MEASURING READINESS FOR CAREER-DECISION MAKING WITH THE CAREER THOUGHTS INVENTORY IN FINLAND: ADAPTATION OR ADOPTION: TECHNICAL REPORT NO. 54[1]

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Measuring Readiness for Career Decision-making with the Career Thoughts Inventory in Finland: Adaptation or Adoption

Abstract

The aim of this study was to examine the adaptation versus adoption of the Career Thoughts Inventory (CTI, Sampson, Peterson, Lenz, Reardon, & Saunders, 1996a) outside the U.S. as a measure readiness for career decision-making. A sample of Finnish polytechnic students (N = 666) completed a Finnish-language version of the CTI. A principle components analysis identified three components: Decision-Making Confusion, Commitment Anxiety, and External Conflict. The results were in accordance with the findings of the U.S. validation studies. The three-factor model explained 36.97% of the total variance. Given the Finnish translation of the CTI, the factor structure and reliability coefficients supported the construct validity of CTI scores and partial structural equivalence was observed. The results demonstrated that it would be appropriate to adapt, not to adopt, the CTI based on CIP theory to the Finnish context. Before implementation of the Finnish CTI in practice, certain modifications in items and scales are warranted.

Keywords: Career Decision-making, Career Thoughts Inventory (CTI), Adapting, Adopting

Measuring Readiness for Career Decision-making with the Career Thoughts Inventory in Finland: Adaptation or Adoption

Readiness for career decision making is a vitally important component in career counseling. The presence of negative career thoughts is an indicator of reduced readiness for career problem solving and decision-making (Sampson, Reardon, Peterson, & Lenz, 2004). Also, the relationship between career decision-making difficulties and needs for counseling clearly apparent (Fouad, Guillen, Harris-Hodge, Henry, Novakovic, Terry, & Kantamneni, 2006). Young adults with higher levels of crystallized career plans reported lower career decision-making difficulties, higher career decision-making self-efficacy, and a higher cognitive decision-making style (Amir & Gati, 2006). In addition, there were significant differences between decided and undecided students on their perceptions of career difficulties. The decided students demonstrated a tendency to present themselves as having less difficulty than do undecided students (Tien, 2005). Therefore the accurate and comprehensive assessment of decision-making problems is an essential component of career counseling, as it facilitates the development of appropriate interventions for different kinds of needs (Gati, Krausz & Osipow, 1996).

Assessing readiness for career decision-making continues to be an important element of research and practice in the delivery of career services. The importance of effective career services is clear given that the drop-out rate in the higher education is high among Finnish students. For example 22% of the students leave Polytechnics or have changed their school or program of study after two years (Lerkkanen, 2002). Plausible reasons for the attrition rate is that students make inappropriate decisions regarding their programs of study due to lack of readiness for career decision making which may include dysfunctional career thoughts or lack of knowledge about the qualifications the programs require or the career opportunities available.

Numerous instruments are available to assess the readiness of individuals to make informed and careful career decisions: Career Development Inventory (CDI; Super, Thomson, Lindeman, Jordaan, & Myers, 1981), Career Decision-Making Difficulties Questionnaire (CDDQ; Gati, Krausz & Osipow 1996), and Career Thoughts Inventory (CTI; Sampson, Peterson, Lenz, Reardon, & Saunders, 1996a). The CTI is a Cognitive Information Processing -based assessment and intervention resource used to measure negative career thoughts associated with the Pyramid of Information Processing Domains and the CASVE Cycle (Peterson, Sampson, & Reardon, 1991; Sampson et al., 2004). From a cognitive perspective, career counseling focuses on helping individuals change dysfunctional thoughts and schemas to more functional ones. The CIP approach is combined

with cognitive therapy (Beck, 1976) to help individuals identify, challenge, and alter negative career thoughts that impede career decision-making (Sampson et al., 2004). Moreover, according to dysfunctional beliefs were the area of greatest decision-making difficulty and individuals had difficulty in verbalizing their negative career thoughts (Fouad et al., 2006). Therefore, a measure of negative or dysfunctional career thoughts is needed to assist individuals in identifying them (Amir & Gati, 2006).

