   ○ Disagree
   ○ Strongly Disagree
Appendix S: List of 79 APOS-2 Items Administered to Participants

Please respond to the following questions about your social attitudes. There are no right or wrong answers, simply indicate your level of agreement or disagreement with each item. The items are written based on your views towards U.S. society.

1. Men often earn more money than women when performing the same job.

2. Gay men are more at risk for being terminated from a job than heterosexual men based solely on sexual orientation.

3. Poor individuals are more likely to suffer from mental illness because of the way society treats them.

4. The stress associated with being poor can cause health problems.

5. This country would be a better place if welfare were eliminated.

6. Most People of Color who are enrolled in a predominantly White university were admitted due to Affirmative Action.

7. Gay men and lesbian women can be confident that their parents will not be upset when they talk about the gender of their new partner.

8. When selling a home, White people can rest assured that most people would want to buy the home they live in.

9. Growing up in a low-income family hurts a person’s chances for obtaining a job that will make them happy.

10. If anyone works hard enough they will be successful.

11. Women are just as capable to serve in leadership positions as men.

12. People of Color receive less medical information from their physicians when compared to White individuals.

13. Most men are concerned about being raped or assaulted whenever walking alone, just as women are.

14. Children from lower-income families are more likely to be teased about their clothing in school.

15. Heterosexual individuals tend to receive better medical treatment when compared to openly gay or lesbian patients.

16. Men and women face the same level of pressure from society to be physically attractive.

17. Having access to learning opportunities such as zoos provides advantages over other students who cannot afford this type of experience.

18. The focus on men’s bodies is just as strong as it is on women’s.

19. Being heterosexual makes it easier to participate in a religious organization.

20. Growing up in a middle class family improves your chances for obtaining a job that will be satisfying.

21. White people can easily find a hairdresser who knows how to cut their hair correctly.
22. Men are judged just as harshly about their attractiveness as women.

23. Women often mean 'yes' when they say 'no' to a man's advances.

24. Men in power are assumed to have earned their position, women may be suspected of having “slept their way to the top.”

25. Having money can lead to instant respect in business settings.

26. A person from an affluent family has a greater chance to earn a college degree than an individual from a poor family.

27. Being poor has no bearing on a person’s opportunity to earn a college degree.

28. Gay men and lesbian women can easily have marriage ceremonies if they want to formalize their relationship.

29. Moderate to high-income individuals are more likely to live in neighborhoods associated with better school districts.

30. Women are better suited to stay at home to raise children than men.

31. Gay couples can be pretty sure their neighbors will be accepting of their relationship.

32. Individuals with parents who went to college are more likely to go to college than an individual whose parents did not go to college.

33. People of Color and White people have to worry equally about their credibility when addressing a group.

34. Lower-income people are just as likely to be hard-working, or more so, as people who grew up wealthy.

35. African Americans with lighter skin color are more likely to be promoted within corporations than African Americans with darker skin color.

36. People of Color can easily find greeting cards that represent people of their race.

37. People who work for minimum wage make enough money to meet basic needs.

38. Public schools in low-income districts provide an equivalent education to public schools in middle or high-income districts.

39. Women who dress provocatively want men to approach them for sex.

40. It is socially easier to be attracted to a partner of the same sex.

41. Women are better suited as entry-level employees when compared to men.

42. People of Color experience high levels of stress because of the discrimination they face.

43. Gay men and lesbian women often have concerns about kissing their partners in public.

44. The fear of being rejected by one’s parents is very real for gay men and lesbian women.
Appendix S (Continued): List of 79 APOS-2 Items Administered to Participants

45. Many women are systematically denied access to leadership positions.

46. Homeless people don’t deserve to get money from hard-working folks.

47. Teenagers who identify as gay or lesbian in school are at a greater risk for being physically assaulted than heterosexual teens.

48. Women exert more energy to prevent being victimized than men.

49. It is acceptable to most people to use vocabulary terms that end in "man" or "men" such as policeman when referring to a female in that line of work.

50. Some hiring officials may not hire gay or lesbian workers to avoid negative reactions from customers.

51. People who have money are more likely to live longer than people who do not have much money.

52. Men are better leaders than women.

53. I find myself assuming a manager in a story is a man if the story does not specifically identify the person’s gender.

