Technical Brief for the STRONG INTEREST INVENTORY® ASSESSMENT

Australia

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With text incorporated from the *Strong Interest Inventory® Manual,*
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INTRODUCTION

The *Strong Interest Inventory*® (Strong) assessment is one of the most widely used career planning tools, helping high school and college students, as well as people in transition, make fulfilling career choices. Because the instrument is so widely used, the publisher, CPP, Inc., continues to develop translations for use in specific regions as well as to evaluate the use of North American English versions in countries or cultures where such use may be successful. This technical brief summarizes the measurement properties of the Strong assessment for a sample of English speakers in Australia, including reliability coefficients for key measures, and correlations among Strong scales. Comparisons to the U.S. General Representative Sample (GRS) are made and similarities and differences between samples are examined. Readers are encouraged to use this document in conjunction with the *Strong Interest Inventory*® *Manual* (Donnay, Morris, Schaubhut, & Thompson, 2005) as well as the *International Technical Brief for the Strong Interest Inventory*® *Assessment* (Herk & Thompson, 2011).

The Strong assessment helps individuals match their interests with different occupational, educational, and leisure pursuits. It compares clients' level of interest on a wide range of familiar items with the interests of people who are successfully employed in different occupations. The information provided by the Strong can be used to help clients make sound educational and career decisions.

The five main types of information provided by the Strong assessment are

- General Occupational Theme (GOT) scores
- Basic Interest Scale (BIS) scores
- Occupational Scale (OS) scores
- Personal Style Scale (PSS) scores
- Administrative indexes

AUSTRALIA SAMPLE DESCRIPTION

The Australia sample is composed of 257 individuals—134 women and 123 men—who completed the Strong assessment in North American English. Respondents' ages ranged from 18 to 71 years (M = 39.80, SD = 15.16). In the sample 37.7% were employed full-time, 31.5% were employed part-time, 28.4% were students, and 2.3% were either not working for income or did not provide their current employment status. The organizational levels of those who were employed and reported organizational level (n = 156) were as follows: 55.8% entry level, 19.9% nonsupervisory, 16.0% supervisory, 3.2% management, and 5.1% executive. All respondents reported their country of origin or residence as Australia. The sample was obtained through the use of a third-party market research firm, sampling individuals who met CPP's criteria for inclusion. Participants were compensated for their participation.

INTERNATIONAL RESEARCH ON THE STRONG ASSESSMENT

A number of studies have examined the "cultural validity" of the Strong assessment. Essentially, these studies have assessed whether the underlying theories of the instrument adequately explain the results for racial/ethnic groups (Fouad & Mohler, 2004). Much of this research has focused primarily on Holland's (1959) typology, as measured by the GOTs. Studies have revealed mixed results. For example, in a literature review conducted by Carter and Swanson (1990), it was found that African Americans scored lower than Caucasians on the Realistic and Investigative Themes and higher on the Social, Enterprising, and Conventional Themes. Researchers (Park & Harrison, 1995; Sue & Kirk, 1972, 1973) have also found that Asian Americans scored higher on Realistic, Investigative, and Conventional Themes when compared to Caucasians. Studies by Goh, Lee, and Yu (2004) and Goh and Yu (2001) found slight differences on Holland's typology when looking at Chinese samples as well.

In contrast, however, Fouad, Harmon, and Borgen (1997) found that RIASEC Themes were similar across Asian American, African American, Hispanic American, and Caucasian samples. Other studies by Fouad also support the notion that minimal differences exist on Strong assessment scales; specifically, Fouad (2002) found minimal differences on the GOTs, and Fouad and Mohler (2004) found minimal differences on both the GOTs and BISs across various ethnic groups. Davison Aviles and Spokane (1999) also determined that

significant differences did not exist on Holland Themes across Hispanic, African American, and Caucasian middle school students; although they did find differences in the manner in which students expressed their interests. Evidence supporting Holland's model, as measured by the Strong assessment, has also been found in Icelandic (Einarsdóttir, Rounds, Ægisdóttir, & Gerstein, 2002), Native Hawaiian (Oliver & Waehler, 2005), and Korean (Tak, 2004) samples. Finally, in examining the criterion-related validity of the RIASEC Themes, Lattimore and Borgen (1999) found that the Strong assessment predicted occupational membership relatively similar for African American, Asian American, Caucasian American, Hispanic American, and Native American adults.

A 2011 research initiative by Herk and Thompson, the *International Technical Brief for the Strong Interest Inventory® Assessment,* examined the measurement properties of Strong translations in samples whose native languages included European English, French, German, Latin American Spanish, and European Spanish. Normative data, internal reliability, and correlations between Strong scales were evaluated. Results suggested that the assessment functioned well in translated languages with results similar to those in the GRS from the United States. As reported in the brief, the consistency of results shows that the Strong can be used as a cross-cultural measure.

This technical brief provides the results of analyses examining potential differences for a sample of English speakers born or living in Australia. Results have been arranged according to scale or type of information provided by the Strong assessment.

GENERAL OCCUPATIONAL THEMES

The General Occupational Themes (GOTs)—developed from the work of the Strong assessment author, E. K. Strong, Jr., and vocational theorist John L. Holland—are scales that reflect an individual's overall orientation to work. Using Holland's classification system, the GOTs describe an individual's interests, work activities, potential skills, and personal values in six broad areas: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C). Generally speaking, a person's interests are reflected by two or three of these Themes, combined to form a cluster of interests.

INTERPRETATION OF THE GOTs

The definitions of the GOTs, presented below, were derived in part from the work of several authors, including Holland (1973), Hansen and Campbell (1985), Gottfredson and Holland (1989), and Hansen (1992). Please refer to the *Strong Interest Inventory® Manual* (Donnay et al., 2005) for more detail on the theoretical foundation of the GOTs.

Realistic (R) Theme: Building, Repairing, Working Outdoors

People who score high on the Realistic Theme like activities, jobs, and coworkers who represent interest areas such as mechanical, construction, and repair activities; nature and the outdoors; and adventurous, physical activities. They enjoy working with tools, machines, and equipment, including computers and computer networks. They are interested in action rather than thought and prefer concrete problems to ambiguous, abstract problems. On the five Strong Personal Style Scales (PSSs), they tend to score toward the "Takes chances" pole of the Risk Taking scale and toward the "Works with ideas/data/things" pole of the Work Style scale (see pp. 50–51 for descriptions of these and the other PSSs).

Investigative (I) Theme: Researching, Analyzing, Inquiring

People who score high on the Investigative Theme have a strong scientific, inquiring orientation. They enjoy gathering information, uncovering new facts or theories, and analyzing and interpreting data. They tend to be most comfortable in academic or research environments and often pursue advanced degrees. They dislike selling and repetitive activities. They tend to score toward the "Works with ideas/data/things" pole of the Work Style scale and toward the "Academic" pole of the Learning Environment scale. The I theme is weakly related to the "Directs others" pole of the Leadership Style scale and toward the "Accomplishes tasks as a team" pole of the Team Orientation scale, indicating that Investigative people will work with others on group projects.

Artistic (A) Theme: Creating or Enjoying Art, Drama, Music, Writing

People who score high on the Artistic Theme value aesthetic qualities and have a need for self-expression. This Theme can be expressed by those who enjoy creating art or engaging in or viewing the arts. Artistic types frequently express their artistic interests in leisure or recreational activities as well as in vocational activities or environments. With their typical verbal-linguistic bent, they tend to be comfortable in academic or intellectual environments, as reflected in their Learning Environment scores. The spectrum of the A Theme spans the visual arts, the performing arts (e.g., music and drama), the culinary arts, and writing.

Social (S) Theme: Helping, Instructing, Caregiving

People who score high on the Social Theme, unlike the first three Themes in the RIASEC hexagon, like to work with people: they enjoy working in groups, sharing responsibilities, and being the center of attention. Central characteristics are helping, nurturing, and caring for others, plus teaching and instructing, especially of young people. Social types like to solve problems through discussions of feelings and interactions with others. They may also enjoy working with people through leading, directing, and persuading. People with high Social Theme scores tend to score toward the "Works with people" pole of the Work Style scale, the "Directs others" pole of the Leadership Style scale, and the "Accomplishes tasks as a team" pole of the Team Orientation scale.

Enterprising (E) Theme: Selling, Managing, Persuading

People who score high on the Enterprising Theme are verbally facile in selling and leading. They seek positions of leadership, power, and status. They enjoy working with other people and leading them toward organizational goals and economic success. The E Theme is clearly linked with a Work Style of working with people, a Team Orientation of preferring team-based activities, and a Leadership Style of directing others. Enterprising people like to take financial and interpersonal risks and to participate in competitive activities. They are quite different from I types (opposite on the RIASEC hexagon) and tend to dislike scientific activities and long periods of intellectual effort. Scientists (e.g., physicists, biologists, mathematicians, geologists, and chemists) score low on the E Theme, reflecting that they have little interest in selling, leading, or working with people.

Conventional (C) Theme: Accounting, Organizing, Processing Data

People who score high on the Conventional Theme especially like activities that require attention to organization, data systems, detail, and accuracy. They often enjoy mathematics and data management activities, such as accounting and investment management. Like those who score high on Enterprising, they work well in large organizations, but unlike Enterprising people they do not show a distinct preference for working with people over working with ideas or data.

AUSTRALIA SAMPLE NORMS OF THE GOT SCALES

The standardized scores for each of the six Themes are presented in Table 1. Means, standard deviations, and interpretive categories are listed for women and men. Standardized scores and interpretive categories were derived using the 2004 GRS. Refer to the *Strong Interest Inventory® Manual* (Donnay et al., 2005) for a description of this sample.

Means and standard deviations for the Australia sample were relatively similar to those reported for the GRS. The largest difference between the two samples for women was on the Enterprising scale, with Australian women scoring slightly lower. The largest difference for men was on the Conventional scale, with Australian men scoring higher.

TABLE 1. GOT MEANS, STANDARD DEVIATIONS, AND INTERPRETIVE BOUNDARIES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

				Standard Score Boundaries				
				Very Little	Little	Average	High	Very High
Theme	Gender	*M*	*SD*	(0–10)	(11–25)	(26–75)	(76–90)	(91–100)
Realistic	Women	46.52	9.15	30–34	35–38	39–51	52–56	57–87
	Men	55.45	9.19	30–43	44–50	51–61	62–66	67–87
Investigative	Women	49.69	10.51	26–35	36–41	42–56	57–62	63–78
	Men	52.49	9.40	26–38	39–45	46–58	59–64	65–78
Artistic	Women	49.19	9.90	26–37	38–44	45–59	60–64	65–76
	Men	50.05	8.81	26–36	37–42	43–56	57–62	63–76
Social	Women	50.73	10.55	23–39	40–46	47–59	60–65	66–83
	Men	49.62	11.20	23–35	36–41	42–55	56–60	61–83
Enterprising	Women	46.36	10.61	21–37	38–42	43–56	57–62	63–80
	Men	49.58	10.87	21–37	38–43	44–58	59–64	65–80
Conventional	Women	50.90	11.03	27–35	36–42	43–57	58–64	65–90
	Men	55.44	11.89	27–38	39–44	45–57	58–63	64–90

Note: N = 257 (134 women and 123 men). Numbers in parentheses under categories are percentiles.

RELIABILITY OF THE GOT SCALES

Cronbach's alpha was used to examine the reliability of the GOTs. Results are presented in Table 2. GOT alphas ranged from .93 to .95, with a median of .94. This is similar to the median GOT alpha of .92 reported in the Strong manual.

TABLE 2. GOT RELIABILITY STATISTICS IN THE AUSTRALIA SAMPLE

Theme	Cronbach's Alpha
Realistic	.93
Investigative	.93
Artistic	.95
Social	.94
Enterprising	.93
Conventional	.94

Note: $N = 257$.

VALIDITY OF THE GOT SCALES

The convergent validity of the GOTs was examined by assessing the relationships between the GOT scales (i.e., the intercorrelations between the six scales), as well as the relationships between the GOT scales and the other scales of the Strong assessment (e.g., the correlations between the GOTs and the OSs). The following sections present these findings.

Intercorrelations Between the GOTs

Tables 3 and 4 show the intercorrelations between each of the six GOTs. These correlations are shown for all individuals in Table 3 and separately by gender in Table 4. As shown, the largest correlation was between the Artistic and Social scales for the overall sample. For women the largest correlations were between the Conventional and Realistic scales and Social and Artistic scales. For men the largest correlation was between the Enterprising and Conventional scales.

TABLE 3. INTERCORRELATIONS BETWEEN THE GOTs IN THE AUSTRALIA SAMPLE

Theme	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Realistic	—	.58	.54	.40	.58	.67
Investigative	.58	—	.61	.54	.38	.54
Artistic	.54	.61	—	.69	.66	.51
Social	.40	.54	.69	—	.63	.52
Enterprising	.58	.38	.66	.63	—	.62
Conventional	.67	.54	.51	.52	.62	—

Note: $N = 257$.

TABLE 4. INTERCORRELATIONS BETWEEN THE GOTs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Theme	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Realistic	—	.60	.61	.41	.51	.65
Investigative	.56	—	.61	.55	.33	.48
Artistic	.54	.61	—	.65	.64	.44
Social	.53	.57	.74	—	.56	.41
Enterprising	.64	.42	.68	.73	—	.46
Conventional	.68	.58	.59	.67	.76	—

Note: $N = 257$. For correlations above the diagonal, women $n = 134$; below the diagonal, men $n = 123$.

While intercorrelations between the GOTs tended to be somewhat larger for women and men in the Australia sample than in the GRS, the pattern of relationships and trends was similar. For example, one of the strongest relationships for women in the Australia sample was between the Artistic and Social scales, also one of the strongest relationships in the GRS. For men the relationship between the Enterprising and Conventional scales was the second strongest in the GRS and the strongest in the Australia sample.

Relationship Between the GOTs and the OSs

The GOTs can provide a global view of an individual's occupational orientation. It is expected that people with common interests and preferences for similar work environments might subsequently choose similar jobs. Thus, when correlating the GOTs with the Occupational Scales (OSs), certain relationships are expected. Tables 5–10 illustrate the relationship between the GOTs and the OSs for each of the six Themes. The 10 OSs with the strongest relationship, as well as the 10 OSs with the weakest relationship, are presented for women and men.

Results indicate that the patterns of relationships commonly found between the GOTs and OSs were found in the Australia sample as well. For instance, women in the GRS and Australia sample who scored high on the Investigative Theme scored highest on the Science Teacher OS. Additionally, men in the GRS and in the Australia sample who scored high on the Realistic Theme scored high on the Firefighter OS.

TABLE 5. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN REALISTIC THEME AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Engineering Technician	.86	Firefighter	.83
Firefighter	.86	Computer & IS Manager	.80
Technical Support Specialist	.82	Engineer	.79
Network Administrator	.81	Technical Support Specialist	.76
Computer Programmer	.79	Military Officer	.76
Engineer	.78	Network Administrator	.75
Software Developer	.77	Computer Systems Analyst	.74
Urban & Regional Planner	.77	Production Worker	.74
Electrician	.76	Software Developer	.74
Computer Scientist	.75	Computer Mathematics Manager	.73
Broadcast Journalist	–.07	Farmer/Rancher	–.29
Speech Pathologist	–.13	Advertising Account Manager	–.30
Photographer	–.15	Translator	–.31
Mental Health Counselor	–.29	Geologist	–.32
Farmer/Rancher	–.33	Mathematician	–.37
Financial Analyst	–.33	Musician	–.44
Production Worker	–.41	Interior Designer	–.52
Advertising Account Manager	–.42	Graphic Designer	–.52
Buyer	–.52	Biologist	–.57
Artist	–.56	Artist	–.61

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 6. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN INVESTIGATIVE THEME AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Science Teacher	.88	Dentist	.85
Chiropractor	.85	Optometrist	.85
Registered Nurse	.82	Medical Technologist	.84
Dentist	.81	Respiratory Therapist	.84
University Faculty Member	.81	Science Teacher	.83
Pharmacist	.81	Psychologist	.79
Optometrist	.81	Engineer	.79
Geographer	.81	Software Developer	.77
Engineer	.78	Pharmacist	.77
Sociologist	.76	Computer Programmer	.76
Business Education Teacher	–.22	Advertising Account Manager	–.30
Cosmetologist	–.30	Automobile Mechanic	–.34
Financial Analyst	–.31	Law Enforcement Officer	–.35
Paralegal	–.36	Graphic Designer	–.37
Florist	–.39	Florist	–.40
Artist	–.46	Restaurant Manager	–.40
Advertising Account Manager	–.56	Landscape/Grounds Manager	–.44
Production Worker	–.59	Artist	–.46
Farmer/Rancher	–.63	Interior Designer	–.50
Buyer	–.64	Farmer/Rancher	–.52

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 7. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN ARTISTIC THEME AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Editor	.93	Arts/Entertainment Manager	.93
Arts/Entertainment Manager	.90	Editor	.89
Technical Writer	.89	English Teacher	.85
ESL Instructor	.88	Instructional Coordinator	.83
English Teacher	.84	Community Service Director	.81
Graphic Designer	.82	Secondary School Teacher	.80
Instructional Coordinator	.78	Urban & Regional Planner	.79
Urban & Regional Planner	.76	Attorney	.79
Translator	.73	Administrative Assistant	.78
Religious/Spiritual Leader	.72	Training & Development Specialist	.77
Health Information Specialist	–.06	Law Enforcement Officer	–.38
Physician	–.09	Military Enlisted	–.39
Business Education Teacher	–.13	Vocational Agriculture Teacher	–.40
Radiologic Technologist	–.22	Electrician	–.42
Buyer	–.25	Radiologic Technologist	–.42
Medical Technician	–.33	Landscape/Grounds Manager	–.48
Artist	–.35	Geologist	–.50
Financial Analyst	–.57	Biologist	–.53
Farmer/Rancher	–.70	Automobile Mechanic	–.65
Production Worker	–.85	Farmer/Rancher	–.84

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 8. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN SOCIAL THEME AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Elementary School Teacher	.91	Elementary School Teacher	.92
Secondary School Teacher	.89	Community Service Director	.92
Social Worker	.88	Middle School Teacher	.91
Rehabilitation Counselor	.88	Secondary School Teacher	.91
Middle School Teacher	.87	Religious/Spiritual Leader	.90
Religious/Spiritual Leader	.86	Rehabilitation Counselor	.89
Special Education Teacher	.85	Instructional Coordinator	.88
School Counselor	.85	Administrative Assistant	.86
University Administrator	.81	University Administrator	.86
Recreation Therapist	.80	Recreation Therapist	.86
Advertising Account Manager	–.13	Electrician	–.31
Forester	–.15	Forester	–.32
Landscape/Grounds Manager	–.15	Mathematician	–.46
R&D Manager	–.17	Landscape/Grounds Manager	–.46
Computer & IS Manager	–.21	Graphic Designer	–.48
Medical Illustrator	–.34	Automobile Mechanic	–.51
Farmer/Rancher	–.37	Biologist	–.58
Financial Analyst	–.40	Farmer/Rancher	–.60
Production Worker	–.41	Artist	–.63
Artist	–.57	Geologist	–.65

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 9. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN ENTERPRISING THEME AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Realtor	.91	Wholesale Sales Representative	.94
Wholesale Sales Representative	.91	Securities Sales Agent	.93
Technical Sales Representative	.88	Technical Sales Representative	.92
Sales Manager	.87	Top Executive, Business/Finance	.91
Securities Sales Agent	.87	Sales Manager	.91
Purchasing Agent	.86	Operations Manager	.90
Marketing Manager	.86	Realtor	.89
Restaurant Manager	.84	Personal Financial Advisor	.89
Top Executive, Business/Finance	.81	Loan Officer Counselor	.88
Personal Financial Advisor	.80	Purchasing Agent	.88
Medical Illustrator	–.30	Landscape/Grounds Manager	–.31
Mathematician	–.32	Forester	–.32
Geologist	–.33	Radiologic Technologist	–.32
Biologist	–.33	Automobile Mechanic	–.37
Medical Technician	–.35	Graphic Designer	–.51
Forester	–.36	Farmer/Rancher	–.54
Farmer/Rancher	–.38	Artist	–.68
Production Worker	–.42	Mathematician	–.72
Physician	–.53	Geologist	–.78
Artist	–.56	Biologist	–.83

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 10. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN CONVENTIONAL THEME AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Accountant	.84	Auditor	.89
Auditor	.79	Accountant	.89
Technical Support Specialist	.79	Financial Manager	.88
Administrative Assistant	.77	Credit Manager	.87
Credit Manager	.76	Business/Finance Supervisor	.87
Software Developer	.76	Financial Analyst	.86
Financial Manager	.76	Customer Service Representative	.81
Computer Programmer	.74	Management Analyst	.81
Customer Service Representative	.71	Sales Manager	.81
Computer Mathematics Manager	.70	Securities Sales Agent	.80
Speech Pathologist	–.14	Automobile Mechanic	–.30
Farmer/Rancher	–.16	Interior Designer	–.35
Production Worker	–.18	Musician	–.40
Musician	–.20	Mathematician	–.41
Buyer	–.31	Landscape/Grounds Manager	–.42
Mental Health Counselor	–.39	Farmer/Rancher	–.48
Medical Illustrator	–.40	Geologist	–.53
Photographer	–.46	Graphic Designer	–.66
Advertising Account Manager	–.47	Biologist	–.70
Artist	–.77	Artist	–.78

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

Relationship Between the GOTs and the CPI 260® Scales

Another way to provide evidence in support of the validity of an instrument is to compare it to other measures. Identifying relationships between the Strong assessment and other tools, such as the CPI 260® instrument, helps establish the validity of the separate scales of the Strong (e.g., GOTs, BISs, etc.).

The CPI 260 instrument is a 260-item omnibus assessment of normal personality. It is a shortened form of the *California Psychological Inventory*™ (CPI™) instrument (Gough, 1957, 1987; Gough & Bradley, 1996), which has been available for more than 50 years and has an established research base of nearly 2,000 citations (Gough, 2002). The CPI 260 and the CPI 434 instruments are based on the same basic normative sample of 6,000 women and men (see Gough & Bradley, 1996). The CPI 260 instrument delivers 29 CPI scales, including the 20 folk scales, the 6 work-related measures, and the 3 vector scales. Table 11 presents the CPI 260 scale names and descriptions.

Table 12 shows all correlations found for the Australia sample. Please note that the correlations were computed for a subsample of individuals (n = 128) who took the CPI 260 assessment in addition to the Strong assessment. Individuals who scored high on the Realistic GOT tended to be described by the scores on the CPI assessment as being good at detecting flaws and self-deceptions of others (high Insightful), as well as tough-minded and action oriented (low Sensitivity). Individuals who scored high on the Investigative GOT tended to be described on the CPI assessment as insightful, prudent, and resourceful (high Conceptual Fluency) but tough-minded and action oriented (low Sensitivity). Individuals who scored high on the Artistic GOT tended to be described by the CPI assessment as ambitious and self-confident (high Capacity for Status) but tough-minded and action oriented (low Sensitivity). Those who scored high on the Social GOT tended to be described by the CPI assessment as insightful, prudent, and resourceful (high Conceptual Fluency) and have a strong drive to do well in settings where conformance is rewarded (high Achievement via Conformance). Those who scored high on the Enterprising GOT tended to be described by the CPI assessment as sociable, active, and socially competent (high Sociability) but tough-minded and action oriented (low Sensitivity). Finally, those who scored high on the Conventional GOT tended to be described by the CPI assessment as being good at detecting flaws and self-deceptions of others (high Insightful), as well as tough-minded and action oriented (low Sensitivity).