Considerable research has examined the role of cognition in career decision-making. Negative or dysfunctional thoughts and beliefs may be manifested in various ways during the different stages of career-decision-making process (Krumboltz, 1991). It was noted that clients' dysfunctional thoughts about career choice make career problem solving and decision-making more difficult (Sampson et al., 1996b). The presence of dysfunctional cognitions are related to negative self-concepts and the lack of self confidence in one's capability to solve career problems and make appropriate career decisions (Beck, 1976). In addition these dysfunctional career thoughts, included in pessimistic views, are a part of the Emotional and Personality-related Career decision-making Difficulties model (Saka, Gati, & Kelly, 2008).

A key element of the CIP approach is the Pyramid of Information Processing Domains. The Pyramid includes three main domains: knowledge, decision-making skills, and executive processing. At the base of the pyramid, the Knowledge domain consists of two sub-domains, self-knowledge and occupational (or options) knowledge. Self-knowledge contains schemata relating personal experiences to perceptions of values, interests, skills, and employment preferences. The integration of self-schemata results in cognitive generalizations about self. The Occupational (or Options) Knowledge domain includes knowledge of individual occupations and possession of a schema for how the world of work is organized. At the mid-level, the Decision-making Skill domain includes the information processing skills individuals use to solve career problems and make decisions. The problem-solving and decision-making process is conceptualized five sequential phases: Communication, Analysis, Synthesis, Valuing and Execution (the CASVE-cycle). Finally, at the apex of the pyramid, the Executive Processing domain includes metacognitions which control the selection and sequencing of cognitive strategies used to solve career problems through self-talk, self-awareness, and monitoring and control (Peterson et al., 1991; Sampson et al., 2004.)

The assessment of career choice readiness, based on CIP-theory, is defined as a capability of an individual to make appropriate career choices while taking into account the complexity of family, social, economic, and organizational factors that influence an individual's career development. Capability refers to the

individual's internal cognitive and affective capacity to engage in effective career decision-making. Individuals who are in a state of low readiness for career problem solving and decision-making may be inhibited by dysfunctional thoughts and negative emotions. (Sampson et al., 2004; see also Saka, Gati, & Kelly, 2008). Complexity, on the other hand, refers to external and contextual factors, originating in the family, society, economy, or employing organizations, that make it more or less difficult to process information to solve career problems and decision-making. Individuals, who are in higher state of readiness, have fewer negative family, social, economic, and organizational factors to cope with in career problem solving and decision-making than individuals in a lower state. (Sampson et al., 2004; see also Saka et al., 2008).

In the original validation of the CTI' s scores, negative career thoughts, were inversely correlated with positive constructs such as vocational identity, certainty, and knowledge about occupations and training, and positively correlated with indecision for all three norm groups (i.e., adults with work experience, college students, and high school students) (Sampson et al., 1996b). However, there appear to be unique aspects of negative career thoughts among college students. In comparison with high school students and adults, college students' negative career thoughts were inversely correlated with choice comfort and decisiveness, and positively correlated with depression. Further validation of the CTI's scores explored its association with emotional intelligence measured by Bar-On Emotional Quotient Inventory. In the Canadian research the Bar-On Emotional Quotient Inventory's all 24 scales had correlation at least in significant level $p < .01$ to the CTI scales (Dahl, Austin, Wagner, & Lukas, 2008). The other validation of the CTI's scores explored its association with difficulties in career decision-making measured by the Career Decision-Making Difficulties Questionnaire (CDDQ). In the cluster analyses of the CDDQ and the CTI has found that the three CTI scales correspond with three major categories of the CDDQ. The only exceptions were the CDDQ Inconsistent Information category and the CTI External Conflict scale (Kleiman, Gati, Peterson, Sampson, Reardon, & Lenz, 2004).

Assuming adequate evidence of reliability and validity, the information given by the CTI could identify students, who possess negative or dysfunctional career thoughts that could limit their career decision-making readiness. Several studies in the U.S. have been reported on the validity and reliability of the CTI scores (Osborn, Howard, & Leierer, 2007; Kleiman et al., 2004). Only a few studies have examined the measure in other national contexts and educational systems outside the U.S. (Lerkkanen, 2002; Björnsdottir, Kardal, & Einarsdottir, 2010).