54. People of Color can readily find mentors or role models of their race who can advise them professionally.

55. People of color can ask to speak to the “person in charge” at a store and be confident that the person will also be a Person of Color.

56. It is okay for men to have multiple sexual partners when compared to women.

57. In many workplaces, some employees would have concerns about hiring a gay or lesbian employee rather than a heterosexual employee.

58. It is socially easier to be attracted to a partner of the opposite sex.

59. For many gay men and lesbian women, the choice about where to vacation can depend on how open a city is to homosexuality.

60. Racism continues to play a prominent role in society.

61. Sexual minority members are rarely allowed to make medical decisions about same gender partners.

62. It’s okay to make racial jokes around friends of the same race.

63. Most history books don’t accurately show how People of Color helped America become the country it is.

64. Having a heterosexual boss would make most employees uncomfortable.

65. People who live on the “good” side of town are less likely to become ill from industrial plants than other people.

66. When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their sexual orientation.
Appendix S (Continued): List of 79 APOS-2 Items Administered to Participants

67. African American political candidates are generally less likely to be accepted by White constituents in their districts.

68. White individuals generally live longer than people of any other race.

69. Most White individuals have a harder time obtaining a college degree when compared to People of Color.

70. I initially picture a White person as the politician when I read a story that involves an unidentified political figure.

71. Men are considered more attractive as they get older when compared to women.

72. Men should do less house cleaning than their female partners.

73. People of Color often notice if they are outnumbered at professional meetings.

74. White individuals don’t have to think about educating their children on racism in order to keep them from danger.

75. White defendants generally receive shorter jail sentences for the same crime when compared to People of Color.

76. Getting beat up is not a concern for gay men or lesbian women.

77. Anyone can get health insurance if they really want to.

78. People of Color are more likely to live in neighborhoods associated with the best school districts.

79. If a woman gets a man sexually aroused on a date she is obligated to have sex.
Appendix T: Marlowe-Crowne Social Desirability Scale – Short Form 1 (MC-1)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

1. I like to gossip at times.
   - True
   - False

2. There have been occasions when I took advantage of someone.
   - True
   - False

3. I’m always willing to admit it when I make a mistake.
   - True
   - False

4. I always try to practice what I preach.
   - True
   - False

5. I sometimes try to get even, rather than forgive and forget.
   - True
   - False

6. At times I have really insisted on having things my own way.
   - True
   - False

7. There have been occasions when I felt like smashing things.
   - True
   - False

8. I never resent being asked to return a favor.
   - True
   - False

9. I have never been irked when people expressed ideas very different from my own.
   - True
   - False

10. I have never deliberately said something that hurt someone’s feelings.
    - True
    - False
Dear Undergraduate Student,

I am a graduate student in the Department of Educational, School, and Counseling Psychology at the University of Kentucky. You have been randomly selected to be invited to participate in my research study that is designed to explore the validity of the newly revised Awareness of Privilege and Opposition Scale-2. You may participate in this study if you are an undergraduate student at the University of Kentucky and you are at least 18 years of age.

Participants will be asked to complete a demographics questionnaire and an internet study. The survey questions will ask you to rate your agreement with statements. You may not receive any direct benefit from your participation in this project; however, you may be gratified to know that you are contributing to our knowledge of instruments that measure diversity awareness. The study will take approximately 15 to 20 minutes to complete and there is no cost to you.

Your participation in this survey is completely voluntary. Your responses will be kept confidential. The results of the survey will be reported in such a way that individual responses cannot be identified. If you decide to participate, please complete the survey by [insert final date of the study]. Participants who complete the survey will be eligible to participate in a raffle for a $25 Wal-Mart gift card where your chances of winning are approximately 1 in 125.

If you experience technical difficulties with or have questions about the study, please email me at m.mcclellan@uky.edu or call [insert phone number here]. You may also contact Dr. Pam Remer at [insert phone number here]. If you have any questions about your rights as a research participant, you may contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428.