TABLE 11. CPI 260® SCALE NAMES AND DESCRIPTIONS

CPI 260® Scales	Description (measure of)
Dominance (Do)	Prosocial interpersonal power and influence
Capacity for Status (Cs)	Ambition for challenge and social status
Sociability (Sy)	Social participation
Social Presence (Sp)	Poise and comfort with attention and recognition
Self-acceptance (Sa)	Sense of personal worth and self-confidence
Independence (In)	Self-sufficiency and self-directedness
Empathy (Em)	Capacity to understand and respond to others' needs
Responsibility (Re)	Conscientiousness and follow-through
Social Conformity (So)	Conformance with social norms and customs
Self-control (Sc)	Cautiousness and self-regulation
Good Impression (Gi)	Tact and positive self-presentation
Communality (Cm)	Conventionality of behavior and attitudes
Well-being (Wb)	Overall sense of health and optimism
Tolerance (To)	Open-mindedness and respect for others
Achievement via Conformance (Ac)	Motivation within organized settings
Achievement via Independence (Ai)	Motivation within unstructured settings
Conceptual Fluency (Cf)	Comfort with intellectual and conceptual matters
Insightfulness (Is)	Analytical insight into the motivations of others
Flexibility (Fx)	Adaptability and comfort with change
Sensitivity (Sn)	Tough- versus tender-mindedness
Managerial Potential (Mp)	Inclination for supervisory responsibilities
Work Orientation (Wo)	Sense of dedication to work
Creative Temperament (Ct)	Individualization and capacity for innovativeness
Leadership (Lp)	Initiative and effectiveness in leading others
Amicability (Ami)	Cooperation and friendliness
Law Enforcement Orientation (Leo)	Conventional and practical values
vector 1: Orientation Toward Others (v.1)	Extraversion versus introversion
vector 2: Orientation Toward Societal Values (v.2)	Rule-following versus rule-questioning
vector 3: Orientation Toward Self (v.3)	Fulfillment of personal potential

Source: Adapted with permission from the *Technical Brief for the CPI® 260 Instrument* (CPP Research Department, 2002).

TABLE 12. CORRELATIONS BETWEEN THE GOTs AND THE CPI 260® SCALES IN THE AUSTRALIA SAMPLE

	General Occupational Theme					
CPI 260® Scale	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Dominance	.09	.11	.28	.20	.37	.02
Capacity for Status	.14	.32	.45	.32	.37	.20
Sociability	.17	.19	.34	.27	.42	.13
Social Presence	.12	.19	.35	.17	.32	.18
Self-acceptance	.06	.06	.27	.11	.40	.03
Independence	.13	.15	.24	.15	.30	.12
Empathy	.13	.23	.34	.21	.24	.09
Responsibility	.08	.27	.14	.29	–.04	.20
Social Conformity	–.11	–.04	–.04	.12	–.13	.11
Self-control	–.10	.01	–.14	.09	–.22	.06
Good Impression	–.01	.05	–.04	.20	–.05	.11
Communality	.05	.18	–.02	.13	–.05	.14
Well-being	.00	.08	.05	.15	.02	.16
Tolerance	.03	.09	.15	.20	–.09	.16
Achievement via Conformance	–.03	.20	.15	.34	.10	.18
Achievement via Independence	.08	.26	.26	.22	–.01	.16
Conceptual Fluency	.13	.34	.40	.35	.17	.22
Insightfulness	.18	.33	.31	.30	.08	.25
Flexibility	–.04	.04	.10	.03	–.12	.02
Sensitivity	–.44	–.15	–.15	–.04	–.35	–.14
Managerial Potential	–.04	.10	.15	.17	.08	.10
Work Orientation	.05	.19	.10	.21	–.04	.21
Creative Temperament	.11	.18	.30	.16	.11	.07
Leadership	.10	.22	.33	.31	.37	.12
Amicability	–.06	.02	–.05	.10	–.18	.11
Law Enforcement Orientation	.03	.04	–.03	.19	.15	.02
vector 1: Orientation Toward Others	–.11	–.05	–.27	–.10	–.38	.04
vector 2: Orientation Toward Societal Values	.11	.16	.04	.20	.09	.09
vector 3: Orientation Toward Self	–.07	.12	.11	.20	–.11	.12

Note: n = 128.

BASIC INTEREST SCALES

The Basic Interest Scales (BISs) measure interest in 30 specific areas, such as art, science, sales, and athletics. Scores on Basic Interest Scales indicate interests and activities individuals find personally motivating and rewarding. The BISs are often referred to as subthemes of the GOTs, as they focus on specific interest domains grouped under the broader, more diverse General Occupational Themes—five for each Theme. The 30 BISs, listed in order of the six GOT scales, are described below.

INTERPRETATION OF THE BISs

Realistic BISs

The five BISs in the Realistic Theme are Mechanics & Construction, Computer Hardware & Electronics, Military, Protective Services, Nature & Agriculture, and Athletics.

Mechanics & Construction. The Mechanics & Construction scale measures interest in activities that require working with large equipment and machinery as well as small precision instruments. High scorers like designing, building, repairing, tinkering, and generally using a wide range of tools and materials. The scale represents a preference for working with things rather than people and thus is associated with scores toward the "Works with ideas/data/things" pole of the Work Style PSS (see pp. 50–51 for descriptions of this and other Personal Style Scales).

Computer Hardware & Electronics. The Computer Hardware & Electronics scale measures interest in activities such as installing and repairing computer and peripheral hardware and network systems. People with scores of "High Interest" or "Very High Interest" on this scale typically include engineering technicians, computer scientists, technical support specialists, network administrators, engineers, and computer and information systems managers. Usually, they score toward the "Works with ideas/data/things" pole of the Work Style scale and the "Accomplishes tasks independently" pole of the Team Orientation PSS. This interest in tangibly repairing and building is also often associated with high scores on the Mechanics & Construction scale.

Military. Interest in a structured environment that has a well-ordered, clearly defined chain of command is characteristic of people with high scores on the Military scale. Such people also like to be in a position of authority, having power or control over others. People with scores of "High Interest" or "Very High Interest" on the Military scale are likely to include military officers, military enlisted, engineers, firefighters, law enforcement officers, and others in law enforcement and protection occupations. High scores on this scale sometimes correspond with scoring toward the "Takes chances" pole of the Risk Taking PSS and the "Works with ideas/data/things" pole of the Work Style scale.

Protective Services. The Protective Services scale measures interest in non-military-related aspects of providing public safety and policing. People with high scores on this BIS typically include law enforcement officers, firefighters, military officers, physical therapists, and registered nurses. Often high scores are associated with a preference for risk taking. These people enjoy protecting and aiding the public, responding to emergencies, and participating in activities related to criminal justice. High scores on this scale and the Law BIS may indicate a specific interest in law enforcement professions. There appears to be a relationship between the Military and Protective Services BISs, suggesting interest in well-structured environments and physical activities.

Nature & Agriculture. The core content of the Nature & Agriculture scale is typified by working in farming or ranching settings, as well as an appreciation for the beauty of nature. Also measured is an interest in physically active work or recreational activities outdoors. People with scores of "High Interest" or "Very High Interest" on the Nature & Agriculture scale are likely to include vocational agriculture teachers, horticulturists, foresters, landscape/grounds managers, science teachers, firefighters, and veterinarians. Reflecting the outdoor and physical activity bent of the scale, athletic trainers may also have high scores on the Nature & Agriculture scale. People with high scores often prefer to live in rural areas or small communities; they may choose to stay at a weekend retreat beside a lake, in the mountains, or on a river. Interest in more vigorous and dangerous activities, such as skydiving, might be expected as scores on the Athletics BIS move higher and scores on the Risk Taking scale move toward the "Takes chances" pole.

Athletics. This scale measures an interest in sports. People who score high on the Athletics scale are often avid fans who may not even participate in sports, although they probably have some past athletic experience, especially in team sports. They tend to enjoy attending a variety of sporting events—such as boxing matches, football games, golf tournaments, gymnastics meets, and wrestling tournaments—as spectators. People who participate only in solitary sports, such as running, or who are interested in only one sport to the exclusion of all others probably will not score high on this scale. People who score high on this scale are likely to include athletic trainers, parks and recreation managers, recreation therapists, and community service managers.

Investigative BISs

The four BISs in the Investigative Theme are Science, Research, Medical Science, and Mathematics.

Science. The Science scale is a measure of interest in the natural sciences, especially the physical sciences. People likely to have scores of "High Interest" or "Very High Interest" on this scale, such as chemists and physicists, emphasize scientific theory, the search for basic truths, and an experimental approach to solving problems and understanding the universe. Other groups that may not be seen as traditional, prototypic natural scientists—such as medical technologists, science teachers, pharmacists, dentists, physicians, and optometrists—also often score high on the Science scale and consider science integral to their work.

Research. The Research scale measures interest in designing and conducting studies to identify underlying relationships and establish facts. Although a wide range of areas may be researched, people who score high on this scale usually enjoy collecting data, working with numbers, summarizing research results, writing reports, and applying findings to solve problems, improve processes, or answer questions. People with scores of "High Interest" or "Very High Interest" are likely to include computer scientists, geographers, sociologists, science teachers, research and development managers, and network administrators. Similar to those who score high on the Science scale, they tend to prefer working with ideas, data, and things rather than people. However, they sometimes score slightly higher on the Team Orientation scale, meaning that they may have preferences for accomplishing tasks collectively and problem solving with others. This is likely due to the increasingly collaborative nature of many research projects.

Medical Science. While the Science scale measures interest primarily in the physical sciences, the Medical Science scale measures interest in the biological sciences and medical fields. The main differences between this scale and the Healthcare Services BIS are the education-intensive occupations and focus on technical scientific (rather than people-oriented) aspects that dominate Medical Science. Occupations on the Medical Science scale typically require a strong educational background in the biological as well as physical sciences. The list of specialized medical occupations is extensive and includes dentists, pharmacists, optometrists, physical therapists, respiratory therapists, chiropractors, and veterinarians. Also scoring high are science teachers and registered nurses. Although many of these people provide medical service and treatment to the public, this is typically not a preference, as they tend to score toward the "Works with ideas/data/things" pole of the Work Style scale.

Mathematics. The Mathematics scale measures interest in working with numbers and performing statistical analyses. The majority of people with high Mathematics scores tend to score toward the "Works with ideas/data/things" pole of the Work Style scale. Most people who score high on the Mathematics scale are of the Investigative type, such as chemists, mathematicians, optometrists, computer scientists, and physicists. People in occupations represented by other primary Holland codes also have mathematics as one of their clusters of interests.

Artistic BISs

The four BISs in the Artistic Theme are Visual Arts & Design, Performing Arts, Writing & Mass Communication, and Culinary Arts.

Visual Arts & Design. The Visual Arts & Design scale emphasizes visual creativity and spatial visualization. The scale includes some appreciation for fine art such as sculpture and photography but overall leans toward creative activities with applied or commercial purposes. People with scores of "High Interest" or "Very High Interest" on the Visual Arts & Design scale are likely to include medical illustrators, architects, photographers, art teachers, technical writers, graphic designers, and interior designers. These people often prefer academic learning environments.

Performing Arts. People who score high on the Performing Arts scale enjoy participating in a wide range of performance activities or being part of the audience that enjoys watching others perform. Performing Arts is a central feature of the Artistic Theme, along with the expected content of Visual Art & Design, Culinary Arts, and Writing & Mass Communication. Although the verbal-linguistic content of the Writing & Mass Communication scale might not be expected within the A Theme, in fact all these areas are correlated. Thus, it is not unusual to have either all high or all low scores across

all these areas. People with high or very high scores typically include art teachers, editors, English teachers, broadcast journalists, ESL instructors, and musicians.

Writing & Mass Communication. The Writing & Mass Communication scale measures interest in literature, reading, and language from the perspectives of appreciation and creation. High scorers often are comfortable in academic learning environments. People with scores of "High Interest" or "Very High Interest" on the scale are often in occupations with a verbal-linguistic orientation, such as English teachers, reporters, public relations directors, technical writers, sociologists, religious/spiritual leaders, translators, editors, and ESL instructors.

Culinary Arts. The Culinary Arts scale measures interest in cooking and entertaining. People with scores of "High Interest" or "Very High Interest" on the Culinary Arts scale are likely to include chefs, dietitians, food service managers, and restaurant managers. These people may enjoy demonstrating new cooking techniques, preparing decorative food displays, and planning menus.

Social BISs

The six BISs in the Social Theme are Counseling & Helping, Teaching & Education, Human Resources & Training, Social Sciences, Religion & Spirituality, and Healthcare Services.

Counseling & Helping. The Counseling & Helping scale reflects an interest in helping others. A high score on this scale indicates a humanistic, altruistic interest in working with and helping people. High scorers are likely to score toward the "Works with people" pole of the Work Style scale and toward the "Directs others" pole of the Leadership Style PSS. Counseling & Helping is correlated highly with most of the other Social BISs. Therefore, people with high scores on this BIS may be expected to also score high on BISs such as Teaching & Education, Human Resources & Training, Social Sciences, and Religion & Spirituality. People with scores of "High Interest" or "Very High Interest" on this scale typically include school counselors, religious/spiritual leaders, special education teachers, community service directors, rehabilitation counselors, nursing home administrators, recreation therapists, and registered nurses.

Teaching & Education. Educators representing a wide range of disciplines score high on the Teaching & Education scale, including elementary school teachers, school counselors, school administrators, and special education teachers. People with high scores on the Teaching & Education scale often score high on several of the PSSs, indicating preferences for working with people, academic learning environments, and directing others, as would be expected.

Human Resources & Training. The Human Resources & Training scale measures interest in developing and training people, as well as managing and directing the employment activities of an organization. High scores on this scale are usually accompanied by high scores on the Management BIS. People with scores of "High Interest" or "Very High Interest" on the Human Resources & Training scale typically include human resources managers, school administrators, nursing home administrators, rehabilitation counselors, school counselors, and operations managers. They often show a preference for the "Directs others" pole of the Leadership Style scale and the "Accomplishes tasks as part of a team" pole of the Team Orientation scale.

Social Sciences. The Social Sciences scale measures interest in the study of people, groups, society, and cultures. Interests typically include research and teaching. People with high scores on the Social Sciences BIS are likely to include sociologists, ESL instructors, school counselors, urban and regional planners, public administrators, rehabilitation counselors, religious/spiritual leaders, elected public officials, and attorneys. These people tend to prefer academic learning environments and score toward the "Directs others" pole of the Leadership Style scale.

Religion & Spirituality. The Religion & Spirituality scale reflects an interest in spiritual or religious concerns, especially through organized activities. This BIS involves attending to people's spiritual, personal, and emotional needs. People with scores of "High Interest" or "Very High Interest" on the Religion & Spirituality scale in past samples have been directly involved with the clergy. Interestingly, rehabilitation counselors and school counselors may also have "High Interest" scores on this scale. Additionally, some teachers, including English teachers, may also have high scores.

Healthcare Services. The Healthcare Services scale focuses on providing service and aid to sick people in medical settings. Usually respondents who score high on the I Theme will not score high on Healthcare Services if they also score low on the S Theme. People with scores of "High Interest" or "Very High Interest" on this scale are likely to include emergency medical technicians, athletic trainers, registered nurses, respiratory therapists, physical therapists, radiologic technologists, occupational therapists, and chiropractors. While people who score high on the Healthcare Services scale generally want to have close contact with patients, those who score high only on the Science and Medical Science scales typically are more research and laboratory oriented and have less direct interest in patients.

Enterprising BISs

The six BISs in the Enterprising Theme are Marketing & Advertising, Sales, Management, Entrepreneurship, Politics & Public Speaking, and Law.

Marketing & Advertising. The Marketing & Advertising scale measures interest in marketing activities, including research and the development of advertising campaigns for products or services. High scorers are typically employed as marketing managers, purchasing agents, technical sales representatives, sales managers, realtors, operations managers, and restaurant managers. These people also commonly score high on the Sales, Management, and Entrepreneurship BISs. Often, they prefer working with people and accomplishing tasks as part of a team.

Sales. The Sales scale measures interest in selling products or services, or working with salespeople. People with high scores on this scale like to take their product to others without prior invitation. They can handle the rejection that often occurs in these situations and will keep calling on new customers until they make a sale. Those who score high on the Sales scale and also score high on the Counseling & Helping or Religion & Spirituality scale typically cannot sell simply for the sake of selling; rather, they have high ideals and need to believe that the product they are selling will benefit the buyer. People with scores of "High Interest" or "Very High Interest" on the Sales scale typically score toward the "Practical" pole of the Learning Environment scale and prefer practical learning settings. People with high scores on the Sales scale are commonly employed in the prototypic sales occupations of realtor, sales manager, and life insurance agent.

Management. The Management scale measures interest in authority and power and in supervising, organizing, leading, or directing others. High scorers typically score toward the "Directs others" pole of the Leadership Style scale and toward the "Accomplishes tasks as a team" pole of the Team Orientation scale. Although these activities most frequently occur in traditional enterprising environments such as business, industrial, and manufacturing settings, managers who score high on this scale may also be found in schools, colleges, hospitals, social service agencies, government offices, and research laboratories. People with scores of "High Interest" or "Very High Interest" on the Management scale are likely to include operations managers, nursing home administrators, school administrators, human resources managers, realtors, purchasing agents, restaurant managers, elected public officials, and facilities managers.

Entrepreneurship. The Entrepreneurship scale measures interest in developing and managing new business opportunities. People who typically have scores of "High Interest" or "Very High Interest" include operations managers, technical sales representatives, realtors, purchasing agents, sales managers, and human resources managers. These people often enjoy being self-employed, taking chances, and making decisions, and they typically score toward the "Directs others" pole of the Leadership Style scale.

Politics & Public Speaking. The Politics & Public Speaking scale measures interest in public affairs, persuading others through verbal activities, being in the limelight, influencing people's thoughts and viewpoints, and a preference for oral communication. People who often score highest on the scale are those involved in persuading others and making public presentations: elected public officials, public administrators, and public relations directors. Also scoring high are attorneys, corporate trainers, and people in high school occupations, such as school counselors, school administrators, and English teachers.

Law. The Law scale measures interest in debating, persuading, and arguing points of view, but it focuses on legal activities. High scorers on the Law BIS are likely to score toward the "Directs others" pole of the Leadership Style scale, the "Works with ideas/data/things" pole of the Work Style scale, and the "Takes chances" pole of the Risk Taking scale. People with scores of "High Interest" or "Very High Interest" on the Law scale typically include elected public officials, attorneys, public administrators, school administrators, and human resources managers. These people may enjoy debating public policy, applying the law, and studying legal proceedings.

Conventional BISs

The four BISs in the Conventional Theme are Office Management, Taxes & Accounting, Programming & Information Systems, and Finance & Investing.

Office Management. This scale measures interest in office coordination activities and supervision. Such activities typically include organizing office records and files, operating office machinery, managing and ordering inventory, reconciling bills, preparing agendas and schedules, and overseeing office staff. People with scores of "High Interest" or "Very High Interest" are likely to include administrative assistants, business education teachers, facilities managers, health information specialists, nursing home administrators, purchasing agents, food service managers, and credit managers. Often high scores on the Office Management scale are associated with low scores on the Risk Taking and Learning Environment scales, indicating preferences for playing it safe and learning in practical, hands-on situations.

Taxes & Accounting. The Taxes & Accounting scale measures interest in financial accounting and tax preparation.

People with scores of "High Interest" or "Very High Interest" on this scale are likely to include accountants, actuaries, mathematics teachers, network administrators, financial managers, credit managers, and computer scientists. Those with high scores on this BIS enjoy analyzing accounting records and financial statements, maintaining budgets, working with numbers and spreadsheets, computing taxes, and preparing forms. Therefore, they can be expected to score high on the Mathematics BIS and toward the "Works with ideas/data/things" pole of the Work Style scale.

Programming & Information Systems. This BIS measures interest in the use of computers, managing information, and developing software and includes activities such as programming websites, developing computer programs to store data and information, updating computer software, and producing coding language from project specifications, problems, and procedures. People who score high on the Programming & Information Systems scale typically include technical support specialists, network administrators, computer scientists, software developers, computer systems analysts, engineers, physicists, and actuaries. Usually, these people tend to prefer leading by example and working with ideas, data, or things. High scorers will likely also score high on the Computer Hardware & Electronics BIS.

Finance & Investing. The Finance & Investing scale measures interest in managing money and investments. It emphasizes things such as analysis of financial data, interpretation of factors affecting investment programs, financial planning and budgeting, and buying and selling securities. People who score high on this scale typically include financial managers, purchasing agents, realtors, financial analysts, credit managers, and operations managers. Most often high scorers have a preference for taking chances and working with ideas, data, or things. They may also score high on the Taxes & Accounting and Mathematics scales, as well as some of the Enterprising BISs.

AUSTRALIA SAMPLE NORMS OF THE BISs

The standardized scores for each of the 30 BISs are presented in Table 13. Means, standard deviations, and interpretive

TABLE 13. BIS MEANS, STANDARD DEVIATIONS, AND INTERPRETIVE BOUNDARIES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

				Standard Score Boundaries				
				Very Little	Little	Average	High	Very High
Basic Interest Scale	Gender	*M*	*SD*	(0–10)	(11–25)	(26–75)	(76–90)	(91–100)
Realistic								
Mechanics & Construction	Women	46.56	9.24	32–34	35–39	40–51	52–57	58–79
	Men	54.79	8.94	32–42	43–48	49–61	62–66	67–79
Computer Hardware & Electronics	Women	46.39	8.98	34–34	35–38	39–53	54–59	60–75
	Men	54.42	8.47	34–41	42–46	47–60	61–65	66–75
Military	Women	47.57	8.86	36–36	37–40	41–52	53–57	58–79
	Men	54.47	9.89	36–41	42–47	48–61	62–68	69–79
Protective Services	Women	49.81	10.03	31–34	35–40	41–55	56–61	62–79
	Men	54.56	9.92	31–40	41–46	47–59	60–65	66–79
Nature & Agriculture	Women	50.39	9.93	29–34	35–41	42–56	57–63	64–74
	Men	53.47	9.09	29–39	40–45	46–59	60–64	65–74
Athletics	Women	46.64	8.31	31–35	36–40	41–54	55–60	61–73
	Men	52.69	8.64	31–38	39–46	47–61	62–66	67–73
Investigative								
Science	Women	51.36	9.97	31–35	36–40	41–56	57–61	62–76
	Men	54.02	8.87	31–38	39–45	46–60	61–64	65–76
Research	Women	47.73	11.49	24–35	36–41	42–56	57–61	62–80
	Men	52.26	9.50	24–40	41–45	46–58	59–63	64–80
Medical Science	Women	52.05	10.32	32–36	37–42	43–57	58–64	65–79
	Men	53.55	9.47	32–36	37–43	44–57	58–63	64–79
Mathematics	Women	47.05	8.80	34–35	36–40	41–55	56–62	63–74
	Men	51.15	8.29	34–38	39–45	46–59	60–65	66–74

TABLE 13. BIS MEANS, STANDARD DEVIATIONS, AND INTERPRETIVE BOUNDARIES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE (CONT'D)

				Standard Score Boundaries				
				Very Little	Little	Average	High	Very High
Basic Interest Scale	Gender	*M*	*SD*	(0–10)	(11–25)	(26–75)	(76–90)	(91–100)
Artistic								
Visual Arts & Design	Women	48.38	9.73	28–36	37–43	44–59	60–64	65–72
	Men	50.64	8.11	28–36	37–42	43–57	58–61	62–72
Performing Arts	Women	48.50	9.87	25–38	39–45	46–60	61–65	66–74
	Men	48.83	9.00	25–36	37–42	43–55	56–61	62–74
Writing & Mass Communication	Women	49.67	9.65	28–35	36–43	44–60	61–64	65–72
	Men	49.91	8.62	28–36	37–42	43–56	57–62	63–72
Culinary Arts	Women	49.49	9.70	22–38	39–45	46–59	60–64	65–67
	Men	49.34	9.09	22–35	36–41	42–56	57–61	62–67
Social								
Counseling & Helping	Women	51.00	10.70	23–39	40–45	46–59	60–65	66–77
	Men	49.52	9.67	23–34	35–41	42–55	56–60	61–77
Teaching & Education	Women	51.17	10.88	28–37	38–43	44–58	59–65	66–78
	Men	49.74	10.35	28–36	37–42	43–56	57–61	62–78
Human Resources & Training	Women	47.12	9.97	21–37	38–43	44–58	59–64	65–72
	Men	47.05	10.21	21–37	38–43	44–56	57–61	62–72
Social Sciences	Women	45.69	10.79	25–37	38–44	45–57	58–64	65–75
	Men	48.24	10.07	25–37	38–43	44–57	58–62	63–75
Religion & Spirituality	Women	45.96	8.86	34–37	38–43	44–57	58–64	65–75
	Men	48.29	9.41	34–36	37–41	42–58	59–64	65–75
Healthcare Services	Women	54.18	10.20	33–37	38–42	43–59	60–65	66–83
	Men	54.25	10.53	33–37	38–42	43–55	56–61	62–83
Enterprising								
Marketing & Advertising	Women	45.11	10.57	24–36	37–44	45–59	60–64	65–75
	Men	48.36	9.92	24–36	37–43	44–56	57–61	62–75
Sales	Women	51.31	10.38	34–37	38–41	42–55	56–62	63–87
	Men	55.42	11.35	34–37	38–42	43–59	60–66	67–87
Management	Women	47.44	9.44	25–36	37–42	43–56	57–61	62–78
	Men	50.33	9.23	25–38	39–45	46–58	59–63	64–78
Entrepreneurship	Women	42.94	11.79	17–35	36–43	44–56	57–61	62–76
	Men	46.36	10.53	17–37	38–45	46–58	59–63	64–76
Politics & Public Speaking	Women	44.14	8.43	31–35	36–41	42–54	55–61	62–75
	Men	49.91	9.37	31–40	41–46	47–59	60–65	66–75
Law	Women	47.22	9.88	33–35	36–41	42–57	58–63	64–71
	Men	49.07	9.56	33–37	38–42	43–58	59–63	64–71
Conventional								
Office Management	Women	55.09	10.74	31–38	39–44	45–60	61–68	69–84
	Men	53.96	10.74	31–37	38–41	42–53	54–59	60–84
Taxes & Accounting	Women	48.54	9.75	34–35	36–40	41–57	58–64	65–78
	Men	52.59	9.77	34–38	39–44	45–57	58–64	65–78
Programming & Information Systems	Women	46.68	10.55	28–34	35–41	42–56	57–63	64–75
	Men	53.06	9.43	28–39	40–46	47–59	60–64	65–75
Finance & Investing	Women	45.14	8.48	28–36	37–41	42–55	56–60	61–75
	Men	50.43	9.93	28–38	39–46	47–60	61–65	66–75

Note: N = 257 (134 women and 123 men). Numbers in parentheses under categories are percentiles.

categories are listed for women and men. Standardized scores and interpretive categories were derived using the 2004 GRS. Refer to the *Strong Interest Inventory® Manual* (Donnay et al., 2005) for sample information.

