

BELIEFS, EVENTS, AND VALUES INVENTORY (BEVI)

*Oh, everyone believes
From emptiness to everything
Oh, everyone believes
And no one's going quietly*

Belief
—John Mayer

I still remember the careful and precise way in which Diana, the mother of my client, sat down in the chair across from me awaiting her “informing,” the final phase of a comprehensive psychological evaluation in which assessment results and conclusions are presented and discussed in summary form by the testing psychologist. Having finished my internship, I was completing my residency year between a university-based department of pediatrics and a psychiatric hospital, absorbing the richness of these diverse experiences and applying my newfound knowledge across a wide range of fascinating presentations. As anyone practicing in the early 1990s will recall, Attention Deficit Disorder (ADD) was swiftly becoming the diagnosis du jour (du décennies, it turned out), receiving sustained and prominent national attention in the popular press.¹

A striking woman in her late 30s, Diana had already determined that Michael, her 10-year-old child, “had ADD,” informing me as such during the initial clinical interview; from her perspective, and that of her family physician who had referred her to our clinic, all of the evidence pointed in this direction. Michael had difficulty concentrating in the classroom, was noncompliant at home, and generally seemed distractible and agitated. The department of pediatrics in which I worked actually had quite a progressive and interdisciplinary team at hand, including clinical psychology, developmental psychology, neurology, nursing, psychiatry, and social work, along with considerable access to other specialty areas with expertise bearing upon the presentations we

¹ Despite continued controversy, ADD (and its variants) has become one of the most common diagnoses assigned to children, youth, and even adults, rising from 7.8% of children aged 3 to 17 in 2003 to 11.0% of children in 2011, and increasing an average of 5% per year from 2003 to 2011. As of 2012, 9.5% of U.S. children aged 3 to 17—approximately 5.9 million children—had received a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD). Interestingly, and presaging the chapter on gender later in this book (Pendleton, Cochran, Kapadia, & Iyer, 2016), 13.2% of children receiving an ADHD diagnosis are boys and 5.6% are girls (Centers for Disease Control and Prevention, 2014). Overall, these trends raise a number of questions, including but not limited to issues of diagnostic reliability and validity, the factors and forces that may facilitate such dramatic increases in this diagnosis over time, as well as the putative “genetic basis” for this condition (e.g., Anmuth et al., 2013; Coates et al., 2016; Cozen et al., 2016; Cummings, Davies, & Campbell, 2000; Deacon, 2013; Horwitz, 2002).

encountered. In that sense, Diana and Michael probably were receiving about the best level and scope of care available at the time. Indeed, a typical psychological assessment might include perspectives from psychology, neurology, nursing, social work, and psychiatry, thus exemplifying the best aspects of interprofessional collaboration (e.g., Arredondo, Shealy, Neale, & Winfrey, 2004; Interprofessional Education Collaborative, 2014; Johnson, Stewart, Brabeck, Huber, & Rubin, 2004). So it was with this young man, who was tested with a comprehensive battery, including continuous performance and other measures for ADD, along with additional instrumentation and assessment processes, including a thorough intake interview. The results of this process? None of us saw evidence for ADD, although other matters of concern readily were apparent. In particular, during the intake interview, Diana hesitatingly recounted a pattern of intense conflict in the home between herself and her husband, which mainly involved verbal altercations between them on a daily basis along with a general feeling of tension and disconnection. How long had this pattern prevailed? “Years,” was Diana’s airy reply, which was accompanied by the hasty disclaimer that such conflict was completely irrelevant from the standpoint of Michael’s difficulties, which also had occurred ever since he had attended school. After sustained consultation, and several preliminary drafts, a final version of the psychological evaluation was presented to Diana for her review. Essentially, our collective diagnostic conclusion did not find evidence for ADD, although we agreed with Diana that Michael was emotionally distressed, perhaps in part because of the unrelenting conflict that he witnessed, which was confirmed to us during our interview with him.

I vividly recall Diana’s reaction to this feedback, which was presented as gently and hypothetically as I could as a beginning clinician. To my observation that “perhaps the ongoing conflict between you and your husband are affecting Michael’s ability to concentrate,” Diana’s jaw dropped, her breathing became rapid, and she declared, “My arm has gone numb.” I stopped, leaned forward, and said something like, “It’s okay. Just take a moment. We have physicians here. Should I get one?” She paused, for what seemed like forever, and said, “No. I’m okay.” Her arm had feeling again, but her face had fallen, and I thought she might cry. Some inner resolve kicked in with a vengeance. Her features stiffened. She regarded me coldly, and declared, “There’s nothing wrong with us that’s affecting Michael.” I assured her that I was *not* stating at any absolute or factual level that such was the case, only that both she and Michael had reported things were not happy in the home, and that Michael himself quietly had acknowledged that he felt badly about things in his family, wondering if there was something about him (e.g., his grades, his school problems) that was causing his parents to fight. Diana paused to take all this in. Eventually, she said, “There’s nothing we can do about all of that,” to which I replied that we might be able to help, if she would like to talk more. She had softened a bit by then, but was not yet sold. “I need to think what to do” she said, before thanking me and leaving the office. Although I moved on professionally soon after, and do not know if she ever followed up with our recommendations, I have thought about this session over the years, mainly because it was one of many that prompted me to begin work on the assessment measure and accompanying theoretical framework that is the focus of this book.

BEVI Impetus and Overview

In fact, I have long been fascinated by the origins, nature, and impact of “beliefs and values,” no doubt due to their salience during my own upbringing, which certainly was characterized by perspectives on the world that were unconventional to say the

least. And, I have likewise been captivated by an attendant idea, presented by a professor long ago, that we could in fact discover “lawfulness in nature,” if our approach to methods and measures was sufficiently rigorous. With indulgence from my master’s adviser, my thesis, in fact, sat squarely in the middle of these interests—beliefs, values, and assessment—by asking whether or not soap opera viewers differed from nonviewers in their “irrational beliefs,” according to the *Jones Irrational Beliefs Test* (they did, to a degree). Given such preoccupations, it may not be surprising that I not only attended closely to what my clients said they believed about all manner of phenomena (e.g., why they and others did what they did), but began to jot down such “belief” statements as they emerged, right as I was completing my internship and postdoctoral training years, and continuing on during the process of conducting therapeutic interventions and graduate student training overseas through the University of Maryland system, which ultimately led to my running a counseling center in a small, highly internationalized campus in Germany. There, I was privileged to encounter beliefs and values about self, others, and the larger world from individuals all over the globe. My notes on belief statements kept growing as I continued a parallel process of researching all that we knew about the etiology and measurement of beliefs and values, which ultimately culminated in the “three components” of *belief*, *needs*, and *self* discussed in Chapter 2 as well as the fundamental dynamics that are illustrated via the EI (Equilintegration) Self of Chapter 3. From that process, an early version of the *Beliefs, Events, and Values Inventory* (BEVI) emerged, eventually winnowed down to 494 items, which represented the first full version of this measure. Twenty years later, there are two versions—long and short—of the BEVI, consisting of 336 and 185 items respectively. Anyone involved in test development knows that the process of developing a valid, reliable, and web-based measure is intensive and demanding, to say the least, in terms of time, energy, and resources, as so many different sources of expertise are involved, from theoretical and empirical to statistical and programming.

Over 20 years in, with dozens of studies and real world applications, hundreds of analyses, and thousands of administrations, I and the many researchers and practitioners who have participated in various phases of the BEVI’s development, implementation, and evaluation—a number of whom are featured in later chapters—are about as confident as we can be that the measure described in this chapter is illuminating various manifestations of “lawfulness in nature” in a valid and reliable manner. However, in truth, the process of test development, analysis, and refinement never concludes. This chapter essentially describes what the BEVI is, why and how it emerged as it did, relevant psychometrics and scale descriptions, and key aspects of usage and interpretation. The research and practice chapters that follow provide further perspective and findings regarding all of these points. Finally, it should be noted that some of the following material addresses various statistical aspects of this measure for purposes of understanding its underlying psychometric properties. Individuals who are not familiar with such information are encouraged not to become overwhelmed, but instead to focus either on the “big picture” aspects of this measure (e.g., what is measures via specific scales; how it is used in the real world; the nature and application of individual, group, and organizational reports) and/or to learn more about such test development processes through further reading, coursework, and consultation in a range of relevant areas (e.g., test development and design; issues of reliability and validity; psychometrics and statistics).

So what is the BEVI? At the most basic level, it is a measure of psychological functioning, broadly defined. That is to say, like most psychological measures, it

presents a series of questions that a respondent (i.e., test taker) may answer according to a set of response options, ranging in the case of the BEVI, from Strongly Agree, Agree, Disagree, and Strongly Disagree. But the BEVI takes another step, by seeking simultaneously to assess not only *what* and *how* the respondent is experiencing his or her own “Version of Reality,” but *why*. That is because the BEVI deliberately includes what in clinical parlance is known as an “intake interview”²—an amalgamation of many such interview questions actually—seeking to ascertain core life experiences that may have impacted *why* one’s sense of self, others, and the larger world is what it is. Moreover, the BEVI also asks the respondent to clarify the nature and form of such life experiences for them (i.e., comprising the “Events” of the BEVI, as in the Beliefs, Events, and Values Inventory), by including a comprehensive Background Information section, which queries about a very wide range of Formative Variables (as noted in the Chapter 3 discussion of the EI Self). For example, test takers are asked about their age, gender, ethnicity, where they were raised, their religious and political inclinations, and so forth. In this way, the BEVI was designed to be used with a very wide range of populations—from students, educators, and clinicians to leaders, clients, and inmates, among other individuals and groups—as the following chapters illustrate. Ultimately, the BEVI is relevant to an array of contexts since it seeks to ask and answer the following questions that are of broad interest and impact: (a) Why do we experience self, others, and the larger world as we do? (b) What are the implications of our experience of self, others, and the larger world on multiple aspects of human functioning? (c) How may such information be used to facilitate a range of processes and outcomes in the real world (e.g., greater awareness, growth, and development)? More specifically, usage of the BEVI tends to fall in one or more of eight areas of inquiry and practice:

1. *Evaluating learning experiences* (e.g., study abroad, multicultural courses, general education, training programs/workshops, service learning, etc.)
2. *Understanding learning processes* (e.g., who learns what and why, and under what circumstances)
3. *Promoting learning objectives* (e.g., increased awareness of self, others, and the larger world)
4. *Enhancing teaching and program quality* (e.g., which experiences, courses, programs, etc. have what impact, and why)
5. *Facilitating growth and development* (e.g., of individuals, groups, and organizations)
6. *Conducting research* (e.g., how, why, and under what circumstances people become more “open” to different cultures)
7. *Addressing organizational needs* (e.g., staff/leadership development)
8. *Complying with assessment and accreditation requirements* (e.g., linking objectives to outcomes)

² As any mental health clinician is aware, the “intake interview” is conducted early in a process of assessment or therapy, typically in the first session or two, and includes a wide range of questions regarding life history as well as thoughts, feelings, and behaviors that may bear upon the referral question—why they are there—as well as the “symptoms” they experience and possible processes or recommendations regarding the clinical intervention that follows. From the standpoint of the EI model and BEVI method—and as multiple analyses attest in various chapters of this book—such Formative Variables impact how all human beings experience self, others, and the larger world, not just individuals who may be seeking mental health services.

Development of the BEVI Long Version

In accordance with appropriate psychometric standards and processes (e.g., Downing & Haladyna, 1997; Geisinger, 2013; Hubley & Zumbo, 2013; Robinson, Shaver, & Wrightsman, 1991, 1999), the BEVI has been in development since the early 1990s. Although three phases may be identified to characterize its development—(a) Item Development and Literature Review; (b) Development, Usage, and Evaluation of the Long Version; and (c) Development, Usage, and Evaluation of the Short Version—the process is understood better along an evolutionary continuum than as discrete and separable stages, mainly because all that is learned from one “phase” of test development is linked inextricably to the next. In any case, to track how the BEVI arrived at its current incarnation, it may be helpful to document key aspects of its developmental trajectory.

The early process of BEVI development began with the realization that the “belief statements” uttered by clients—and later by students, and later still, by individuals in the public sphere (e.g., politicians and other public figures)—seemed to loom large for human beings vis-à-vis why and how they “made meaning” as they did. For the most part, these “belief statements” manifested in the form of verbal (and sometimes written) one-sentence assertions regarding why we humans do what we do and/or why the world works as it does. Mainly, I simply started to keep track of (i.e., began to write down) what people said on such matters, because I was intrigued by the trifold reality that (a) such statements were often expressed with complete certitude (i.e., there seemed to be no question in the asserter’s mind that the belief statement was valid); (b) generally, there seemed to be not great awareness that the most parsimonious explanation for their own strongly held beliefs was that they were massively shaped if not determined by their own life histories and circumstances (i.e., the unique “Formative Variables” that characterized their own development were highly correlated with what they declared to be good or bad and true or false); and (c) such belief statements were invoked directly to explain or justify why they—and others—did what they did, with all manner of implications for acts of omission and commission in the real world (e.g., what they did and did not do in relation to self, others, and the larger world). In short, I was, and am, fascinated by the fact that we humans may live out our lives, for better or worse, on the basis of beliefs about the nature of reality that have not been identified, examined, or understood. And of course, in many cases—particularly in a clinical realm, but ultimately, at every level of reality (e.g., individual, group, organizational, societal, national, global)—these beliefs were not mere abstractions, but explicitly were cited as *the reason why* a specific action, policy, or practice was or was not deemed to be good and true or bad and false. As observed earlier, the historical record is clear in that regard, from the rationale for persecuting specific religious groups in antiquity, to the fundamental justification for the “final solution” of the Holocaust in the 20th century, to current “climate change denial,” to invoke only a few of countless exemplars from the past, present, and undoubtedly, the future. In short, the fundamental observation—that we may be living our lives and impacting others according to beliefs that we acquired under circumstances and in situations of which we are unaware—was, and is, remarkable because so much of our existence, regard, and treatment of one another is traced directly to our apparent faith in such unexamined beliefs.

Of course, countless individuals have been drawn to such matters in one way or another through their lives and work, perhaps most notably beginning with Socrates's bold assertion that *The unexamined life is not worth living*. But at least two fundamental advances over the past century have allowed us to explore Socrates's proposition empirically and in applied terms. First, thanks to powerful statistical methodologies that painstakingly have been developed over the past century—and informed theoretically and empirically by a range of interdisciplinary scholarly and applied perspectives and technologies—we are able to demonstrate the real world etiology, impact, and transformation of “beliefs and values” in a reliable and valid manner. Second, decades of research on psychotherapy processes and outcomes as well as allied fields of inquiry (e.g., cognitive and developmental psychology; aspects of neurobiology), have allowed us to begin apprehending how the “self”—broadly defined—becomes structured as it does as well as why and under what circumstances various aspects of “self” may be transformed vis-à-vis therapeutic relationships and related change-oriented interventions (e.g., Henriques, 2011; Magnavita & Achin, 2013; Newberg & Waldman, 2006; Norcross, 2005; Wachtel, 2008; Wampold, 2010; see also Chapters 2 and 3). Of course, many other fields also contribute to this process of illuminating why we humans think, feel, and behave as we do—and many of these perspectives are integral to the EI Model. The implications of such scientific and applied advances cannot be overestimated for scholars, practitioners, educators, students, and policy makers who wish to illuminate why we humans do what we do, and how we might “cultivate our capacity to care” in a way that is demonstrably more sustainable over the short and the long term (e.g., *Cultivating the Globally Sustainable Self*, 2014; Shealy, Bhuyan, & Sternberger, 2012; Shealy & Bullock, in press). The trick of course is translating such high minded sentiment into concrete form. Here resides the intensive, long-term, and resource-extensive process of test development, evaluation, and refinement as well as programmatic and assessment-based research.

At the outset then, beginning in the early 1990s, an extensive review began of research and theory relevant to specific BEVI constructs, which culminated in the “three components” of *beliefs*, *needs*, and *self*, and continues to this day (e.g., Anmuth et al., 2013; Atwood, Chkhaidze, Shealy, Staton, & Sternberger, 2014; Bolen, Shealy, Pysarchik, & Whalen, 2009; Brearly, Shealy, Staton, & Sternberger, 2012; Hill et al., 2013; Isley, Shealy, Crandall, Sivo, & Reifsteck, 1999; Hayes, Shealy, Sivo, & Weinstein, 1999; Patel, Shealy, & De Michele, 2007; Pysarchik, Shealy, & Whalen, 2007; Shealy, 2004, 2005, 2015; Shealy, Burdell, Sivo, Davino, & Hayes, 1999; Shealy, Sears, Sivo, Allessandria, & Isley, 1999; Shealy et al., 2012; Spaeth, Shealy, Cobb, Staton, & Sternberger, 2010; Sternberger, Whalen, Pysarchik, & Shealy, 2009; Tabit et al., 2011; Williams & Shealy, 2004).

Concretely, as noted, preliminary items were developed from actual belief-value statements (e.g., from adolescent/adult clients and student trainees, students, and political/public figures), and reviewed and revised through multiple processes over the past 20-plus years (e.g., several Subject Matter Expert [SME] panel reviews; multiple Institutional Review Board processes; review processes via scholarly presentations/publications). From a statistical standpoint, five separate statisticians have participated in the evaluation of various iterations of the BEVI, including early exploratory factor analytic work, which culminated in 10 “process scales” for the 494-item version of the BEVI (e.g., Shealy, 2004). As indicated in Table 4.1, the majority of reliability and stability (i.e., 3-month test-retest) estimates for this version of the BEVI were .80 or higher.

TABLE 4.1
Preliminary Reliability and Stability (3 Month Test–Retest)
Estimates for BEVI Scales³

	RELIABILITY	STABILITY
Basic Openness	.86	.87
Negative Life Events	.90	.85
Naïve Determinism	.68	.85
Sociocultural Closure	.87	.90
Authoritarian Introjects	.68	.81
Religious Traditionalism	.95	.95
Need for Control	.62	.78
Emotional Attunement	.75	.65
Self Access	.70	.72
Separation Individuation	.83	.78
Gender Stereotypes	.86	.88

Initial evidence of validity is indicated by a number of studies demonstrating that the BEVI is able to predict group membership across a wide range of demographic variables, including gender, ethnic background, parental income, political orientation, and religious orientation (e.g., Anmuth et al., 2013; Atwood et al., 2014; Brearly et al., 2012; Hayes et al., 1999; Hill et al., 2013; Isley et al., 1999; Patel et al., 2007; Pysarchik et al., 2007; Shealy, 2004, 2005, 2015; Shealy et al., 2012; Tabit et al., 2011). For example, in a study comparing Mental Health Professionals and Evangelical Christians on the BEVI, Hayes (2001) found that “. . .the instrument accurately classified Evangelical Christians and Mental Health Professionals, with 95% of originally grouped cases correctly classified, which strongly suggests that the BEVI can validly discriminate between these two groups” (p. 102).³

In another study examining environmental beliefs and values in general and the reported degree of concern about global warming, Patel (2008) found the following:

. . .women, Democrats, and atheists or agnostics with a lower “need for control,” lower “self access,” and a relatively lower degree of “separation-individuation” are most likely to express environmental concerns whereas Republican men who are Christians with a higher “need for control,” higher “self access,” and a relatively higher degree of “separation-individuation” are the least likely to express environmental concerns. . . .EI theory, the EI Self, and the BEVI offer a promising theoretical framework, model, and method for predicting and explaining who is and is not concerned about the environment by illuminating the underlying affective, attributional, developmental, and contextual processes that mediate and moderate why such belief/value processes and outcomes occur in the first place. (pp. 43, 46–47)

³ Note. These estimates are based upon an initial sample of 648 participants of undergraduate psychology students.

As a final example, in a study comparing the BEVI and the Intercultural Development Inventory (IDI), Reisweber (2008) concluded the following:

... it is both compelling and consistent with an EI framework that the BEVI was able to identify in advance which students would be more or less likely to increase their intercultural awareness by the end of that academic year. Specifically, students who reported lower Naïve Determinism and more Gender Stereotypes at the beginning of the academic year were statistically more likely to demonstrate an increase in intercultural awareness after living for nine months in an international residence hall. Furthermore, students with a higher degree of Negative Life Events (NLE) and Emotional Attunement, as measured by the BEVI, also demonstrated greater and more accurate intercultural sensitivity, as measured by the IDI. (pp. 79–80)

The Forum BEVI Project: Initial Findings and Implications

Beginning with Patel (2008) and Reisweber (2008), the Forum BEVI Project—a 6-year, multi-institution assessment of learning project—offered an ideal opportunity to examine and refine further the underlying psychometric properties of this measure, while also conducting a wide range of studies to understand the complex interactions among various BEVI scales (and subscales) as well as real world implications and applications (see Forum BEVI Project, 2015). As such, one of the major substantive outcomes of this initiative was further analysis of what was by then (following additional factor analytic work) a 415-item version of the BEVI in an attempt to lower the number of items on this measure, clarify further its underlying factor structure, and examine a wide range of mediators and moderators of learning. As reported in over 20 publications (e.g., articles, chapters, dissertations), 50 presentations (e.g., symposia, papers, posters), and hundreds of separate analyses from 2007 to 2014, a range of colleges, universities, and study abroad providers administered the BEVI to successive waves of participants including an initial sample of nearly 2,000 participants in the United States and internationally. Working from this 415-item version of the BEVI, statistical analysis narrowed the original number of factors on the BEVI from 40 to 18; nearly 60 items also were eliminated during the subsequent review process. Norms then were established for each of these “scales” (i.e., factors) with most reliabilities above 0.80 or 0.90 (no scale had a reliability of less than 0.75). Three new qualitative items also were integrated into the BEVI prior to the pilot phase, which allowed for complementary types of analyses.

Based upon factor analytic and correlation matrix data, the 18 scales of the BEVI—in what was now a 336-item, “long version”—were organized in a manner that corresponds with the basic EI theoretical framework of this measure. In an attempt to reduce further the number of factors, a Schmid–Leiman transformation (i.e., essentially, a factor analysis of a factor analysis) was conducted (Schmid & Leiman, 1957). Although six primary factors (PF) were in fact extractable from the larger Exploratory Factor Analysis (EFA), approximately half of the variance accounted for by the EFA was not accounted for by the six factors that were retained via Schmid–Leiman. Thus, in consultation with the project statistician, it was determined at that phase of the project to report out both “PF” (from Schmid–Leiman) and secondary factors (“SF”) from the EFA as well as the order in which factors were extracted. A correlation matrix then was conducted (i.e., a correlation matrix is a

statistical procedure by which all factors on a measure are correlated with each other in order to demonstrate the magnitude and direction of their correlative relationship to each other). As a whole, this information—combined with relative loadings of specific items on each factor—further illuminated both the nature of each factor (i.e., what it was measuring) as well as how—and perhaps why—such factors were related to each other as they were.