The reliability of the Icelandic version of the CTI and its construct scales were estimated using Cronbach's alpha and ranged from .76 to .96. They were comparable to the reliabilities found in the original U.S. version (.77 to .96) (Sampson et al., 1996b). However, the factor structure is only partially replicated in Iceland and is, therefore, not comparable with the factor structure in the U. S. Only the EC items seem to form a coherent factor with almost all the items loading high on one factor. In Iceland the results did not support separate interpretation of the two scales Decision- Making Confusion and Commitment Anxiety (Björnsdottir et al., 2010).Therefore, the direct transfer of instruments across cultures may require modification and validation before use in practice.

The major task in career counseling in Finnish Higher education adapt models and services that are better tailored to individual needs, are cost effective, and allow for a systematic evaluation of their effectiveness. The characteristics of the CTI that make it desirable for use in Finnish Polytechnics are that it is brief, theory based, research tested, and useful in that it provides suggested interventions remediate readiness problems. Such an effort is important because no measures are currently available in Finland to serve as an assessment of readiness for career decision making.

Adaptation Versus Adoption

With the greater need for career services, there is also a necessity to explore the availability of measures from outside your own cultural context and to consider whether to adapt or adopt them for local uses. However, we recognize that if measures are used in a new country, the items should not only be translated well linguistically, but they must also be adapted culturally (Beaton, Bombardier, Guillemin, & Ferraz, 2000). Thus, there is concern regarding the etic (universal) and the emic (culture–bound) properties as well as the need to demonstrate utility and psychometric properties across cultural and linguistic groups (Verdugo, Arias, Ibáñez, & Schalock, 2010). Ultimately, the decision to adapt or adopt an instrument in another culture is influenced by the theory on which the instruments are based as well as on the psychometric properties of the instrument itself (Creed & Yin, 2006).

The procedure of cross-cultural adaptation or adoption of psychometric measure may be structured according to five phases. The first phase entails determining the validity of the theoretical constructs for the intended purpose and use of the assessments in counseling and guidance (Turner, DeMers, Roberts Fox, & Reed, 2001). Second, involves conducting a translation followed by a back translation employing a native

translator and expert committee review and pre-test trials (Beaton et al., 2000; Moriguchi, Alem, van Veldhoven, & Coury, 2010). In the third phase, it entails exploration of the factor structure by estimating the factor structure with exploratory factor analysis (EFA). Forth, examines the reliability of the instrument's scores through deriving internal consistency (Cronbach alpha or split-half) and stability coefficients (test-retest) of the revised items (and possibly scales) of the instrument (Verdugo et al., 2010). Fifth and the last phase, includes investigating the construct validity of the adapted measure through acquiring evidence to support convergent and criterion-related validities (Creed & Yin, 2006; Savickas & Hartung, 1996; Tien, 2010). Local norms are also established. This final phase should also include a confirmation of the factor structure by conducting a confirmatory factor analysis employing a second population sample (CFA; see also Creed & Yin, 2006).

In this study adoption refers to incorporating a translated measure directly in career service delivery without changing the theoretical basis, items, scales, the order of the items, or norms. Instead, adaptation refers to incorporating a measure in career service delivery without changing the theoretical basis or fundamental structure of the instrument, but it entails modifying item phrasing and content, and modifying the scales. In addition, adequate reliability and, validity of scores, and norms are established before use of the measure in practice. Following favorable translations and reviews of reliability of the scores, content validity, and norms, the instrument is then regarded ready for use in practice. However, should questions arise regarding the validity of the instrument's scores in the translation or review and trial processes, we highly recommend that adaptation procedures be conducted prior to application in practice.

Purpose of the Study

The aim of this study was to examine the adaptation versus adoption of the CTI outside the U.S. as a measure of readiness for career decision-making using the Finnish translated version of the CTI as a case in point. Following the translation of the CTI into the Finnish language and subsequent reviews, questions arose regarding whether the scales and items comprising the scales performed in the same way across cultures. Therefore, the decision was made to pursue through the first four phases of adaptation procedures outlined above before implementing the CTI in practice. These procedures were established to investigate the validity of CTI scores measure readiness for career decision making for students enrolled in the polytechnics in Finland. The first goal of the inquiry was to examine the factor structure and the internal consistency of the respective scales of the Finnish version of the CTI. Second goal was to examine items which require modification or elimination.

Method

Participants

The Finnish sample consisted of 666 from 956 students enrolled at Jyväskylä Polytechnic in Central Finland. In terms of gender, 54% of the students were female. The students represented six units in Jyväskylä Polytechnic: Business, Engineering, Facility Management, Nursing and Social Care, Music, and Clothing Design. Their mean age was 22 (ranging from18 to 45). The basic studies before Polytechnic were from high school (64 %) or a vocational qualification (31%). Information on basic studies was unknown for 5% of the students.