Follow this link to the Survey:
$\{l://SurveyLink?d=Take the Survey\}$

Or copy and paste the URL below into your internet browser:
$\{l://SurveyURL\}$

Follow the link to opt out of future emails:
$\{l://OptOutLink?d=Click here to unsubscribe\}$
Appendix U (Continued): Participant Recruitment Email

Michael J. McClellan, M.S., Ed.S.
Doctoral Candidate
Department of Education, School, and Counseling Psychology
University of Kentucky
Phone: [insert phone number here]
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Pam Remer, Ph.D.
Associate Professor
Department of Educational, School, and Counseling Psychology
University of Kentucky
Phone: [insert phone number here]
Email: premer@email.uky.edu
Appendix V: Participant Reminder Email

Dear Undergraduate Student,

I emailed you on [insert start data of the study] to seek your participation in a research study on the validity of a newly revised measure named the Awareness of Privilege and Oppression Scale-2. You are being invited to participate in this study because you are an undergraduate student at the University of Kentucky and you are at least 18 years of age.

Participants will be asked to complete a demographics questionnaire and an internet study. The survey questions will ask you to rate your agreement with statements. You may not receive any direct benefit from your participation in this project; however, you may be gratified to know that you are contributing to our knowledge of instruments that measure diversity awareness. The study will take approximately 15 to 20 minutes to complete and there is no cost to you.

Your participation in this survey is completely voluntary. Your responses will be kept confidential. The results of the survey will be reported in such a way that individual responses cannot be identified. If you decide to participate, please complete the survey by [insert end date of the study]. Participants who complete the survey will be eligible to participate in a raffle for a $25 Wal-Mart gift card where your chances of winning are approximately 1 in 125.

If you experience technical difficulties with the survey or have questions about the study, please email me at m.mcclellan@uky.edu or call [insert phone number]. You may also contact Dr. Pam Remer at [insert phone number]. If you have any questions about your rights as a research participant, you may contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428. A digital copy of the informed consent document that outlines your rights is attached to this email for your reference.

Thank you,

Follow this link to the Survey:
$://{l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:
$://{l://SurveyURL}

Follow the link to opt out of future emails:
$://{l://OptOutLink?d=Click here to unsubscribe}
Appendix V (Continued): Participant Reminder Email

Michael J. McClellan, M.S., Ed.S.
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Email: premer@email.uky.edu
Appendix W: List of the Final 40 APOS-2 Items

<table>
<thead>
<tr>
<th>APOS-2 Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Men should do less house cleaning than their female partners. *</td>
</tr>
<tr>
<td>2. Men often earn more money than women when performing the same job.</td>
</tr>
<tr>
<td>3. Individuals with parents who went to college are more likely to go to college than an individual whose parents did not go to college.</td>
</tr>
<tr>
<td>4. In many workplaces, some employees would have concerns about hiring a gay or lesbian employee rather than a heterosexual employee.</td>
</tr>
<tr>
<td>5. Growing up in a middle class family improves your chances for obtaining a job that will be satisfying.</td>
</tr>
<tr>
<td>6. Men are judged just as harshly about their attractiveness as women. *</td>
</tr>
<tr>
<td>7. White individuals don’t have to think about educating their children on racism in order to keep them from danger.</td>
</tr>
<tr>
<td>8. Gay couples can be pretty sure their neighbors will be accepting of their relationship. *</td>
</tr>
<tr>
<td>9. Being poor has no bearing on a person’s opportunity to earn a college degree. *</td>
</tr>
<tr>
<td>10. People who have money are more likely to live longer than people who do not have much money.</td>
</tr>
<tr>
<td>11. Women are better suited to stay at home to raise children than men. *</td>
</tr>
<tr>
<td>12. African American political candidates are generally less likely to be accepted by White constituents in their districts.</td>
</tr>
<tr>
<td>13. Women are better suited as entry-level employees when compared to men. *</td>
</tr>
<tr>
<td>14. Women often mean 'yes' when they say 'no' to a man's advances. *</td>
</tr>
<tr>
<td>15. People of Color can easily find greeting cards that represent people of their race. *</td>
</tr>
<tr>
<td>16. Being heterosexual makes it easier to participate in a religious organization.</td>
</tr>
<tr>
<td>17. The stress associated with being poor can cause health problems.</td>
</tr>
<tr>
<td>18. Teenagers who identify as gay or lesbian in school are at a greater risk for being physically assaulted than heterosexual teens.</td>
</tr>
<tr>
<td>19. People of Color experience high levels of stress because of the discrimination they face.</td>
</tr>
<tr>
<td>20. People of Color can readily find mentors or role models of their race who can advise them professionally. *</td>
</tr>
<tr>
<td>21. Public schools in low-income districts provide an equivalent education to public schools in middle or high-income districts.</td>
</tr>
<tr>
<td>22. People who live on the “good” side of town are less likely to become ill from industrial plants than other people.</td>
</tr>
<tr>
<td>23. The focus on men’s bodies is just as strong as it is on women’s. *</td>
</tr>
<tr>
<td>24. People of Color and White people have to worry equally about their credibility when addressing a group. *</td>
</tr>
<tr>
<td>25. Racism continues to play a prominent role in society.</td>
</tr>
</tbody>
</table>