Consider, for example, the following correlation matrix data for two scales of the long version of the BEVI, Needs Closure and Emotional Attunement.⁴ For interpretive purposes, the numbers listed in parentheses are the respective reliabilities for each scale; the “PF” and “SF” designations and the accompanying numbers refer to whether the scale was extracted as a “primary” or “secondary” factor, and in which order of extraction. The descriptive information listed for each scale corresponds to the type of content assessed by the items that load on each scale. The scales that are listed underneath each numbered scale are presented in descending order of magnitude from correlation matrix findings (e.g., the correlation of each scale by all other scales).

Scale 2. Needs Closure (0.88, PF 1)

(challenging life circumstances, odd explanations for why things are the way they are, ambivalent or distant relationship with core needs in self and/or others)

Socioemotional Convergence (−0.93)
 Sociocultural Openness (−0.90)
 Emotional Attunement (−0.85)
 Identity Closure (0.84)
 Negative Life Events (0.81)
 Basic Closedness (0.78)
 Ecological Resonance (−0.72)
 Divergent Determinism (0.65)
 Hard Structure (0.53)
 Socioreligious Traditionalism (0.31)

Scale 10. Emotional Attunement (0.87, SF 17)

(highly emotional, highly sensitive, highly social, needy affiliative, undifferentiated, values emotional expression)

Needs Closure (−0.85)
 Socioemotional Convergence (0.84)
 Basic Closedness (−0.77)
 Sociocultural Openness (0.77)
 Ecological Resonance (0.64)
 Identity Structure (−0.63)
 Negative Life Events (−0.62)
 Hard Structure (−0.59)
 Divergent Determinism (−0.58)
 Socioreligious Traditionalism (−0.20)

⁴ This section is adapted and/or excerpted with permission from Shealy, C. N., Bhuyan, D., & Sternberger, L. G. (2012). Cultivating the capacity to care in children and youth: Implications from EI Theory, EI Self, and BEVI. In U. Nayar (Ed.), *Child and Adolescent Mental Health* (pp. 240–255). New Delhi, India: Sage Publications. See also the Forum BEVI Project at www.forumea.org/research-bevi-project.cfm

From the standpoint of the EI model and BEVI method, such findings illustrate (a) how the degree to which we believe our core needs were met is associated with how we experience ourselves, others, and the larger world and (b) how such processes are associated with our capacity to resonate emotionally with self and others. Needs Closure (the first of the “Primary Factors” or PF) is composed of items that indicate whether a respondent reports that his or her childhood was “happy,” the degree to which basic needs were or were not met in a “good enough” way, and subjectively held explanations for why people or the world work as they do. In considering the interrelationship among Needs Closure and its three most highly correlated scales, note that the relationship between the reported experience of a “bad childhood” is associated with: (a) relative difficulty holding complex, equally plausible, and sometimes contradictory realities simultaneously in the mind (i.e., Socioemotional Convergence); (b) a relative lack of openness to beliefs and practices that are different from one’s own (i.e., Sociocultural Openness); and (c) a relative difficulty with, or indifference toward, the “emotional world” of self or others (i.e., Emotional Attunement). How do we understand and interpret such findings?

As discussed in Chapters 2 and 3, abundant evidence suggests that what we believe and value as good or true is partly a function of our unique Family Variables (e.g., family, culture, context, life, and contextual experiences), which interact with powerful core needs (such as attachment, affiliation, actualization, etc.) to mediate affective and attributional processes of which we often have little awareness. Among other relevant fields, developmental psychopathology provides important insights about the variables that shape pathways to adaptation or maladaptation, by examining the interactions among genetic, biological, psychosocial, and familial domains in order to understand developmental processes and outcomes from infancy to adulthood. More specifically, this interdisciplinary field of inquiry examines the etiology and interactions among a wide range of processes that causally are associated with variation in human conduct and functioning, ranging from “disturbed” or “maladaptive” to “healthy” or “optimal” (e.g., Cummings, Davies, & Campbell, 2000; Sroufe, 2009; Toth & Cicchetti, 2013). Highly consistent with the Needs Closure intercorrelations from the BEVI, findings cited previously indicate that poor parenting, insecure attachment, abuse, and neglect are associated negatively with the capacity in children and youth to experience care for self and others (e.g., Shealy, 1995; Shealy et al., 2012). Among related explanations for such outcomes, perhaps the most parsimonious is that children and youth who were not well cared for themselves tend to be preoccupied by their own emotional, cognitive, and behavioral struggles, which are compounded by an impaired capacity for self-care as well as poor or inadequate support from caregivers.

Note also from the preceding correlation matrix data that Needs Closure is the most highly negatively correlated scale with Emotional Attunement. How might such findings be interpreted? Essentially, it appears that the degree to which individuals report that their core needs were *not* met in a “good enough” manner is associated with a *lack* of capacity and inclination to attend to emotional processes in self and other, and vice versa. Such findings do receive support from extant literature. For example, Garner, Dunsmore, and Southam-Gerrow (2008) examined the conversations of mothers regarding the explanation of emotion and emotional knowledge vis-à-vis the relational and physical aggression and pro-social behavior in their children. Essentially, children with mothers who explained emotion were more likely to engage in pro-social behavior. The authors hypothesize that such discussions facilitate the development of emotional capacity and skill, by validating their children’s emotions and helping them to be aware of and sensitive to emotional cues in self and in others. Grounded in attachment theory, emotional security is mediated by the

relative capacity to regulate one's own emotions (Cummings & Davies, 1996). Children living in homes characterized by domestic violence have significant challenges in safeguarding their security in the presence of unpredictable and volatile behaviors, posing considerable challenges to their adjustment (Davies, Winter, & Cicchetti, 2006; Shealy, 1995). Furthermore, McCoy, Cummings, and Davies (2009) found that how parents handled conflict (constructively or destructively) was associated with their children's emotional security and their relative likelihood to engage in pro-social behavior. Such findings rightly have influenced a wide range of interventions, including values-based curricula, which emphasizes the importance of attending to emotional experiences in self and others as well as other pro-social behaviors, all of which are designed to enhance a capacity and inclination to care (e.g., Singh, 2009; Toomey & Lovat, 2009). In short, these findings suggest that warm and engaged parenting is an important variable in positive mental health outcomes for children, which in turn yields a higher likelihood that children will engage in pro-social behaviors. Likewise, as the BEVI correlational matrix data illustrate, the degree to which we report the experience of "warm parenting" is highly associated with our attendant capacity and inclination toward "emotional attunement" in self and other (Shealy et al., 2012). In any case, for present purposes, findings such as those presented previously were among the first to emerge from the Forum BEVI Project. Ultimately, the hundreds of analyses that followed—including dozens of BEVI reports, which were used in a range of applied settings—are presented in the various research and practice chapters that follow later in this book.

Development of the BEVI Short Version

Despite such findings, a number of institutions/organizations still desired a shorter version of the BEVI for a number of reasons. First, within the context of higher education in particular, assessment demands already were high and student/faculty time was short. Second, although each scale on the long version of the BEVI assessed different constructs, these were interdependent with one another (i.e., by design, and consistent with the interconnected nature of beliefs, the "oblique" nature of factor rotation parameters allowed items to load on more than one factor). Information gleaned from separate EFAs during its development did much to illuminate how and why specific "beliefs, events, and values" were associated together as they were. However, we long had recognized the need to move beyond EFA in order to determine by Confirmative Factor Analysis (CFA) if and how the EFA structure of the measure held upon administration to a new and separate sample, and to understand the relationship among more parsimonious versions of each scale construct. Thus, from 2011 to 2013, we undertook the process of creating a "short version" of the BEVI. The overarching goal was to determine if a shorter version of the BEVI, with substantially fewer items, could be developed in a manner that did not compromise the fundamental integrity of the measure (i.e., a "short version" would continue to illuminate how and why "beliefs, events, and values" were interrelated as they seemed via multiple analyses). As any psychometrician will attest, this process was highly painstaking and intensive.⁵ Following a data-scrubbing process (e.g., ensuring that duplicated or incomplete cases were removed from the database), we identified a sample of 2,331 cases to be used in conducting the CFA.

⁵ An initial version of this section—on development of the short BEVI—was documented by Wenjuan Ma, a statistician for the Forum BEVI Project.

This first phase was much more doable than the next, which required multiple steps to determine which items could be eliminated without sacrificing the integrity of the measure. First, we confirmed which items were loading on which specific scale. Because a number of the long version scales were measuring higher order constructs, it was necessary again to identify smaller subsets of items (i.e., subfactors) that comprised the larger construct. Through Cronbach's alpha, items were selected that could be removed safely without significantly impacting the consistency of a particular factor (i.e., scale) or its subfactors (i.e., subscales). We then used analytic methods aligned with item response theory (IRT) to identify the relative contribution of each item to each scale. Again, the overarching goal of this step was to ensure that the short BEVI extracted information about respondents that was similar to the information extracted on the long BEVI.⁶ Although the analyses for this process were relatively straightforward, the challenge lay in the sheer volume of data as well as the need to examine all possible permutations among all items and all scales. Ultimately, we automated these procedures via a "python program," which would stop and output results whenever the Cronbach's alpha coefficient was equal to 0.7 and allow us to compare the respective shape of the information curve for each scale of the BEVI. In other words, to preserve the integrity of the BEVI, items loading on the short version needed to evidence a similar capacity to identify the same types of respondents as did the longer version (e.g., regardless of whether someone strongly agreed or strongly disagreed to the items on a particular scale, the short BEVI needed to be able to identify such individuals with a degree of sensitivity that was equivalent to that of the longer version). The end result of this process was the identification of candidate items for retention and deletion in the development of the short BEVI.

But despite this fundamental step forward, we were not done yet. That is because the python program often "spat out" different multiple item combinations of various short BEVI scales. To figure out which combination was best for each scale, we used structural equation modeling (SEM) to test all of these possible combinations based upon theoretical propositions that had emerged over time to explain "what" specific BEVI scales were assessing and "why." This process was also highly iterative, involving a great deal of back-and-forth dialogue between theoretical and statistical perspectives on this measure. Ultimately, we were able to settle on final solutions for all scales that had good statistical and sound theoretical properties. At the conclusion of this process, 40 demographic and background variables (from 65), 185 items (from 336), and 17 scales (from 18) were retained in the short BEVI.⁷ Table 4.2 summarizes core information regarding these scales.⁸

⁶ Since most institutions, organizations, and settings are now using the "short version" of the BEVI, and because of the extensive analytic process that resulted in this version, it seems likely as of this writing that the "short version" of the BEVI will become the primary version of the BEVI.

⁷ It should be noted that we retained one scale—Identity Diffusion—that did not meet this .70 threshold (it had an alpha of .61). Also, a few items progressing through the first steps did not survive SEM, but were retained nonetheless. Our reasons for doing so were to identify specific combinations of items for the short version of the BEVI that had the best reliability while also retaining as much fidelity as possible to the longer BEVI. One scale—Global Engagement—appeared to be a subfactor of a newly named factor, called Meaning Quest, which explains why the short version of the BEVI has one less scale than the long version. Extensive review of item combinations resulted in the renaming of several scales in order to better represent the apparent meaning of each factor. Finally, in addition to the statistical analyses of the 336 items from the long version, another round of SME review of the demographic/background items was conducted as well, which resulted in the elimination of 25 such items.

⁸ Note that although scale names for the BEVI short version remain the same, the scale orders in Tables 4.2 and 4.3 are different from the final numbering of scales for purposes of theoretical alignment. Such differences were due to factor extraction and other analytic processes during scale/item review. Please see "Describing and Interpreting BEVI Scales" for the final linkages between scale numbers and names.

TABLE 4.2
BEVI Scale Summaries

	MEAN	STANDARD DEVIATION	CRONBACH'S ALPHA	NUMBER OF ITEMS
Negative Life Events	2.889	0.610	0.862	9
Needs Closure	2.646	0.290	0.712	25
Needs Fulfillment	1.892	0.342	0.882	24
Identity Diffusion	2.791	0.322	0.610	13
Basic Openness	2.108	0.417	0.809	12
Basic Determinism	2.887	0.355	0.755	16
Ecological Resonance	2.248	0.524	0.760	6
Self Certitude	2.122	0.357	0.761	13
Religious Traditionalism	2.705	0.782	0.903	5
Emotional Attunement	2.175	0.421	0.814	13
Physical Resonance	2.200	0.429	0.719	7
Self Awareness	1.855	0.358	0.810	12
Socioemotional Convergence	1.908	0.286	0.877	36
Sociocultural Openness	2.058	0.287	0.798	26
Global Resonance	1.719	0.469	0.828	6
Gender Traditionalism	2.275	0.472	0.828	11
Meaning Quest	1.873	0.317	0.831	19

As noted, to explore scale structure, we used SEM to test the relationships between the items and constructs, a process that was highly iterative. Table 4.3 summarizes the final model fit information, which indicates that (a) these scales have a relatively good model fit and (b) these scales sufficiently approximated the underlying theory.

Finally, it is important to demonstrate the emergent factor/subfactor structure for each scale. This information is provided in the following figures for each of the 17 scales (Figures 4.1–4.17) of the BEVI.⁹

⁹ As of this writing, most subfactors have not formally been named. Initials listed in association with many subfactors were based upon an early EFA conducted on the BEVI (e.g., nfc = Need for Control). Also, in a few cases, subfactor names were emergent and have not yet been assigned. Although we have reasonable confidence in the higher order structure of each factor, with items associated significantly with their corresponding subfactors, further research is needed to understand the meaning and nature of all subfactors comprising each construct. For interpretive purposes, see Figure 4.1 as an example. Here, NLE is a one-dimensional construct with nine items. All nine items have relatively strong associations with the latent construct. As another example, consider Figure 4.2, Needs Closure. As is evident, there are five subfactors under the Needs Closure construct. All subfactors were associated significantly with Needs Closure, and all items were associated significantly with their corresponding subfactors.

TABLE 4.3
Model Fit Information for BEVI Scales

	CHI-SQUARE	DF	P VALUE	CFI	RMSEA
Negative Life Events	428.612	27	0.000	0.977	0.080
Needs Closure	2993.316	225	0.000	0.911	0.073
Needs Fulfillment	2855.248	248	0.000	0.912	0.067
Identity Diffusion	28.973	2	0.000	0.983	0.076
Basic Openness	619.225	54	0.000	0.956	0.067
Basic Determinism	536.465	41	0.000	0.927	0.072
Ecological Resonance	456.526	9	0.000	0.967	0.147
Self Certitude	634.634	62	0.000	0.937	0.064
Religious Traditionalism	166.821	9	0.000	0.995	0.087
Emotional Attunement	654.891	62	0.000	0.960	0.064
Physical Resonance	40.557	2	0.000	0.984	0.091
Self Awareness	598.360	54	0.000	0.948	0.066
Socioemotional Convergence	3523.339	369	0.000	0.901	0.061
Sociocultural Openness	2596.628	225	0.000	0.935	0.067
Global Resonance	93.898	14	0.000	0.994	0.050
Gender Traditionalism	765.686	44	0.000	0.948	0.084
Meaning Quest	836.661	61	0.000	0.925	0.074

In summary, to develop the BEVI short version, we progressed through a series of procedures. First, we used Cronbach's alpha to determine which items could be deleted without significantly influencing the reliabilities of the scales. Then, we used IRT to compute the information level of the items. A python program allowed us to compare the respective shapes of the information curve for each version of the BEVI, while SEM facilitated a deep understanding of constructs, which were in fact highly congruent with the EFA version of the measure. In the end, we had a short version BEVI (185 items), which was consistent with the essential structure of the long BEVI (336 items), but with substantially fewer items. Of course, further research is ongoing and will continue on this measure over time (e.g., to evaluate the temporal dimension; continue to assess reliability/validity across different groups, including non-English speakers).

Describing and Interpreting BEVI Scales

Although both "long" and "short" versions of the BEVI are in use, the short version seems preferred mainly due to time savings, as noted. Therefore, the following overview of BEVI scales is based upon the "short version," which overlaps substantially with the "long version" as indicated previously. Essentially, the BEVI consists of

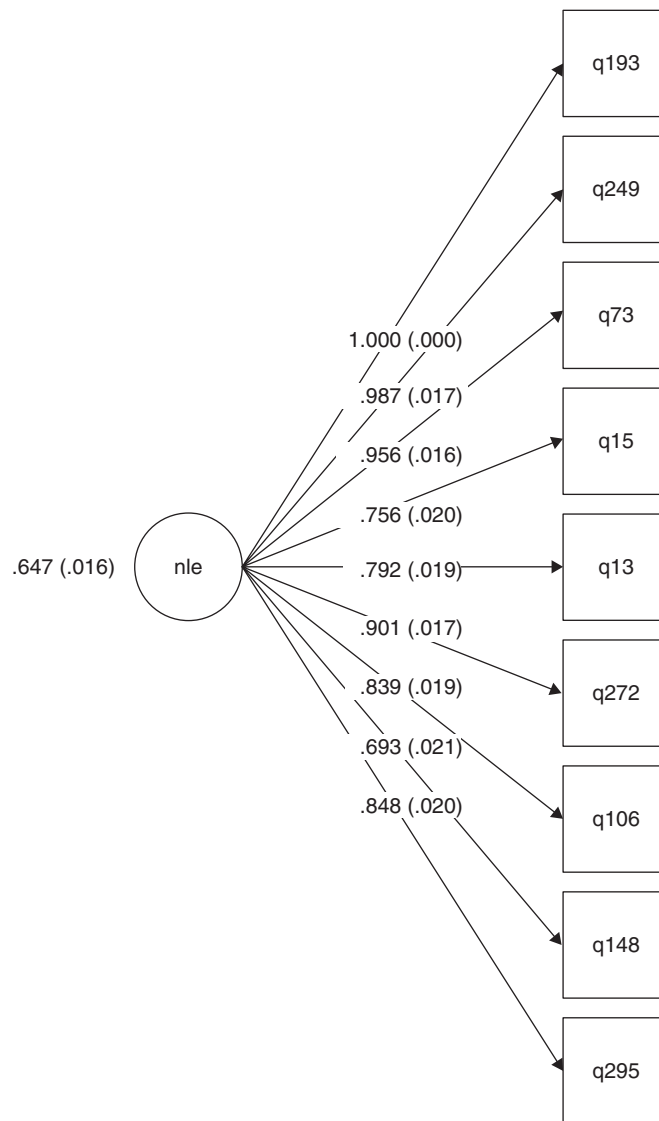


FIGURE 4.1. Factor structure for Negative Life Events.

2 validity and 17 process scales. Although there are many ways to present scale scores, they typically are presented as a series of colored bars along with a number within each bar (bars are presented here in shades of gray, not color). The number within each colored bar corresponds to the percentile score between 1 to 100 that an individual—or a group—has been assigned on each scale based upon his or her overall response to the items that statistically load on each BEVI scale (i.e., “loading” refers to which items have been shown statistically to cluster together on a specific “construct” or scale of the BEVI, and therefore comprise the items on that scale). The resulting scores are standardized based upon the means and standard deviations for

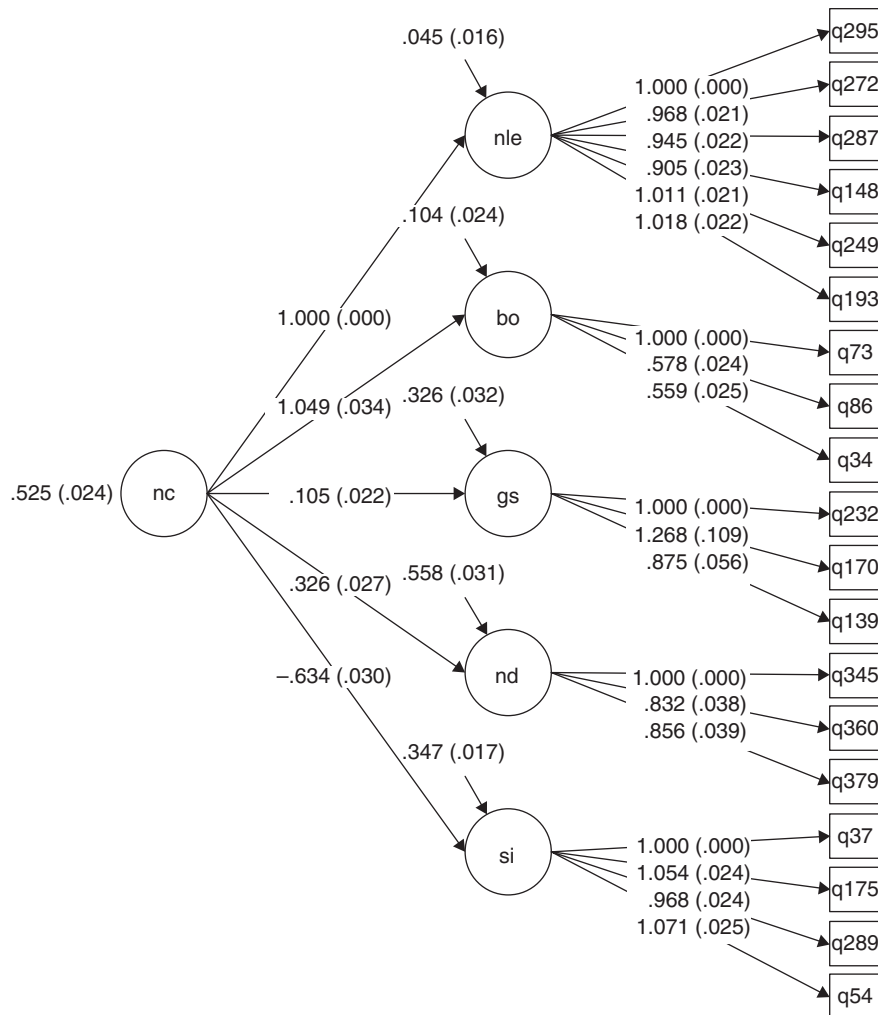


FIGURE 4.2. Factor structure for Needs Closure.

each scale (see Table 4.2). For group reports, the score is called “aggregate” because it represents the average score for all individuals in the group on a specific scale. BEVI results are presented under nine different domains. A description of each of the BEVI scales, under their respective domains, also is provided along with sample items for each scale (in parentheses).¹⁰ In reviewing the following information, remember that by design, items may load statistically on a given scale in either a negative or positive direction. Thus, if sample items seem to be the opposite of one another, that is both expected and appropriate in terms of the psychometrics of inventories such as the BEVI (i.e., positively and negatively loading items both may comprise a given scale).