Australia sample results were generally similar to those reported for the GRS. However, women in the Australia sample scored lower on Marketing & Advertising and Entrepreneurship than did those in the GRS; men in the Australia sample scored higher on Healthcare Services and Office Management.

RELIABILITY OF THE BISs

Cronbach's alpha was used to examine the reliability of the BISs. Results are presented in Table 14. Cronbach's alphas ranged from .80 for the Management scale to .91 for the Mechanics & Construction, Computer Hardware & Electronics, Sales, and Law scales, with a median of .88. The internal consistency of the BISs in the Australia sample was similar to that reported for the GRS in the Strong manual, with a median of .87 and a range of .80 to .91. Thus, the samples are internally consistent as they reach moderate to high levels of reliability (Murphy & Davidshofer, 2005).

VALIDITY OF THE BISs

The relationships between the 30 BISs (i.e., the intercorrelations between the scales) were examined, as were the relationships between the BISs and other scales of the Strong assessment (i.e., the correlations between the BISs and the GOTs and between the BISs and the OSs). The following sections present these findings.

Intercorrelations Between the BISs

Table 15 shows the intercorrelations between each of the six BISs for all individuals in the Australia sample. These correlations are shown for both women and men in Table 16. Again, while the correlations were somewhat larger for the Australia sample, the pattern of relationships was very similar to that reported for the GRS (Donnay et al., 2005). As shown in Table 16, the strongest relationship between BISs for women and men in the Australia sample was between the Healthcare Services and Medical Science scales, as well as between the Programming & Information Systems and Computer Hardware & Electronics scales.

TABLE 14. BIS RELIABILITY STATISTICS IN THE AUSTRALIA SAMPLE

Basic Interest Scale	Cronbach's Alpha
Mechanics & Construction	.91
Computer Hardware & Electronics	.91
Military	.88
Protective Services	.85
Nature & Agriculture	.89
Athletics	.88
Science	.86
Research	.86
Medical Science	.84
Mathematics	.89
Visual Arts & Design	.87
Performing Arts	.86
Writing & Mass Communication	.88
Culinary Arts	.85
Counseling & Helping	.86
Teaching & Education	.90
Human Resources & Training	.85
Social Sciences	.85
Religion & Spirituality	.90
Healthcare Services	.87
Marketing & Advertising	.88
Sales	.91
Management	.80
Entrepreneurship	.89
Politics & Public Speaking	.90
Law	.91
Office Management	.88
Taxes & Accounting	.86
Programming & Information Systems	.90
Finance & Investing	.86

Note: N = 257.

TABLE 15. INTERCORRELATIONS BETWEEN THE BISs IN THE AUSTRALIA SAMPLE

Basic Interest Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Mechanics & Construction	—	.75	.67	.61	.56	.51	.56	.57	.47	.60	.60	.41	.35	.23	.16
2. Computer Hardware & Electronics	.75	—	.65	.59	.45	.41	.54	.65	.46	.63	.49	.38	.34	.23	.17
3. Military	.67	.65	—	.73	.45	.53	.51	.55	.53	.53	.41	.37	.35	.24	.27
4. Protective Services	.61	.59	.73	—	.55	.60	.59	.63	.68	.46	.55	.55	.51	.42	.47
5. Nature & Agriculture	.56	.45	.45	.55	—	.45	.47	.45	.43	.35	.53	.38	.38	.43	.30
6. Athletics	.51	.41	.53	.60	.45	—	.35	.44	.45	.38	.44	.35	.34	.34	.36
7. Science	.56	.54	.51	.59	.47	.35	—	.75	.80	.62	.58	.50	.46	.27	.38
8. Research	.57	.65	.55	.63	.45	.44	.75	—	.70	.67	.63	.57	.64	.34	.52
9. Medical Science	.47	.46	.53	.68	.43	.45	.80	.70	—	.49	.54	.57	.50	.35	.58
10. Mathematics	.60	.63	.53	.46	.35	.38	.62	.67	.49	—	.51	.42	.43	.14	.28
11. Visual Arts & Design	.60	.49	.41	.55	.53	.44	.58	.63	.54	.51	—	.77	.71	.40	.47
12. Performing Arts	.41	.38	.37	.55	.38	.35	.50	.57	.57	.42	.77	—	.74	.44	.56
13. Writing & Mass Communication	.35	.34	.35	.51	.38	.34	.46	.64	.50	.43	.71	.74	—	.36	.57
14. Culinary Arts	.23	.23	.24	.42	.43	.34	.27	.34	.35	.14	.40	.44	.36	—	.46
15. Counseling & Helping	.16	.17	.27	.47	.30	.36	.38	.52	.58	.28	.47	.56	.57	.46	—
16. Teaching & Education	.31	.28	.34	.39	.31	.35	.42	.51	.51	.40	.51	.54	.58	.41	.67
17. Human Resources & Training	.29	.28	.32	.51	.37	.46	.36	.56	.51	.31	.51	.53	.58	.45	.66
18. Social Sciences	.44	.41	.48	.59	.41	.43	.57	.71	.62	.57	.63	.66	.67	.34	.66
19. Religion & Spirituality	.29	.26	.38	.37	.32	.36	.27	.37	.36	.37	.43	.44	.36	.21	.56
20. Healthcare Services	.43	.40	.48	.67	.45	.43	.59	.58	.79	.42	.49	.51	.45	.37	.62
21. Marketing & Advertising	.43	.40	.48	.63	.40	.55	.29	.55	.44	.32	.58	.58	.61	.52	.51
22. Sales	.55	.46	.53	.61	.42	.51	.35	.45	.46	.41	.55	.50	.46	.37	.41
23. Management	.56	.45	.56	.65	.47	.55	.43	.55	.56	.43	.59	.54	.57	.44	.48
24. Entrepreneurship	.39	.38	.37	.53	.44	.46	.26	.49	.36	.23	.49	.45	.51	.55	.42
25. Politics & Public Speaking	.54	.46	.60	.60	.37	.52	.42	.63	.51	.49	.56	.58	.61	.32	.48
26. Law	.43	.39	.51	.68	.35	.47	.48	.57	.57	.45	.42	.48	.57	.33	.46
27. Office Management	.40	.45	.38	.45	.37	.34	.34	.49	.41	.51	.40	.42	.46	.27	.40
28. Taxes & Accounting	.59	.58	.52	.48	.32	.44	.44	.56	.40	.77	.40	.32	.37	.15	.20
29. Programming & Information Systems	.60	.85	.51	.52	.44	.36	.50	.67	.42	.57	.51	.41	.44	.29	.27
30. Finance & Investing	.60	.58	.61	.60	.40	.56	.43	.63	.44	.61	.52	.39	.46	.29	.31

Note: $N = 257$.

(cont'd)

TABLE 15. INTERCORRELATIONS BETWEEN THE BISs IN THE AUSTRALIA SAMPLE (CONT'D)

Basic Interest Scale	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1. Mechanics & Construction	.31	.29	.44	.29	.43	.43	.55	.56	.39	.54	.43	.40	.59	.60	.60
2. Computer Hardware & Electronics	.28	.28	.41	.26	.40	.40	.46	.45	.38	.46	.39	.45	.58	.85	.58
3. Military	.34	.32	.48	.38	.48	.48	.53	.56	.37	.60	.51	.38	.52	.51	.61
4. Protective Services	.39	.51	.59	.37	.67	.63	.61	.65	.53	.60	.68	.45	.48	.52	.60
5. Nature & Agriculture	.31	.37	.41	.32	.45	.40	.42	.47	.44	.37	.35	.37	.32	.44	.40
6. Athletics	.35	.46	.43	.36	.43	.55	.51	.55	.46	.52	.47	.34	.44	.36	.56
7. Science	.42	.36	.57	.27	.59	.29	.35	.43	.26	.42	.48	.34	.44	.50	.43
8. Research	.51	.56	.71	.37	.58	.55	.45	.55	.49	.63	.57	.49	.56	.67	.63
9. Medical Science	.51	.51	.62	.36	.79	.44	.46	.56	.36	.51	.57	.41	.40	.42	.44
10. Mathematics	.40	.31	.57	.37	.42	.32	.41	.43	.23	.49	.45	.51	.77	.57	.61
11. Visual Arts & Design	.51	.51	.63	.43	.49	.58	.55	.59	.49	.56	.42	.40	.40	.51	.52
12. Performing Arts	.54	.53	.66	.44	.51	.58	.50	.54	.45	.58	.48	.42	.32	.41	.39
13. Writing & Mass Communication	.58	.58	.67	.36	.45	.61	.46	.57	.51	.61	.57	.46	.37	.44	.46
14. Culinary Arts	.41	.45	.34	.21	.37	.52	.37	.44	.55	.32	.33	.27	.15	.29	.29
15. Counseling & Helping	.67	.66	.66	.56	.62	.51	.41	.48	.42	.48	.46	.40	.20	.27	.31
16. Teaching & Education	—	.59	.56	.53	.55	.45	.47	.54	.30	.44	.41	.51	.31	.37	.28
17. Human Resources & Training	.59	—	.52	.34	.51	.66	.56	.74	.54	.53	.48	.48	.32	.37	.46
18. Social Sciences	.56	.52	—	.44	.60	.57	.50	.55	.45	.67	.63	.49	.46	.47	.56
19. Religion & Spirituality	.53	.34	.44	—	.44	.36	.43	.33	.18	.46	.32	.36	.30	.28	.28
20. Healthcare Services	.55	.51	.60	.44	—	.45	.52	.54	.28	.48	.53	.49	.40	.38	.39
21. Marketing & Advertising	.45	.66	.57	.36	.45	—	.78	.71	.76	.65	.56	.51	.42	.47	.65
22. Sales	.47	.56	.50	.43	.52	.78	—	.73	.52	.59	.53	.55	.48	.48	.62
23. Management	.54	.74	.55	.33	.54	.71	.73	—	.60	.62	.59	.57	.48	.43	.66
24. Entrepreneurship	.30	.54	.45	.18	.28	.76	.52	.60	—	.46	.44	.36	.35	.42	.63
25. Politics & Public Speaking	.44	.53	.67	.46	.48	.65	.59	.62	.46	—	.70	.36	.49	.41	.60
26. Law	.41	.48	.63	.32	.53	.56	.53	.59	.44	.70	—	.45	.55	.39	.60
27. Office Management	.51	.48	.49	.36	.49	.51	.55	.57	.36	.36	.45	—	.62	.57	.55
28. Taxes & Accounting	.31	.32	.46	.30	.40	.42	.48	.48	.35	.49	.55	.62	—	.52	.77
29. Programming & Information Systems	.37	.37	.47	.28	.38	.47	.48	.43	.42	.41	.39	.57	.52	—	.56
30. Finance & Investing	.28	.46	.56	.28	.39	.65	.62	.66	.63	.60	.60	.55	.77	.56	—

Note: $N = 257$.

TABLE 16. INTERCORRELATIONS BETWEEN THE BISs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Basic Interest Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Mechanics & Construction	—	.73	.63	.59	.46	.48	.57	.56	.47	.58	.63	.44	.40	.30	.13
2. Computer Hardware & Electronics	.66	—	.64	.50	.38	.32	.55	.64	.46	.64	.50	.45	.40	.21	.16
3. Military	.61	.54	—	.72	.35	.49	.58	.54	.55	.53	.40	.36	.37	.29	.22
4. Protective Services	.57	.63	.71	—	.46	.56	.62	.59	.71	.37	.52	.55	.50	.41	.44
5. Nature & Agriculture	.65	.48	.51	.63	—	.38	.46	.40	.40	.28	.48	.35	.36	.41	.26
6. Athletics	.38	.30	.45	.57	.48	—	.32	.42	.46	.28	.43	.37	.33	.33	.37
7. Science	.53	.53	.42	.53	.45	.33	—	.77	.81	.62	.56	.51	.50	.28	.34
8. Research	.52	.61	.51	.64	.49	.39	.71	—	.71	.66	.62	.59	.67	.34	.52
9. Medical Science	.49	.50	.53	.66	.46	.44	.78	.69	—	.44	.50	.50	.50	.33	.52
10. Mathematics	.56	.55	.45	.50	.39	.40	.58	.64	.56	—	.51	.42	.42	.21	.24
11. Visual Arts & Design	.58	.48	.39	.59	.58	.42	.58	.61	.59	.48	—	.79	.74	.40	.47
12. Performing Arts	.45	.35	.43	.57	.42	.37	.50	.57	.66	.44	.75	—	.44	.51	.51
13. Writing & Mass Communication	.36	.33	.38	.54	.42	.38	.41	.62	.50	.47	.68	.72	—	.40	.57
14. Culinary Arts	.22	.31	.23	.47	.48	.41	.26	.35	.37	.08	.41	.45	.32	—	.47
15. Counseling & Helping	.30	.31	.42	.58	.40	.46	.45	.59	.67	.39	.51	.63	.57	.44	—
16. Teaching & Education	.41	.32	.43	.50	.36	.42	.41	.52	.59	.40	.53	.68	.61	.37	.72
17. Human Resources & Training	.39	.39	.39	.57	.41	.53	.43	.64	.61	.41	.56	.63	.65	.45	.74
18. Social Sciences	.39	.37	.47	.65	.46	.47	.54	.71	.68	.57	.60	.67	.66	.34	.74
19. Religion & Spirituality	.31	.25	.45	.40	.33	.27	.25	.33	.45	.37	.37	.47	.38	.16	.59
20. Healthcare Services	.49	.46	.52	.72	.52	.45	.61	.63	.82	.53	.60	.63	.55	.38	.74
21. Marketing & Advertising	.44	.48	.53	.67	.45	.60	.29	.60	.49	.42	.56	.59	.61	.46	.58
22. Sales	.56	.48	.57	.69	.49	.60	.39	.54	.61	.49	.59	.61	.54	.38	.62
23. Management	.57	.48	.62	.73	.54	.61	.48	.62	.69	.50	.62	.65	.66	.41	.66
24. Entrepreneurship	.43	.54	.46	.64	.52	.53	.26	.56	.36	.27	.47	.43	.46	.55	.46
25. Politics & Public Speaking	.38	.33	.51	.49	.37	.36	.36	.64	.54	.47	.58	.69	.75	.26	.62
26. Law	.48	.43	.55	.65	.39	.49	.48	.63	.62	.56	.54	.63	.66	.33	.56
27. Office Management	.51	.53	.50	.66	.43	.59	.42	.66	.58	.65	.55	.60	.62	.31	.59
28. Taxes & Accounting	.53	.53	.47	.54	.38	.49	.42	.59	.47	.77	.41	.43	.48	.14	.39
29. Programming & Information Systems	.51	.86	.43	.57	.38	.31	.50	.65	.46	.54	.49	.35	.38	.36	.37
30. Finance & Investing	.55	.58	.60	.67	.44	.63	.46	.66	.50	.64	.53	.45	.51	.32	.44

Note: $N = 264$. For correlations above the diagonal, women $n = 134$; below the diagonal, men $n = 130$.

(cont'd)

TABLE 16. INTERCORRELATIONS BETWEEN THE BISs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE (CONT'D)

Basic Interest Scale	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1. Mechanics & Construction	.35	.26	.46	.23	.46	.38	.50	.53	.31	.56	.40	.42	.61	.57	.57
2. Computer Hardware & Electronics	.36	.25	.42	.20	.42	.30	.39	.40	.21	.43	.35	.51	.58	.82	.50
3. Military	.35	.30	.48	.27	.51	.39	.42	.48	.25	.59	.49	.35	.50	.47	.53
4. Protective Services	.35	.47	.52	.30	.65	.58	.49	.56	.42	.66	.69	.30	.38	.41	.47
5. Nature & Agriculture	.29	.35	.35	.28	.41	.32	.32	.39	.35	.32	.31	.34	.23	.45	.32
6. Athletics	.38	.45	.36	.40	.46	.48	.37	.48	.37	.57	.44	.18	.32	.26	.40
7. Science	.45	.31	.57	.27	.59	.27	.29	.36	.23	.43	.47	.29	.42	.47	.37
8. Research	.56	.53	.70	.37	.58	.48	.35	.48	.42	.60	.52	.42	.51	.65	.58
9. Medical Science	.46	.43	.57	.28	.78	.39	.32	.45	.35	.49	.52	.28	.34	.39	.37
10. Mathematics	.45	.23	.54	.33	.34	.19	.29	.34	.14	.44	.35	.43	.74	.54	.54
11. Visual Arts & Design	.52	.48	.64	.46	.41	.58	.51	.56	.49	.53	.32	.30	.37	.51	.51
12. Performing Arts	.44	.45	.65	.42	.41	.58	.42	.45	.47	.54	.37	.27	.23	.48	.36
13. Writing & Mass Communication	.56	.52	.69	.34	.37	.62	.40	.51	.56	.55	.50	.33	.29	.52	.45
14. Culinary Arts	.43	.46	.34	.27	.37	.58	.38	.48	.57	.42	.33	.24	.17	.27	.29
15. Counseling & Helping	.62	.60	.62	.56	.53	.49	.26	.37	.42	.45	.40	.24	.09	.25	.25
16. Teaching & Education	—	.55	.54	.49	.47	.43	.41	.48	.30	.39	.30	.40	.25	.44	.27
17. Human Resources & Training	.63	—	.42	.37	.39	.61	.47	.69	.49	.48	.38	.25	.16	.32	.38
18. Social Sciences	.62	.64	—	.39	.50	.51	.36	.45	.43	.62	.54	.38	.39	.47	.53
19. Religion & Spirituality	.60	.32	.47	—	.38	.34	.34	.24	.17	.36	.21	.24	.17	.29	.20
20. Healthcare Services	.64	.64	.72	.51	—	.34	.34	.38	.20	.45	.45	.35	.32	.38	.30
21. Marketing & Advertising	.52	.75	.63	.36	.58	—	.73	.68	.74	.62	.49	.32	.26	.36	.56
22. Sales	.59	.68	.64	.49	.71	.83	—	.69	.43	.48	.39	.39	.37	.43	.53
23. Management	.65	.81	.66	.40	.74	.73	.76	—	.58	.56	.46	.41	.36	.39	.62
24. Entrepreneurship	.33	.61	.44	.16	.39	.78	.60	.61	—	.44	.39	.21	.23	.28	.57
25. Politics & Public Speaking	.60	.63	.73	.53	.57	.66	.64	.67	.44	—	.68	.20	.44	.35	.57
26. Law	.56	.60	.72	.41	.62	.63	.67	.74	.48	.75	—	.23	.48	.33	.55
27. Office Management	.64	.73	.65	.49	.65	.77	.74	.79	.58	.59	.70	—	.49	.66	.44
28. Taxes & Accounting	.42	.51	.52	.41	.51	.56	.55	.58	.45	.48	.61	.81	—	.48	.73
29. Programming & Information Systems	.36	.46	.45	.21	.42	.56	.47	.43	.55	.37	.46	.58	.51	—	.47
30. Finance & Investing	.36	.58	.59	.31	.49	.72	.66	.68	.68	.56	.64	.74	.79	.59	—

Note: N = 257. For correlations above the diagonal, women n = 134; below the diagonal, men n = 123

Relationship Between the BISs and the GOTs

The BISs focus on specific interest domains grouped under the General Occupational Themes. In most cases, BISs in the same categories correlate at least moderately with each other. Table 17 shows the intercorrelations between BISs and GOTs presented in RIASEC order for the overall group and separately by gender. The correlations found between BISs and GOTs in the Australia sample are consistent with those found in the GRS (Donnay et al., 2005). For instance, strong relationships were found between the Science BIS and the Investigative GOT, and between the Marketing & Advertising BIS and the Enterprising GOT.

Relationship Between the BISs and the OSs

As detailed in the 2005 Strong manual, one of the main purposes of developing the BISs was to improve upon the understanding of the OSs. Thus, it is expected that certain BISs will be related to certain OSs. For instance, one would expect people who score high on Computer Hardware & Electronics to also score high on OSs such as Computer Scientist, Network Administrator, Technical Support Specialist, and so on. Tables 18–47 illustrate the correlations between these two sets of scales. The 10 OSs with the strongest positive relationships with the BISs, as well as the 10 OSs with the strongest negative relationships with the BISs, are presented for women and men.

It is important to note that the OSs were built using occupational samples of employed adults obtained in the United States. While occupations in different countries may share the same job titles, different sets of knowledge, skills, abilities, and other attributes may be required to successfully perform them. For example, farming in the U.S. may be more technologically sophisticated than in another country, drawing different types of individuals to that occupation. These differences may show up in results. Furthermore, although OS results from the Australia sample are generally congruent with those from the U.S. GRS, caution should be taken when interpreting those results, as differences in work tasks as well as organizational, national, and cultural differences between the two countries may be an influencing factor.