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Appendix W (Continued): List of the Final 40 APOS-2 Items

<table>
<thead>
<tr>
<th>APOS-2 Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Racism continues to play a prominent role in society.</td>
</tr>
<tr>
<td>26. Most history books don’t accurately show how People of Color helped America become the country it is.</td>
</tr>
<tr>
<td>27. Gay men and lesbian women often have concerns about kissing their partners in public.</td>
</tr>
<tr>
<td>28. A person from an affluent family has a greater chance to earn a college degree than an individual from a poor family.</td>
</tr>
<tr>
<td>29. African Americans with lighter skin color are more likely to be promoted within corporations than African Americans with darker skin color.</td>
</tr>
<tr>
<td>30. Gay men are more at risk for being terminated from a job than heterosexual men based solely on sexual orientation.</td>
</tr>
<tr>
<td>31. People of color can ask to speak to the “person in charge” at a store and be confident that the person will also be a Person of Color. *</td>
</tr>
<tr>
<td>32. Women who dress provocatively want men to approach them for sex. *</td>
</tr>
<tr>
<td>33. People of Color receive less medical information from their physicians when compared to White individuals.</td>
</tr>
<tr>
<td>34. When meeting new people, gay men and lesbian women have to spend extra time trying to figure out if it is safe to reveal their sexual orientation.</td>
</tr>
<tr>
<td>35. Poor individuals are more likely to suffer from mental illness because of the way society treats them.</td>
</tr>
<tr>
<td>36. Some hiring officials may not hire gay or lesbian workers to avoid negative reactions from customers.</td>
</tr>
<tr>
<td>37. Sexual minority members are rarely allowed to make medical decisions about same gender partners.</td>
</tr>
<tr>
<td>38. For many gay men and lesbian women, the choice about where to vacation can depend on how open a city is to homosexuality.</td>
</tr>
<tr>
<td>39. Growing up in a low-income family hurts a person’s chances for obtaining a job that will make them happy.</td>
</tr>
<tr>
<td>40. Men are better leaders than women. *</td>
</tr>
</tbody>
</table>

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References


Center for Education Statistics.


minority stressors in the workplace (Doctoral dissertation). Retrieved from ProQuest. (Document No. 3190518)


Chronic stress, the HPA axis, and physical and mental health disparities over the life course. *American Journal of Public Health, 100*, 933-940. doi:10.2105/AJPH.2008.143446


Wilkinson, L., & the American Psychological Association Task Force on Statistical


Vita

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**Education:**
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- **Title of Dissertation:** Awareness of Privilege and Oppression Scale – 2: Construction and Initial Validation
- **Dissertation Chair:** Pam Remer, Ph.D.
- **Proposal Defended:** October 2011
- **Dissertation Defense Date:** May 2, 2014

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**Master of Science, Counseling Psychology,** University of Kentucky, Lexington, KY - May 2002

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Multiple Projects: Studied the efficacy of social justice-focused diversity training with undergraduate students.
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Responsibilities included:  
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- Conducted initial phone screening for participants in this research study.

Publications:  

Conference Presentations  

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