¹⁰ The BEVI is a copyrighted instrument. BEVI items, item content, scales, or reports may not be modified, copied, disseminated, or published, in whole or part, without the written and express permission of Craig N. Shealy, PhD.

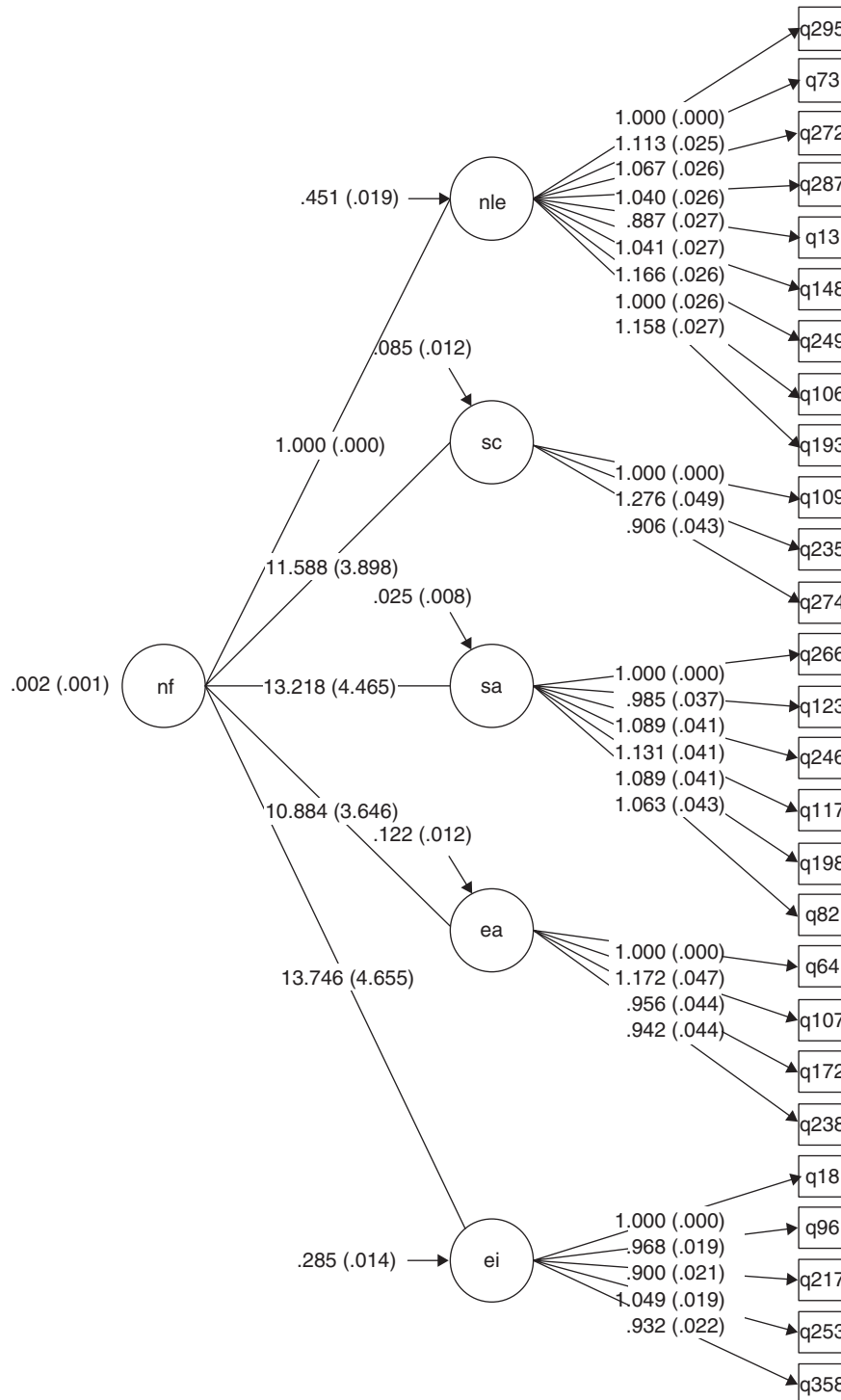


FIGURE 4.3. Factor structure for Needs Fulfillment.

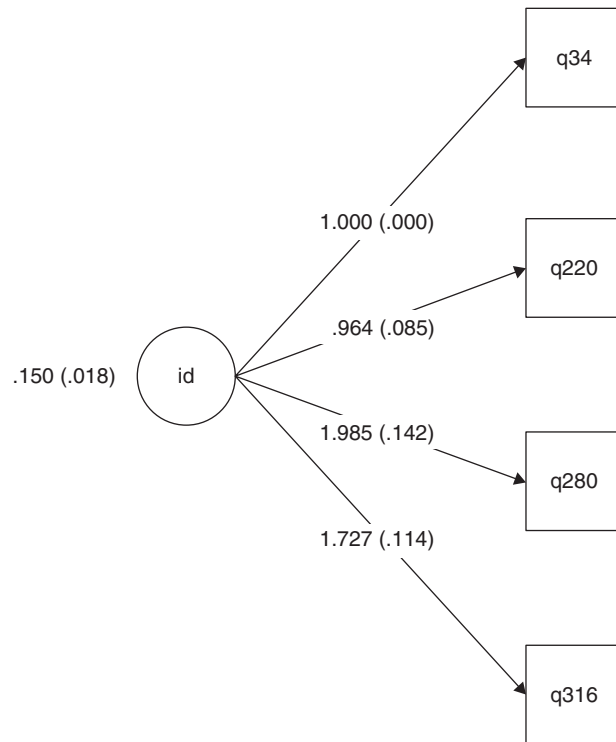


FIGURE 4.4. Factor structure for Identity Diffusion.

I. Validity Scales

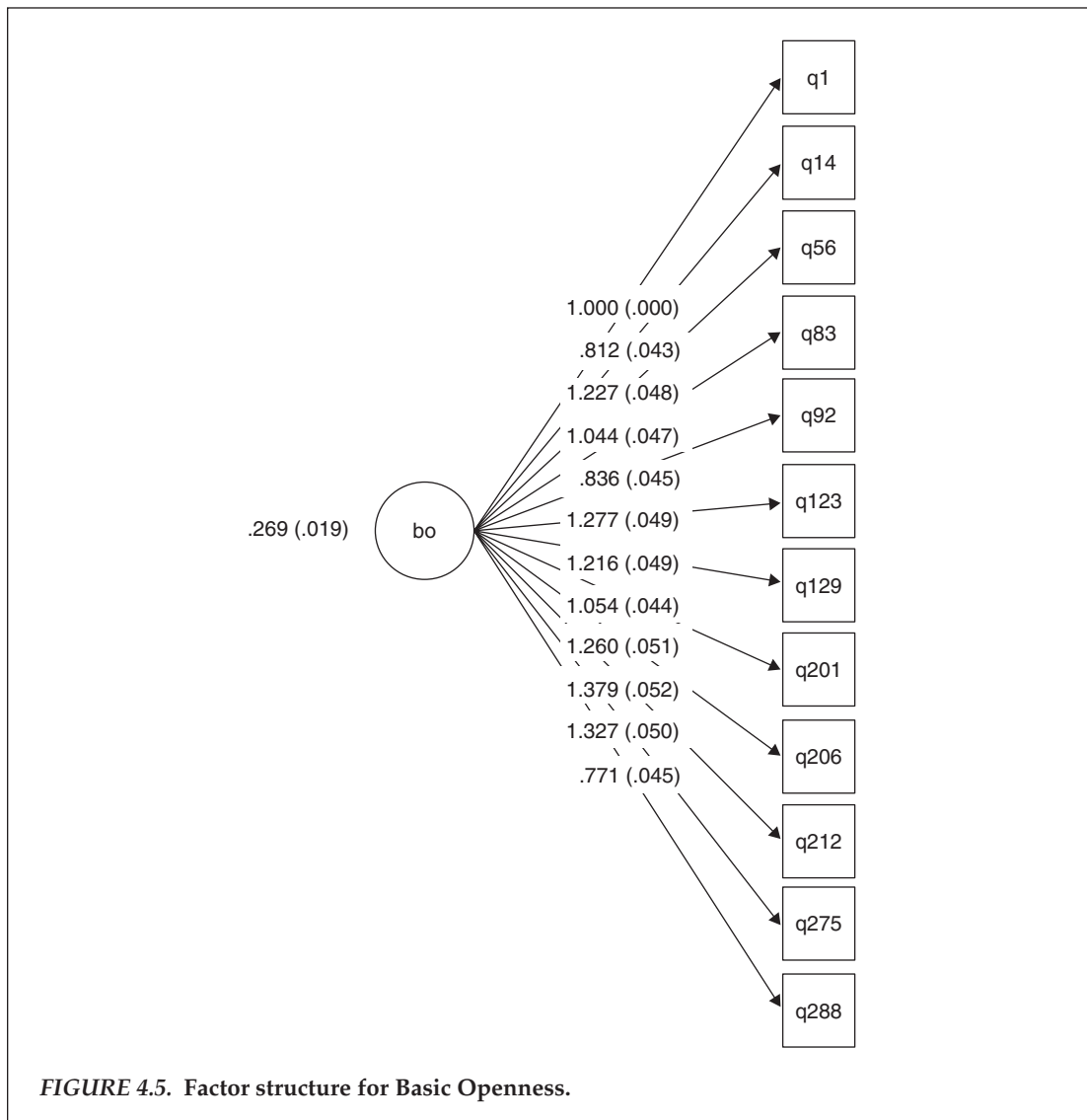
- *Consistency*: the degree to which responses are consistent for differently worded items that are assessing similar or identical content (e.g., *People change all the time*; *People don't really change*)
- *Congruency*: the degree to which response patterns correspond to that which would be predicted statistically (e.g., *I have real needs for warmth and affection*; *I take my own feelings very seriously*)

II. Formative Variables

- *Demographic/Background Items*: gender, educational level, ethnicity, political/religious orientation, income, and so on (e.g., *What is your gender?* *What is your ethnic background?*)
- *Scale 1. Negative Life Events*: bad childhood; parents were troubled; life conflict/struggles; many regrets (e.g., *I have had a lot of conflict with one or more members of my family*; *My family had a lot of problems with money*)

III. Fulfillment of Core Needs

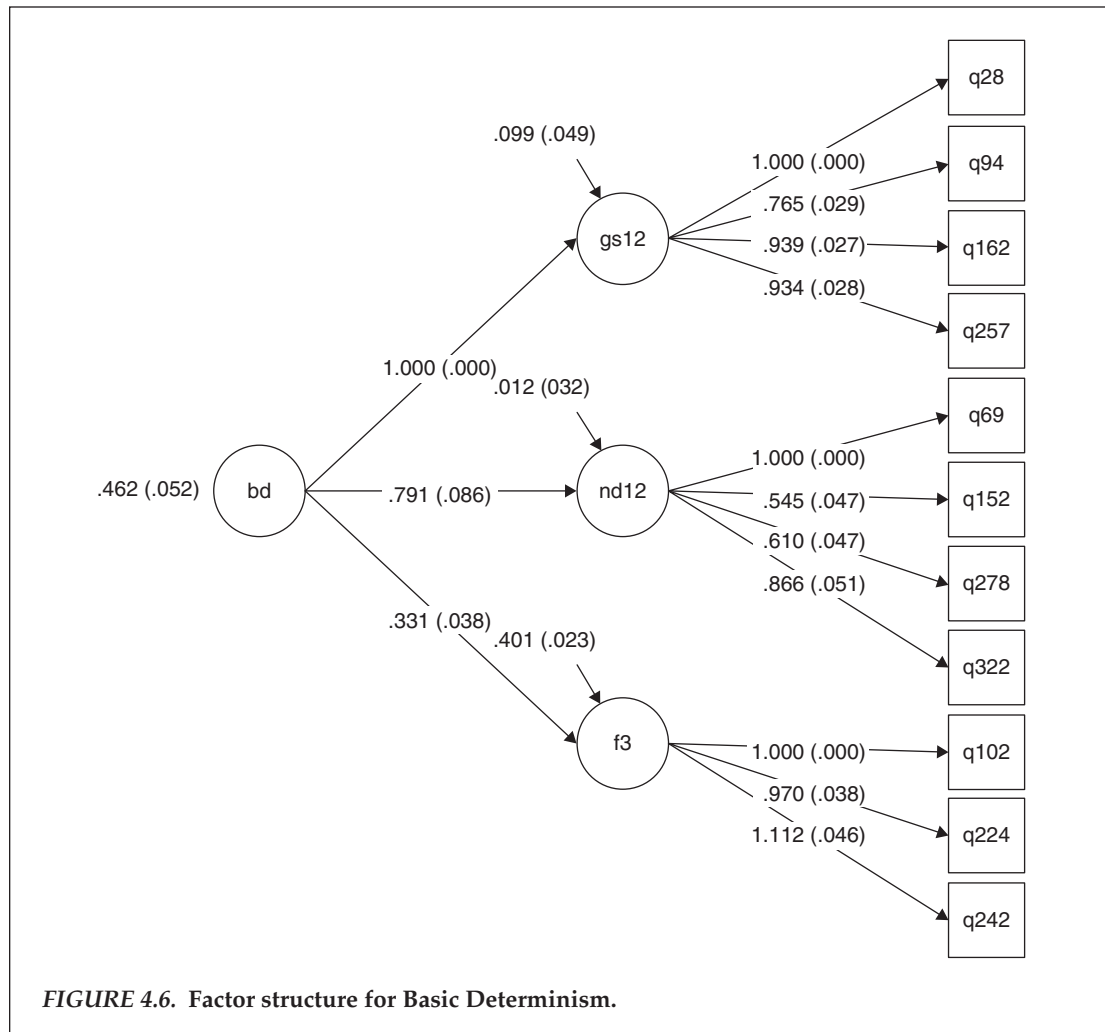
- *Scale 2. Needs Closure*: challenging life circumstances, odd explanations for why things are the way they are, ambivalent or distant relationship with core needs in self and/or others (e.g., *I had a wonderful childhood*; *Some numbers are more lucky than others*)



- *Scale 3. Needs Fulfillment*: open to experiences, needs, and feelings; deep care/sensitivity for self, others, and the larger world (e.g., *We should spend more money on early education programs for children; I like to think about who I am*)
- *Scale 4. Identity Diffusion*: indicates painful crisis of identity; fatalistic regarding negatives of marital/family life; feels “bad” about self and prospects (e.g., *I have gone through a painful identity crisis; Even though we expect them to be, men are not really built to be faithful in marriage*)

IV. Tolerance of Disequilibrium

- *Scale 5. Basic Openness*: open and honest about the experience of basic thoughts, feelings, and needs (e.g., *I don’t always feel good about who I am; I have felt lonely in my life*)



- *Scale 6. Self Certitude*: strong sense of will; impatient with excuses for difficulties; emphasizes positive thinking; disinclined toward deep analysis (e.g., *You can overcome almost any problem if you just try harder*; *If you play by the rules, you get along fine*)

V. Critical Thinking

- *Scale 7. Basic Determinism*: prefers simple explanations for differences/behavior; people do not change/strong will to survive; troubled life history (e.g., *AIDS may well be a sign of God's anger*; *It's only natural that the strong will survive*)
- *Scale 8. Socioemotional Convergence*: open, aware of self/other, larger world; thoughtful, pragmatic, determined; sees world in shades of gray, such as the need for self-reliance while caring for vulnerable others (e.g., *We should do more to help those who are less fortunate*; *Too many people don't meet their responsibilities*)

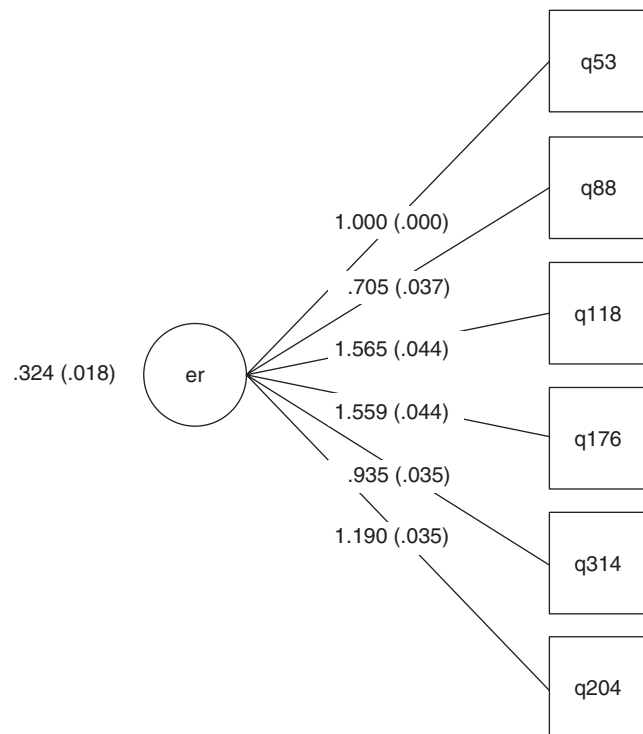


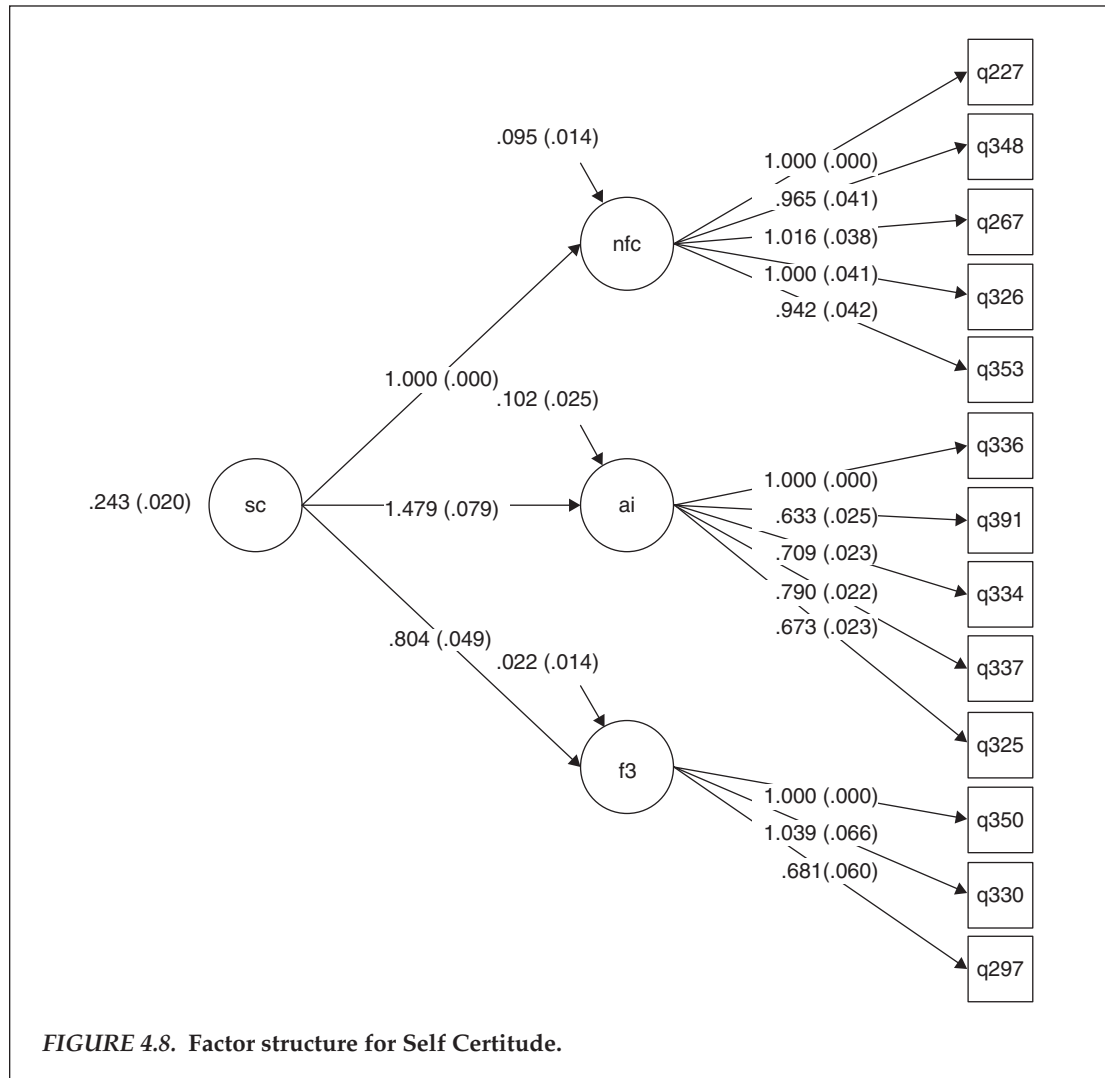
FIGURE 4.7. Factor structure for Ecological Resonance.