TABLE 17. CORRELATIONS BETWEEN THE BISs AND THE GOTs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

	Realistic			Investigative			Artistic			Social			Enterprising			Conventional		
Basic Interest Scale	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined
Mechanics & Construction	.89	.88	.91	.54	.53	.54	.54	.47	.48	.33	.45	.33	.45	.53	.50	.66	.59	.64
Computer Hardware & Electronics	.76	.76	.80	.56	.57	.57	.49	.39	.42	.33	.37	.30	.32	.51	.43	.75	.70	.72
Military	.75	.75	.78	.57	.44	.52	.43	.40	.40	.39	.51	.40	.41	.59	.52	.55	.58	.59
Protective Services	.74	.76	.76	.62	.60	.62	.58	.61	.59	.49	.65	.54	.58	.73	.66	.47	.73	.61
Nature & Agriculture	.68	.81	.72	.47	.52	.50	.46	.54	.50	.35	.47	.39	.37	.53	.46	.39	.47	.44
Athletics	.61	.54	.63	.37	.36	.38	.42	.42	.41	.46	.53	.45	.46	.64	.56	.32	.58	.48
Science	.62	.55	.58	.94	.93	.94	.58	.55	.57	.45	.51	.46	.28	.35	.33	.44	.51	.48
Research	.61	.58	.62	.85	.82	.84	.66	.61	.63	.62	.63	.59	.45	.61	.53	.60	.72	.66
Medical Science	.57	.56	.54	.83	.84	.83	.55	.65	.60	.55	.73	.63	.40	.59	.49	.39	.59	.49
Mathematics	.52	.53	.56	.71	.69	.71	.47	.47	.47	.40	.50	.42	.24	.45	.36	.63	.71	.68
Visual Arts & Design	.64	.62	.61	.58	.62	.60	.92	.89	.91	.59	.62	.59	.61	.63	.62	.46	.58	.52
Performing Arts	.53	.46	.46	.55	.57	.56	.91	.90	.90	.54	.72	.62	.57	.66	.61	.36	.54	.44
Writing & Mass Communication	.48	.42	.41	.55	.48	.52	.86	.84	.85	.63	.65	.63	.58	.65	.60	.43	.59	.50
Culinary Arts	.37	.40	.34	.33	.29	.31	.49	.51	.50	.50	.42	.46	.59	.49	.54	.24	.32	.27
Counseling & Helping	.23	.40	.24	.46	.53	.47	.56	.65	.59	.84	.90	.87	.45	.64	.52	.23	.55	.36
Teaching & Education	.38	.46	.34	.52	.46	.48	.58	.69	.62	.89	.90	.89	.43	.59	.49	.41	.56	.46
Human Resources & Training	.36	.46	.37	.39	.48	.42	.52	.65	.58	.71	.78	.75	.65	.78	.71	.29	.67	.47
Social Sciences	.49	.48	.49	.67	.65	.67	.71	.70	.70	.65	.78	.70	.49	.66	.58	.47	.64	.56

TABLE 17. CORRELATIONS BETWEEN THE BISs AND THE GOTs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE (CONT'D)

	Realistic			Investigative			Artistic			Social			Enterprising			Conventional		
Basic Interest Scale	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined	Women	Men	Combined
Religion & Spirituality	.29	.35	.34	.35	.32	.35	.45	.47	.46	.63	.67	.64	.32	.42	.39	.26	.46	.38
Healthcare Services	.56	.59	.52	.62	.64	.62	.45	.66	.54	.64	.83	.73	.34	.66	.50	.43	.63	.52
Marketing & Advertising	.48	.56	.52	.32	.37	.35	.65	.61	.63	.57	.65	.59	.92	.94	.93	.41	.74	.58
Sales	.52	.63	.59	.28	.42	.36	.50	.62	.55	.48	.74	.59	.84	.91	.88	.53	.74	.65
Management	.57	.66	.61	.38	.52	.45	.56	.70	.62	.56	.78	.65	.81	.82	.82	.51	.74	.64
Entrepreneurship	.38	.58	.49	.28	.33	.32	.54	.46	.50	.40	.45	.41	.74	.81	.78	.30	.61	.46
Politics & Public Speaking	.59	.42	.57	.51	.46	.50	.58	.71	.62	.50	.69	.55	.64	.71	.68	.43	.59	.54
Law	.49	.52	.49	.50	.54	.52	.42	.63	.52	.40	.66	.52	.47	.69	.58	.46	.71	.58
Office Management	.44	.57	.43	.34	.51	.41	.33	.62	.46	.40	.74	.57	.35	.78	.54	.85	.93	.86
Taxes & Accounting	.52	.54	.56	.47	.50	.50	.30	.44	.36	.22	.51	.35	.32	.57	.46	.79	.88	.84
Programming & Information Systems	.66	.60	.67	.52	.55	.54	.53	.41	.47	.42	.41	.38	.39	.53	.47	.78	.73	.76
Finance & Investing	.54	.63	.63	.42	.52	.48	.46	.49	.46	.33	.50	.39	.64	.74	.70	.73	.87	.81

Note: N = 257 (134 women and 123 men).

TABLE 18. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN MECHANICS & CONSTRUCTION BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Engineering Technician	.83	Engineer	.82
Electrician	.81	Engineering Technician	.80
Engineer	.80	Computer & IS Manager	.76
Network Administrator	.80	Military Officer	.74
Computer Programmer	.77	Computer Programmer	.73
Software Developer	.77	Network Administrator	.72
Technical Support Specialist	.77	Production Worker	.72
Computer Scientist	.74	Software Developer	.72
Urban & Regional Planner	.71	R&D Manager	.70
Firefighter	.70	Computer Mathematics Manager	.69
Financial Analyst	–.16	Geologist	–.19
Broadcast Journalist	–.19	Mathematician	–.22
Photographer	–.24	Mental Health Counselor	–.23
Speech Pathologist	–.26	Farmer/Rancher	–.28
Farmer/Rancher	–.29	Advertising Account Manager	–.33
Mental Health Counselor	–.30	Musician	–.34
Production Worker	–.37	Biologist	–.47
Advertising Account Manager	–.48	Graphic Designer	–.48
Artist	–.54	Artist	–.52
Buyer	–.54	Interior Designer	–.52

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 19. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN COMPUTER HARDWARE & ELECTRONICS BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Computer Programmer	.89	Computer Systems Analyst	.89
Software Developer	.88	Computer & IS Manager	.87
Network Administrator	.88	Technical Support Specialist	.86
Computer Scientist	.87	Network Administrator	.85
Technical Support Specialist	.87	Software Developer	.84
Engineer	.77	Computer Programmer	.82
Computer Mathematics Manager	.74	Computer Mathematics Manager	.81
Engineering Technician	.72	Engineer	.72
Physicist	.69	Computer Scientist	.72
Actuary	.68	R&D Manager	.63
Broadcast Journalist	–.20	Landscape/Grounds Manager	–.21
Speech Pathologist	–.20	Musician	–.27
Bartender	–.21	Farmer/Rancher	–.27
Photographer	–.27	Biologist	–.37
Farmer/Rancher	–.31	Social Worker	–.38
Production Worker	–.33	Advertising Account Manager	–.40
Mental Health Counselor	–.49	Interior Designer	–.43
Artist	–.50	Graphic Designer	–.47
Advertising Account Manager	–.51	Artist	–.49
Buyer	–.54	Mental Health Counselor	–.51

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 20. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN MILITARY BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Military Officer	.79	Military Officer	.78
Firefighter	.71	Firefighter	.73
Engineering Technician	.66	Purchasing Agent	.66
Engineer	.66	Sales Manager	.65
Network Administrator	.65	Operations Manager	.65
Software Developer	.65	Realtor	.65
Computer Programmer	.64	School Administrator	.64
Military Enlisted	.62	Securities Sales Agent	.63
Technical Support Specialist	.61	Credit Manager	.63
Computer Scientist	.60	Financial Analyst	.62
Medical Illustrator	–.14	Landscape/Grounds Manager	–.18
Broadcast Journalist	–.16	Advertising Account Manager	–.19
Mental Health Counselor	–.19	Farmer/Rancher	–.33
Musician	–.23	Geologist	–.39
Production Worker	–.28	Mathematician	–.47
Farmer/Rancher	–.28	Interior Designer	–.50
Photographer	–.30	Biologist	–.54
Buyer	–.42	Graphic Designer	–.56
Advertising Account Manager	–.42	Musician	–.61
Artist	–.55	Artist	–.69

Note: *N* = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 21. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN PROTECTIVE SERVICES BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Firefighter	.83	Pharmacist	.77
Law Enforcement Officer	.77	Firefighter	.76
Military Officer	.74	Credit Manager	.75
Chiropractor	.72	Accountant	.75
Dentist	.67	Health Information Specialist	.75
Technical Sales Representative	.66	Physical Therapist	.74
Registered Nurse	.65	Wholesale Sales Representative	.74
Physical Therapist	.64	Securities Sales Agent	.74
Engineering Technician	.64	Sales Manager	.73
Urban & Regional Planner	.63	Financial Analyst	.73
Cosmetologist	–.06	Automobile Mechanic	–.22
Business Education Teacher	–.08	Landscape/Grounds Manager	–.24
Medical Illustrator	–.10	Musician	–.35
Photographer	–.12	Interior Designer	–.35
Buyer	–.30	Farmer/Rancher	–.42
Financial Analyst	–.32	Mathematician	–.52
Advertising Account Manager	–.32	Graphic Designer	–.56
Production Worker	–.40	Geologist	–.56
Farmer/Rancher	–.46	Biologist	–.66
Artist	–.55	Artist	–.70

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 22. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN NATURE & AGRICULTURE BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Engineering Technician	.68	Firefighter	.72
Urban & Regional Planner	.67	Chiropractor	.69
Landscape/Grounds Manager	.66	Respiratory Therapist	.62
Chiropractor	.65	Physical Therapist	.61
Firefighter	.65	Engineer	.61
Recreation Therapist	.64	Veterinarian	.60
Vocational Agriculture Teacher	.63	Medical Technologist	.59
Graphic Designer	.57	Science Teacher	.58
Horticulturist	.56	Technical Support Specialist	.57
Technical Support Specialist	.55	Pharmacist	.56
Florist	–.02	Advertising Account Manager	–.17
Paralegal	–.04	Musician	–.24
Business Education Teacher	–.05	Geologist	–.25
Mental Health Counselor	–.10	Translator	–.26
Advertising Account Manager	–.15	Farmer/Rancher	–.26
Farmer/Rancher	–.18	Mathematician	–.27
Buyer	–.32	Interior Designer	–.30
Production Worker	–.33	Graphic Designer	–.33
Artist	–.35	Artist	–.39
Financial Analyst	–.50	Biologist	–.44

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 23. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN ATHLETICS BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Parks & Recreation Manager	.73	Personal Financial Advisor	.76
Firefighter	.69	Parks & Recreation Manager	.76
Recreation Therapist	.68	Financial Analyst	.75
Law Enforcement Officer	.67	Loan Officer Counselor	.74
Physical Therapist	.60	Technical Sales Representative	.74
Technical Sales Representative	.60	Accountant	.72
Bartender	.58	Wholesale Sales Representative	.71
Chiropractor	.54	Financial Manager	.69
Wholesale Sales Representative	.54	Securities Sales Agent	.68
Realtor	.54	Physical Therapist	.68
Musician	–.08	Photographer	–.20
Medical Technician	–.08	Farmer/Rancher	–.26
Advertising Account Manager	–.13	Interior Designer	–.29
Medical Illustrator	–.14	Musician	–.41
Buyer	–.19	Graphic Designer	–.43
Librarian	–.21	Translator	–.51
Financial Analyst	–.22	Geologist	–.53
Farmer/Rancher	–.25	Mathematician	–.55
Production Worker	–.28	Artist	–.58
Artist	–.37	Biologist	–.68

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 24. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN SCIENCE BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Science Teacher	.88	Medical Technologist	.85
Optometrist	.84	Dentist	.84
Chiropractor	.84	Science Teacher	.82
Dentist	.82	Optometrist	.81
Pharmacist	.81	Respiratory Therapist	.81
Medical Technologist	.78	Veterinarian	.77
Geographer	.78	Engineer	.77
Registered Nurse	.78	Pharmacist	.74
Engineer	.77	Medical Technician	.74
Engineering Technician	.76	Software Developer	.72
Cosmetologist	–.26	Law Enforcement Officer	–.25
Business Education Teacher	–.26	Buyer	–.32
Paralegal	–.33	Advertising Account Manager	–.33
Financial Analyst	–.35	Landscape/Grounds Manager	–.33
Florist	–.35	Graphic Designer	–.35
Artist	–.47	Restaurant Manager	–.37
Production Worker	–.56	Florist	–.41
Farmer/Rancher	–.58	Artist	–.45
Advertising Account Manager	–.61	Farmer/Rancher	–.45
Buyer	–.69	Interior Designer	–.57

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 25. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN RESEARCH BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
University Faculty Member	.86	Psychologist	.82
Sociologist	.85	Computer Mathematics Manager	.78
Management Analyst	.78	Management Analyst	.78
Engineer	.77	Sociologist	.78
Psychologist	.76	Software Developer	.77
Science Teacher	.76	Engineer	.77
Geographer	.75	Health Information Specialist	.77
Chiropractor	.75	Computer Programmer	.76
Dentist	.74	Technical Support Specialist	.75
Software Developer	.74	Auditor	.75
Radiologic Technologist	–.13	Restaurant Manager	–.24
Paralegal	–.17	Geologist	–.27
Financial Analyst	–.23	Radiologic Technologist	–.29
Florist	–.29	Interior Designer	–.39
Cosmetologist	–.35	Automobile Mechanic	–.42
Advertising Account Manager	–.43	Biologist	–.45
Artist	–.48	Graphic Designer	–.46
Buyer	–.49	Landscape/Grounds Manager	–.51
Production Worker	–.61	Artist	–.57
Farmer/Rancher	–.67	Farmer/Rancher	–.60

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 26. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN MEDICAL SCIENCE BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Registered Nurse	.86	Pharmacist	.87
Chiropractor	.85	Respiratory Therapist	.86
Dentist	.85	Registered Nurse	.83
Pharmacist	.82	Dentist	.82
Science Teacher	.81	Physical Therapist	.80
Physical Therapist	.75	Chiropractor	.79
Optometrist	.74	Optometrist	.78
Firefighter	.71	Veterinarian	.76
Veterinarian	.69	Health Information Specialist	.75
University Faculty Member	.67	Science Teacher	.75
Cosmetologist	–.20	Mathematician	–.23
Florist	–.23	Florist	–.26
Business Education Teacher	–.26	Geologist	–.32
Paralegal	–.32	Automobile Mechanic	–.37
Financial Analyst	–.41	Biologist	–.40
Production Worker	–.47	Landscape/Grounds Manager	–.42
Artist	–.50	Interior Designer	–.43
Buyer	–.50	Graphic Designer	–.48
Advertising Account Manager	–.51	Farmer/Rancher	–.53
Farmer/Rancher	–.52	Artist	–.59

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 27. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN MATHEMATICS BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Engineer	.79	Actuary	.85
Software Developer	.77	Auditor	.78
Physicist	.77	Computer Programmer	.78
Computer Programmer	.76	Engineer	.76
Computer Scientist	.76	Software Developer	.74
Actuary	.75	Optometrist	.74
Accountant	.74	R&D Manager	.71
Network Administrator	.73	Computer Mathematics Manager	.70
Mathematics Teacher	.70	Accountant	.69
Optometrist	.69	Financial Manager	.68
Paralegal	–.26	Photographer	–.24
Speech Pathologist	–.31	Musician	–.25
Broadcast Journalist	–.34	Advertising Account Manager	–.26
Florist	–.40	Law Enforcement Officer	–.35
Photographer	–.40	Biologist	–.37
Farmer/Rancher	–.41	Farmer/Rancher	–.40
Production Worker	–.41	Landscape/Grounds Manager	–.45
Artist	–.47	Interior Designer	–.45
Buyer	–.51	Graphic Designer	–.53
Advertising Account Manager	–.53	Artist	–.59

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 28. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN VISUAL ARTS & DESIGN BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Arts/Entertainment Manager	.89	Arts/Entertainment Manager	.84
Graphic Designer	.88	Editor	.77
Editor	.87	Instructional Coordinator	.70
ESL Instructor	.82	Health Information Specialist	.69
Technical Writer	.82	Urban & Regional Planner	.68
Urban & Regional Planner	.76	Community Service Director	.68
Architect	.74	Administrative Assistant	.67
English Teacher	.73	Respiratory Therapist	.66
Instructional Coordinator	.71	Technical Writer	.66
Art Teacher	.70	English Teacher	.66
Health Information Specialist	–.06	Radiologic Technologist	–.24
Physician	–.07	Mathematician	–.26
Business Education Teacher	–.16	Vocational Agriculture Teacher	–.28
Radiologic Technologist	–.21	Artist	–.33
Medical Technician	–.28	Landscape/Grounds Manager	–.35
Buyer	–.31	Law Enforcement Officer	–.35
Artist	–.34	Geologist	–.39
Financial Analyst	–.49	Automobile Mechanic	–.43
Farmer/Rancher	–.62	Biologist	–.50
Production Worker	–.79	Farmer/Rancher	–.69

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 29. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN PERFORMING ARTS BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Editor	.81	Arts/Entertainment Manager	.87
Arts/Entertainment Manager	.79	Instructional Coordinator	.80
ESL Instructor	.78	Editor	.80
Technical Writer	.76	English Teacher	.79
English Teacher	.72	Secondary School Teacher	.78
Instructional Coordinator	.69	Community Service Director	.77
Graphic Designer	.68	Administrative Assistant	.76
Urban & Regional Planner	.65	Training & Development Specialist	.75
Religious/Spiritual Leader	.65	Customer Service Representative	.74
Translator	.64	Rehabilitation Counselor	.74
Forester	–.11	Forester	–.38
Food Service Manager	–.12	Artist	–.38
Buyer	–.16	Radiologic Technologist	–.38
Business Education Teacher	–.17	Vocational Agriculture Teacher	–.39
Radiologic Technologist	–.18	Electrician	–.41
Medical Technician	–.29	Geologist	–.49
Artist	–.30	Landscape/Grounds Manager	–.49
Financial Analyst	–.48	Biologist	–.50
Farmer/Rancher	–.67	Automobile Mechanic	–.59
Production Worker	–.76	Farmer/Rancher	–.80

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 30. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN WRITING & MASS COMMUNICATION BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
English Teacher	.87	Attorney	.86
Editor	.87	English Teacher	.86
Technical Writer	.87	Reporter	.86
ESL Instructor	.80	Public Administrator	.86
Arts/Entertainment Manager	.77	Editor	.85
Instructional Coordinator	.76	Sociologist	.84
Translator	.76	Training & Development Specialist	.82
Reporter	.75	Urban & Regional Planner	.82
Attorney	.74	Elected Public Official	.80
Elected Public Official	.71	Arts/Entertainment Manager	.79
Computer & IS Manager	–.08	Optician	–.41
Forester	–.13	Military Enlisted	–.43
Cosmetologist	–.13	Artist	–.45
Buyer	–.17	Geologist	–.51
Radiologic Technologist	–.31	Biologist	–.56
Artist	–.35	Landscape/Grounds Manager	–.57
Medical Technician	–.43	Electrician	–.59
Financial Analyst	–.52	Radiologic Technologist	–.65
Farmer/Rancher	–.70	Automobile Mechanic	–.73
Production Worker	–.81	Farmer/Rancher	–.84

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 31. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN CULINARY ARTS BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Chef	.71	Chef	.72
Marketing Manager	.57	Food Service Manager	.68
Realtor	.57	Bartender	.65
Wholesale Sales Representative	.57	Flight Attendant	.65
Technical Sales Representative	.56	Dietitian	.59
Sales Manager	.54	Technical Sales Representative	.51
Securities Sales Agent	.54	Recreation Therapist	.50
Purchasing Agent	.53	Cosmetologist	.49
Instructional Coordinator	.53	Wholesale Sales Representative	.47
Recreation Therapist	.53	Customer Service Representative	.47
R&D Manager	–.11	Physicist	–.10
Medical Technician	–.12	Translator	–.11
Biologist	–.15	Chemist	–.12
Mathematician	–.16	Graphic Designer	–.13
Physician	–.19	Artist	–.18
Farmer/Rancher	–.20	Automobile Mechanic	–.23
Medical Illustrator	–.21	Mathematician	–.31
Production Worker	–.29	Geologist	–.33
Financial Analyst	–.32	Farmer/Rancher	–.33
Artist	–.38	Biologist	–.35

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 32. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN COUNSELING & HELPING BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Social Worker	.87	Rehabilitation Counselor	.86
Rehabilitation Counselor	.84	Religious/Spiritual Leader	.85
Secondary School Teacher	.82	Community Service Director	.84
Religious/Spiritual Leader	.82	Secondary School Teacher	.83
Special Education Teacher	.80	Career Counselor	.82
Career Counselor	.79	University Administrator	.81
Elementary School Teacher	.77	Nursing Home Administrator	.81
School Counselor	.77	Elementary School Teacher	.80
Middle School Teacher	.76	Middle School Teacher	.80
Recreation Therapist	.71	School Counselor	.80
Automobile Mechanic	–.18	Electrician	–.32
Landscape/Grounds Manager	–.19	Forester	–.34
R&D Manager	–.19	Graphic Designer	–.37
Forester	–.20	Mathematician	–.41
Computer & IS Manager	–.24	Landscape/Grounds Manager	–.46
Medical Illustrator	–.25	Artist	–.50
Artist	–.36	Biologist	–.50
Production Worker	–.42	Automobile Mechanic	–.53
Farmer/Rancher	–.43	Farmer/Rancher	–.57
Financial Analyst	–.46	Geologist	–.61

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 33. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN TEACHING & EDUCATION BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Elementary School Teacher	.90	Elementary School Teacher	.88
Middle School Teacher	.84	Special Education Teacher	.86
Special Education Teacher	.79	Middle School Teacher	.86
Secondary School Teacher	.78	Secondary School Teacher	.85
Religious/Spiritual Leader	.76	Religious/Spiritual Leader	.83
Social Worker	.75	Community Service Director	.82
School Counselor	.74	Recreation Therapist	.82
Rehabilitation Counselor	.73	Instructional Coordinator	.81
University Administrator	.71	School Counselor	.79
Recreation Therapist	.70	University Administrator	.77
Medical Technician	–.14	Electrician	–.35
Landscape/Grounds Manager	–.18	Radiologic Technologist	–.36
Buyer	–.20	Graphic Designer	–.37
Computer & IS Manager	–.21	Optician	–.39
Advertising Account Manager	–.23	Biologist	–.45
Farmer/Rancher	–.30	Landscape/Grounds Manager	–.48
Financial Analyst	–.31	Automobile Mechanic	–.50
Medical Illustrator	–.33	Geologist	–.51
Production Worker	–.37	Artist	–.52
Artist	–.54	Farmer/Rancher	–.61

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 34. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN HUMAN RESOURCES & TRAINING BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Training & Development Specialist	.85	Customer Service Representative	.81
Human Resources Specialist	.84	Human Resources Manager	.81
Human Resources Manager	.84	Operations Manager	.80
Instructional Coordinator	.82	Training & Development Specialist	.80
Operations Manager	.80	Top Executive, Business/Finance	.80
University Administrator	.78	Instructional Coordinator	.80
Personal Financial Advisor	.77	Human Resources Specialist	.79
Career Counselor	.75	Community Service Director	.79
Rehabilitation Counselor	.74	Middle School Teacher	.78
School Counselor	.73	Purchasing Agent	.77
Geologist	–.13	Radiologic Technologist	–.33
Radiologic Technologist	–.15	Forester	–.34
Medical Technician	–.22	Landscape/Grounds Manager	–.38
Physician	–.22	Graphic Designer	–.43
Forester	–.22	Automobile Mechanic	–.45
Financial Analyst	–.31	Mathematician	–.54
Medical Illustrator	–.32	Artist	–.58
Farmer/Rancher	–.37	Farmer/Rancher	–.58
Production Worker	–.38	Biologist	–.62
Artist	–.44	Geologist	–.64

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 35. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN SOCIAL SCIENCES BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
ESL Instructor	.79	Community Service Director	.83
Rehabilitation Counselor	.75	University Administrator	.83
University Administrator	.73	Secondary School Teacher	.81
University Faculty Member	.72	Rehabilitation Counselor	.81
Psychologist	.72	Instructional Coordinator	.79
Editor	.71	Career Counselor	.78
Urban & Regional Planner	.70	Attorney	.78
Religious/Spiritual Leader	.70	Management Analyst	.78
Arts/Entertainment Manager	.68	Public Administrator	.78
Sociologist	.67	Human Resources Manager	.78
Florist	–.14	Electrician	–.33
Advertising Account Manager	–.15	Mathematician	–.33
Radiologic Technologist	–.18	Forester	–.36
Medical Technician	–.20	Graphic Designer	–.43
Cosmetologist	–.21	Biologist	–.52
Buyer	–.31	Landscape/Grounds Manager	–.54
Financial Analyst	–.33	Geologist	–.55
Artist	–.39	Automobile Mechanic	–.55
Farmer/Rancher	–.64	Artist	–.57
Production Worker	–.65	Farmer/Rancher	–.61

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 36. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN RELIGION & SPIRITUALITY BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Religious/Spiritual Leader	.70	Religious/Spiritual Leader	.71
School Counselor	.59	Elementary School Teacher	.67
Elementary School Teacher	.56	Dietitian	.65
Special Education Teacher	.56	School Counselor	.60
Middle School Teacher	.55	Administrative Assistant	.60
Recreation Therapist	.54	School Administrator	.58
Secondary School Teacher	.54	Nursing Home Administrator	.56
Social Worker	.52	Secondary School Teacher	.56
Facilities Manager	.50	Community Service Director	.55
English Teacher	.49	Instructional Coordinator	.54
Paralegal	–.09	Photographer	–.23
Medical Illustrator	–.10	Musician	–.24
Buyer	–.11	Mathematician	–.26
R&D Manager	–.13	Graphic Designer	–.31
Farmer/Rancher	–.15	Landscape/Grounds Manager	–.32
Computer & IS Manager	–.16	Biologist	–.35
Computer Systems Analyst	–.20	Farmer/Rancher	–.36
Production Worker	–.23	Automobile Mechanic	–.38
Financial Analyst	–.27	Geologist	–.39
Artist	–.31	Artist	–.45

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 37. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN HEALTHCARE SERVICES BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Registered Nurse	.81	Registered Nurse	.89
Physical Therapist	.81	Pharmacist	.89
Dentist	.78	Physical Therapist	.86
Pharmacist	.76	Health Information Specialist	.84
Chiropractor	.75	Respiratory Therapist	.82
Firefighter	.71	Chiropractor	.81
Athletic Trainer	.71	Occupational Therapist	.80
Respiratory Therapist	.69	Administrative Assistant	.78
Emergency Medical Technician	.69	Customer Service Representative	.78
Occupational Therapist	.68	Rehabilitation Counselor	.77
Librarian	–.13	Musician	–.28
Interior Designer	–.19	Interior Designer	–.31
Photographer	–.21	Landscape/Grounds Manager	–.31
Production Worker	–.22	Automobile Mechanic	–.35
Farmer/Rancher	–.22	Mathematician	–.41
Paralegal	–.24	Farmer/Rancher	–.49
Financial Analyst	–.37	Graphic Designer	–.53
Buyer	–.38	Biologist	–.53
Advertising Account Manager	–.43	Geologist	–.53
Artist	–.56	Artist	–.65

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 38. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN MARKETING & ADVERTISING BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Realtor	.84	Wholesale Sales Representative	.90
Wholesale Sales Representative	.83	Securities Sales Agent	.88
Technical Sales Representative	.80	Technical Sales Representative	.88
Marketing Manager	.79	Top Executive, Business/Finance	.86
Sales Manager	.79	Sales Manager	.85
Restaurant Manager	.78	Operations Manager	.84
Purchasing Agent	.78	Realtor	.83
Securities Sales Agent	.77	Personal Financial Advisor	.83
Personal Financial Advisor	.72	Marketing Manager	.83
Top Executive, Business/Finance	.72	Purchasing Agent	.83
Chemist	–.26	Landscape/Grounds Manager	–.33
Biologist	–.30	Radiologic Technologist	–.35
Geologist	–.35	Automobile Mechanic	–.35
Medical Technician	–.35	Forester	–.36
Mathematician	–.36	Graphic Designer	–.46
Forester	–.40	Farmer/Rancher	–.50
Farmer/Rancher	–.42	Artist	–.63
Production Worker	–.44	Mathematician	–.70
Artist	–.46	Geologist	–.76
Physician	–.48	Biologist	–.79

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 39. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN SALES BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Realtor	.78	Wholesale Sales Representative	.88
Technical Sales Representative	.77	Technical Sales Representative	.87
Wholesale Sales Representative	.74	Realtor	.85
Purchasing Agent	.74	Securities Sales Agent	.85
Securities Sales Agent	.72	Sales Manager	.84
Restaurant Manager	.71	Personal Financial Advisor	.84
Sales Manager	.70	Loan Officer Counselor	.84
Life Insurance Agent	.65	Credit Manager	.83
Personal Financial Advisor	.65	Operations Manager	.81
Flight Attendant	.63	Top Executive, Business/Finance	.80
Farmer/Rancher	–.19	Forester	–.24
Medical Technician	–.20	Automobile Mechanic	–.25
Production Worker	–.20	Landscape/Grounds Manager	–.25
Mathematician	–.20	Musician	–.35
Forester	–.22	Farmer/Rancher	–.45
Geologist	–.25	Graphic Designer	–.58
Biologist	–.26	Mathematician	–.67
Medical Illustrator	–.33	Artist	–.72
Physician	–.52	Geologist	–.73
Artist	–.63	Biologist	–.78

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 40. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN MANAGEMENT BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Operations Manager	.81	Operations Manager	.88
Securities Sales Agent	.79	Business/Finance Supervisor	.87
Wholesale Sales Representative	.77	Sales Manager	.86
Top Executive, Business/Finance	.77	Purchasing Agent	.85
Sales Manager	.76	Credit Manager	.85
Personal Financial Advisor	.75	Top Executive, Business/Finance	.83
Realtor	.75	Personal Financial Advisor	.83
Marketing Manager	.75	Facilities Manager	.82
Technical Sales Representative	.75	Realtor	.82
Human Resources Manager	.75	Securities Sales Agent	.82
Photographer	–.16	Landscape/Grounds Manager	–.31
Musician	–.16	Interior Designer	–.34
Financial Analyst	–.17	Automobile Mechanic	–.38
Forester	–.18	Musician	–.43
Medical Technician	–.23	Farmer/Rancher	–.56
Farmer/Rancher	–.32	Mathematician	–.59
Production Worker	–.36	Graphic Designer	–.63
Physician	–.36	Geologist	–.67
Medical Illustrator	–.38	Biologist	–.76
Artist	–.65	Artist	–.77

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 41. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN ENTREPRENEURSHIP BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Realtor	.69	Wholesale Sales Representative	.76
Marketing Manager	.68	Securities Sales Agent	.74
Sales Manager	.68	Technical Sales Representative	.72
Securities Sales Agent	.68	Top Executive, Business/Finance	.71
Top Executive, Business/Finance	.67	Purchasing Agent	.70
Wholesale Sales Representative	.67	Operations Manager	.70
Technical Sales Representative	.66	Sales Manager	.69
Operations Manager	.66	Personal Financial Advisor	.69
Human Resources Manager	.62	Financial Analyst	.69
Elected Public Official	.60	Loan Officer Counselor	.67
Biologist	–.17	Musician	–.19
Radiologic Technologist	–.18	Social Worker	–.20
Mathematician	–.24	Geographer	–.22
Physician	–.27	Translator	–.24
Artist	–.28	Graphic Designer	–.35
Financial Analyst	–.28	Farmer/Rancher	–.36
Forester	–.30	Artist	–.46
Medical Technician	–.37	Geologist	–.54
Farmer/Rancher	–.43	Mathematician	–.56
Production Worker	–.47	Biologist	–.69

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 42. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN POLITICS & PUBLIC SPEAKING BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Attorney	.80	Elected Public Official	.88
Elected Public Official	.78	Public Administrator	.88
School Administrator	.76	School Administrator	.83
Top Executive, Business/Finance	.74	Attorney	.82
University Administrator	.70	Training & Development Specialist	.80
Urban & Regional Planner	.70	Marketing Manager	.79
Public Administrator	.70	Top Executive, Business/Finance	.78
Sales Manager	.69	Human Resources Manager	.77
Technical Sales Representative	.68	University Administrator	.77
Instructional Coordinator	.68	Religious/Spiritual Leader	.76
Food Service Manager	–.12	Forester	–.41
Buyer	–.15	Horticulturist	–.43
Financial Analyst	–.16	Electrician	–.49
Cosmetologist	–.20	Artist	–.52
Horticulturist	–.25	Geologist	–.53
Radiologic Technologist	–.28	Landscape/Grounds Manager	–.54
Medical Technician	–.40	Biologist	–.55
Artist	–.41	Radiologic Technologist	–.59
Production Worker	–.52	Automobile Mechanic	–.65
Farmer/Rancher	–.55	Farmer/Rancher	–.71

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 43. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN LAW BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Attorney	.70	Attorney	.79
Law Enforcement Officer	.70	Public Administrator	.78
Elected Public Official	.67	School Administrator	.77
Public Administrator	.67	Auditor	.77
Top Executive, Business/Finance	.63	Elected Public Official	.77
School Administrator	.63	Purchasing Agent	.76
Auditor	.60	Sales Manager	.75
Urban & Regional Planner	.59	Top Executive, Business/Finance	.75
Sales Manager	.58	Management Analyst	.75
Securities Sales Agent	.58	Marketing Manager	.75
Florist	–.18	Mathematician	–.39
Buyer	–.21	Forester	–.39
Medical Technician	–.21	Horticulturist	–.41
Medical Illustrator	–.22	Landscape/Grounds Manager	–.47
Advertising Account Manager	–.26	Automobile Mechanic	–.47
Horticulturist	–.29	Geologist	–.53
Cosmetologist	–.30	Graphic Designer	–.57
Production Worker	–.38	Farmer/Rancher	–.59
Artist	–.46	Biologist	–.61
Farmer/Rancher	–.54	Artist	–.70

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 44. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN OFFICE MANAGEMENT BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Administrative Assistant	.83	Business/Finance Supervisor	.87
Customer Service Representative	.76	Accountant	.86
Credit Manager	.72	Credit Manager	.86
Health Information Specialist	.69	Customer Service Representative	.85
Facilities Manager	.67	Auditor	.85
Technical Support Specialist	.63	Administrative Assistant	.84
Accountant	.62	Financial Manager	.83
Military Enlisted	.60	Financial Analyst	.82
Food Service Manager	.60	Sales Manager	.81
Auditor	.57	Operations Manager	.81
Interior Designer	–.09	Radiologic Technologist	–.30
Musician	–.14	Musician	–.33
Buyer	–.14	Automobile Mechanic	–.37
Carpenter	–.17	Landscape/Grounds Manager	–.43
Physician	–.20	Mathematician	–.48
Mental Health Counselor	–.25	Farmer/Rancher	–.51
Advertising Account Manager	–.34	Geologist	–.62
Photographer	–.38	Graphic Designer	–.63
Medical Illustrator	–.47	Biologist	–.72
Artist	–.72	Artist	–.75

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 45. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN TAXES & ACCOUNTING BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Financial Manager	.87	Financial Manager	.85
Accountant	.87	Auditor	.85
Auditor	.78	Accountant	.81
Actuary	.75	Financial Analyst	.79
Software Developer	.67	Business/Finance Supervisor	.77
Engineer	.67	Actuary	.75
Mathematics Teacher	.63	Credit Manager	.74
Computer Programmer	.63	Management Analyst	.72
Computer Scientist	.61	Customer Service Representative	.68
Network Administrator	.61	Sales Manager	.67
Farmer/Rancher	–.24	Mental Health Counselor	–.24
Florist	–.24	Photographer	–.29
Musician	–.25	Interior Designer	–.33
Broadcast Journalist	–.33	Musician	–.34
Mental Health Counselor	–.34	Geologist	–.34
Buyer	–.35	Landscape/Grounds Manager	–.35
Speech Pathologist	–.40	Farmer/Rancher	–.37
Photographer	–.49	Biologist	–.54
Advertising Account Manager	–.51	Graphic Designer	–.62
Artist	–.55	Artist	–.68

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 46. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN PROGRAMMING & INFORMATION SYSTEMS BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Technical Support Specialist	.84	Computer Systems Analyst	.87
Computer Programmer	.80	Computer & IS Manager	.84
Software Developer	.78	Technical Support Specialist	.83
Network Administrator	.76	Network Administrator	.80
Computer Scientist	.74	Computer Mathematics Manager	.80
Computer Mathematics Manager	.74	Software Developer	.79
Engineer	.63	Computer Programmer	.78
Administrative Assistant	.61	Computer Scientist	.69
Management Analyst	.59	Engineer	.63
Engineering Technician	.59	Actuary	.58
Medical Illustrator	–.15	Geologist	–.20
Photographer	–.15	Advertising Account Manager	–.30
Financial Analyst	–.19	Interior Designer	–.31
Bartender	–.22	Farmer/Rancher	–.34
Farmer/Rancher	–.30	Social Worker	–.36
Production Worker	–.35	Landscape Grounds Manager	–.37
Advertising Account Manager	–.36	Biologist	–.39
Buyer	–.37	Graphic Designer	–.42
Mental Health Counselor	–.39	Artist	–.46
Artist	–.55	Mental Health Counselor	–.47

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 47. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN FINANCE & INVESTING BIS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
Financial Manager	.84	Financial Manager	.89
Auditor	.80	Financial Analyst	.88
Sales Manager	.77	Accountant	.84
Management Analyst	.76	Auditor	.84
Top Executive, Business/Finance	.76	Securities Sales Agent	.81
Accountant	.75	Credit Manager	.81
Securities Sales Agent	.74	Business/Finance Supervisor	.81
Business/Finance Supervisor	.73	Management Analyst	.81
Operations Manager	.72	Sales Manager	.81
Personal Financial Advisor	.70	Personal Financial Advisor	.80
Advertising Account Manager	–.21	Radiologic Technologist	–.25
Radiologic Technologist	–.22	Landscape Grounds Manager	–.32
Photographer	–.22	Interior Designer	–.33
Medical Illustrator	–.23	Farmer/Rancher	–.40
Musician	–.25	Musician	–.42
Speech Pathologist	–.26	Mathematician	–.43
Medical Technician	–.27	Geologist	–.45
Production Worker	–.37	Graphic Designer	–.55
Farmer/Rancher	–.40	Biologist	–.70
Artist	–.55	Artist	–.70

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

Relationship Between the BISs and the CPI 260® Scales

The validity of the BISs was also examined by correlating the BISs with the CPI 260 scales for 128 individuals. Some of the strongest relationships between individual BISs and the CPI 260 scales are presented in Table 48. All correlations between the BISs and CPI 260 scales are presented in Table 49. Table 49 shows that patterns of correlations are consistent with expectations for the Basic Interest Scales and the personality measures from the CPI 260 assessment. For example, the CPI scale Dominance correlates with BISs Human Resources & Training, Management, and Politics & Public Speaking, meaning that individuals who score higher on Dominance also score higher on these BISs. These patterns, generally in the direction of and among measures expected to show some degree of relationship, demonstrate the validity of the BISs in the Australia sample.

TABLE 48. STRONG RELATIONSHIPS BETWEEN THE BISs AND THE CPI 260® SCALES IN THE AUSTRALIA SAMPLE

Basic Interest Scale	CPI 260® Scale
Mechanics & Construction	Insightfulness
Computer Hardware & Electronics	Insightfulness
Military	Capacity for Status
Protective Services	Sociability
Nature & Agriculture	Insightfulness
Athletics	Sociability
Science	Conceptual Fluency
Research	Capacity for Status
Medical Science	Capacity for Status
Mathematics	Responsibility
Visual Arts & Design	Conceptual Fluency
Performing Arts	Capacity for Status
Writing & Mass Communication	Capacity for Status
Culinary Arts	Empathy
Counseling & Helping	Capacity for Status
Teaching & Education	Conceptual Fluency
Human Resources & Training	Leadership
Social Sciences	Capacity for Status
Religion & Spirituality	Responsibility
Healthcare Services	Responsibility
Marketing & Advertising	Sociability
Sales	Sociability
Management	Sociability
Entrepreneurship	Self-acceptance
Politics & Public Speaking	Dominance and Capacity for Status
Law	Social Presence
Office Management	Achievement via Conformance
Taxes & Accounting	Insightfulness
Programming & Information Systems	Insightfulness
Finance & Investing	Capacity for Status

Note: n = 128.

TABLE 49. CORRELATIONS BETWEEN THE BISs AND THE CPI 260® SCALES IN THE AUSTRALIA SAMPLE

CPI 260® Scale	Basic Interest Scales														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Do	.10	.04	.06	.13	.00	.15	.09	.21	.18	.00	.23	.31	.27	.23	.16
Cs	.16	.16	.15	.20	.04	.18	.26	.43	.29	.28	.34	.48	.48	.26	.30
Sy	.17	.10	.11	.22	.06	.30	.17	.28	.23	.11	.28	.37	.29	.29	.22
Sp	.13	.16	.11	.22	.01	.22	.15	.26	.18	.19	.23	.41	.33	.24	.14
Sa	.04	–.03	.09	.14	–.01	.22	.04	.15	.15	.00	.18	.28	.30	.25	.13
In	.16	.10	.14	.09	.08	.10	.10	.19	.11	.12	.22	.23	.22	.18	.10
Em	.09	.17	.11	.15	.09	.12	.18	.31	.25	.11	.23	.39	.38	.30	.20
Re	.14	.18	.08	.02	.01	.12	.20	.31	.22	.34	.13	.18	.14	–.02	.27
So	–.03	–.03	–.16	–.26	–.07	.03	–.09	–.07	–.11	.15	.02	–.07	–.07	.01	–.06
Sc	–.08	.01	–.09	–.24	–.01	–.03	–.02	–.05	–.08	.11	–.10	–.17	–.18	–.03	.01
Gi	–.01	.03	–.03	–.13	.05	.11	.02	.07	–.03	.10	–.01	–.05	–.08	.08	.09
Cm	.03	.13	–.03	.04	.10	.13	.17	.18	.11	.14	.01	–.01	–.04	.07	.05
Wb	.05	.06	–.04	–.12	.03	.12	–.01	.05	–.01	.19	.07	.05	–.01	.11	.04
To	.07	.10	.00	–.09	.00	.08	.05	.12	.04	.24	.13	.13	.12	.07	.15
Ac	.02	.01	–.05	–.08	.04	.14	.13	.24	.13	.25	.15	.12	.17	.05	.25
Ai	.12	.19	.05	.01	.11	.03	.20	.29	.21	.25	.19	.26	.26	.12	.21
Cf	.19	.18	.09	.11	.11	.13	.31	.34	.27	.31	.35	.36	.35	.12	.28
Is	.23	.25	.06	.06	.15	.16	.28	.38	.21	.33	.28	.25	.28	.23	.26
Fx	–.03	.07	–.04	.00	.01	–.10	–.02	.02	.05	.08	.01	.12	.09	.03	.09
Sn	–.46	–.30	–.37	–.32	–.20	–.24	–.15	–.21	–.20	–.13	–.17	–.16	–.11	–.24	–.01
Mp	.01	.04	.03	–.07	–.10	–.01	.06	.18	.09	.15	.11	.12	.20	.07	.13
Wo	.10	.15	.04	–.05	.02	.10	.10	.17	.08	.28	.10	.08	.05	.09	.11
Ct	.13	.19	.08	.09	.07	.11	.13	.20	.15	.16	.23	.31	.25	.11	.18
Lp	.13	.09	.09	.13	.08	.16	.17	.30	.20	.12	.27	.33	.31	.29	.26
Ami	.00	.06	–.07	–.23	–.04	.04	–.03	–.01	–.06	.17	–.03	–.08	–.10	.05	–.01
Leo	.01	.01	.05	.01	.07	.22	.04	.05	.10	.00	.00	–.06	–.06	.22	.08
v.1	–.11	–.04	–.14	–.23	.01	–.09	–.04	–.18	–.14	.04	–.20	–.32	–.33	–.15	–.09
v.2	.13	.03	.05	.02	.11	.22	.12	.16	.16	.14	.09	.05	.05	.10	.11
v.3	–.03	.02	–.06	–.11	–.01	.05	.06	.11	.06	.20	.07	.10	.09	.05	.17

Note: n = 128. Basic Interest Scales: 1 = Mechanics & Construction; 2 = Computer Hardware & Electronics; 3 = Military; 4 = Protective Services; 5 = Nature & Agriculture; 6 = Athletics; 7 = Science; 8 = Research; 9 = Medical Science; 10 = Mathematics; 11 = Visual Arts & Design; 12 = Performing Arts; 13 = Writing & Mass Communication; 14 = Culinary Arts; 15 = Counseling & Helping.

TABLE 49. CORRELATIONS BETWEEN THE BISs AND THE CPI 260® SCALES IN THE AUSTRALIA SAMPLE (CONT'D)

CPI 260® Scale	Basic Interest Scales														
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Do	.16	.51	.12	.03	.12	.32	.21	.33	.27	.41	.18	–.02	.01	.04	.13
Cs	.31	.46	.34	.18	.13	.41	.23	.27	.26	.50	.34	.12	.21	.20	.27
Sy	.23	.50	.21	.13	.17	.42	.28	.36	.30	.38	.27	.05	.18	.06	.21
Sp	.16	.39	.25	.05	.07	.33	.21	.28	.22	.38	.34	.09	.21	.14	.22
Sa	.09	.43	.11	–.02	–.01	.37	.18	.34	.36	.34	.24	–.02	.08	–.02	.19
In	.17	.40	.06	.08	.03	.23	.21	.31	.23	.31	.17	.06	.12	.14	.18
Em	.21	.38	.22	.11	.10	.26	.08	.18	.26	.33	.18	.03	.05	.18	.14
Re	.30	.13	.25	.34	.24	–.02	.04	–.07	–.06	.24	.10	.18	.18	.24	.12
So	.25	.06	–.02	.08	–.04	–.12	–.04	–.07	–.12	–.06	–.13	.17	.14	.05	.01
Sc	.16	–.07	–.05	.09	.03	–.21	–.08	–.16	–.23	–.16	–.15	.13	.03	.08	–.05
Gi	.23	.10	.00	.20	.10	–.03	.04	–.03	–.14	.05	–.04	.16	.09	.04	.01
Cm	.13	.11	.09	.04	.18	–.03	.04	–.06	.02	–.03	–.02	.11	.07	.19	.06
Wb	.22	.15	.06	.16	.03	.01	.07	–.01	–.02	.08	–.03	.12	.21	.10	.16
To	.23	.10	.11	.21	.07	–.06	–.04	–.06	–.10	.08	.01	.14	.21	.11	.10
Ac	.39	.31	.20	.25	.15	.11	.12	.07	.03	.25	.14	.21	.20	.11	.14
Ai	.27	.15	.26	.15	.11	.01	–.02	.04	–.02	.20	.09	.11	.14	.24	.13
Cf	.40	.37	.34	.22	.17	.16	.18	.19	.05	.36	.23	.17	.21	.22	.21
Is	.30	.29	.29	.13	.17	.12	.03	.11	.12	.27	.17	.19	.25	.30	.19
Fx	.04	–.09	.08	.09	.01	–.13	–.07	–.09	–.09	–.06	.02	.01	–.05	.11	–.04
Sn	–.02	–.28	–.10	.06	–.12	–.29	–.26	–.37	–.33	–.31	–.24	.04	–.21	–.15	–.29
Mp	.18	.32	.11	.10	.05	.07	.03	.09	.01	.23	.11	.05	.16	.10	.13
Wo	.25	.19	.17	.15	.13	–.02	.05	–.02	–.08	.16	.04	.18	.24	.16	.15
Ct	.17	.20	.23	.17	.04	.09	.08	.11	.04	.31	.15	–.04	.06	.15	.10
Lp	.26	.56	.23	.13	.17	.33	.22	.33	.25	.42	.23	.08	.10	.13	.20
Ami	.22	.02	–.03	.10	.01	–.16	–.09	–.12	–.18	–.04	–.12	.13	.14	.08	.02
Leo	.20	.32	–.03	.01	.08	.09	.11	.20	.08	.11	.05	.01	.04	–.04	.10
v.1	–.03	–.37	–.11	–.08	–.03	–.33	–.20	–.31	–.30	–.41	–.23	.13	.00	.02	–.10
v.2	.22	.16	.10	.20	.21	.11	.07	.07	.08	.19	.06	.13	.11	.09	.06
v.3	.24	.12	.13	.18	.06	–.08	–.05	–.05	–.18	.06	–.03	.13	.14	.06	.05

Note: n = 128. Basic Interest Scales: 16 = Teaching & Education; 17 = Human Resources & Training; 18 = Social Sciences; 19 = Religion & Spirituality; 20 = Healthcare Services; 21 = Marketing & Advertising; 22 = Sales; 23 = Management; 24 = Entrepreneurship; 25 = Politics & Public Speaking; 26 = Law; 27 = Office Management; 28 = Taxes & Accounting; 29 = Programming & Information Systems; 30 = Finance & Investing.