VI. Self Access

- *Scale 9. Physical Resonance:* receptive to corporeal needs/feelings; experientially inclined; appreciates the impact of human nature/evolution (e.g., *I am a free spirit; My body is very sensitive to what I feel*)
- *Scale 10. Emotional Attunement:* emotional, sensitive, social, needy, affiliative; values the expression of affect; close family connections (e.g., *I don't mind displays of emotion; Weakness can be a virtue*)
- *Scale 11. Self Awareness:* introspective; accepts complexity of self; cares for human experience/condition; tolerates difficult thoughts/feelings (e.g., *I am always trying to understand myself better; I have problems that I need to work on*)
- *Scale 12. Meaning Quest:* searching for meaning; seeks balance in life; resilient/persistent; highly feeling; concerned for less fortunate (e.g., *I think a lot about the meaning of life; I want to find a better sense of balance in my life*)

VII. Other Access

- *Scale 13. Religious Traditionalism:* highly religious; sees self/behavior/events as mediated by God/spiritual forces; one way to the "afterlife" (e.g., *Without religion there can be no peace; There is one way to heaven*)
- *Scale 14. Gender Traditionalism:* men and women are built to be a certain way; prefers traditional/simple views of gender and gender roles (e.g., *Women are more emotional than men; A man's role is to be strong*)



- *Scale 15. Sociocultural Openness*: progressive/open regarding a wide range of actions, policies, and practices in the areas of culture, economics, education, environment, gender/global relations, politics (e.g., *We should try to understand cultures that are different from our own; There is too big a gap between the rich and poor in our country*)

VIII. Global Access

- *Scale 16. Ecological Resonance*: deeply invested in environmental/sustainability issues; concerned about the fate of the earth/natural world (e.g., *I worry about our environment; We should protect the land no matter who owns it*)
- *Scale 17. Global Resonance*: invested in learning about/encountering different individuals, groups, languages, cultures; seeks global engagement (e.g., *It is important to be well informed about world events; I am comfortable around groups of people who are very different from me*)

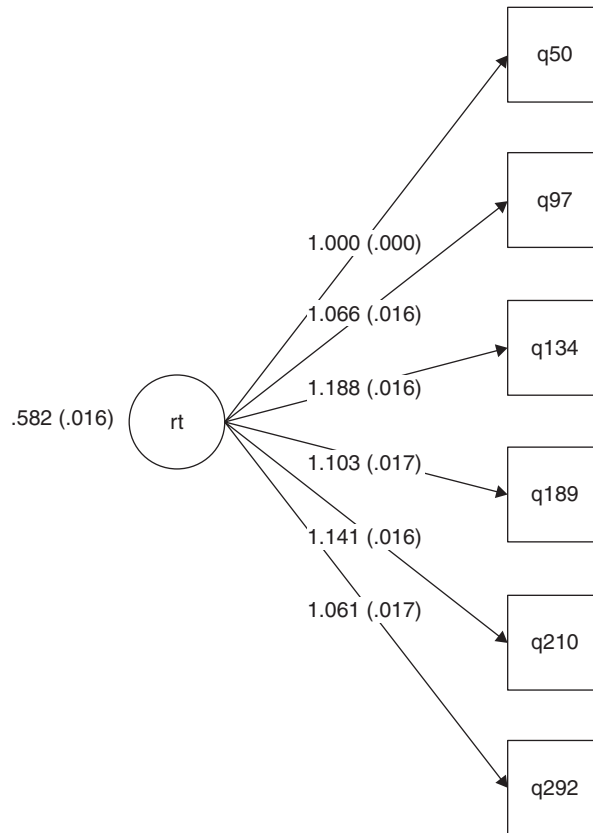


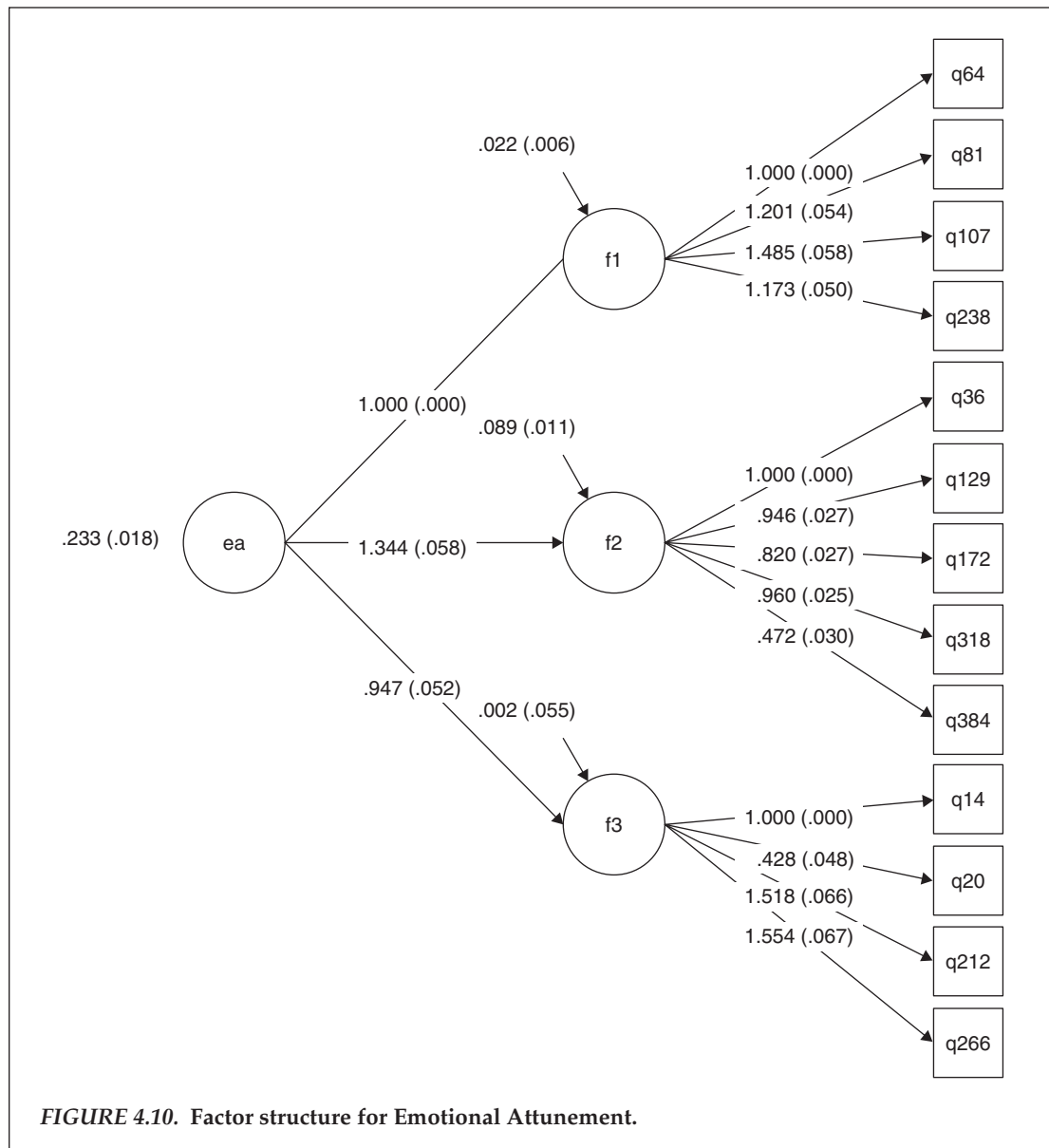
FIGURE 4.9. Factor structure for Religious Traditionalism.

IX. Experiential Reflection Items

The BEVI is a “mixed methods” measure in that both quantitative (i.e., Likert-scaled items) and qualitative (i.e., free response) questions are asked during administration and used for purposes of interpretation (e.g., Coates, Hanson, Samuel, Webster, & Cozen, 2016; Cozen, Hanson, Poston, Jones, & Tabit, 2016). The following three qualitative Experiential Reflection Items are included in the BEVI, and completed in written format at the conclusion of administration. *First, please describe which aspect of this experience has had the greatest impact upon you and why? Second, is there some aspect of your own “self” or “identity” (e.g., gender, ethnicity, sexual orientation, religious or political background, etc.) that has become especially clear or relevant to you or others as a result of this experience? Third, what are you learning or how are you different as a result of this experience?*

Understanding the BEVI’s Design

By design, the BEVI essentially is an objective measure that functions in a projective manner. Although respondents “project” their own meaning onto items that are meant to elicit a response, the BEVI officially is neutral in regard to the nature of the response that is elicited. To understand the implications of this core feature of the



BEVI, it may be helpful to examine how items and responses on the BEVI are organized, and why such a structure is relevant to issues of statistical analysis and interpretation. The BEVI consists of a series of background information questions followed by specific items covering a very wide range of issues, which are presented in the form of statements about beliefs, values, and life events. At the most basic level, the “power” of the BEVI is derived from the fact that items on the BEVI interact with each individual’s unique beliefs, values, life experiences, and overall worldview, to produce a particular response, which is coded on the following four-point scale: Strongly Agree, Agree, Disagree, and Strongly Disagree. Although very different people may have very different reactions to the very same items, it should be appreciated that the

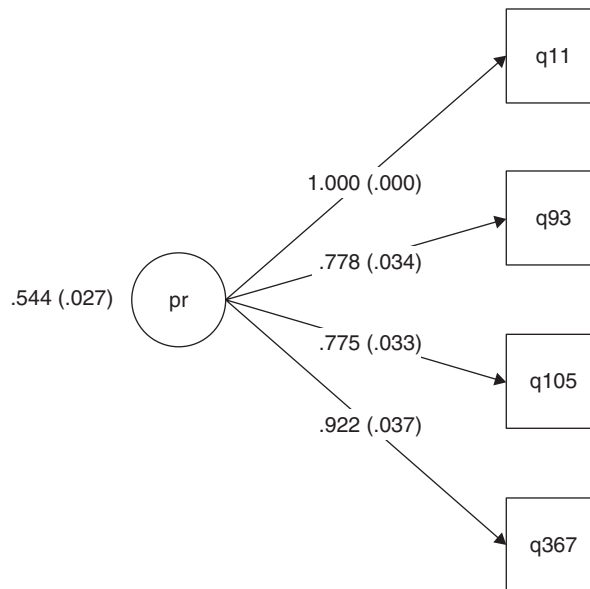


FIGURE 4.11. Factor structure for Physical Resonance.

BEVI takes no position on the “rightness” or “wrongness” of any item.¹¹ What it does do is offer a series of stimuli that different people will react to in different ways; depending upon the context, culture, and population at hand, reactions may range from very mild to very strong. For example, consider four highly predictive items on the BEVI from Scale 13, Religious Traditionalism, and Scale 15, Sociocultural Openness, respectively:

Sample Religious Traditionalism Items

God’s word is good enough for me.

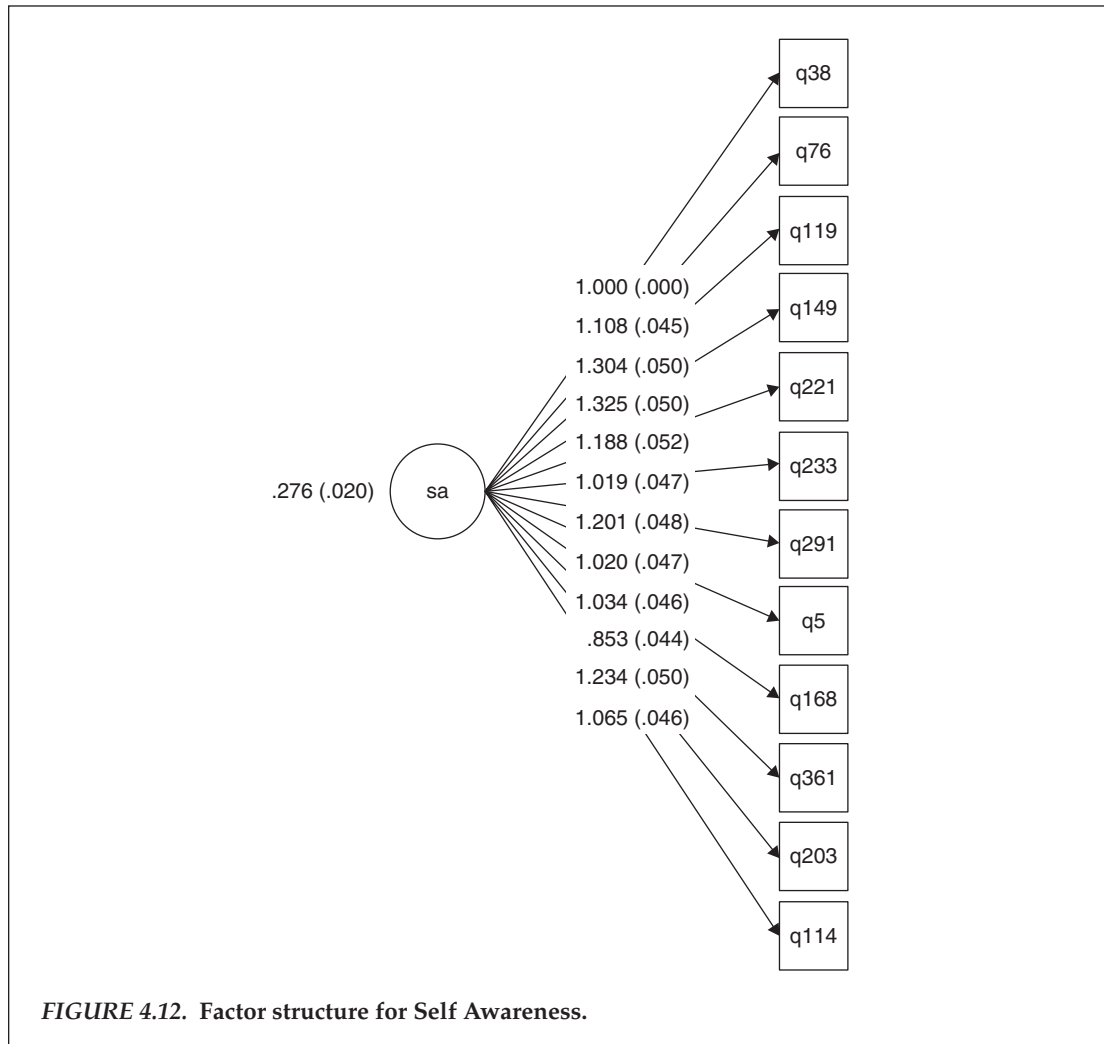
Sometimes I think that religion does more harm than good.

Sample Sociocultural Openness Items

Racism is no longer a big problem in our country.

We should do more to help minority groups in our country.

¹¹ Of course, all assessment measures—including the BEVI—are a product of “their time.” Even though painstaking efforts have been devoted to ensuring that the BEVI is “valid” for usage in different sociocultural settings and contexts (e.g., statistically, in terms of item review, and in actual usage with diverse individuals and groups), such processes are and must be ongoing. Along these lines, it is important to appreciate that from a statistical and psychometric perspective, one core aspect of validity essentially refers to whether it is possible to predict “from” and “to” a range of variables and processes on the basis of appraising one’s “beliefs and values” via the BEVI (e.g., do BEVI scales reliably predict specific background or demographic variables, such as gender, ethnicity, income, education, life events, and/or political/religious orientation; accounting for individual differences, do response patterns on the BEVI to various scales and indexes follow statistically expected patterns and trends). In this regard, as documented in various research and practice chapters of this book, the BEVI does seem to exhibit very good reliability and validity, across a range of settings, contexts, and populations. Nonetheless, the BEVI inevitably will be refined further on the basis of additional statistical analysis and real world application.



Such items illustrate a number of interrelated points, which all are key to understanding what the BEVI is and is not, and how and why it is structured and designed as it is.

First, at the most basic level, note that each of the preceding items essentially is a statement of “belief,” which may be defined in part as “an internalized and discrete version of reality that can influence and mediate the experience and expression of needs, feelings, thoughts, and behaviors” (Shealy, 2015, p. 35). As a relatively accessible point of entry into the basic structure of personality or self, beliefs such as those listed are powerful phenomena for a number of interrelated reasons, as the following points that are derivative of EI Theory illustrate:

- We believe and value as we do for reasons that are often unknown to us.
- We are inclined toward particular beliefs and values because of a complex interaction among affective, attributional, and developmental processes that typically occurred over a long time in a specific context.

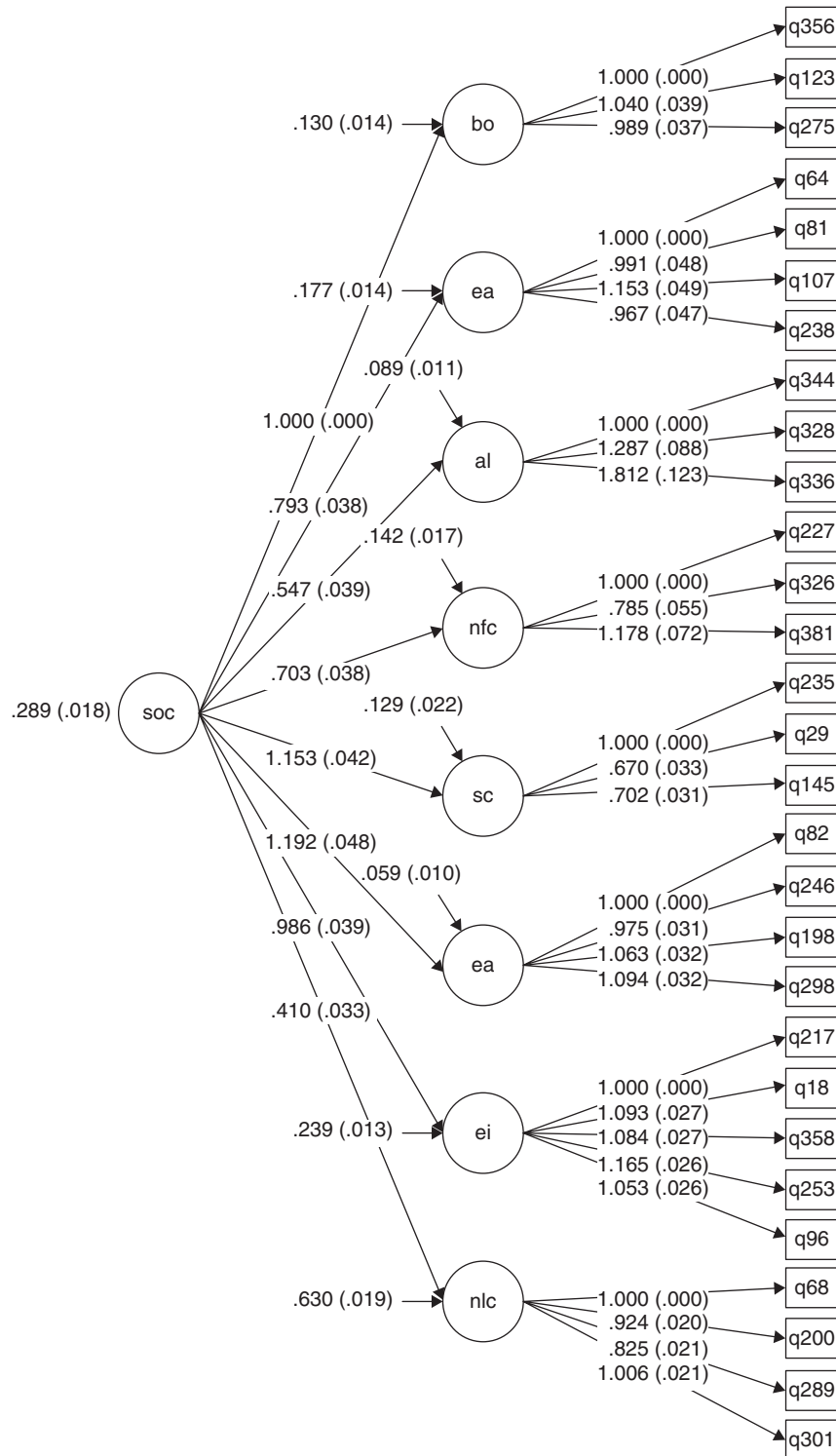
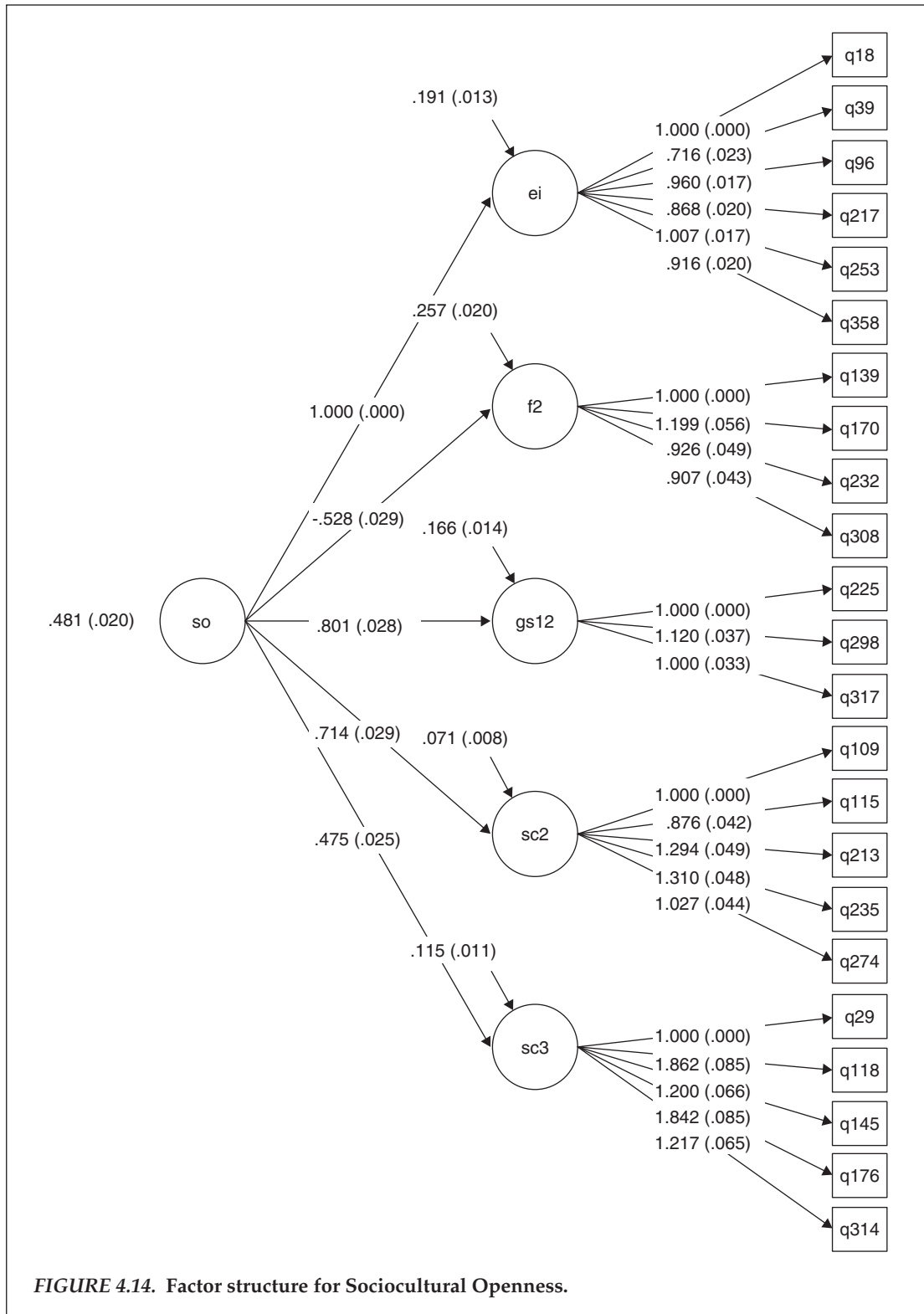


FIGURE 4.13. Factor structure for Socioemotional Convergence.