OCCUPATIONAL SCALES

The Occupational Scales (OSs) provide information about how individuals' responses compare with those of people actually employed in and satisfied with a particular occupation. The results of each of the OSs answer the basic question, "Does the respondent have likes and dislikes similar to those of women or men in this occupation?" Thus, the OSs enable respondents to compare their interests with those of people from a diverse representation of occupations, including accountants, graphic designers, engineering technicians, and financial managers, to name just a few. These scales generate a large amount of specific information about and for each respondent. For an in-depth discussion of the interpretation of the OSs, as well as the construction and norming of the scales, please refer to the *Strong Interest Inventory® Manual* (Donnay et al., 2005) and the *Strong Interest Inventory® Manual Supplement* (Herk & Thompson, 2012).

In order to maintain the psychometric soundness of the Strong, the assessment is frequently revised to reflect the changes in the occupational world and in society. In 2010, the Strong was again updated; however, this update focused solely on the OSs. Specifically, new OSs were added, some older OSs were deleted, some OSs were updated by developing a scale for a newer sample, and in other cases samples were updated with additional members of the occupation. This resulted in 260 OSs—130 separate scales each for women and men. The following analyses were run using this list of 260 scales, along with all above-mentioned analyses, illustrating the relationships between the GOTs and the OSs, and between the BISs and the OSs.

As stated earlier, the OSs were built using occupational samples obtained in the United States. Although occupations in different countries may share the same job titles, different sets of knowledge, skills, abilities, and other attributes may be required to successfully perform these jobs. Despite generally congruent results between the Australia sample and the GRS, caution should be taken when interpreting OS results, as cultural differences may be a factor.

AUSTRALIA SAMPLE NORMS OF THE OSs

The standardized scores for each of the 260 OSs are presented in Table 50. Means, standard deviations, and interpretive categories are listed for women and men. Means and standard deviations were set at 50 and 10, respectively, for individuals composing an occupational group. Thus, when OSs are interpreted, occupations receiving a score of 40 or above are deemed to be those for which a client has a "Similar" interest. Since the interests of women and men are somewhat different, separate OSs have been constructed for each occupation. Table 50 provides the mean scores on female and male scales for the same occupations in the Australia sample. For women in the Australia sample, 75 of the 130 female OSs show a mean score that is within 5 points of the mean score of the corresponding male OS. For men, 90 of the 130 male OSs show a mean score that is within 5 points of the corresponding female OS. These findings suggest that the female and male OS scores are similar for well over half of the scales.

In the Australia sample, scales with the largest mean score differences were the Interior Designer scale for women and the Religious/Spiritual Leader scale for men.

TABLE 50. COMPARISONS OF THE OS MEAN SCORES BY GENDER IN THE AUSTRALIA SAMPLE

	Women			Men		
Occupational Scale	Mean Score on Female Scale	Mean Score on Male Scale	Mean Difference	Mean Score on Male Scale	Mean Score on Female Scale	Mean Difference
Accountant	35.60	30.64	4.96	38.06	41.37	–3.31
Actuary	30.51	20.51	10.00	31.74	39.03	–7.29
Administrative Assistant	43.54	49.97	–6.43	47.32	43.78	3.54
Advertising Account Manager	28.69	34.33	–5.64	29.98	24.61	5.37
Architect	11.41	18.46	–7.04	22.73	22.12	0.61
Art Teacher	7.77	18.20	–10.43	10.34	4.15	6.19
Artist	33.61	38.74	–5.13	39.74	37.06	2.68
Arts/Entertainment Manager	28.21	26.75	1.46	20.09	24.25	–4.16
Athletic Trainer	14.06	19.29	–5.24	21.83	17.21	4.62
Attorney	23.58	21.22	2.37	21.64	25.93	–4.29
Auditor	34.70	27.33	7.37	35.43	40.39	–4.96
Automobile Mechanic	29.89	30.22	–0.33	34.38	38.45	–4.07
Bartender	35.55	30.59	4.95	30.21	35.24	–5.03
Biologist	25.63	33.64	–8.01	30.02	29.28	0.74
Broadcast Journalist	30.91	28.96	1.94	27.71	28.15	–0.44
Business Education Teacher	31.18	38.01	–6.83	36.63	30.71	5.91
Business/Finance Supervisor	35.01	31.31	3.70	37.33	39.71	–2.38
Buyer	30.59	30.90	–0.31	27.72	26.65	1.07
Career Counselor	26.35	33.94	–7.59	27.45	21.57	5.88
Carpenter	21.46	30.32	–8.86	36.14	29.37	6.78
Chef	32.09	30.07	2.02	29.42	28.02	1.40
Chemist	27.39	19.19	8.20	26.67	34.35	–7.68
Chiropractor	33.56	33.08	0.48	33.40	38.33	–4.93
Community Service Director	34.45	32.86	1.58	33.02	35.42	–2.40
Computer & IS Manager	31.68	31.08	0.60	41.17	39.84	1.32
Computer Programmer	38.14	30.38	7.75	39.50	46.92	–7.42
Computer Scientist	25.11	19.03	6.09	27.08	37.56	–10.48
Computer Systems Analyst	35.31	33.69	1.63	43.63	39.02	4.61
Computer/Mathematics Manager	26.05	26.32	–0.27	36.96	36.93	0.03
Cosmetologist	37.77	39.42	–1.65	35.67	33.16	2.51
Credit Manager	42.57	34.06	8.50	40.47	43.14	–2.67
Customer Service Representative	43.43	46.22	–2.79	45.99	43.64	2.35

(cont'd)

TABLE 50. COMPARISONS OF THE OS MEAN SCORES BY GENDER IN THE AUSTRALIA SAMPLE (CONT'D)

	Women			Men		
Occupational Scale	Mean Score on Female Scale	Mean Score on Male Scale	Mean Difference	Mean Score on Male Scale	Mean Score on Female Scale	Mean Difference
Dentist	27.21	27.47	–0.27	31.67	33.02	–1.35
Dietitian	31.68	34.48	–2.79	34.05	30.14	3.92
Editor	24.02	27.88	–3.86	27.75	25.57	2.19
Elected Public Official	17.30	16.20	1.10	20.36	22.25	–1.89
Electrician	23.87	29.38	–5.51	36.91	33.28	3.63
Elementary School Teacher	31.14	37.74	–6.59	36.49	27.43	9.06
Emergency Medical Technician	38.16	34.53	3.64	36.16	38.10	–1.94
Engineer	33.01	27.86	5.15	38.05	42.54	–4.49
Engineering Technician	36.38	25.48	10.90	34.36	44.91	–10.55
English Teacher	11.00	15.27	–4.27	13.39	9.69	3.70
ESL Instructor	27.82	33.06	–5.24	26.44	28.88	–2.44
Facilities Manager	36.53	37.60	–1.07	37.67	34.40	3.27
Farmer/Rancher	43.55	41.77	1.78	45.24	45.84	–0.60
Financial Analyst	39.04	35.46	3.58	35.87	37.74	–1.87
Financial Manager	37.52	27.23	10.29	35.55	38.79	–3.24
Firefighter	30.49	21.38	9.11	31.54	36.75	–5.22
Flight Attendant	23.53	26.78	–3.24	34.02	34.46	–0.44
Florist	37.61	41.49	–3.88	41.47	38.59	2.88
Food Service Manager	30.98	37.77	–6.79	36.56	29.78	6.78
Forester	40.20	36.47	3.73	37.39	39.03	–1.65
Geographer	33.73	31.07	2.66	34.27	38.77	–4.51
Geologist	20.75	26.20	–5.44	24.22	24.23	–0.01
Graphic Designer	24.39	28.46	–4.06	29.91	31.35	–1.44
Health Information Specialist	29.84	29.11	0.73	24.36	33.71	–9.35
Horticulturist	44.51	42.81	1.70	44.76	42.84	1.92
Human Resources Manager	25.25	28.77	–3.52	28.18	27.47	0.71
Human Resources Specialist	34.84	31.98	2.86	31.43	36.78	–5.34
Instructional Coordinator	34.26	38.06	–3.80	38.80	35.43	3.37
Interior Designer	14.76	32.95	–18.19	26.83	15.75	11.08
Landscape/Grounds Manager	36.46	41.07	–4.60	42.92	43.68	–0.77
Law Enforcement Officer	35.26	36.17	–0.91	40.52	43.11	–2.59
Librarian	32.37	39.51	–7.14	33.94	31.02	2.92
Life Insurance Agent	29.07	30.25	–1.18	33.35	32.72	0.62
Loan Officer/Counselor	35.47	26.17	9.30	31.46	36.96	–5.50

TABLE 50. COMPARISONS OF THE OS MEAN SCORES BY GENDER IN THE AUSTRALIA SAMPLE (CONT'D)

	Women			Men		
Occupational Scale	Mean Score on Female Scale	Mean Score on Male Scale	Mean Difference	Mean Score on Male Scale	Mean Score on Female Scale	Mean Difference
Management Analyst	33.10	29.99	3.10	36.00	39.66	–3.67
Marketing Manager	24.31	26.19	–1.88	29.96	27.44	2.51
Mathematician	16.37	20.52	–4.14	17.82	22.39	–4.57
Mathematics Teacher	23.81	23.23	0.58	26.47	29.10	–2.64
Medical Illustrator	13.60	12.54	1.07	9.03	13.16	–4.12
Medical Technician	38.77	28.85	9.92	32.05	36.95	–4.90
Medical Technologist	32.27	28.99	3.28	32.77	35.27	–2.50
Mental Health Counselor	23.87	32.70	–8.84	22.40	12.68	9.72
Middle School Teacher	30.97	31.54	–0.57	32.48	25.38	7.11
Military Enlisted	40.42	35.58	4.85	41.97	44.20	–2.23
Military Officer	33.98	25.89	8.08	35.72	42.62	–6.91
Musician	31.19	37.52	–6.32	31.64	25.41	6.23
Network Administrator	36.50	26.13	10.37	38.51	46.44	–7.92
Nursing Home Administrator	41.60	39.92	1.67	41.87	42.78	–0.91
Occupational Therapist	37.26	38.65	–1.39	36.61	33.95	2.67
Operations Manager	32.29	26.41	5.88	32.61	37.67	–5.06
Optician	42.49	39.40	3.09	42.53	42.32	0.21
Optometrist	33.53	26.60	6.92	30.82	37.45	–6.64
Paralegal	42.10	38.54	3.56	39.42	41.66	–2.24
Parks & Recreation Manager	35.33	36.08	–0.76	39.95	40.52	–0.57
Personal Financial Advisor	28.55	15.42	13.13	24.22	33.17	–8.95
Pharmacist	36.26	39.38	–3.12	41.79	38.98	2.80
Photographer	34.38	31.73	2.65	30.50	30.54	–0.04
Physical Therapist	28.81	26.18	2.63	33.30	32.92	0.38
Physician	28.25	21.77	6.49	22.97	28.77	–5.80
Physicist	11.65	6.19	5.47	17.39	24.69	–7.31
Production Worker	42.89	37.98	4.91	46.31	42.10	4.21
Psychologist	24.49	25.88	–1.39	24.56	24.93	–0.37
Public Administrator	16.14	21.87	–5.74	26.15	23.43	2.72
Public Relations Director	16.20	22.24	–6.03	22.66	18.05	4.61
Purchasing Agent	30.54	26.70	3.84	31.32	35.01	–3.68
R&D Manager	22.97	19.58	3.38	28.02	29.90	–1.88
Radiologic Technologist	44.15	43.48	0.67	43.01	41.67	1.35
Realtor	32.42	25.65	6.77	32.21	38.39	–6.18

(cont'd)

TABLE 50. COMPARISONS OF THE OS MEAN SCORES BY GENDER IN THE AUSTRALIA SAMPLE (CONT'D)

	Women			Men		
Occupational Scale	Mean Score on Female Scale	Mean Score on Male Scale	Mean Difference	Mean Score on Male Scale	Mean Score on Female Scale	Mean Difference
Recreation Therapist	35.61	32.49	3.12	30.85	37.96	–7.11
Registered Nurse	33.53	36.32	–2.78	34.77	33.65	1.12
Rehabilitation Counselor	28.47	36.23	–7.77	33.62	27.17	6.45
Religious/Spiritual Leader	2.30	16.44	–14.14	16.59	2.60	13.99
Reporter	20.81	23.07	–2.26	19.44	20.64	–1.21
Respiratory Therapist	38.10	30.36	7.73	33.88	34.38	–0.50
Restaurant Manager	29.70	34.80	–5.10	35.65	33.99	1.66
Sales Manager	23.69	15.24	8.44	24.20	31.93	–7.73
School Administrator	26.43	21.87	4.56	28.87	31.89	–3.02
School Counselor	26.35	27.93	–1.58	26.56	25.60	0.96
Science Teacher	22.41	24.93	–2.53	27.37	25.60	1.77
Secondary School Teacher	28.72	31.86	–3.14	32.41	24.71	7.70
Securities Sales Agent	25.02	9.32	15.70	19.68	30.21	–10.52
Social Worker	29.87	37.85	–7.97	29.24	24.14	5.10
Sociologist	12.94	19.21	–6.27	19.46	18.07	1.39
Software Developer	34.61	27.11	7.50	37.69	43.94	–6.25
Special Education Teacher	28.52	41.41	–12.89	35.33	22.57	12.76
Speech Pathologist	43.08	42.95	0.13	36.93	33.97	2.96
Technical Sales Representative	32.54	30.59	1.96	36.03	38.80	–2.78
Technical Support Specialist	39.78	32.13	7.65	40.55	48.24	–7.69
Technical Writer	27.65	35.05	–7.40	30.77	27.86	2.91
Top Executive, Business/Finance	27.73	18.26	9.47	24.21	33.96	–9.75
Training & Development Specialist	27.65	30.19	–2.54	30.26	29.46	0.80
Translator	32.25	41.21	–8.96	34.69	27.72	6.96
University Administrator	26.56	31.20	–4.63	28.29	27.74	0.55
University Faculty Member	32.91	28.91	3.99	26.26	33.38	–7.12
Urban & Regional Planner	26.19	34.44	–8.25	33.54	34.66	–1.12
Veterinarian	30.49	27.02	3.47	30.16	33.21	–3.05
Vocational Agriculture Teacher	26.74	27.91	–1.17	29.84	27.97	1.87
Wholesale Sales Representative	28.49	29.52	–1.02	35.14	34.46	0.68

Note: N = 257 (134 women and 123 men).

VALIDITY OF THE OSs

The validity of the OSs was also evaluated by examining the relationships among the OSs within each of the six RIASEC Themes. Finding stronger relationships among scales with the same Theme, rather than among all OSs together, provides evidence of discriminate validity for the OSs. Results of this analysis are presented in the following section.

Correlations Among the OSs

Table 51 presents the correlations among the OSs by RIASEC Theme for women and men in the Australia sample. The median correlations among the female OSs ranged from .36 for Conventional to .47 for Artistic. This is comparable to the numbers reported for the GRS, where the medians ranged from .39 (Realistic, Social, and Conventional) to .57 (Artistic) for women. Median correlations for men in the Australia sample ranged from .42 for Realistic to .58 for Artistic, while the median correlations found for men in the GRS ranged from .27 (Conventional) to .58 (Investigative). Finally, the overall median correlations across all OSs for the Australia sample were .42 and .51 for women and men, respectively. These are higher than the average correlations reported for the GRS, which were .05 for women and .07 for men. Taken together, the results found for the Australia sample suggest that OSs within the same Theme are related to a greater extent than OSs overall.

TABLE 51. OS CORRELATIONS WITHIN THEME AND OVERALL FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

	OS Correlation	
Theme	Women *r*	Men *r*
Realistic	.43	.42
Investigative	.43	.49
Artistic	.47	.58
Social	.43	.57
Enterprising	.40	.53
Conventional	.36	.51
Overall	.42	.51

Note: N = 257 (134 women and 123 men).

PERSONAL STYLE SCALES

The Personal Style Scales (PSSs), first introduced in the 1994 *Strong Interest Inventory* assessment and further revised in 2004, measure preferences for and comfort with broad styles of living and working. Each scale includes a style description at both ends of a continuum, with scores indicating an individual's preference for one style over the other. The PSSs complement the traditional vocation scales by enabling individuals to more effectively narrow choices and examine opportunities.

INTERPRETATION OF THE PSSs

The five PSSs—Work Style, Learning Environment, Leadership Style, Risk Taking, and Team Orientation—are described below. Please refer to the *Strong Interest Inventory®* *Manual* (Donnay et al., 2005, pp. 135–141) for more detailed descriptions.

Work Style Scale

The Work Style scale distinguishes individuals who prefer to work with people (favoring the "Works with people" pole) from those who prefer working with ideas, data, or things (favoring the "Works with ideas/data/things" pole). Those who prefer people-focused work endorse Strong assessment items that represent people-oriented occupations and activities, including some items that refer to relating to others as helpers. The item "Can smooth out disagreements between people" clearly differentiates those who prefer to work with people from those who prefer to work alone. However, items that imply contact with others without directly involving a helping function (e.g., "Planning a large party") also identify the "Works with people" pole of the scale. Those who prefer working alone (favoring the "Works with ideas/data/things" pole), in contrast, endorse items in those particular domains. They tend to like scientific and technical activities, see themselves as having mechanical ingenuity, and endorse items such as "Author of technical books."

Learning Environment Scale

The Learning Environment scale differentiates people who prefer academic learning environments (favoring the "Academic" pole) from those who prefer more practical-oriented, tactile learning situations (favoring the "Practical" pole). People who prefer to learn in academic settings tend to express cultural, verbal, and research interests as well as an interest in teaching itself. People who prefer to learn in more practical settings tend to express interest in healthcare service, technical, protective service, and office-related activities. The Learning Environment scale reflects whether an individual is more comfortable in a practical or an academic learning setting. However, it is not an indicator of whether the person will be successful in one setting or the other.

Leadership Style Scale

One pole of the Leadership Style scale reflects a preference for meeting, directing, persuading, and leading other people (favoring the "Directs others" pole). People who score toward this pole tend to enjoy moving readily and gregariously into interpersonal settings and like to take the initiative and take charge in an organizational setting. People who score toward the opposite pole—"Leads by example"—tend not to be comfortable taking charge of others directly. They prefer to do a task themselves rather than direct others to do it. They may lead by example rather than by giving directions. There are no substantial gender differences on the Leadership Style scale. The means for women and men are virtually identical.

Risk Taking Scale

The content of the Risk Taking scale is a mix of physically risky activities, such as auto racing, and other more general items about risk taking, such as investing money in the stock market. This scale was first developed by Campbell, Borgen, Eastes, Johansson, and Peterson in 1968, so considerable experience and knowledge have developed about its implications and counseling use (Campbell, 1971; Douce & Hansen, 1988; Hansen, 1992; Hansen & Campbell, 1985).

Team Orientation Scale

The Team Orientation scale reflects a preference for engaging in team-based activities (favoring the "Accomplishes tasks as a team" pole) versus individual activities (favoring

TABLE 52. PSS MEANS AND STANDARD DEVIATIONS BY GENDER IN THE AUSTRALIA SAMPLE

	Women		Men	
Personal Style Scale	*M*	*SD*	*M*	*SD*
Work Style	51.32	8.52	46.99	7.86
Learning Environment	43.05	8.01	44.56	6.49
Leadership Style	42.76	9.58	45.84	9.07
Risk Taking	46.27	9.74	53.97	9.07
Team Orientation	45.71	11.05	46.93	10.01

Note: N = 257 (134 women and 123 men).

the "Accomplishes tasks independently" pole). Those who score toward the "Accomplishes tasks as a team" pole enjoy working with others and collaborating on team goals. High scores on the Team Orientation scale are often associated with high scores on the Social and Enterprising GOTs, and on BISs such as Human Resources & Training, Management, and Marketing & Advertising.

AUSTRALIA SAMPLE NORMS OF THE PSSs

The mean score for the PSSs is 50 (*SD* is 10) for people in general. A score of 45 or below identifies one pole of a PSS, while a score of 55 or above identifies the other pole of the scale. Midrange scores (46–54) occur for individuals with no predominate preference for one pole or the other. Table 52 presents the standardized scores for each of the five PSSs. Means, standard deviations, and interpretive categories are listed for women and men. Standardized scores and interpretive categories were derived using the 2004 GRS. Results from the Australia sample were similar to those reported for the GRS. Women in both the Australia sample and the GRS scored highest on the Work Style scale, while men in both samples scored highest on the Risk Taking scale.

RELIABILITY OF THE PSSs

Internal consistency was examined for the PSSs. Internal consistency reliabilities (Cronbach's alphas) are shown in Table 53. Alphas range from .80 for the Team Orientation scale to .94 for the Learning Environment scale. Cronbach's alphas reported for the GRS in the Strong manual (Donnay et al., 2005) range from .82 for the Risk Taking scale to .87 for the Leadership Style scale.

VALIDITY OF THE PSSs

The validity of the PSSs was also examined through the intercorrelations between the five PSSs and through the correlations between the PSSs and the other scales of the Strong assessment (i.e., the GOTs, the BISs, and the OSs). Results of these analyses are presented in the following sections.

Intercorrelations Between the PSSs

The intercorrelations of the five PSSs are shown in Table 54 for the overall Australia sample and by gender in Table 55. In the overall sample the largest correlation was between the Leadership Style and Team Orientation scales. In the GRS,

TABLE 53. INTERNAL CONSISTENCY RELIABILITIES FOR THE PSSs IN THE AUSTRALIA SAMPLE

Personal Style Scale	Cronbach's Alpha
Work Style	.89
Learning Environment	.94
Leadership Style	.86
Risk Taking	.85
Team Orientation	.80

Note: N = 257.

the largest correlation for both women and men was Leadership Style and Team Orientation as well.

Correlations for the Australia sample generally revealed patterns of relationships similar to those in the GRS. In the Australia sample, the largest difference overall was between the Work Style and Risk Taking scales.

Relationships Between the PSSs, the GOTs, and the BISs

The relationships between the PSSs and both the GOTs and BISs are shown in Table 56. The correlations illustrate how the PSSs fit into the theoretical structure established for the six Holland Themes and how they link to the BISs as well. Some parallels between correlations within this table are expected, as the BISs often measure specific content that is more broadly measured by the GOTs.

As shown, clear patterns exist between scales. For instance, Risk Taking has a strong relationship with the Realistic GOT and all of the BISs grouped under that Theme as well. Additionally, Leadership Style is related to the Enterprising Theme and the BISs grouped under that Theme.

Relationship Between the PSSs and the OSs

To further examine the validity of the PSSs in the Australia sample, they were also correlated with the OSs. Relationships found between scales were as expected and similar to those reported in the Strong manual. Results, shown in Tables 57–61, support the validity of the PSSs. For example, for women the Work Style pole "Works with people" is strongly related to the female Community Service Director OS. For men, it is strongly related to the male Special Education Teacher OS. At the other end of the Work Style scale, the "Working with ideas/data/things" pole, for women the strongest relationship is with the female R&D Manager OS, while for men it is with the male Geologist OS.

TABLE 54. INTERCORRELATIONS BETWEEN THE PSSs IN THE AUSTRALIA SAMPLE

Personal Style Scale	Work Style	Learning Environment	Leadership Style	Risk Taking	Team Orientation
Work Style	—	.16	.45	.08	.36
Learning Environment	.16	—	.51	.20	.22
Leadership Style	.45	.51	—	.57	.62
Risk Taking	.08	.20	.57	—	.39
Team Orientation	.36	.22	.62	.39	—

Note: $N = 257$.

TABLE 55. INTERCORRELATIONS BETWEEN THE PSSs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Personal Style Scale	Work Style	Learning Environment	Leadership Style	Risk Taking	Team Orientation
Work Style	—	.14	.46	.07	.36
Learning Environment	.27	—	.52	.28	.27
Leadership Style	.58	.49	—	.58	.62
Risk Taking	.34	.03	.53	—	.32
Team Orientation	.43	.15	.62	.50	—

Note: $N = 257$. For correlations above the diagonal, women $n = 134$; below the diagonal, men $n = 123$.

TABLE 56. CORRELATIONS BETWEEN THE PSSs, THE GOTs, AND THE BISs FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

	Personal Style Scale by Gender									
	Work Style		Learning Environment		Leadership Style		Risk Taking		Team Orientation	
Basic Interest Scale by Theme	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Realistic	–.04	.10	.20	.00	.40	.47	.77	.80	.28	.43
Mechanics & Construction	–.14	–.14	.22	.22	.31	.31	.65	.65	.22	.22
Computer Hardware & Electronics	–.16	–.16	.22	.22	.28	.28	.48	.48	.27	.27
Military	.02	.02	.19	.19	.36	.36	.65	.65	.26	.26
Protective Services	.16	.16	.19	.19	.53	.53	.84	.84	.35	.35
Nature & Agriculture	.14	.14	.10	.10	.32	.32	.44	.44	.25	.25
Athletics	.25	.25	.23	.23	.52	.52	.64	.64	.37	.37
Investigative	–.02	.12	.53	.37	.42	.44	.51	.52	.35	.39
Science	–.10	–.10	.41	.41	.29	.29	.52	.52	.26	.26
Research	.05	.05	.59	.59	.56	.56	.58	.58	.42	.42
Medical Science	.09	.09	.37	.37	.44	.44	.58	.58	.34	.34
Mathematics	–.11	–.11	.45	.45	.25	.25	.36	.36	.21	.21
Artistic	.27	.53	.63	.54	.54	.66	.61	.62	.33	.36
Visual Arts & Design	.18	.18	.58	.58	.49	.49	.57	.57	.25	.25
Performing Arts	.20	.20	.56	.56	.51	.51	.57	.57	.35	.35
Writing & Mass Communication	.30	.30	.66	.66	.51	.51	.55	.55	.31	.31
Culinary Arts	.49	.49	.27	.27	.54	.54	.41	.41	.44	.44
Social	.71	.77	.51	.38	.56	.71	.37	.60	.43	.47
Counseling & Helping	.61	.61	.50	.50	.57	.57	.30	.30	.39	.39
Teaching & Education	.60	.60	.50	.50	.40	.40	.28	.28	.38	.38
Human Resources & Training	.57	.57	.40	.40	.74	.74	.45	.45	.62	.62
Social Sciences	.22	.22	.68	.68	.48	.48	.50	.50	.24	.24
Religion & Spirituality	.38	.38	.30	.30	.32	.32	.18	.18	.28	.28
Healthcare Services	.28	.28	.18	.18	.39	.39	.48	.48	.34	.34
Enterprising	.51	.61	.31	.18	.71	.79	.64	.75	.39	.61
Marketing & Advertising	.51	.51	.32	.32	.68	.68	.63	.63	.38	.38
Sales	.42	.42	.08	.08	.42	.42	.51	.51	.22	.22
Management	.39	.39	.29	.29	.64	.64	.61	.61	.35	.35
Entrepreneurship	.31	.31	.36	.36	.57	.57	.56	.56	.31	.31
Politics & Public Speaking	.23	.23	.53	.53	.75	.75	.69	.69	.38	.38
Law	.20	.20	.30	.30	.53	.53	.62	.62	.34	.34
Conventional	.07	.39	.07	.12	.32	.62	.46	.76	.22	.49
Office Management	.21	.21	–.09	–.09	.17	.17	.23	.23	.14	.14
Taxes & Accounting	–.10	–.10	.20	.20	.29	.29	.42	.42	.20	.20
Programming & Information Systems	.02	.02	.24	.24	.30	.30	.40	.40	.25	.25
Finance & Investing	.08	.08	.31	.31	.54	.54	.59	.59	.30	.30

Note: N = 257 (134 women and 123 men).

TABLE 57. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN WORK STYLE PSS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Work Style PSS	Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
"Works with people" pole	Community Service Director	.78	Special Education Teacher	.84
	Elementary School Teacher	.70	Speech Pathologist	.78
	Special Education Teacher	.69	Recreation Therapist	.76
	Social Worker	.68	Middle School Teacher	.75
	School Counselor	.67	Career Counselor	.74
	Speech Pathologist	.65	Elementary School Teacher	.73
	Middle School Teacher	.65	University Administrator	.72
	Secondary School Teacher	.64	School Counselor	.71
	Career Counselor	.64	Secondary School Teacher	.71
	Nursing Home Administrator	.60	Religious/Spiritual Leader	.70
"Works with ideas/data/ things" pole	Computer & IS Manager	–.41	Artist	–.42
	Carpenter	–.41	Carpenter	–.45
	Physicist	–.46	Chemist	–.45
	Physician	–.50	Farmer/Rancher	–.46
	Biologist	–.50	Forester	–.50
	Mathematician	–.52	Biologist	–.51
	Medical Illustrator	–.55	Electrician	–.52
	Chemist	–.56	Automobile Mechanic	–.57
	Geologist	–.58	Mathematician	–.60
	R&D Manager	–.64	Geologist	–.75

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 58. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN LEARNING ENVIRONMENT PSS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Learning Environment PSS	Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
"Academic" pole	Psychologist	.81	ESL Instructor	.79
	Editor	.71	Librarian	.78
	Technical Writer	.70	Urban & Regional Planner	.75
	ESL Instructor	.70	University Faculty Member	.72
	Sociologist	.68	English Teacher	.71
	University Faculty Member	.68	Editor	.70
	University Administrator	.68	Geographer	.69
	Translator	.67	Sociologist	.67
	English Teacher	.66	Reporter	.67
	Attorney	.65	Translator	.66
"Practical" pole	Military Enlisted	–.33	Emergency Medical Technician	–.52
	Food Service Manager	–.38	Restaurant Manager	–.55
	Health Information Specialist	–.38	Law Enforcement Officer	–.57
	Emergency Medical Technician	–.38	Landscape/Grounds Manager	–.65
	Medical Technician	–.42	Military Enlisted	–.70
	Optician	–.44	Radiologic Technologist	–.71
	Cosmetologist	–.44	Electrician	–.72
	Radiologic Technologist	–.54	Farmer/Rancher	–.72
	Farmer/Rancher	–.76	Optician	–.75
	Production Worker	–.79	Automobile Mechanic	–.78

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 59. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN LEADERSHIP STYLE PSS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Leadership Style PSS	Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
"Directs others" pole	Human Resources Manager	.84	Top Executive, Business/Finance	.85
	Top Executive, Business/Finance	.83	Training & Development Specialist	.82
	Training & Development Specialist	.82	Marketing Manager	.82
	Operations Manager	.81	Human Resources Manager	.82
	Marketing Manager	.80	Public Administrator	.80
	Personal Financial Advisor	.79	Elected Public Official	.80
	Instructional Coordinator	.77	School Administrator	.80
	Sales Manager	.77	Operations Manager	.80
	University Administrator	.77	Sales Manager	.79
	Human Resources Specialist	.75	Purchasing Agent	.78
"Leads by example" pole	Physician	–.17	Graphic Designer	–.38
	Forester	–.18	Electrician	–.40
	Cosmetologist	–.19	Landscape/Grounds Manager	–.44
	Medical Illustrator	–.20	Mathematician	–.50
	Financial Analyst	–.22	Radiologic Technologist	–.51
	Artist	–.34	Artist	–.52
	Medical Technician	–.35	Automobile Mechanic	–.55
	Radiologic Technologist	–.36	Geologist	–.57
	Production Worker	–.46	Biologist	–.60
	Farmer/Rancher	–.49	Farmer/Rancher	–.67

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 60. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN RISK TAKING PSS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Risk Taking PSS	Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
"Takes chances" pole	Law Enforcement Officer	.81	Personal Financial Advisor	.78
	Firefighter	.77	Accountant	.78
	Military Officer	.74	Financial Analyst	.78
	Technical Sales Representative	.72	Credit Manager	.77
	Top Executive, Business/Finance	.68	Securities Sales Agent	.77
	Urban & Regional Planner	.68	Sales Manager	.76
	Attorney	.66	Wholesale Sales Representative	.76
	Sales Manager	.66	Loan Officer Counselor	.76
	Realtor	.66	Financial Manager	.75
	Wholesale Sales Representative	.64	Realtor	.75
"Plays it safe" pole	Food Service Manager	–.07	Landscape/Grounds Manager	–.18
	Speech Pathologist	–.08	Translator	–.28
	Cosmetologist	–.09	Musician	–.30
	Advertising Account Manager	–.19	Interior Designer	–.33
	Medical Technician	–.20	Farmer/Rancher	–.41
	Buyer	–.23	Graphic Designer	–.51
	Financial Analyst	–.28	Geologist	–.53
	Artist	–.47	Mathematician	–.53
	Farmer/Rancher	–.49	Artist	–.67
	Production Worker	–.50	Biologist	–.73

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

TABLE 61. TEN HIGHEST AND LOWEST CORRELATIONS BETWEEN TEAM ORIENTATION PSS AND OS SCORES FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

Team Orientation PSS	Female Occupational Scale	Women *r*	Male Occupational Scale	Men *r*
"Accomplishes tasks as a team" pole	Human Resources Specialist	.66	Food Service Manager	.65
	Business/Finance Supervisor	.63	Top Executive, Business/Finance	.64
	Operations Manager	.59	Operations Manager	.63
	Human Resources Manager	.58	Management Analyst	.63
	Computer Mathematics Manager	.57	Purchasing Agent	.62
	Training & Development Specialist	.57	Securities Sales Agent	.62
	Personal Financial Advisor	.55	Wholesale Sales Representative	.62
	Top Executive, Business/Finance	.55	Financial Analyst	.61
	Management Analyst	.55	Technical Sales Representative	.61
	Instructional Coordinator	.55	Personal Financial Advisor	.60
"Accomplishes tasks independently" pole	Medical Technician	–.09	Automobile Mechanic	–.22
	Paralegal	–.09	Landscape/Grounds Manager	–.22
	Cosmetologist	–.10	Translator	–.23
	Radiologic Technologist	–.13	Musician	–.27
	Advertising Account Manager	–.13	Farmer/Rancher	–.36
	Medical Illustrator	–.14	Graphic Designer	–.39
	Financial Analyst	–.19	Geologist	–.41
	Production Worker	–.21	Mathematician	–.42
	Farmer/Rancher	–.25	Biologist	–.48
	Artist	–.26	Artist	–.49

Note: N = 257 (134 women and 123 men). Ten highest correlations are shaded; 10 lowest correlations are not shaded.

Relationships Between the PSSs and the CPI 260® Scales

The validity of the PSSs was also examined by correlating them with the CPI 260 scales (see Table 62). Results showed that people who scored high on the Work Style PSS tended to be described by the CPI 260 assessment as being nominated to positions of leadership (high Leadership) and sociable, active, and socially competent (high Sociability). Individuals who scored high on the Learning Environment PSS tended to be described by the CPI assessment as ambitious (high Capacity for Status) and efficient in use of intellectual abilities (high Conceptual Fluency). Those who scored high on the Leadership Style PSS tended to be described by the CPI assessment as being nominated to positions of leadership (high Leadership), confident, assertive, and persuasive (high Dominance), and liking activities involving other people (high Sociability). Those who scored high on the Risk Taking PSS tended to be described by the CPI assessment as enjoying activities involving other people (high Sociability) and self-assured and not easily embarrassed (high Social Presence). Finally, those with high Team Orientation scores tended to be described as enjoying activities involving other people (high Sociability), being nominated to positions of leadership (high Leadership), and understanding the feelings and thinking of others (high Empathy).

TABLE 62. CORRELATIONS BETWEEN THE PSSs AND THE CPI 260® SCALES IN THE AUSTRALIA SAMPLE

	Personal Style Scales				
CPI 260® Scale	Work Style	Learning Environment	Leadership	Risk Taking	Team Orientation
Dominance	.23	.35	.59	.20	.31
Capacity for Status	.21	.56	.57	.27	.37
Sociability	.29	.32	.58	.30	.45
Social Presence	.18	.35	.50	.30	.35
Self-acceptance	.23	.29	.56	.26	.32
Independence	.15	.33	.50	.16	.24
Empathy	.16	.40	.47	.23	.41
Responsibility	.05	.32	.14	–.06	.25
Social Conformity	.16	.11	–.08	–.26	.08
Self-control	.08	–.03	–.23	–.32	.08
Good Impression	.22	.06	.02	–.16	.23
Communality	.03	–.02	–.07	–.02	.21
Well-being	.17	.19	.13	–.09	.29
Tolerance	.11	.25	.04	–.08	.19
Achievement via Conformance	.29	.34	.25	–.11	.28
Achievement via Independence	.06	.40	.17	.01	.23
Conceptual Fluency	.21	.49	.37	.10	.31
Insightfulness	.09	.41	.27	.10	.27
Flexibility	–.01	.09	–.06	–.04	.03
Sensitivity	.11	–.11	–.38	–.46	–.21
Managerial Potential	.15	.37	.33	–.07	.31
Work Orientation	.12	.24	.12	–.08	.30
Creative Temperament	.06	.42	.34	.14	.21
Leadership	.29	.43	.60	.16	.43
Amicability	.11	.10	–.06	–.24	.22
Law Enforcement Orientation	.01	.28	.23	.11	.21
vector 1: Orientation Toward Others	–.08	–.30	–.51	–.29	–.14
vector 2: Orientation Toward Societal Values	.11	.11	.15	.01	.16
vector 3: Orientation Toward Self	.17	.24	.03	–.14	.23

Note: n = 128.

ADMINISTRATIVE INDEXES

The administrative indexes provide a summary of an individual's responses to the different sections of the Strong assessment. This information can aid career professionals in interpretation of a client's Strong results. The current version of the Strong has three types of administrative indexes that are reported on the Strong Profile. These include item response percentages, a total responses index, and a typicality index. Each type of index is described below.

ITEM RESPONSE PERCENTAGES

The item response percentages index comprises five measures, one for each of the response options on the *Strong* assessment (see chapter 4 of the Strong manual [Donnay et al., 2005] for further discussion of the response options used on the 2004 Strong assessment). Each of the measures shows the percentage of responses made using the various response options. For example, the "Strongly Like" component of the index reflects the percentage of responses on the inventory that were either "Strongly Like" (used in sections 1 through 5) or "Strongly Like Me" (used in section 6). These values reflect the respondent's response style when completing the inventory. In addition to the item response percentages for the entire inventory, similar measures are also computed for each of the six sections that make up the Strong assessment. These are reported for the career professional to aid in interpretation but are not used for additional analyses or identification of unusual or irregular response profiles.

Normal Response Ranges

Table 63 shows the means and standard deviations for the entire inventory (total percentage) as well as the response percentages for each of the six sections of the Strong assessment. Mean scores for the GRS are reported in the Strong manual. A range of 2 standard deviations above and below the GRS mean score reflects normal responding. For additional interpretive guidance, Table 64 shows the upper and lower bounds of normal ranges of possible response percentages. The interpretive categories are again based on the 2004 U.S. General Representative Sample (GRS). Figures 1–5 also show the distribution of response percentages of the entire inventory for women and men in the Australia sample. These figures are very similar to those reported for the GRS in the Strong manual. As shown, respondents made the most use of the "Indifferent," "Like," and "Dislike" response options.

TOTAL RESPONSES INDEX

One indicator of response problems that has been used historically on the Strong assessment, and is continued here, is the total responses index. "Total Responses" represents the number of item responses on the answer sheet recognized by the scanning software, or entered and recorded on the Internet site. Since the Strong assessment has 291 items, if every item were answered, the response total would be 291. A few answers may be omitted without appreciably affecting the scoring, but if the total responses index drops below 276, reports will not be generated. The average total responses index for the overall Australia sample was 289.

TYPICALITY INDEX

The typicality index is the result of a multipart computation that provides the career professional with a quick check for potentially invalid or unusual responses. It identifies response profiles that appear to be random and those that appear to be outside the normal range of responses, or both. Potential concerns along with suggestions regarding the apparent issue are provided on the last page of the Profile. A detailed description of the computation process and use of the typicality index is provided in the Strong manual. In short, however, a score of 17 or greater indicates that the combination of item responses appears consistent, while a score of less than 17 indicates that the combination of item responses appears inconsistent. The average typicality index for the Australia sample was 22, thus suggesting that responses were consistent across participants.

TABLE 63. AVERAGE ITEM RESPONSE PERCENTAGES FOR THE ENTIRE INVENTORY AND EACH SECTION FOR WOMEN AND MEN IN THE AUSTRALIA SAMPLE

		Strongly Like		Like		Indifferent		Dislike		Strongly Dislike	
Section	Gender	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Entire Inventory	Women	7.29	7.77	23.25	14.35	27.57	18.54	20.19	16.01	21.71	22.12
	Men	7.42	9.58	27.06	20.68	35.10	24.50	17.67	17.21	12.75	18.90
	Combined	7.35	8.66	25.07	17.74	31.17	21.88	18.99	16.61	17.42	21.08
Occupations	Women	5.55	8.55	20.47	16.10	26.25	22.95	22.22	21.70	25.51	27.82
	Men	6.84	12.69	22.93	21.46	33.64	28.50	20.59	22.60	16.00	23.83
	Combined	6.17	10.73	21.65	18.86	29.79	25.97	21.44	22.11	20.96	26.37
Subject Areas	Women	6.70	8.40	23.02	17.32	26.43	22.35	19.67	20.05	24.18	29.07
	Men	6.90	10.92	26.27	22.74	34.94	27.82	18.05	20.88	13.84	23.01
	Combined	6.79	9.67	24.57	20.12	30.51	25.42	18.89	20.42	19.23	26.80
Activities	Women	8.20	9.19	25.42	16.71	28.68	20.44	18.90	15.15	18.80	22.40
	Men	7.86	11.29	30.14	22.93	36.10	26.98	15.41	16.17	10.49	19.80
	Combined	8.04	10.23	27.68	20.03	32.23	24.03	17.23	15.71	14.82	21.56
Leisure Activities	Women	11.55	12.29	24.49	16.09	22.50	17.78	18.97	16.50	22.49	22.07
	Men	10.29	14.35	28.79	21.75	32.97	25.69	16.09	16.26	11.86	16.54
	Combined	10.95	13.31	26.55	19.10	27.51	22.50	17.59	16.42	17.40	20.29
People	Women	5.85	12.59	22.04	20.81	43.47	27.53	17.05	17.20	11.58	17.48
	Men	5.99	12.35	27.24	25.79	46.04	29.49	14.00	16.98	6.72	12.27
	Combined	5.92	12.45	24.53	23.42	44.70	28.46	15.59	17.13	9.26	15.38
Your Characteristics[a]	Women	11.38	16.06	34.88	21.93	25.87	24.15	20.44	20.48	7.43	14.14
	Men	6.45	12.34	45.31	28.98	31.27	29.95	13.90	14.76	3.07	7.96
	Combined	9.02	14.58	39.87	26.03	28.45	27.16	17.31	18.24	5.34	11.78

Note: N = 257 (134 women and 123 men).

[a]Response options in section 6 (the "Your Characteristics" section)—"Strongly Like Me," "Like Me," "Don't Know," " Unlike Me," "Strongly Unlike Me"—differ from response options in others sections of the Strong items.

TABLE 64. NORMAL RANGES OF POSSIBLE RESPONSE PERCENTAGES FOR WOMEN AND MEN IN THE GRS

		Strongly Like		Like		Indifferent		Dislike		Strongly Dislike	
Section	Gender	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
Entire Inventory	Women	0.00	27.21	4.78	41.46	4.22	42.83	0.00	37.55	0.00	60.27
	Men	0.00	27.31	5.64	44.54	6.78	46.23	0.00	39.99	0.00	49.96
	Combined	0.00	27.26	5.10	43.10	5.28	44.75	0.00	38.88	0.00	55.81
Occupations	Women	0.00	20.02	0.00	35.07	0.00	43.70	0.00	48.96	0.00	83.69
	Men	0.00	19.95	0.00	37.84	0.00	47.81	0.00	51.45	0.00	72.98
	Combined	0.00	19.98	0.00	36.52	0.00	45.95	0.00	50.39	0.00	78.98
Subject Areas	Women	0.00	35.27	0.00	50.35	0.00	49.81	0.00	42.67	0.00	65.75
	Men	0.00	33.99	0.00	53.00	0.02	56.45	0.00	46.56	0.00	54.15
	Combined	0.00	34.66	0.00	51.72	0.00	53.46	0.00	44.73	0.00	60.58
Activities	Women	0.00	35.83	3.13	51.21	1.97	48.39	0.00	37.13	0.00	50.75
	Men	0.00	36.14	4.43	54.88	3.99	52.19	0.00	39.90	0.00	39.97
	Combined	0.00	35.99	3.65	53.17	2.80	50.47	0.00	38.58	0.00	46.10
Leisure Activities	Women	0.00	44.77	0.00	52.85	0.00	45.55	0.00	39.36	0.00	54.79
	Men	0.00	40.27	0.91	56.55	0.00	50.97	0.00	42.22	0.00	44.87
	Combined	0.00	42.64	0.34	54.80	0.00	48.60	0.00	40.89	0.00	50.45
People	Women	0.00	36.16	0.00	62.50	0.00	75.22	0.00	45.23	0.00	43.43
	Men	0.00	38.07	0.00	63.64	0.00	71.24	0.00	43.78	0.00	31.88
	Combined	0.00	37.14	0.00	63.15	0.00	73.28	0.00	44.50	0.00	38.18
Your Characteristics[a]	Women	0.00	56.81	0.00	75.55	0.00	58.94	0.00	44.58	0.00	28.74
	Men	0.00	62.46	0.00	79.81	0.00	57.61	0.00	41.57	0.00	20.24
	Combined	0.00	59.75	0.00	77.81	0.00	58.29	0.00	43.15	0.00	24.88

Note: N = 2,250 (1,125 women and 1,125 men).