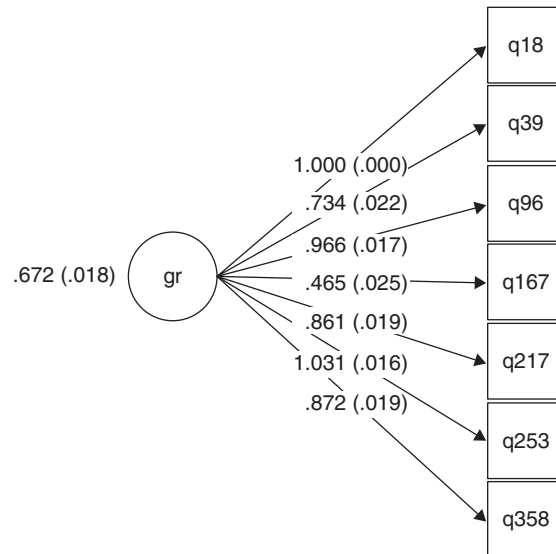


FIGURE 4.15. Factor structure for Global Resonance.

- We exist *in* our beliefs and values, and are *subject*—not object—to them; they innervate the deepest aspects of self and personality; they are—in no small part—who and what we say we are.
- Our beliefs and values may evolve vis-à-vis the experiences of our lives, but without substantial and sudden contradiction—or a deliberate and prolonged process of self-exploration—such evolution is likely to be quantitative not qualitative, and retain congruence with the basic cognitive structures and affective templates that represent constituent aspects of self and personality.
- Like the spoken language we learn, we tend to acquire the dominant beliefs and values of our context and culture; they become part of the “real” us, and we cannot call them into question without some parallel deconstruction of self.
- The fact that we all possess beliefs and values is not in itself sufficient to confer legitimacy upon them; that is to say, beliefs and values are not necessarily true, right, or better simply because they are held to be so (Shealy, 2005, pp. 101–102).

In other words, as discussed in Chapters 2 and 3, the beliefs we “hold to be self-evident” often suggest much more about us—what our history, culture, and context have been—than they do about some putative “reality” of “others” and “the world out there.” Thus, knowing what we believe reveals a great deal about who we are, particularly if such information is combined with sufficient information about relevant historical events and contextual factors (e.g., Anmuth et al., 2013; Atwood et al., 2014; Brearly et al., 2012; Hayes et al., 1999; Hill et al., 2013; Isley et al., 1999; Patel et al., 2007; Pysarchik et al., 2007; Shealy, 2004, 2005, 2015; Shealy et al., 2012; Tabit et al., 2011).

Because constellations of beliefs, values, and life events effectively mediate the experience that people have of self, others, and the world at large, the BEVI is able to identify and predict significant differences and similarities among individuals and

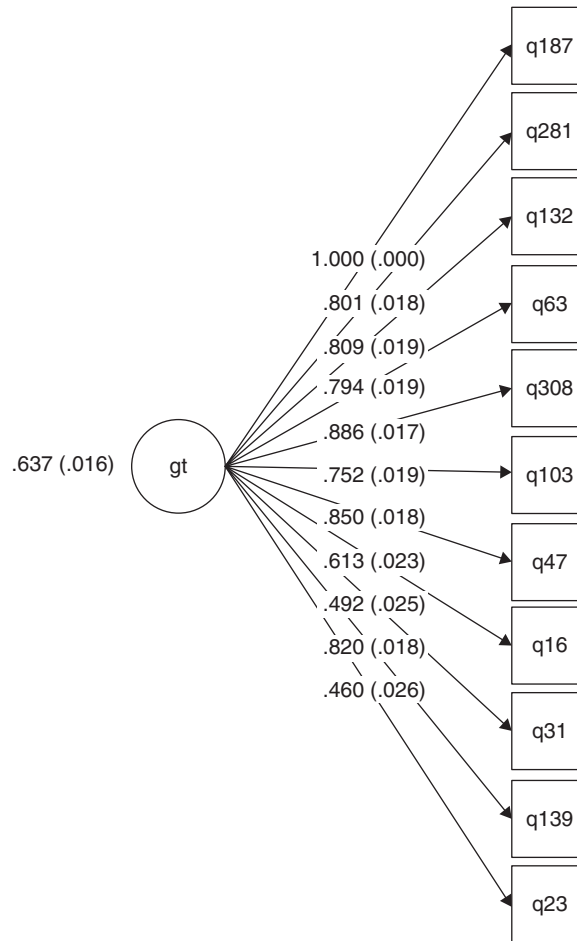
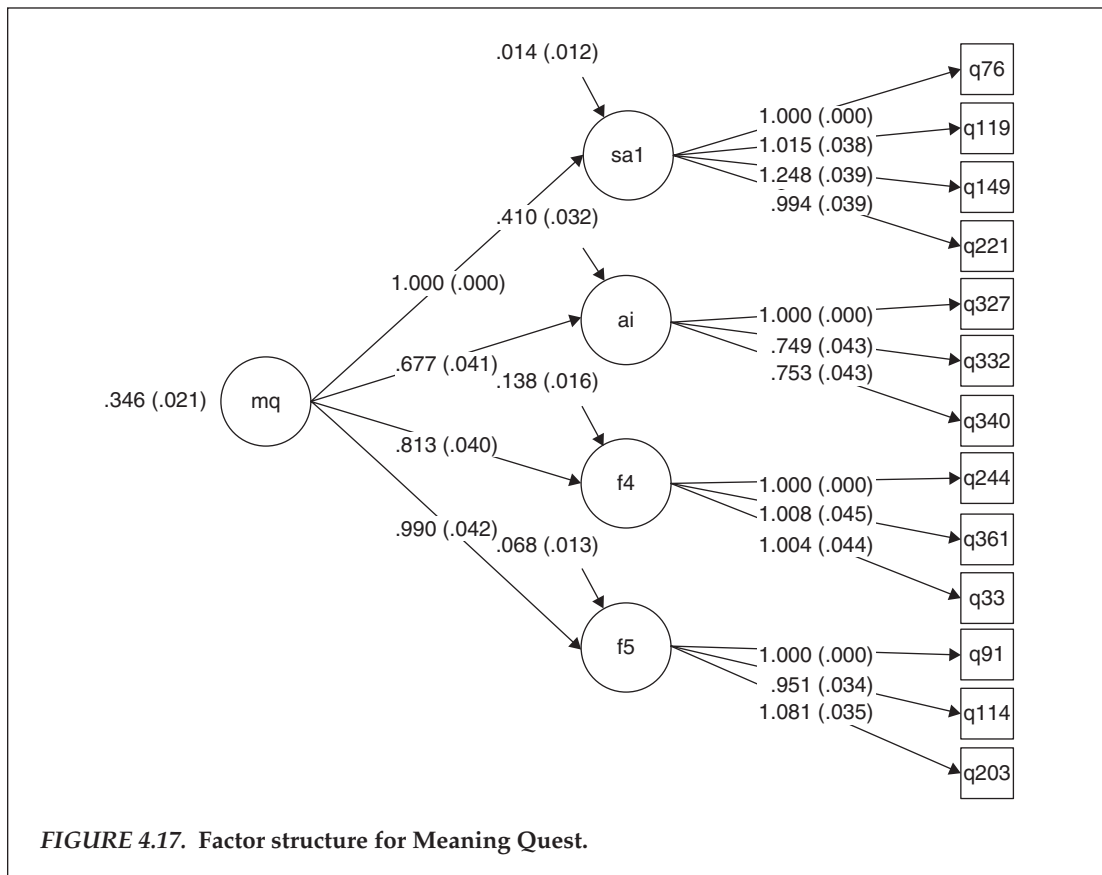


FIGURE 4.16. Factor structure for Gender Traditionalism.

groups; that is why the BEVI—in conjunction with its underlying EI theoretical framework—may provide information relevant to who learns what and why, and under what circumstances. That is also why the BEVI is not the Beliefs and Values Inventory, but the Beliefs, *Events*, and Values Inventory. Thousands of studies have demonstrated the impact that life events may have on individuals, and how such experiences interact with various affective, cognitive, contextual, and developmental processes; the entire field of developmental psychopathology is essentially concerned with such issues and outcomes (e.g., Cummings et al., 2000; Sroufe, 2009; Toth & Cicchetti, 2013).

Consider one BEVI study that examined the interaction between Scale 1, Negative Life Events (NLE), and religious orientation. Here, self-described Christians differed significantly from self-described atheists or agnostics on a number of items (Isley et al., 1999). For example, the Christian group was relatively likely to agree with the statement, *I have lost someone who was close to me* whereas the atheist/agnostic group was likely to disagree with this same statement. Although the potential interpretation



of such a finding should be considered in the context of a larger response pattern—while also avoiding correlation/causation confusion—the point is that many reported life events were associated with differences in religious orientation (i.e., overall, Christians strongly differed from atheists/agnostics on a number of reported life events¹²). What are the implications of findings like these? To take but one example, in trying to understand complex processes or phenomena such as “international or multicultural learning,” different groups may experience international or multicultural learning very differently for reasons that have nothing to do with the learning experience per se. For example, life events that participants have experienced may significantly influence who learns what and why, and under what circumstances, and how beliefs, values, and life experiences interact with such learning processes. In fact, evidence from the Forum BEVI Project suggests that “who someone is” prior to an “international learning experience” may significantly moderate or mediate (i.e., influence or shape) the nature or degree of international learning that an individual is able to experience or willing to demonstrate (e.g., Wandschneider et al., 2016). Such variables, which are

¹² Of course, as Brearly, van de Bos, and Tan (2016) document in their chapter on religious certitude, even though self-report categories such as “Christian” or “atheist” may, on the whole, be statistically predictive of a range of variables (e.g., gender, education), it is a mistake to conclude that all self-reported “Christians,” “atheists,” or any other group always responds in a similar manner on the BEVI. Such a conclusion is core to their chapter (i.e., avoid stereotyping and look more deeply into a range of interacting variables) as it is to multiple chapters in this book.

assessed by the BEVI, may be more important to the learning that actually occurs than the learning experience itself, a plausible interaction that cannot be evaluated if such variables are not assessed (e.g., Cummings et al., 2000).

Second, a basic criterion by which an instrument such as the BEVI is evaluated, is the degree to which it is “face valid,” that is, the degree to which its goal or intent can be ascertained simply by examining the instrument at face value. If an average respondent can tell what an instrument is trying to assess simply by looking at it, the susceptibility of that instrument to conscious or nonconscious manipulation or “malingering” (i.e., faking) may be unacceptably high; likewise, the “social desirability” of particular responses or need to present one’s self in a maximally favorable light is a well-documented phenomenon in the social sciences (e.g., Aronson, 2012). An instrument that is face valid may be prone to such psychological and social psychological processes because a respondent easily can “tell” what the instrument is trying to assess, and therefore can adjust his or her responses in an attempt to create the desired impression. The lack of attention to these issues in the design and execution of assessment instruments and assessment research may introduce a serious confound (i.e., an unintended and unrecognized source of error), which may adversely impact validity—the degree to which an instrument is measuring what it purports to measure (e.g., Campbell & Stanley, 2005; Geisinger, 2013; Mertens, 1998). Face valid measures also may neglect the “deeper” affective and attributional processes that interact to produce particular responses, by erroneously assuming that what people say they think or feel is actually what they do think or feel. Abundant evidence suggests that such assumptions are unwarranted at best, particularly when the implications of particular beliefs—were they to be freely and genuinely expressed—could have very real and largely negative consequences, socially and otherwise (e.g., Aronson, 2012; Bargh & Chartrand, 1999; Frijda, Manstead, & Bem, 2000; Shealy, 2005). In short, face validity typically is *not* a desirable characteristic of measures that are designed to access or tap into psychological phenomena and emotional dynamics that are readily susceptible to cognitive screening and impression management processes.

Formal evaluation of the BEVI suggests it is not face valid (Shealy, 2004, 2015). Although the basic themes of the BEVI may be identified, the underlying structure and purpose of the instrument cannot. When the average participant is asked, “What is the BEVI getting at?” the typical response is, “Well, there were a lot of questions about politics, or religion, or family background.” But, the interaction among such variables—and how they fit into a larger explanatory and predictive system—typically is not discernible. Interestingly, the lack of face validity to the BEVI, although a highly desirable feature, could also be a source of consternation on occasion, since the reason particular questions are being asked is by no means clear. If there are those who are puzzled by the content of various items, there is no way around this conundrum, except to include a discussion of what the BEVI is actually tapping in the context of a competently administered debriefing or follow-up session that occurs after the BEVI is administered and/or a research or assessment project is completed (e.g., Aita & Richer, 2005; Brody, Gluck, and Aragon, 1997, 2000; McShane, Davey, Rouse, Usher, & Sullivan, 2014; Mertens, 1998).

Third, items on the BEVI are worded in both the affirmative and negative, and are designed to tap “affective” and “nonconscious” processes. Any administrator of the BEVI should understand that the direction of the wording of BEVI items is irrelevant from the standpoint of item content (i.e., what the item assesses and the factor or scale on which the item is loaded), for two basic reasons: (a) respondents may indicate their agreement or disagreement to each item, thus indicating their

particular “belief” in the “correctness” or “truth” of a given item; (b) for purposes of factor loading and various analyses (e.g., whether particular items, clusters of items, scales, or grouping of scales are predictive of other variables, measures, or outcomes), a correlation of $-.30$ is the same as a correlation of $+.30$ (i.e., it does not matter whether an item is worded in the affirmative or negative because disagreement conveys as much information as agreement). Although multiple factors are considered in the development, review, and evaluation of items (e.g., Downing & Haladyna, 1997; Weiss, 2013), from a psychometric and test design perspective, one reason to include both affirmative and negative items is to lower the face validity of the instrument (i.e., to make it more difficult to determine, *accurately*, what the BEVI is, and is not, designed to assess simply by reviewing the items).

Two related points also deserve emphasis. As noted, the BEVI is answered on a four-point scale, ranging from “Strongly Agree” to “Strongly Disagree”; there is no option of “undecided” or “neutral.” This “forced choice” method is deliberate, and may even be essential to the BEVI, as many people likely would avoid committing to various beliefs if given the opportunity to do so. By “choosing” responses on one side or another, a respondent may access basic affective and nonconscious (i.e., “gut level”) processes, which theoretically tap more than a simple cognitive or rational appraisal of whether an item is “true” or “false.”

Could someone simply “fake” their responses in an attempt to mask their “true” thoughts and feelings? As with any inventory, the short answer is, “yes.” However, from an analysis and psychometric perspective, the most important question is not the ability to “fake” responses, but rather to “fake” responses in a way that is not detectable. The BEVI contains two separate validity measures—Consistency and Congruency—along with a series of other internal validity checks (e.g., amount of time for completion), which are designed to appraise the degree to which a respondent is answering truthfully, consistently, and in a manner that would statistically be predicted. From the standpoint of BEVI reports (individual, group, organizational as described next), BEVI administrations that do not meet these validity thresholds ultimately are flagged from the standpoint of interpretation (i.e., are considered invalid). In short, multiple “checks” have been incorporated into the BEVI in order to identify individuals who may be attempting to “fake out” the BEVI; moreover, the fact that the BEVI shows good evidence of reliability, stability, and validity, suggests that the vast majority of respondents are answering BEVI items in a consistent manner.

Fourth, from a test design and statistical perspective, note that many BEVI items are worded in a way that is designed to elicit an opposite response even as they are “tapping” the same underlying construct. For example, an average respondent who disagrees with the item, *Racism is no longer a big problem in our country* is statistically likely to agree that, *We should do more to help minority groups in our culture*; likewise, an average respondent who agrees with the item, *God’s word is good enough for me*, is statistically likely to disagree with the item, *Sometimes I think religion does more harm than good*. In each pair, these sample items strongly “load” (i.e., are correlated) on the same factor (i.e., scale), even though the correlation between them is negative, as discussed in Chapter 2 regarding the “Continuum of Belief.” Of course, across thousands of administrations, this pattern will not (and should not) hold for everyone, but from a statistical standpoint, the degree to which such a pattern does hold is at the core of the reliability of any measure. In any case, what an item appears to assess—including “the way it is worded”—is not nearly as germane as whether or not it actually is predictive (presuming of course that basic quality indexes have been addressed in the development and review of items as noted previously). In any case,

it is very important to understand this fundamental point, particularly with an instrument like the BEVI, which includes a number of items that deliberately are ambiguous.

Ultimately, we may never know why a particular item “clusters” with other items and/or tends to predict specific processes or outcomes. For example, if we included a rather absurd item such as, “Old shoes just feel better” on the BEVI, it is likely that strong agreement or strong disagreement with this “belief” would in fact be associated with other items on the BEVI, and would even predict specific outcomes or phenomena. Why? Although the answer to that question has occupied assessment theorists and psychometricians for decades (e.g., Nichols, 2004; Weiss, 2013), a common scholarly response has been, “It doesn’t matter *why* it does, just *that* it does,” a perspective that has been referred to as “dustbowl empiricism” (e.g., Freedheim, 2003). At another level, it makes intuitive sense that an item such as “Old shoes just feel better” might covary with items that also load on a scale such as “Emotional Attunement” on the BEVI, which assesses “receptivity and attitude toward a range of feelings, emotional experiences/behaviors, and affect in general, for oneself and others” (Shealy, 2005, p. 100). In the final analysis, whether or not this item or any other item is predictive in the real world can only be answered via statistical analysis. Thus, it really does not matter whether or not an item “seems” to make sense; ultimately, presuming appropriate processes of item and instrument development and review have been followed (e.g., Downing & Haladyna, 1997; Geisinger, 2013; Robinson et al., 1991, 1999; Weiss, 2013), the most relevant question is as follows: Is the item strongly and reliably associated with other items that demonstrably measure the same construct? If the answer is yes, a psychometrician may well wish to retain “Old shoes just feel better” even though the face validity of such an item is nil.

Fifth and finally, depending upon personal background, life history, and context (among other factors), reactions to BEVI items may occur at differing degrees (e.g., from mild to strong) and at multiple levels (e.g., from emotional to intellectual). Consider two studies of the BEVI that compared responses of different groups. In one study, the responses of Caucasian students to items on the BEVI were compared to those of ethnic minority students (defined for this analysis as African American, American Indian, Asian, or Hispanic) (Shealy et al., 1999); in a separate study, the responses of self-identified “Christian” students were compared with those of self-identified “atheists” and “agnostics” (Hayes et al., 1999). In both studies, very sharp differences emerged between these groups on the BEVI.

Now imagine that a random sample of individuals from each of these groups were put together in the same room and asked to “debate” questions such as, *We should do more to help minority groups in our culture* or *Without religion there can be no peace*. What might happen if the debating groups comprised only those individuals who expressed “strong agreement” or “strong disagreement” with the strongly differentiating items (excluding those who merely expressed “agreement” or “disagreement”)? Further imagine that the BEVI as a whole were used to identify groups that were maximally different from one another, and we put these extremely divergent groups together to debate various issues? The ensuing “discussion” could well become heated at the very least.

The point is, at this level, all of the items on the BEVI are “biased” because there will be—by design—wide variability in how items are perceived or experienced by different groups and individuals. Different people and groups will have different perceptions and experiences of the BEVI, ranging from strong and mild disagreement, to mild and strong agreement. What these differences do NOT demonstrate is

that one group is “right” and the other group is “wrong,” or that the BEVI is “biased toward” or “biased against” one group or the other. The BEVI provides a set of stimuli (i.e., items) that have been carefully identified, developed, reviewed, and subjected to multiple statistical analyses to which different individuals and groups may react in different ways. Individual responses or profiles may well be deemed “right” or “wrong,” but such value judgments are made by individuals and groups within a particular sociocultural context, not the BEVI.¹³ Along similar lines, although the BEVI is used in a wide array of settings and contexts (see “BEVI Impetus and Overview”), it is officially “neutral” regarding such usage. At the very least, all usage of the BEVI (e.g., individual, group, course, program, institutional, organizational) should be conducted in a manner that is consistent with “best practices,” a topic that is integral to the BEVI training and certification process.

Although a full explication of these and related issues exceeds the scope of this discussion (e.g., see Campbell & Stanley, 2005; Downing & Haladyna, 1997; Geisinger, 2013; Hong & Roznowski, 2001; Mertens, 1998; Robinson et al., 1991, 1999; Weiss, 2013), one definition of “test bias” is whether or not an assessment measure adversely impacts an identifiable group in a particular context (e.g., assessment of aptitude, employment screening) or is responded to differentially by various populations in a way that skews results. With an instrument such as the BEVI, respondents inevitably will, and by design, react to such items by agreeing or disagreeing, sometimes strongly. But the fact that someone agrees or disagrees with an item, even if such agreement or disagreement applies to a vast portion of the BEVI, or even all of it, says nothing in itself about the “bias” of the BEVI. To one individual or group, the BEVI may seem biased in one direction whereas to another person or group, the BEVI may seem biased in the other direction. That is the point of this instrument. An emotional reaction to any instrument—should it occur—says nothing in itself about the “rightness,” “wrongness,” or even “bias” of actual items on that instrument. Rather, “a reaction” to one or more items on a particular measure—and the similarities and differences among individuals and groups in the nature and strength of their reactions—is precisely the phenomenon that the BEVI is designed to assess.