[a]Response options in section 6 (the "Your Characteristics" section)—"Strongly Like Me," "Like Me," "Don't Know," " Unlike Me," "Strongly Unlike Me"—differ from response options in others sections of the Strong items.

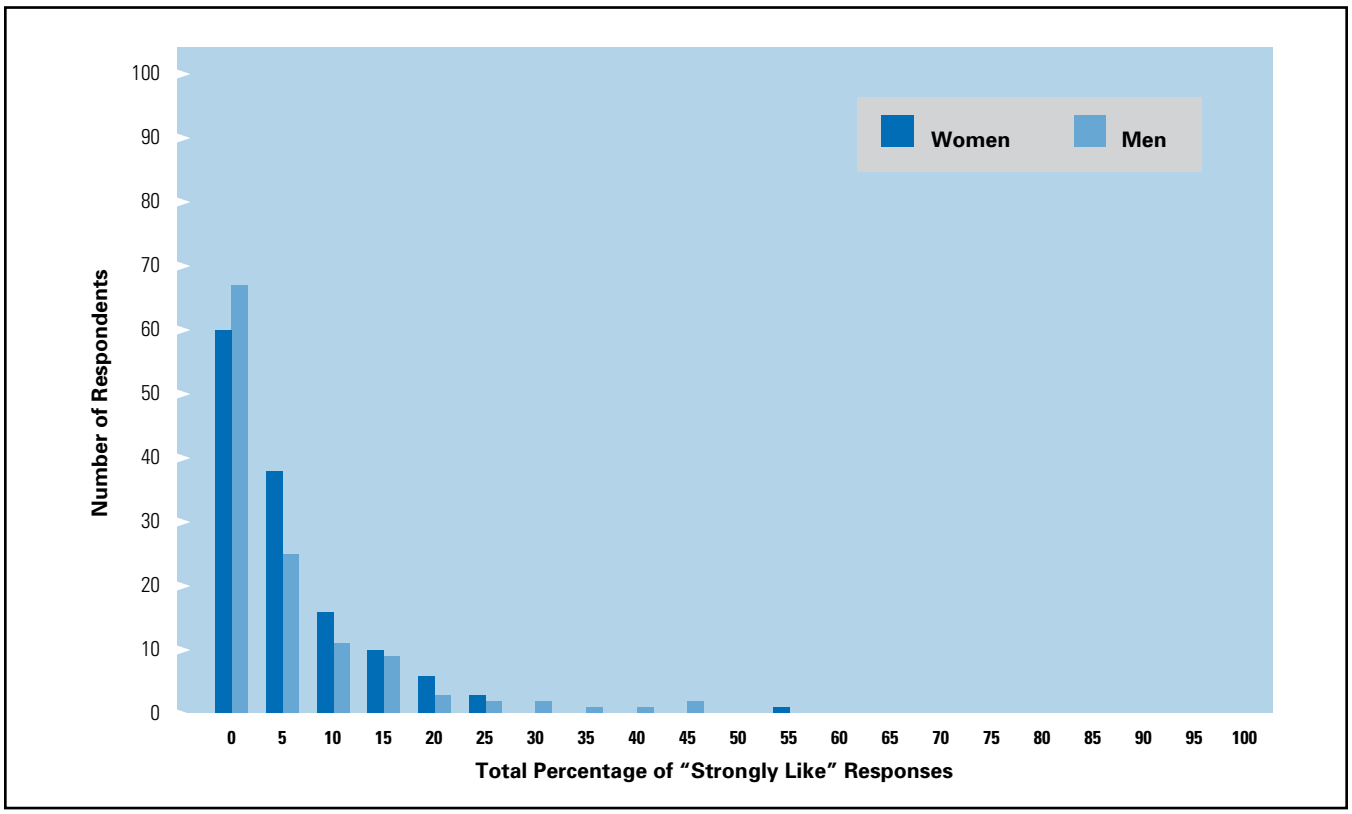

Figure 1. Distribution of "Strongly Like" Responses for Women and Men in the Australia Sample

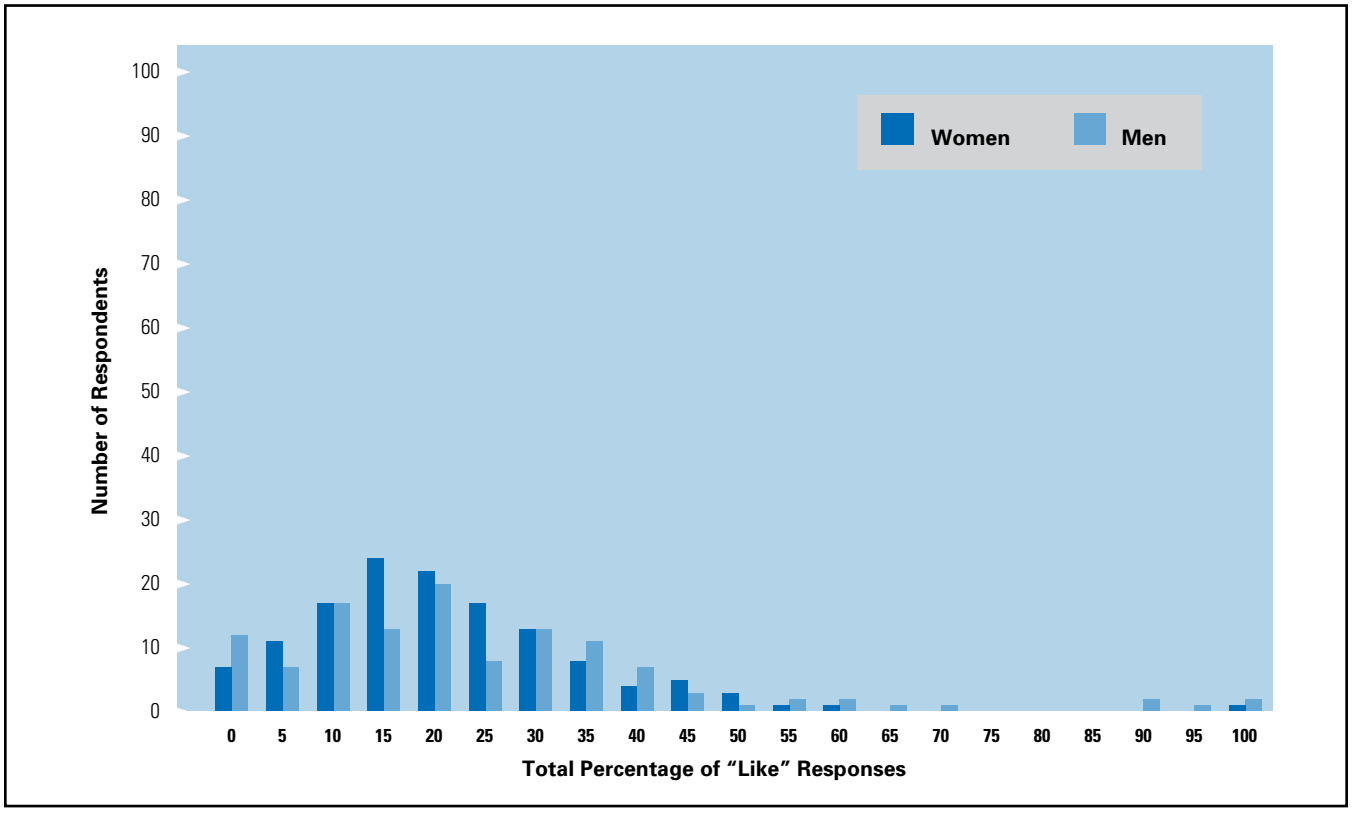

Figure 2. Distribution of "Like" Responses for Women and Men in the Australia Sample

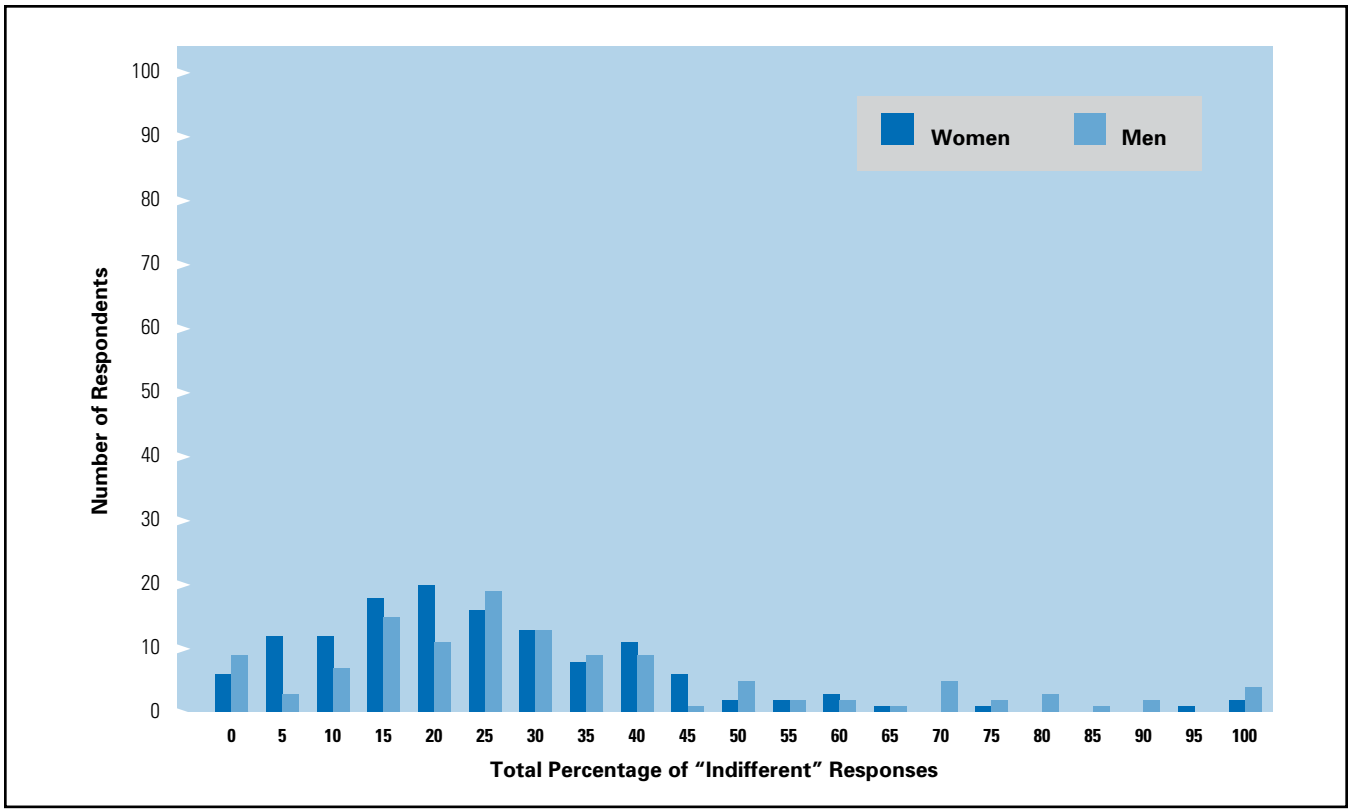

Figure 3. Distribution of "Indifferent" Responses for Women and Men in the Australia Sample

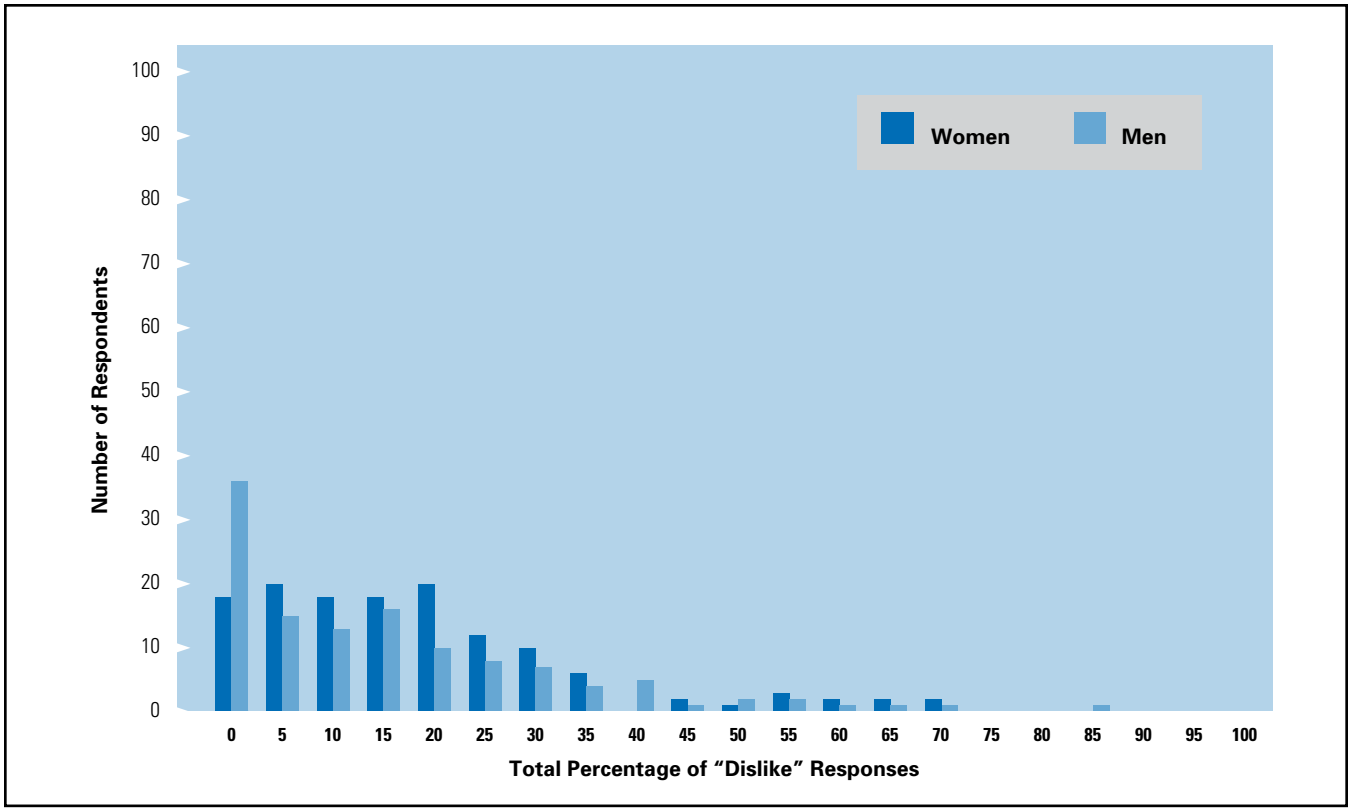

Figure 4. Distribution of "Dislike" Responses for Women and Men in the Australia Sample

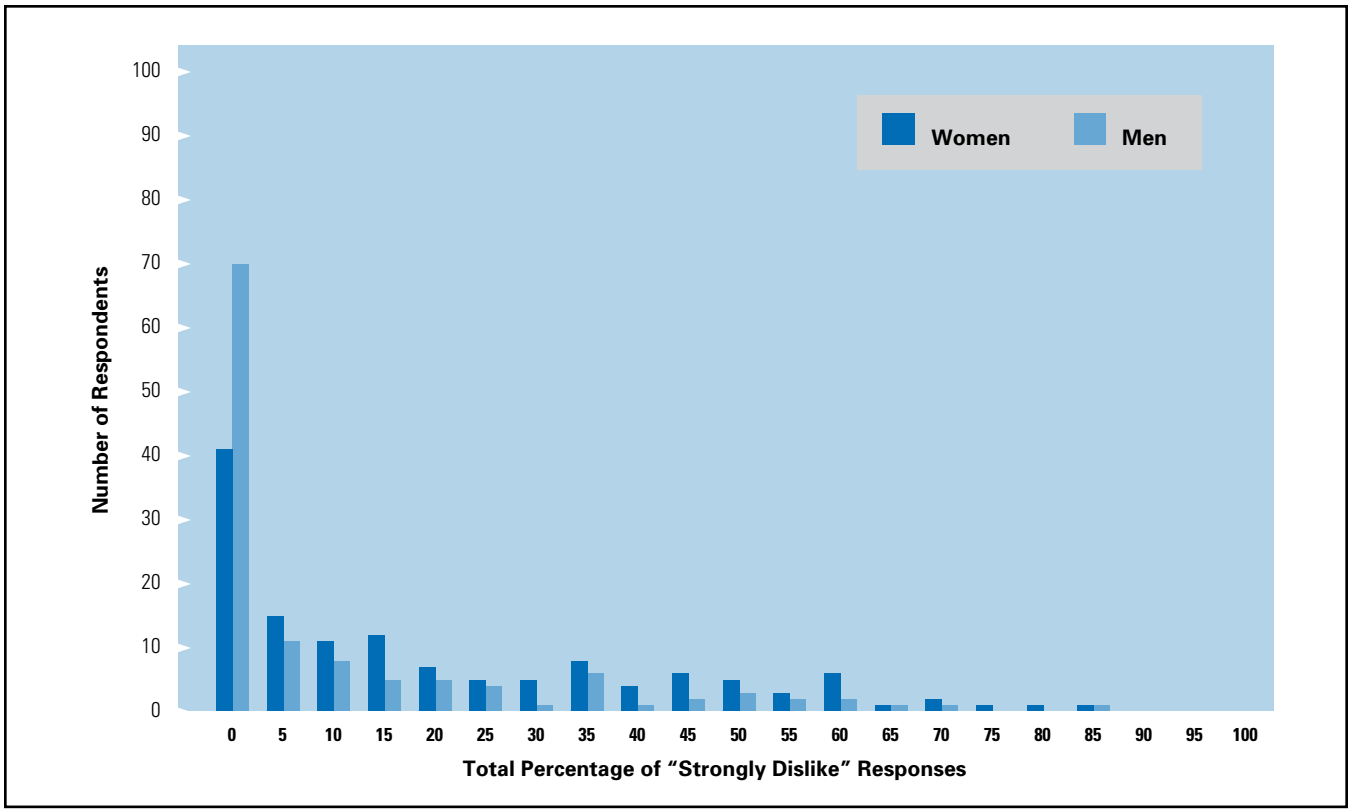

Figure 5. Distribution of "Strongly Dislike" Responses for Women and Men in the Australia Sample

CONCLUSION

This technical brief summarizes the measurement properties of the *Strong Interest Inventory* assessment Australia sample. Results presented in this document suggest that the Strong assessment functions with people in Australia similarly to how it functions with the U.S. General Representative Sample and other international samples. The consistency of these results speaks to the ability of the Strong to be used as a cross-cultural measure of an individual's career and leisure interests and preferences for various occupations and styles of learning, working, playing, and living. As the Strong assessment continues to grow, larger and more diverse samples will become available to the publisher, and the measurement properties of the Strong assessment will continue to be evaluated.

REFERENCES

Campbell, D. P. (1971). *Handbook for the Strong Vocational Interest Blank*. Stanford, CA: Stanford University Press.

Campbell, D. P., Borgen, F. H., Eastes, S., Johansson, C. B., & Peterson, R. A. (1968). A set of Basic Interest Scales for the Strong Vocational Interest Blank for Men. *Journal of Applied Psychology Monographs, 52*(6, Pt. 2).

Carter, R. T., & Swanson, J. L. (1990). The validity of the Strong Interest Inventory® with Black Americans: A review of the literature. *Journal of Vocational Behavior*, *36*, 195–209.

CPP Research Department (2002). *Technical brief for the CPI 260® instrument.* Mountain View, CA: CPP, Inc.

Davison Aviles, R. M., & Spokane, A. R. (1999). A comparison of the vocational interests of African American, Asian, Hispanic, and White middle school students. *Measurement and Evaluation in Counseling and Development, 32,* 138–148.

Donnay, D. A. C., Morris, M. L., Schaubhut, N. A., & Thompson R. C. (2005). *Strong Interest Inventory® manual.* Mountain View, CA: CPP, Inc.

Douce, L. A., & Hansen, J. C. (1988). Examination of the construct validity of the SVIB-SCII Adventure scale for college women. *Measurement and Evaluation in Counseling and Development, 20,* 171–174.

Einarsdóttir, S., Rounds, J., Ægisdóttir, S., & Gerstein, L. H. (2002). The structure of vocational interests in Iceland: Examining Holland's and Gati's RIASEC models. *European Journal of Psychological Assessment, 18*(1), 85–95.

Fouad, N. A. (2002). Cross-cultural differences in vocational interests: Between-groups differences on the Strong Interest Inventory. *Journal of Counseling Psychology, 49,* 283–289.

Fouad, N. A., Harmon, L. W., & Borgen, F. H. (1997). Structure of interests in employed male and female members of U.S. racial–ethnic minority and nonminority groups. *Journal of Counseling Psychology, 44,* 339–345.

Fouad, N. A., & Molher, C. J. (2004). Cultural validity of Holland's theory and the Strong Interest Inventory® for five racial/ethnic groups. *Journal of Career Assessment, 12*(4), 423–439.

Goh, D. S., Lee, J. A., Yu, J. (2004). Factor structure of the Strong Interest Inventory® with a Chinese high school sample. *Journal of Psychology: Interdisciplinary and Applied, 138*(2), 171–183.

Goh, D. S., & Yu, J. (2001). Translation and validation of the Chinese form of the Strong Interest Inventory®. *Applied Psychology: An International Review, 50*(2), 252–268.

Gottfredson, G. D., & Holland, J. L. (1989). *Dictionary of Holland occupational codes* (2nd ed.). Odessa, FL: Psychological Assessment Resources.

Gough, H. G., (2002). *CPI™ bibliography*. Mountain View, CA: CPP, Inc.

Gough, H. G. (1987). *The California Psychological Inventory™ administrator's guide*. Mountain View, CA: CPP, Inc.

Gough, H. G. (1957). *Manual for the California Psychological Inventory™.* Mountain View, CA: CPP, Inc.

Gough, H. G., & Bradley, P. (1996). *CPI™ manual* (3rd ed.). Mountain View, CA: CPP, Inc.

Hansen, J. C. (1992). *User's guide for the Strong Interest Inventory®* (rev. ed.). Stanford, CA: Stanford University Press.

Hansen, J. C., & Campbell, D. P. (1985). *Manual for the SVIBSCII: Strong-Campbell Interest Inventory, Form T325 of the Strong Vocational Interest Blank* (4th ed.). Stanford, CA: Stanford University Press.

Herk, N. A., & Thompson, R. C. (2012). *Strong Interest Inventory® manual supplement.* Mountain View, CA: CPP, Inc.

Herk, N. A., & Thompson, R. C. (2011). *International technical brief for the Strong Interest Inventory® assessment.* Retrieved from: https://www.cpp.com/Pdfs/Strong_Intl_Tech_Brief.pdf.

Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice Hall.

Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology, 6,* 35–45.

Lattimore, R. R., & Borgen, F. H. (1999). Validity of the 1994 Strong Interest Inventory® with racial and ethnic groups in the United States. *Journal of Counseling Psychology, 46,* 185–195.

Murphy, K. R., & Davidshofer, C. O. (2005). Psychological testing: Principles and applications (6th ed.). Upper Saddle River, NJ: Prentice-Hall.

Oliver, K. E., & Waehler, C. A. (2005). Investigating the validity of Holland's (1959, 1997) RIASEC typology among native Hawaiians. *Journal of Counseling Psychology, 52,* 448–452.

Park, S. E., & Harrison, A. A. (1995). Career-related interests and values, perceived control, and acculturation of Asian-American and Caucasian-American college students. *Journal of Applied Social Psychology, 25,* 1184–1203.

Sue, D. W., & Kirk, B. A. (1972). Differential characteristics of Japanese-American and Chinese-American college students. *Journal of Counseling Psychology, 20,* 142–148.

Tak, J. (2004). Structure of vocational interests for Korean college students. *Journal of Career Assessment, 12*(3), 298–311.