In the final analysis, when using the BEVI, it must never be forgotten that many of the items on the BEVI were developed on the basis of actual statements from real people in a diverse array of contexts and settings. The ecological (i.e., real world) validity of BEVI items accords the BEVI its potential to evoke strong reactions for some individuals in particular contexts, in part because various items¹⁴ may “tap” or interact with the beliefs, values, and real life experiences of a respondent; that is what is meant by the preceding observation that the BEVI is an objective measure that functions in a projective manner. Over the past two decades, various iterations of the BEVI have been administered to thousands of individuals without incident; the typical reaction to the BEVI ranges from humorous, to puzzlement, to thoughtfulness, to indifference. However, these facts should never be taken for granted or assumed for everyone, which is a main reason why all phases of BEVI administration must be conducted in an appropriate manner, the voluntary nature of the BEVI emphasized, and informed consent given (e.g., Aita & Richer, 2005; Brody, Gluck, & Aragon, 1997, 2000; Geisinger, 2013; McShane et al., 2014).

¹³ Of course, the BEVI has been, and will continue to be, evaluated vis-à-vis reliability and validity in different sociocultural contexts. See footnote 11 from this chapter for additional perspective in this regard.

¹⁴ For more information about the nature and origins of BEVI items, please see “BEVI Impetus and Overview.”

Usage of the BEVI's Report System

As illustrated in later chapters of this book, the BEVI has been used for a wide range of purposes. Research-focused chapters explain how the EI model and BEVI method increase our conceptual sophistication and methodological capacity across an array of areas: culture, development, environment, gender, politics, and religion. Practice-oriented chapters demonstrate how the BEVI is used in the real world across a range of applied domains: assessment, education, forensics, leadership, and psychotherapy. These implications and applications of the BEVI are illuminated by a variety of statistical analyses (e.g., analysis of variance, regression, structural equation modeling) as well as the BEVI report system. From an applied standpoint, the underlying software for the BEVI produces three types of reports—individual, group, and organizational—which may be modified depending upon specific needs and goals.

Individual reports have multiple applications and are designed to facilitate thoughtful and substantive reflection on self, others, and the world at large. Through the underlying software that drives the report system, individual reports consist of a seven- to nine-page narrative, which includes both common text that everyone receives (e.g., explaining the nature and implications of beliefs and values) as well as individually tailored content based upon responses to the background information section of the BEVI along with scores on specific BEVI scales. More specifically, based upon each individual's responses, a report is generated under the following headings, which correspond to the "BEVI structure," which is as follows:

1. *Introduction*
Provides an overview of the BEVI.
2. *The Foundation: "Formative Variables" and "Core Needs"*
Provides an indication of what the respondent reports about his or her own life history relative to others.
3. *Tolerance of Disequilibrium*
Describes whether the respondent sees him or herself as "very clear" or "not sure" about who he or she and others "are" under the auspices of how "confident" or "questioning" the respondent appears to be.
4. *Making Sense of Why We Do What We Do*
Indicates attributional tendencies in general (e.g., how and why people do what they do and why events happen as they do).
5. *Access to Yourself and Your Thoughts, Feelings, and Needs*
Describes how the individual deals with his or her own emotions as well as his or her interest in and predilection toward introspection and reflection upon "the self."
6. *Access to the Thoughts and Feelings of Others*
Describes how the person tends to regard and experience issues that are of consequence at a sociocultural level (e.g., beliefs about politics, religion, gender, or the way society "should be structured").
7. *Access to the Larger World*
Indicates one's perspectives on "big picture" issues of the environment (e.g., the degree to which one is or is not concerned about ecological issues) and global engagement (e.g., the degree to which we should or should not be concerned about, or invested in, what is happening outside of our own country, culture, and context).
8. *Conclusion*
Provides context for the report and offers closing thoughts to consider.

As noted, reports are individualized based upon one's unique pattern of scores. How does such a process work? Essentially, the underlying software uploads bolded text that corresponds with BEVI scale scores, and integrates that text into the overarching narrative that each individual receives (i.e., at least three bolded narratives have been developed for each scale from the individual report, corresponding with whether the scale score falls in the bottom, middle, or upper third of the profile). In this way, respondents receive an in-depth but accessible "primer" on the nature and role of "beliefs and values" under the headings noted previously, but through a framework that corresponds with their unique BEVI profile (i.e., the bolded text relates to their unique scores). The following sample individual report excerpt from "Access to Yourself and Your Thoughts, Feelings, and Needs" illustrates the interplay between an individual's unique scores (reflected in the bolded text) and the general text from all individual reports.

Access to Yourself and Your Thoughts, Feelings, and Needs

You probably have noticed that some people tend to be more emotional and sensitive while also valuing the expression of needs or feelings more deeply than others. Such a description seems less descriptive of how you approach your own feelings and those of others, in that you may tend to be puzzled and even irritated at times by what you experience as excessive displays of emotion or vulnerability in other people. If that is the case for you, it may be helpful to reflect again on the fact that our backgrounds and life experiences may make us much more likely—or much less likely—to be able and willing to "access" deep needs and feelings. Only you can be the judge of whether your background and experiences were such that you were discouraged in general from feeling too deeply or needing too much from others. If that was your experience, it's important to think about the possible impact of such processes for you in your life, in your relationships with others, and in how you experience people, situations, and relationships, which may be difficult to handle, at least at first, particularly when they are new. Think for a moment about how central emotions are to human existence. The ability to feel what you feel, while accurately interpreting and understanding the feelings of others—what some have referred to as "emotional intelligence"—is key to navigating every aspect of life, from your personal relationships to the world of work. Without emotions, it would be very difficult to understand what we like and who others are, and who we want to be.

So, in this excerpt from a BEVI individual report, the bolded text would correspond with an individual's score that fell in the lower third on Emotional Attunement of the BEVI. A great deal of attention by SME panels was devoted to such language in order to promote the developmental/growth-oriented nature of these reports (i.e., the overarching goal is not to point out "pathology," per se, but rather to offer opportunities for reflection on how and why individuals experience self, others, and the larger world as they do). At the same time, it should be noted that in some contexts (e.g., clinical, forensic, leadership) the individual report system does include a mechanism for reporting out individual scores via a profile along with "Critical Items" (e.g., those that are marked as "Strongly Agree" or "Strongly Disagree") as well as full scale and other domain scale scores. Usage of this feature of the individual report system requires the administrator to be authorized (e.g., via training) to interpret such scores and indexes in an appropriate manner. In short, the default setting for individual reports is an individualized narrative, although much greater scale/index specificity may also be obtained when appropriate.

Group reports are designed for cohorts of 10 or more, and may be used with appropriate oversight by qualified administrators in a wide range of group-based contexts and forums. These reports aggregate the data from a group of participants in order to produce the following components: (a) **descriptive information** about the group (e.g., gender, ethnicity); (b) **profiles** which include, in bar graph form, both the average scores for each of the 17 BEVI scales along with distribution data to show the variation among the group across the scales; (c) multiple **index and table scores**, which illustrate a wide range of phenomena regarding how the group sees self, others, and the larger world as well as the similarities and differences within the group; (d) **qualitative data**, from across the three “experiential reflective” questions of the BEVI, so that the group report administrator can get a sense of how participants are reacting—in their own words—to a particular experience; and (e) **an aggregate report**, which averages the individual scores to produce a single report of the group as a whole.

Finally, *organizational reports* are designed for administrators or other leaders to use in multiple applications including but not limited to (a) **assessment purposes** (e.g., to assess overall learning and belief/value change processes within their institution or organization); (b) **comparing and contrasting cohorts** over time; (c) **evaluating outcomes** across specific programs or experiences; (d) **enhancing and improving learning, growth, and development experiences** (e.g., interventions, programs, courses); and (e) **meeting assessment needs and requirements** (e.g., accreditation; program review; quality assurance). In addition to many of the features for group level reports (i.e., aggregated background variables; table and index scores; qualitative responses), organizational reports also include the option of acquiring customized analyses. For example, administrators and/or leaders within an institution or organization may wish to review the interaction between particular demographic variables and scale scores, or focus in on more detailed analyses of learning, growth, or development experiences or programs, in order to examine processes or outcomes that are of particular relevance within a specific context (e.g., to see who learns what and why and under what circumstances). It is also possible to compare BEVI results with other sources of data and/or measures that are of interest to an institution or organization. By specifying which analyses are wanted, these customized reports may be tailored to meet the different assessment goals and needs at an institution or organizational level.

It should be noted that one difference between an individual report narrative and a group/organizational report narrative is that the group/organizational report narrative takes the average score of all members of the group and uses that score to determine which bolded text is uploaded and integrated into the report (i.e., the group report uses the average score of the group to determine which bolded text is to be uploaded into the report for the group as a whole). Such group/organizational narrative reports help the group—and individuals who are in various leadership roles (e.g., course instructors, program directors, managers, group facilitators, administrators)—get “a feel” for how the group as a whole is experiencing self, others, and the larger world.

Additional questions that commonly appear to be asked and answered via the report system include the following: (a) How would you describe the group, organization, or institution overall in terms of the most striking findings? (b) How is the group most different and most similar to itself? (c) Which findings are most surprising, and how can you make sense of such results on the basis of data that are provided (e.g., from Background–Domain information)? (d) Which findings were expected, and what do they suggest about your group, organization, or institution? (e) Which findings would be most relevant or interesting to a particular group or your overall organization/institution, and why? (f) How could findings inform or

shape group-based discussions and processes (e.g., in class, during program orientation/debriefing processes, as part of training)? (g) What do findings suggest in terms of a particular course, program, or learning experience (e.g., where might areas of consensus or conflict occur over time; how might patterns interact with a learning, growth, or development experience in terms of overarching goals)? (h) What might findings suggest about the effectiveness of a particular learning, growth, or development experience? (i) How might findings be used to facilitate the development of new or improved learning, growth, or development experiences? (j) How might findings be used to track changes over time? Again, there are many other questions to be asked of such report results. Overall, we have learned that it is very important for users to take the time to review and reflect upon reports in order to ascertain which tables, indexes, or specific findings are most relevant for their specific goals and purposes.

Juxtaposing Individual and Group Reports

As later chapters in this book illustrate, a common usage of the report system is to combine individual and group reports. Specifically, individuals are offered the opportunity to receive their own individual report, which they, and only they, read (although that provision may vary when appropriate across different settings). Then, the group as a whole reviews a group report—typically facilitated by the leader of the experience (e.g., course instructor, program director, workshop coordinator, etc.)—that had been developed on the basis of the aggregate scores from these individuals (e.g., all of the individual members from a group of which they are a part), typically via projection onto a screen. In this way, individuals are able to reflect upon (in private) their own BEVI results in the form of a narrative by juxtaposing it with the indexes and other scale information from the BEVI group report (in public). This dialectic process between private and public reflection seems to be integral to the sort of awareness, insight, and discussion (e.g., regarding self, others, and the larger world) that participants frequently report from this process (e.g., “It helped to think about why I am who I am”; “It helps me appreciate why others believe what they do”; “I now understand better why we have the dynamics we do in our group”).

At another level, group reports help interventionists, program directors, course instructors, workshop facilitators, and so forth understand better the differences and similarities of life histories or worldviews by the members of their group. For example, we often encounter bimodal distributions on various scales (e.g., Gender Traditionalism; Religious Traditionalism), which when combined with the breakdown of scale scores by profile, permits the interventionist, leader, or administrator to understand better the makeup of a group even before the group experience begins. From an applied standpoint, such results may be used productively by showing group-based results and asking for volunteers to discuss “why they believe what they believe,” a process which leads very often to rich dialogue and reflection by participants.

Finally, as noted, group and organizational reports are helpful in understanding “big picture” processes that characterize a larger system (e.g., the worldviews of entering students; prominent expectations of self/other in an organizational context). Such information may be very helpful not only in understanding the basic profile of an institution’s or organization’s members, but also where resources might productively be directed for a wide range of purposes (e.g., outreach and

engagement to specific subgroups; to see how worldviews shift over time; to appraise the relative effectiveness of specific experiences in promoting learning and growth).

Finally, all three report types—individual, group, and organizational—may also be reported out longitudinally for purposes of mapping change processes and outcomes over time. More specifically, T1 reports refer to the report from the original administration of the BEVI to a specific group. T1/T2 reports refer to the report that examines how groups change from one administration of the BEVI to the next. And it should be noted, that T1/T2/T3, and so on, reports may be derived, and are recommended in terms of tracking trends over the long term. The primary difference between T1 and T1/T2 reports is that a few indexes only may be developed on the basis of comparisons between groups from Time 1 to Time 2 (e.g., Worldview Shift).

BEVI Tables and Indexes

Both group and organizational reports—and selected aspects of the individual reports in specific contexts—contain a wide range of tables and indexes, which are essential for processes of interpretation. Although training processes offer much more depth as well as hands-on usage, a brief explication of these tables and indexes may be helpful at this point.

Background–Domain Contrast illustrates how different or similar the group is at the level of background information and domain scores by the lowest 30%, middle 40%, and highest 30% of full scale scores.¹⁵ Background–Domain Contrast is “key” to understanding whether and to what degree group characteristics (e.g., background variables such as gender, ethnicity, etc.) and domain scores (e.g., differences in Critical Thinking, Self Access, etc.) are different or similar across these different full scale levels. For example, particular background variables may be associated with low, medium, or high full scale scores on the BEVI, which may be helpful in understanding how such variables are associated with a relative degree of group predilection toward or against a specific learning, growth, or development experience.

Profile Contrast illustrates how different and similar the group is across all 17 BEVI scales via the lowest 30%, middle 40%, and highest 30% of full scale scores. Profile Contrast is “key” to interpreting whether and to what degree groupings by low, medium, and high full scale scores are associated with different elevations on specific BEVI scales. For example, such information may be helpful in interpreting the variability within a specific group, which may range from minimal to substantial. Profile Contrast may also help users apprehend how and why subgroups within the larger group show changes in similar and different directions in the context of learning, growth, and development experiences. Thus, this index is considered a more robust and nuanced measure of the differential impact of specific learning experiences than are aggregated indexes, which may obscure subgroup differences or cancel out changes that are in fact occurring among subsets of the larger group.

Lowest Optimal Background–Domain presents aggregated background information and domain scores for the 1st to 30th percentile of full scale scores. It is “key” to interpretation and intervention because this subgroup weights the bottom 30% of the overall group (i.e., this subgroup likely could benefit most from “change” in a

¹⁵ The full scale score is summative of scores from the seven domains of the BEVI under which the 17 process scales are clustered: (a) Formative Variables; (b) Fulfillment of Core Needs; (c) Tolerance of Disequilibrium; (d) Critical Thinking; (e) Self Access; (f) Other Access; and (g) Global Access (see www.thebevi.com).

direction that probably would be consistent with key goals of the learning, growth, or development experience in which such individuals are participating).

Lowest Optimal Profile presents aggregated background information and domain scores for the 1st to 30th percentile of full scale scores across all 17 process scales of the BEVI. In other words, this profile represents the Aggregate Profile of those individuals who scored “lowest” on the full scale score of the BEVI. It is “key” to interpretation and intervention because this subgroup weights the bottom 30% of the overall group (i.e., this subgroup likely could benefit most from “change” in a direction that probably would be consistent with key goals of the learning, growth, or development experience in which such individuals are participating).

Aggregate Background–Domain presents aggregated background information and domain scores for the full scale scores of the entire group (i.e., 1st–100th percentile). It is most useful for Time 1 assessment (i.e., understanding where the overall group is at the outset of a learning, growth, or development experience) and to track group results over time (i.e., from year to year). However, it generally should not be used alone to determine if a learning, growth, or development experience is or is not effective (e.g., at Time 2 assessment) mainly because it may obscure subgroup differences and/or “cancel out” changes that actually are occurring within various subsets of the larger group. The best index to determine what is happening in this regard (i.e., between the lowest 30%, middle 40%, and highest 30% of full scale scorers) is Profile Contrast.

Aggregate Profile presents aggregated background information and domain scores for the full scale scores of the entire group (i.e., 1st–100th percentile). It is most useful for Time 1 assessment (i.e., understanding where the overall group is at the outset of a learning, growth, or development experience) and to track group results over time (i.e., from year to year). However, it generally should not be used alone to determine if a learning, growth, or development experience is or is not effective (e.g., at Time 2 assessment) mainly because it may obscure subgroup differences and/or “cancel out” changes that actually are occurring within various subsets of the larger group. The best index to determine what is happening in this regard (i.e., between the lowest 30%, middle 40%, and highest 30% of full scale scorers) is Profile Contrast.

Decile Profile illustrates how scores for group participants cluster across deciles (i.e., from the lowest 10% that individuals may score on each BEVI scale to the highest 10%—and everything in between—in “chunks” of 10%). For example, on a BEVI group report for 40 people, if 10% of the group falls within the “first decile,” that means that 4 people (i.e., 4 out of 40 = 10%) scored in the lowest 10% that can be scored on a particular BEVI scale. This profile is particularly useful in observing the dispersion of the larger group across all BEVI scales (e.g., it helps illustrate if a group clusters at one or both ends of a scale or is scattered throughout the entire scale).

Aggregate Profile by Country of Origin compares the scores of participants who report that they were raised primarily in one country (the target country of origin) versus those who report that they were raised primarily in countries other than the target country across all 17 process scales of the BEVI.¹⁶

¹⁶ It should be noted that these “Aggregate Profile by . . .” tables are not meant to capture the full complexity of all that is happening on any given variable for a specific group (e.g., ethnicity, politics, religion). Other individual and group report indexes (e.g., Profile Contrast; Decile Profile) should be juxtaposed with these Aggregate Profiles to help explicate similarities and differences within a particular cohort. However, these “Aggregate Profiles by . . .” may well illuminate the relative salience of specific variables within a larger group, thus clarifying underlying processes or dynamics that may be worthy of further exploration. Finally, because these “Aggregate Profiles by . . .” tables are, by necessity, generated from self-reported identifications, it is important to keep such processes in mind when reviewing various results (e.g., to ascertain how the individual members of the larger cohort are self-identifying).

Aggregate Profile by Gender compares the scores of females and males across all 17 process scales of the BEVI.

Aggregate Profile by Education compares the scores of participants at the lowest 30% of educational attainment versus the highest 30% of educational attainment across all 17 process scales of the BEVI.

Aggregate Profile by Ethnicity compares the scores of participants who report that they are Caucasian to those who report that they are non-Caucasian across all 17 process scales of the BEVI.

Aggregate Profile by Income compares the scores of participants who report at the lowest 30% of household income compared to those who report at the highest 30% of household income across all 17 process scales of the BEVI.

Aggregate Profile by Interest compares the scores of participants who report at the lowest 30% of interest in participating in a learning, growth, or development experience to those who report at the highest 30% of such interest across all 17 process scales of the BEVI.

Aggregate Profile by Politics compares the scores of participants who report overall as “liberal” or overall as “conservative” across all 17 process scales of the BEVI.

Aggregate Profile by Religion compares the scores of participants who report a religious affiliation to those who report no religious affiliation (e.g., as “atheist” or “agnostic”) across all 17 process scales of the BEVI.

Aggregate Profile by Satisfaction compares the scores of participants who report at the lowest 30% of satisfaction upon completing a learning, growth, or development experience to those who report at the highest 30% of such satisfaction across all 17 process scales of the BEVI.

Full Scale Shift provides background and domain score information for the top 30% of individuals who (a) move from higher to lower, (b) do not move substantially, or (c) move from lower to higher on their full scale scores from Time 1 to Time 2 administrations of the BEVI. More specifically, Negative Full Scale Shift represents the top 30% of the overall group that goes from higher to lower on their full scale scores. Neutral Full Scale Shift represents the top 30% of the overall group that shows the least amount of change from Time 1 to Time 2. Positive Full Scale Shift represents the top 30% of the overall group that goes from lower to higher on their full scale scores. Full Scale Shift may be helpful in understanding which background variables and domain scores seem to be most and least associated with changes in anticipated and/or unanticipated directions across different administrations of the BEVI.

Worldview Shift is an aggregate index that illustrates how a group moves higher or lower on each of the 17 scales on the BEVI from the initial to subsequent administrations of the BEVI. It is most useful for tracking group results over time (i.e., from year to year), but generally should not be used alone to determine if a learning, growth, or development experience is or is not effective, mainly because it may obscure subgroup differences and/or “cancel out” changes that actually are occurring within various subsets of the larger group. The best index to determine what is happening in this regard (i.e., between the lowest 30%, middle 40%, and highest 30% of full scale scorers) is Profile Contrast. However, Worldview Shift may be especially useful if the overall group demonstrates movement in desired directions across many or all scales of the BEVI, mainly because such results suggest that a

learning, growth, or development experience may be having a similar impact across most if not all subgroups within the larger group.

Worldview Intensity indicates the degree to which individuals tend to endorse Strongly Agree or Strongly Disagree—versus Agree or Disagree—on the items for each of the 17 process scales of the BEVI (e.g., a higher degree of Worldview Intensity is associated with a greater tendency to endorse response options of Strongly Agree or Strongly Disagree).

Worldview Convergence indicates the degree to which the group is responding similarly or differently from itself across each of the 17 process scales of the BEVI (e.g., a lower degree of Worldview Convergence is associated with less variation by members of the group with each other on a given scale).

Experiential Reflection Items. The BEVI is a “mixed methods” measure in that both quantitative (i.e., Likert-scaled items) and qualitative (i.e., free response) questions are asked during administration and used for purposes of interpretation. The following three qualitative Experiential Reflection Items are included in the BEVI. *First, please describe which aspect of this experience has had the greatest impact upon you and why? Second, is there some aspect of your own “self” or “identity” (e.g., gender, ethnicity, sexual orientation, religious or political background, etc.) that has become especially clear or relevant to you or others as a result of this experience? Third, what are you learning or how are you different as a result of this experience?* In the development of group reports for the BEVI, up to 20 responses are selected randomly from the range of responses that are available and uploaded under each of these questions. In doing so, a response under question 1 is drawn from the same participant as are questions 2 and 3 (e.g., response number 14 under each of the three questions is from the same person). In this way, it is possible to consider how qualitative aspects of learning, growth, or development are experienced by a random sample of individuals from the larger group through subjective reflections on one’s own experience in one’s own words. Because the T1/T2/T3, and so on, feature of the report system also allows for the juxtaposition of qualitative responses across time, it becomes possible to compare and contrast—at a qualitative level—learning, growth, and development before, during, and after the experience, and in the respondent’s own words. Oftentimes, such information may be juxtaposed productively with quantitative scale scores to understand in a deeper manner what the experience of a group is or has been.

Narrative Reports are developed at individual, group, and organizational levels, typically are between seven and nine pages in length,¹⁷ and consist of written text in two different forms: (a) general information regarding the nature of beliefs and values (e.g., their etiology, how they change) as well as the role of life experiences and events in influencing why we experience self, others, and the larger world as we do; (b) bolded text within these reports, which corresponds to where the individual or group scores on each scale of the BEVI. The underlying software for the BEVI uploads and integrates bolded text into the narrative, which corresponds to the actual scores that an individual—or an overall group—produces on the BEVI.

¹⁷ Group and organizational reports may be substantially longer depending upon the number of tables/indexes that are accessed during the review of such reports (i.e., there is a provision for opening or closing additional indexes depending upon which are of greatest relevance for purposes of review).

The Report System in Practice: Five Examples

To illustrate how various components of the BEVI report system work, five examples are offered next (multiple chapters later in this book also illustrate such usage). These include: (a) *Sample Narrative Report, Aggregate Profile, and Decile Profile*¹⁸; (b) *Background–Domain Contrast*¹⁹; (c) *Time 1/Time 2 Comparisons Across BEVI Scales*; (d) *Time 1/Time 2 Comparisons Across Formative Variables*; and (e) *Longitudinal Assessment via Time 1/Time 2/Time 3 Analysis*.

Example 1: Narrative Report and Aggregate/Decile Profiles.

First, consider one project involving a learning community at James Madison University, called Madison International, which brings together U.S. and international students as part of a living and learning community, which completes coursework and participates in other experiences together during their first year in the university (see www.jmu.edu/international/mip). The subsequent example of individual/group report usage focuses on a subset of these students ($N = 22$), who completed a course called *Making Sense of Beliefs and Values: A Guided Tour for Global Citizens*. After providing consent and completing the BEVI, individual reports were provided (in a sealed envelope) to each student in the course, who had the opportunity to read their report privately (a process that typically requires approximately 10 minutes). Although additional information about the structure of individual reports is provided, recall that these basically consist of a seven- to nine-page narrative, which contains common information presented to all report recipients along with individualized content, which is bolded throughout the report, and which is uploaded into the report based upon each student's unique scores on the BEVI. By way of context, the first page of such a report is similar to the excerpt from Figure 4.18.

After each student has read his or her full individual report in private, the BEVI trained coordinator of the process then reviews the group report with all members of the cohort. As noted, both group and organizational reports include a range of different sections, all of which may or may not be emphasized depending upon the goals of a particular BEVI workshop. In the case of Madison International, most of the focus centered on the three components of the group report, which include (a) *Background Information* (i.e., which provides descriptive information regarding how the group “breaks down” across a range of different demographic variables); (b) the *Aggregate Profile* (i.e., provides the aggregate scores for participants across all BEVI scales); and (c) *Decile Profile* (i.e., breaks down the aggregate scores across each scale in increments of 10%, in order to illustrate how the members of a group are dispersed across each of the BEVI scales). Figures 4.19 to 4.22 illustrate these three components of the BEVI Group Report for the Madison International Learning Community.

How were the three components of the BEVI group profile used with the Madison International Learning Community? Essentially, after reviewing the background characteristics of the group (e.g., highlighting areas of similarity and difference), the bulk of this session focused on explaining and discussing the results from the Aggregate Profile and Decile Profile. To highlight a number of these scales, note overall that

¹⁸ This example is excerpted and/or adapted from Chapter 12 in this book. BEVI reports typically are presented in color, but are printed here in black and white.

¹⁹ The full scale score is summative of scores from the seven domains of the BEVI under which the 17 process scales are clustered: (a) Formative Variables; (b) Fulfillment of Core Needs; (c) Tolerance of Disequilibrium; (d) Critical Thinking; (e) Self Access; (f) Other Access; and (g) Global Access (see www.thebevi.com).



You and Your Worldview

A Personal Report from the Beliefs, Events, and Values Inventory (BEVI)[™]

User: 9389488

Date of Test: 8/29/2012

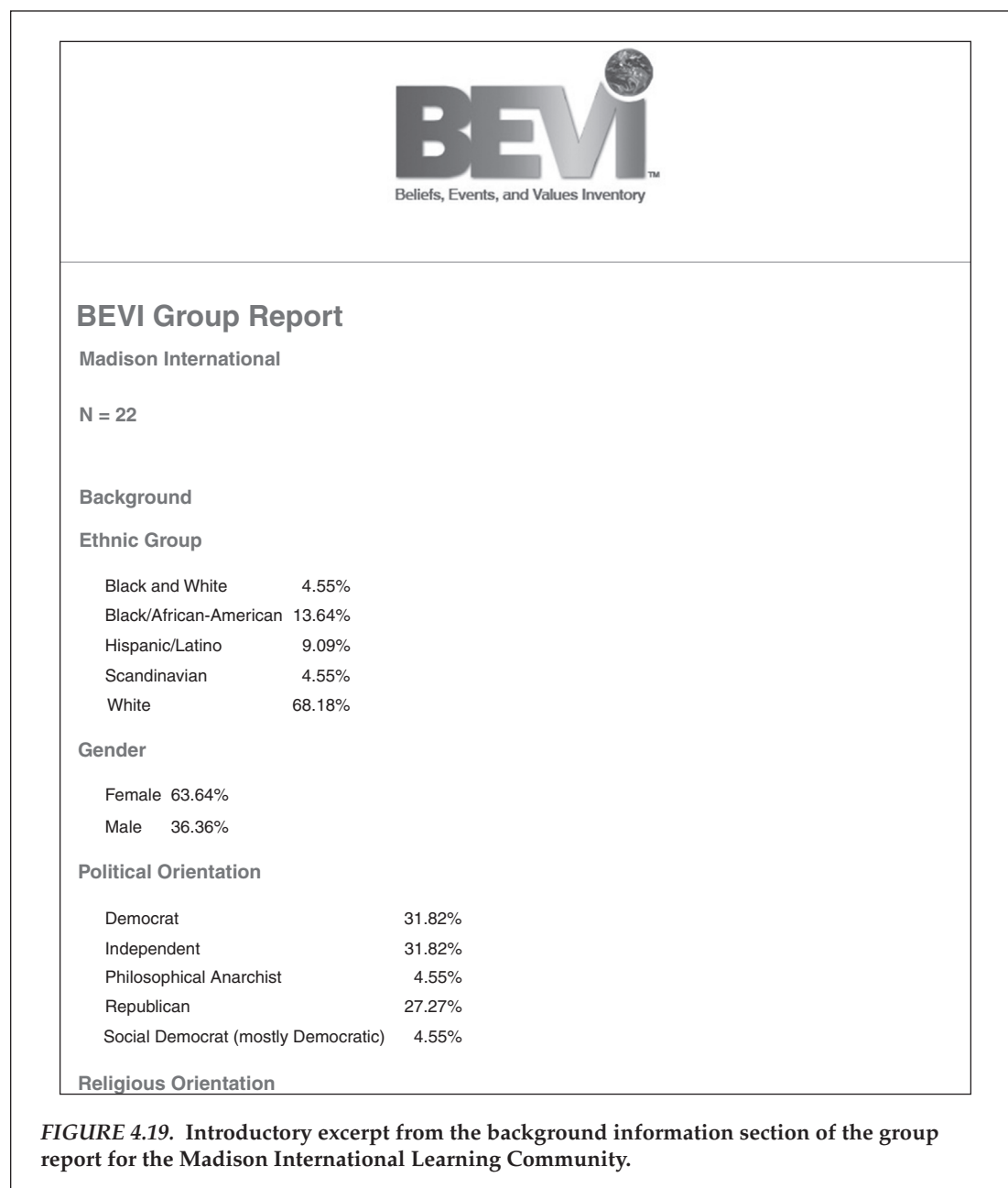
Introduction

Pick up a newspaper or turn on a radio or television anywhere in the world and one fact becomes immediately clear: beliefs and values are integral to the human experience. People have strong opinions about topics from politics, religion, education and the arts, to marriage, family, gender, and sexuality. However, whether a specific belief is "right" or "wrong" is arguably less important than understanding the complex interaction among thoughts, feelings, behavior, life history, and context that results in a unique version of reality for each human being. Such understanding is important because beliefs and values influence the actions, policies, and practices of individuals, groups, organizations, governments, and societies all over the world. The BEVI provides a way for us to explore these complex issues at the individual level, by helping each of us to make sense of why we hold certain beliefs and values, while also examining why other people may see the world in similar and different ways. At the outset, however, it is very important to emphasize that the BEVI takes no position on whether one set of beliefs and values is "right," "wrong," "better," or "worse" than any other set of beliefs and values.

So, let's take a closer look at what you seem to believe and value, while also offering some possibilities about why you believe what you believe. In addition to explanatory information throughout this report, your unique responses to the BEVI are highlighted in bold. Admittedly, these "what" and "why"...

FIGURE 4.18. Sample introductory page from the BEVI individual report.

the group as a whole reports relatively positive life histories (e.g., Negative Life Events, Needs Closure); is quite open to basic thoughts/feelings that characterize the typical experience for most human beings (e.g., Basic Closedness); demonstrates a moderate degree of attributional complexity regarding why human beings do what they do and why events in the world happen as they do (e.g., Basic Determinism); evidences a moderate degree of religiosity (e.g., Socioreligious Traditionalism); is highly self and emotionally aware (e.g., Emotional Attunement, Self Awareness); appears to possess a high capacity to experience self and other in shades of gray rather than in dichotomous terms (e.g., Socioemotional Convergence); is very open to cultural beliefs and practices that are different from one's own (e.g., Sociocultural Openness); is concerned about the environment and natural world (e.g., Ecological



Resonance); and is deeply interested in making a difference in the world (e.g., Global Engagement). In many ways, such a profile would perhaps be consistent with a group of individuals who have self-selected to be part of an international living and learning community. However, as noted, it is very important to go beyond aggregate results in order to understand areas of difference and similarity by the group as a whole. To do so, let us focus on one of the BEVI scales, Socioreligious Traditionalism, from the Decile Profile, particularly because this scale prompted a great deal of reflection and discussion by community members. As illustrated in Figure 4.22, note first

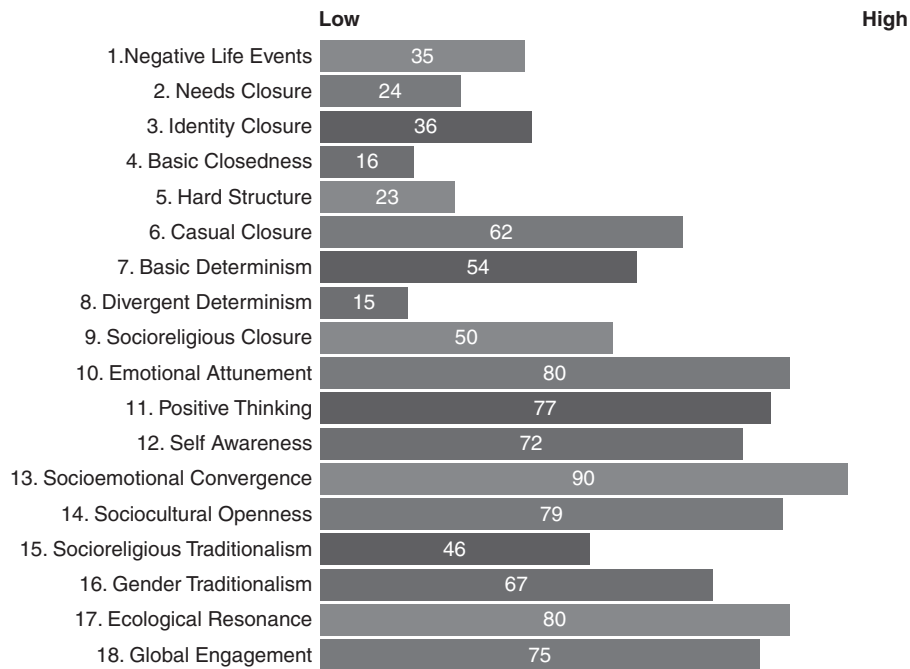


FIGURE 4.20. Aggregate Profile of the BEVI for the Madison International Learning Community.

Deciles	1	2	3	4	5	6	7	8	9	10
1. Negative life events	18%	14%	23%	5%	9%	0%	14%	9%	5%	5%
2. Needs closure	23%	14%	23%	18%	23%	0%	0%	0%	0%	0%
3. Identity closure	23%	5%	5%	23%	36%	5%	0%	0%	0%	5%
4. Basic closedness	45%	9%	5%	23%	14%	5%	0%	0%	0%	0%
5. Hard structure	32%	18%	5%	9%	18%	0%	9%	5%	5%	0%
6. Casual closure	9%	0%	18%	0%	5%	27%	14%	0%	9%	18%
7. Basic determinism	5%	9%	18%	14%	9%	9%	18%	0%	5%	14%
8. Divergent determinism	32%	18%	32%	5%	5%	5%	0%	0%	0%	5%
9. Socioreligious closure	18%	5%	9%	5%	5%	18%	5%	9%	23%	5%
10. Emotional attunement	0%	0%	5%	0%	5%	14%	5%	18%	27%	27%
11. Positive thinking	5%	0%	9%	9%	9%	9%	9%	9%	14%	27%
12. Self awareness	14%	9%	0%	9%	5%	5%	0%	9%	14%	36%
13. Socioemotional convergence	0%	0%	0%	0%	0%	5%	9%	18%	27%	41%
14. Sociocultural openness	0%	0%	0%	0%	0%	14%	14%	23%	32%	18%
15. Socioreligious traditionalism	23%	5%	9%	14%	0%	0%	0%	32%	9%	9%
16. Gender traditionalism	5%	5%	9%	0%	14%	9%	9%	14%	23%	14%
17. Ecological resonance	0%	0%	0%	0%	5%	27%	9%	14%	14%	32%
18. Global engagement	5%	9%	0%	14%	5%	5%	14%	9%	18%	23%
Deciles	1	2	3	4	5	6	7	8	9	10

FIGURE 4.21. Decile Profile of the BEVI for the Madison International Learning Community.

15. Socioreligious traditionalism	23%	5%	9%	14%	0%	0%	0%	32%	9%	9%
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FIGURE 4.22. The Socioreligious Traditionalism scale from Decile Profile of the BEVI for the Madison International Learning Community.

the extraordinary dispersion by the group across this scale, which essentially results in a bimodal distribution. That is, approximately 50% of the learning community falls between the 1st and 40th percentile of the scale whereas the remaining 50% falls between the 70th and 100th percentile (no respondents fall between the 41st and 69th percentile). Note further that approximately one quarter of the community occupies the lowest 10th percentile on this scale (i.e., approximately 25% of the community essentially is disavowing religion and religious belief). The presentation of this finding sparked a great deal of dialogue by the group (along with other scales, where dispersion was especially noteworthy, such as Negative Life Events, Self Awareness, and Gender Traditionalism). From a thematic perspective, the group engaged deeply in discussions regarding the fact that such profound differences existed among them. Moreover, the meaning of the larger issues was considered as well, such as the purpose of existence, where beliefs and values come from, and why such considerations should—or should not—matter to us as individuals and as a society, particularly in a community that juxtaposed U.S. and international students (Iyer, 2013).

Example 2: Background–Domain Contrast

The preceding conclusion is bolstered further by another dimension of the reporting system, which distinguishes among “high,” “medium,” and “low” full scale scores among subgroups. As noted previously, various indexes and tables on the reporting system examine this issue, including Background–Domain Contrast, which illustrates how different or similar the group is at the level of background information and domain scores by the lowest 30%, middle 40%, and highest 30% of full scale scores (i.e., again, full scale scores represent an amalgamation of BEVI scores—organized under the seven main domains of the BEVI, from Formative Variables through Global Access, as illustrated in Tables 4.4 and 4.5—in order to obtain an overall profile of where an individual is according to the BEVI as a whole). Specifically, consider the following excerpts of T1/T2 Group Report results from a sample of university participants ($N = 101$) from one of the Forum BEVI Project partners on Background–Domain Contrast. Of other highlights that might be emphasized, note from Tables 4.4 and 4.5 that individuals who, at the outset of a learning experience, are at the low, middle, or high end of the “full scale” continuum (i.e., are, relative to each of these subgroups, the least, neutral, or most inclined toward a learning experience from the standpoint of their full scale score), demonstrate specific profile characteristics, either in terms of “background” variables (e.g., age, gender, education) or “domain” variables (i.e., one of the seven areas under which BEVI scales are clustered). To take just a few examples, for this sample, students who are most versus least inclined toward an international, multicultural, or transformational learning experience would appear to be older (average age = 27 versus 19); approximately twice as likely to be female; more likely to come from a less wealthy family (\$70,000 versus \$85,000); and more likely to have experienced a greater number of years of education (7 versus 2). Moreover, as would be expected given differences in full scale scores across high (71), medium (58), and low (41) respondents, these subgroups

TABLE 4.4

Sample Findings from the Background Information Section of Background–Domain Contrast: Lowest Full Scale (N = 31), Middle Full Scale (N = 37), and Highest Full Scale (N = 31)

BACKGROUND INFORMATION	BACKGROUND INFORMATION	BACKGROUND INFORMATION
Average Age: 19	Average Age: 22	Average Age: 27
Males: 15 Females: 16	Males: 11 Females: 26	Males: 11 Females: 20
Caucasians: 25 Non-Caucasians: 6 ➤ Details:	Caucasians: 26 Non-Caucasians: 11 ➤ Details:	Caucasians: 20 Non-Caucasians: 11 ➤ Details:
Raised in the United States: 31 Not raised in the United States: 0 ➤ Details:	Raised in the United States: 37 Not raised in the United States: 0 ➤ Details:	Raised in the United States: 29 Not raised in the United States: 2 ➤ Details:
Average Years of Education: 2	Average Years of Education: 3	Average Years of Education: 7
Average Parental/Household Income: \$85,484	Average Parental/Household Income: \$77,162	Average Parental/Household Income: \$70,161

TABLE 4.5

Sample Findings from the Domain Section of Background–Domain Contrast

FULL SCALE: 41	FULL SCALE: 58	FULL SCALE: 71
III. Formative Variables • Negative Life Events: 40 • See Background Information	III. Formative Variables • Negative Life Events: 64 • See Background Information	III. Formative Variables • Negative Life Events: 51 • See Background Information
IV. Fulfillment of Core Needs: 27	IV. Fulfillment of Core Needs: 69	IV. Fulfillment of Core Needs: 82
V. Tolerance of Disequilibrium: 36	V. Tolerance of Disequilibrium: 52	V. Tolerance of Disequilibrium: 68
VI. Critical Thinking: 35	VI. Critical Thinking: 51	VI. Critical Thinking: 73
VII. Self Access: 57	VII. Self Access: 76	VII. Self Access: 78
VIII. Other Access: 30	VIII. Other Access: 55	VIII. Other Access: 78
IX. Global Access: 32	IX. Global Access: 54	IX. Global Access: 78

show substantial differences on nearly all domain scores as indicated in Table 4.5 (e.g., 36, 52, and 68 on Tolerance of Disequilibrium; 35, 51, 73 on Critical Thinking; 30, 55, 78 on Other Access; 32, 54, and 78 on Global Access).

As may be clear, such report-based findings illustrate again that groups may be substantially different from one another at the level of both background (e.g., age, gender) and domain (e.g., various clusters of BEVI scales) characteristics before they have even begun to engage in a learning experience together, which may influence

not only whether they are inclined toward, or against, participation in such an experience at the outset, but the degree to which they are likely to express satisfaction about the experience once it has concluded (i.e., as noted, we are able to predict such satisfaction even before they have engaged in it) (e.g., Wandschneider et al., 2016).²⁰

Example 3: Time 1/Time 2 Scale Comparisons

Regarding the overarching issue of what we may learn about learning processes and outcomes from Time 1 to Time 2, consider the following comparisons of Aggregate Profile and Profile Contrast results across two BEVI scales for one of the Forum BEVI Project partners: Negative Life Events (NLE) and Identity Diffusion (ID) (N = 36). To facilitate interpretation, the Aggregate Profile Time 1/Time 2 scale scores are followed by the Profile Contrast Time 1/Time 2 scores, and then by an explanation of salient points regarding this juxtaposition.

At least two observations are worth noting from the preceding contrast. In the first place, note that the Aggregate Profile for NLE goes up from the 48th to the 55th percentile on the Aggregate Profile. However, on Profile Contrast, the lowest 30% and middle 40% (70% of the overall sample) actually go down from Time 1 to Time 2 on NLE. A basic and overarching conclusion from such results is that Profile Contrast is a much more robust and nuanced analysis of what is actually happening within a group than is the Aggregate Profile. So, we must be very careful in our interpretation of Time 1/Time 2 findings on any measure—including but not limited to the BEVI—in order to ensure that we are apprehending what actually is happening within subsets of the overall group, as such subgroups may actually be responding very differently from one another in the context of an international, multicultural, or transformative learning experience. Note the very interesting finding—observed across multiple group report analyses in the larger project—that the perception of one's life history and background may differentially be affected by one's point of departure prior to engaging in an international, multicultural, or transformative learning experience. This observation is highly congruent with a narrative framework that how we experience ourselves, others, and the larger world is mediated strongly by the life experiences we have and may not “exist” in absolute or inviolable terms (as noted in Chapters 2 and 3). In other words, our memory and experience of our “past” is highly dependent upon events that occur in the present and future. And yet, this process may unfold differently for individuals depending upon their point of departure (i.e., how they are “organized” affectively or cognitively prior to the learning experience). For example, as Figure 4.23 illustrates, individuals who report a greater degree of “NLE” at Time 1 subsequently show a decrement in such a report at Time 2 (3–4 months after the international/multicultural learning experience) whereas individuals who report a lesser degree of “NLE” at Time 1 subsequently show an increase in such a report at Time 2. What do such findings suggest? Although we emphasize that such findings are common but not universal, such outcomes suggest that prolonged exposure to radically different “Formative Variables” (e.g., a different culture, context, language, religion, etc.) interacts with “who we were” at the outset of the experience to produce a sort of “progression to the mean” effect. Such findings imply further that those who experienced their past

²⁰ Many other examples of variations on BEVI reports as well as varying aspects of analysis, interpretation, and usage are described in later chapters of this book. See in particular Chapter 12 by Wandschneider et al., which summarizes the implications of the Forum BEVI Project along with accompanying data and profiles. By way of example, the following section regarding Negative Life Events and Identity Diffusion was excerpted and/or adapted from Chapter 12.

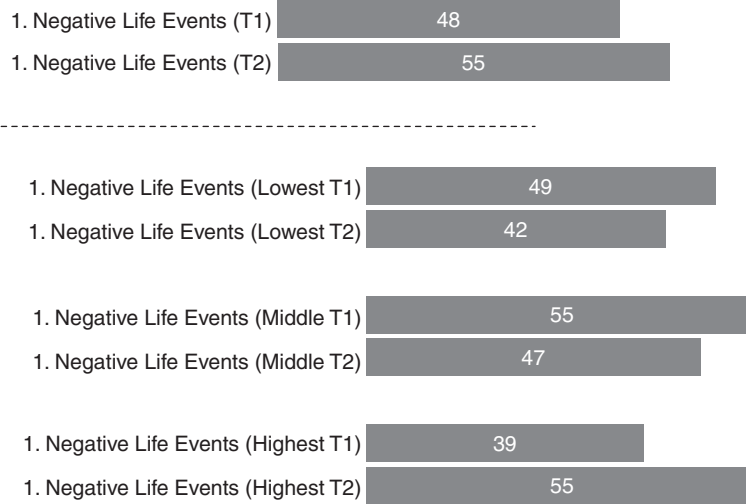


FIGURE 4.23. Aggregate Profile versus Profile Contrast for Negative Life Events.

as especially “negative” or “positive” are not so sure that was the case following the completion of this intensive learning experience (i.e., relative to what they experienced, their past may have been “better” or “worse” than what they believed after being exposed to a culture and context that was radically different from that which they were accustomed). Along related lines, next consider Figure 4.24. From an interpretive standpoint, the Aggregate Profile and Profile Contrast results on Identity Diffusion amplify the preceding point.

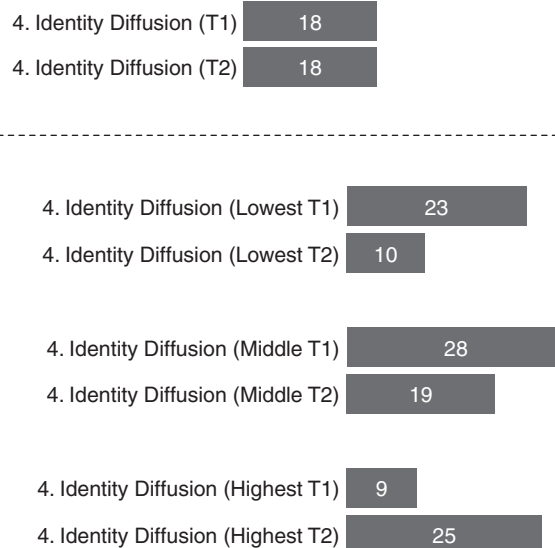


FIGURE 4.24. Aggregate Profile versus Profile Contrast for Identity Diffusion.

Recall that “Identity Diffusion” indicates the degree to which individuals report a “painful crisis of identity,” and are “fatalistic regarding negatives of marital/family life,” and “feel ‘bad’ about one’s self and prospects.” If we only review the Time 1/Time 2 Aggregate Profile (which takes the average of all participants), we would conclude that no change occurred on this fundamental aspect of how one experiences self from the beginning to the conclusion of the experiences (i.e., the Time 1/Time 2 Aggregate Report remains at the 18th percentile). Such a conclusion would be ill-advised as there are clear differences between subgroups on this core construct of the BEVI, as indicated by the Profile Contrast results for this scale. Specifically, the lowest and middle “full scale” cohorts would appear to become substantially clearer on who they are and where they are going in life, whereas those who believed they were the clearest on such aspects of self at the beginning of the experience report markedly less clarity by the conclusion of this experience. The reasons for such findings warrant further exploration, but one possibility is that by dint of their exposure to a context and culture that is substantially different from what they were accustomed, each subgroup may “balance” what they previously believed and valued against what they saw in terms of the realities that others faced. Such a process may differentially be associated with greater clarity for those who were relatively unclear about who they were and where they were going versus those who, relatively speaking, felt clearer about such matters at the outset, but became less convinced of their clarity by the end of the experience.

Example 4. Time 1/Time 2 Formative Variable by Scale Comparisons

Likewise, note also that such differences manifest not only between different subgroups with a larger group on the basis of low, medium, or high full scale scores on the BEVI. Differences also emerge on the basis of single variables, a point that is expanded upon substantially in the forthcoming chapters. There are many such variables, but for illustrative purposes, a couple of examples may suffice. Consider the role of gender and religious orientation on two BEVI scales—Religious Traditionalism and Gender Traditionalism (from a university-wide T1/T2 report from one of the Forum BEVI Project partners). In Figures 4.25 and 4.26, we see that not unexpectedly perhaps, individuals who self-report as having a religious affiliation ($N = 85$) receive substantially higher scores on Religious Traditionalism at Time 1 and Time 2 than do individuals who report no religious affiliation (e.g., as atheists or agnostics, $N = 26$). Likewise, individuals who self-report as males ($N = 43$) also show substantially higher scores on Gender Traditionalism at Time 1 and Time 2 than do females ($N = 77$). What is most interesting and relevant, from an interpretive perspective, are the interactions that seem to emerge. Note, for example, that individuals who report a religious affiliation also achieve a substantially higher score on Gender Traditionalism at Time 1 and Time 2. Moreover, note interestingly that women in this sample tend to achieve a substantially higher score on Religious Traditionalism at Time 1 and Time 2 than do men. Finally and perhaps most intriguing, note that both Religious Traditionalism and Gender Traditionalism decrease for all four subgroups in this particular group report—religious, nonreligious, male, and female. Whether such outcomes are “good,” “bad,” or “indifferent” really is a matter for the institution/organization and its members to determine based upon their goals and the nature of the intervention(s) that were introduced between Time 1 and Time 2 of BEVI administration. For present purposes, then, the most salient points are that (a) different demographic variables are often associated with different response patterns on BEVI

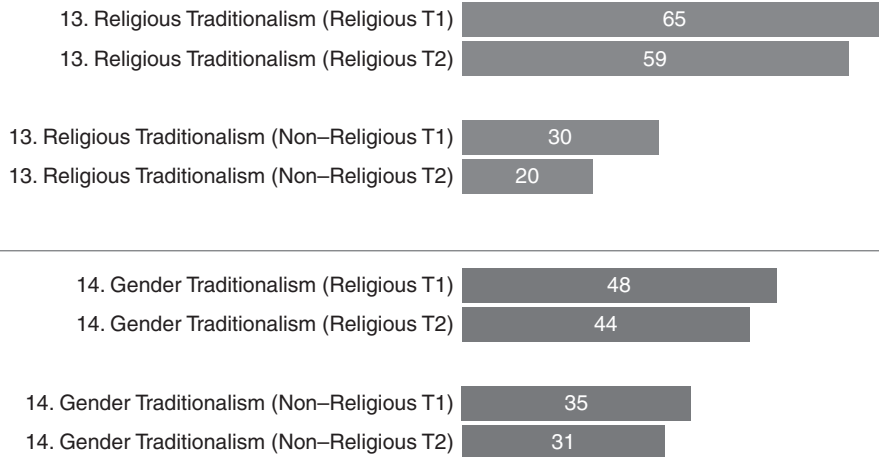


FIGURE 4.25. The association of religious orientation to Religious Traditionalism and Gender Traditionalism on the BEVI.

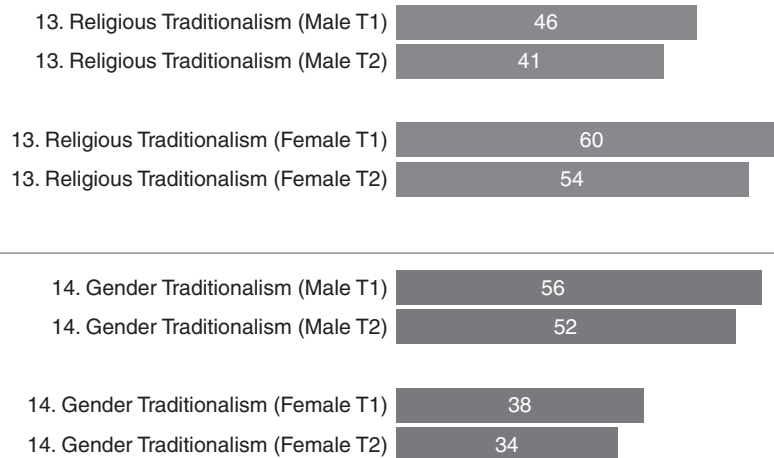
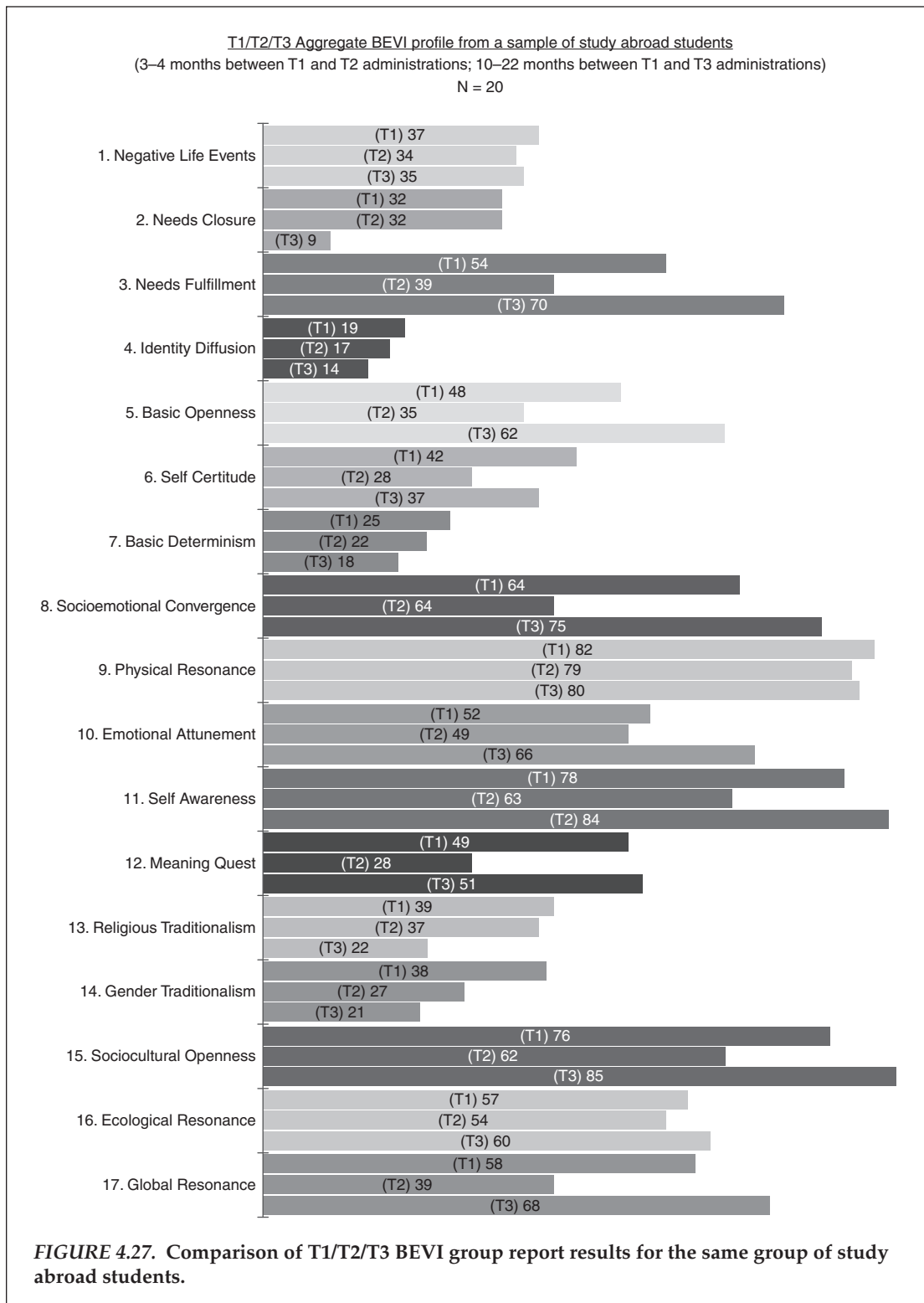


FIGURE 4.26. The association of gender to Religious Traditionalism and Gender Traditionalism on the BEVI.

profiles; (b) interpretation of the BEVI requires that we examine such interactions to understand what “really is happening” within the larger group; (c) change at the level of beliefs and values appears not only to occur and be measurable across time, but may show underlying patterns that help us evaluate the effectiveness of the intervention that we have implemented; and d) with the BEVI—and arguably any assessment measure—we should not simply look at overall results to determine what is happening for a group, since powerful mediators and moderators of subgroup change may in fact be driving what we see an aggregated or overall level.

Example 5: Time 1/Time 2/Time 3 Group Reports and the “7Ds.”

Although many more findings, implications, and applications from the BEVI and its report system are presented in subsequent chapters, one final profile comparison may be helpful to illustrate a fundamental point that has been emphasized in Chapter 2. Although relatively immutable over the short term, beliefs and values may well change as a function of exposure to Formative Variables that meet specific criteria, such as duration, difference, and depth (e.g., the “7Ds” as noted previously); as such, it is wise to adopt a longitudinal approach to assessment and measurement whenever possible, as the true nature and form of belief/value “transformation” may be detectable best over the long term. Consider, in this regard, Figure 4.27, which consists of T1/T2/T3 comparisons for the same group of study abroad students ($N = 20$) with one of the Forum BEVI Project partners. As this figure illustrates, although some aspects of the T1/T2 comparison move in a direction that presumably would be desirable at the conclusion of a study abroad experience (e.g., Self Certitude drops from the 42nd to the 28th percentile; Gender Traditionalism drops from the 38th to the 27th percentile), other scales move in a direction that presumably would not be desirable, given the goals of the study abroad experience (e.g., Needs Fulfillment drops from the 54th to the 39th percentile; Self Awareness drops from the 78th to the 63rd percentile; and Sociocultural Openness drops from the 76th to the 62nd percentile). As noted in Figure 4.27, T1/T2 administrations occurred between 3 and 4 months after initial administration of the BEVI at the beginning of the study abroad experience. So, what happens if we let at least half a year pass before assessing these same students again? Here we see a highly intriguing flip on a number of key scales. For example, in Figure 4.27, consider the three scales noted previously that presumably went in the “opposite direction” of what reasonably could be anticipated (or at least hoped for) at Time 2: (a) *Scale 3. Needs Fulfillment* (which measures openness to experiences, needs, and feelings; deep care/sensitivity for self, others, and the larger world); (b) *Scale 11: Self Awareness* (which measures a tendency toward introspection, acceptance of self-complexity, cares for the human experience/condition, and tolerates difficult thoughts/feelings); and (c) *Scale 15. Sociocultural Openness* (which measures progressiveness/openness regarding a wide range of actions, policies, and practices in the areas of culture, economics, education, environment, gender, global relations, and politics). As illustrated in Figure 4.27, on all three of these scales (among others that might be reviewed as well), results now solidly are in the direction of what might be anticipated (or hoped for) at the conclusion of a study abroad experience. How do we explain such findings? As discussed in Chapters 2 and 3, from an Equilintegration or EI perspective, the “7Ds” of belief/values transformation explicitly acknowledge that multiple factors interact simultaneously to determine how, for whom, and under what circumstances “change” occurs. Moreover, the greater the discrepancy between one’s original “Formative Variables” and those to which one is next exposed, the greater the degree of potential “affective/cognitive shut down” that occurs, as the “self” strives essentially to protect “its self” from the intensely experienced shock of such exposure, which may in qualitative and subjective terms be described as “amazing,” but nonetheless may exert a toll on the self, which simply needs time and space to consolidate and “make sense of beliefs and values” once again. Thus, we see a Time 3 profile that is, in many ways, a mirror image of Time 2, and in some ways, is a poignant reminder of what the human self endures as we all go about the business of living, which is felt that much more dramatically when experiencing “high impact” and “transformative” learning, such as study abroad (e.g., Cranton, 2006; Dirkx, 2012; Kuh, 2008; Mezirow & Taylor, 2009). From the standpoint of the BEVI and its report system, the basic point



here is to keep in mind that the interface between the complexities of being human and the complexities of assessment requires us to adopt measurement strategies that do not wag the dog; meaning let us first be who we are, and then and only then, seek to capture the meaning of our experience vis-à-vis assessment (e.g., by assessing such evolving human phenomenology over time, rather than “just once”), as such an approach is more likely to allow for our human complexity to be apprehended as it manifests naturally in the real world.

Usage of the BEVI Report System: Summary

In the final analysis then, as we conclude this chapter on the BEVI, the implications of the preceding report-based findings should be clear.

First, differences within groups should not be underestimated, but expected (e.g., we should assume that groups may well have important differences at multiple levels, from different Formative Variables—the *events* component of the BEVI to how they experience self, others, and the larger world—to the *beliefs* and *values* components of the BEVI).

Second, for those who are leading learning, growth, or development experiences, reviewing such differences may be very helpful in understanding the nature of the group with which they will be interacting throughout the learning experience.

Third, for appropriately trained and skilled facilitators, it may be helpful to share some or all such results with participants in order to sensitize them to such differences and similarities among them (e.g., to highlight the fact that there may be very good reasons for why participants react as they do to the experiences they are about to have, as illustrated on several occasions through various projects reported herein and in subsequent chapters).

Fourth, such findings may help at the level of interpretation (e.g., the role of the instructor/leader and/or learning/growth experience should be appraised accurately in terms of relative impact) since most likely, there will be multiple interactions occurring simultaneously that affect learning, growth, and development processes and outcomes.

Fifth, and finally, from the standpoint of the BEVI and its report system, it is important to keep in mind that the interface between the complexities of being human and the complexities of assessment requires us to adopt measurement strategies that do not wag the dog. That is to say, let us allow ourselves first to be who we are, and then and only then, seek to capture the meaning of our experience vis-à-vis an ecologically valid assessment of such evolving human phenomenology over time, rather than “just once” (i.e., such an approach is more likely to allow for our complexity to be apprehended as it really exists). In short, by reviewing such report-based results, more reflective and skillful assessment, research, and learning interventions may be developed, implemented, and appraised. That is because we will have a legitimate basis for understanding *why* and *how* learning, growth, and development processes and outcomes unfold as they do, for whom, and under what circumstances.

The BEVI in Conclusion: Over 20 Years in and 20 Years Hence

We have covered a lot of ground in this chapter, which may not be surprising as the goal essentially was to describe over 20 years of work on this measure. Recall that we began with a discussion of Diana, who was convinced that her son “had ADHD,”

which prompted a comprehensive evaluation process to try and ascertain whether that diagnosis best fit the circumstances (it did not, as far as we could tell). This clinical anecdote was offered by way of introduction to the fundamental impetus for the BEVI: to understand why, how, and under what circumstances individuals became committed, often deeply, to particular beliefs and values regarding self, others, and the larger world. The trajectory of BEVI development was then traced, beginning with an amalgamation of actual belief statements by clients, students, and public figures over the years along with accompanying immersion in various literatures that were relevant to these constructs. The original “long version” of the BEVI that emerged in the early 1990s eventually culminated in a range of statistical analyses, to include multiple factor analyses along with examination of psychometric properties of the overall measure, its scales, and items (e.g., factor structure, stability, reliability).

The next phase of development occurred under the auspices of the Forum BEVI Project, a multiple-site, multiyear assessment of international, multicultural, and transformative learning initiative over a period of 6 years (from 2007 to 2013), which resulted in hundreds of analyses as well as a range of publications and presentations (e.g., see Forum BEVI Project, 2015). To illustrate some of these findings, we focused next on correlation matrix data and their implications from two sample scales of the BEVI—Needs Closure and Emotional Attunement.

Another major development during the Forum BEVI Project was that of the short version of this measure, which occurred over a period of several years ($N = 2331$), and included a variety of statistical procedures (e.g., from IRT to SEM). Ultimately, we narrowed the demographics to 40 (from 65), items to 185 (from 336), and scales to 17 (from 18). After reporting scale summaries (e.g., means, standard deviations, Cronbach’s alpha), model fit information (e.g., CFI, RMSEA), and factor/subfactor structure for each of the 17 scales, information was offered regarding the description and interpretation of all BEVI scales, including the three “experiential reflection items,” before explicating the BEVI’s design (e.g., meaning and role of “belief statements”; the issue of face validity; the rationale for item wording and positive/negative loadings; basic aspects of administration).

Next, we discussed the BEVI’s report system, including the structure and usage of individual, group, and organizational reports (e.g., for assessment, outcome evaluation, enhancing learning, growth, and development, meeting assessment needs) before reviewing a range of BEVI tables and indexes, from Background–Domain Contrast and Profile Contrast to Aggregate and Decile Profiles. Finally, we concluded with five examples of the report system in practice, including (a) Narrative Reports and Aggregate/Decile Profiles; (b) Background–Domain Contrast; (c) what can be learned both from Time 1/Time 2 comparisons at the scale level as well as (d) interactions between Formative Variables and specific BEVI scales; and last, (e) the role of longitudinal assessment including the “7Ds” of belief/value transformation (who learns what and why and under what circumstances).

Hopefully, the information presented throughout this chapter provides an accessible overview of what the BEVI is, why and how it emerged as it did, relevant psychometrics and scale descriptions, and key aspects of usage and interpretation. Along with theoretical considerations presented in Chapters 2 and 3, the research and practice chapters that follow provide additional information on all of these points. In the final analysis, we know from much experience now that there is no substitute for real world immersion in BEVI data, scales, and reports as well as ongoing consultation with other users. In fact, many of the most enjoyable and intriguing discussions over the years have been from users “in the field” who have run a myriad of analyses

and creatively experimented with various approaches to usage, interpretation, and the like. Although we are over 20 years in, it still feels like we are just getting started. It will be interesting indeed to see all we will have discovered, developed, and implemented in 2035, two decades hence.

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