Procedure

Data collection occurred during the orientation lectures to the polytechnic students in the first two weeks of their program of studies at Fall. Verbal and written instructions were given by the first author with 20 minutes allocated for completing the Finnish language version of the CTI.

Measure

The Career Thoughts Inventory (CTI; Sampson et al. 1996a) is a self-administered, measure of negative thoughts that inhibit career problem solving and decision-making. The CTI provides three construct scales derived from an exploratory factor analysis employing a principle components analysis of the 48 items: Decision-Making Confusion (DMC, 14 items), Commitment Anxiety (CA, 10 items), and External Conflict (EC, 5 items). *Decision-Making Confusion* indicates difficulty in beginning or continuing with career decision-making due to disabling emotions and/or a limited understanding of the decision-making process itself. *Commitment Anxiety* identifies the inability to commit to a specific career choice, accompanied by generalized anxiety about the results of the decision-making process that leads to further indecision. *External Conflict* indicates an inability to balance the importance of personal perceptions with the importance of input from significant others, leading to reluctance to assume responsibility for decision-making. All 48 items of the CTI do not load on one of these components. The total score of the 48 items is an overall indicator of negative career thoughts. The 48 items were derived from eight content domains from CIP theory. Each of the content domains and phases were represented with 6 items on the CTI. Clients complete the CTI by responding to each of the 48 items using a 4-point Likert-type scale ranging (0 = Strongly Disagree, 1 = Disagree, 2 = Agree, to 3 = Strongly Agree) (Sampson et al., 1996b).

The original U.S. version of the CTI includes norms for college students from freshman to seniors (n = 595). Internal consistency for the construct scales included coefficient alphas of .94 for the DMC scale, .88 for the CA scale, and .77 for the EC scale. The three components explained 45.50% of the total variance. Four-week stability coefficients for the DMC, CA, and EC scales were .82, .79 and .74 respectively (Sampson et al., 1996b).

The Translation of the CTI into Finnish.

The Finnish language version of the CTI was translated from English to Finnish by the first author. An expert committee, consisting of four Finnish researchers with expertise in English language translation and counseling, verified the translation. A blind back translation from Finnish to English was then completed by the professional translator. Using a blind translation limits the likelihood that the back translation has been influenced by prior knowledge of the CTI. Five items (items 15, 18, 23, 28, and 39) were identified by the author of the CTI, in which the meaning of the original CTI items were substantially changed in meaning in the Finnish translation. Discrepancies in item meanings were resolved with a second translation, blind back translation, and verification of the appropriateness of the five items.

Results

Factor Structure of the Finnish CTI

In order to address the research questions in this study, we conducted an exploratory factor analysis with a principle components analysis of the Finnish version of the CTI and compared the results to the factor structure of the original version (Sampson et al., 1996b). In the four-factor solution the first four eigenvalues were 13.51, 2.34, 1.90, and 1.49. The solution explained 34,75% of the total variance, but factors 1 and 2 had a correlation of r = .68 suggesting that they could be combined. It was showed the three-factor solution was appropriate for several explanations. It seems to be most interpretable solution consistent with the CIP theory. The Cattell scree-test indicated that a three-factor solution was appropriate. The cut-off point for factor loadings was .40 and it was equal that was previous used in the U.S. sample. The resulting Finnish version of the CTI (see Table 1) provides three construct scales derived from the above exploratory factor analysis of the 48 items, Decision-Making Confusion (DMC, 13 items), Commitment Anxiety (CA, 10 items), and External Conflict (EC, 8 items). These components explained 36.97% of the total variance in the matrix.

The intercorrelations among CTI Total score, DMC, and CA were very similar both in Finland and in the U.S. samples. In the Finnish sample the intercorrelations varied from .39 to .92. The highest intercorrelation was between the DMC and CTI Total Score (.92) and the lowest intercorrelation was between the EC and CA (.39). The other intercorrelations were .83 (CA – CTI Total Score), .67 (DMC-CA), .58 (EC- CTI Total Score) and .41 (DMC-EC). In the U.S. sample the intercorrelations varied from .56 to .92. The highest intercorrelation was between DMC and CTI Total Score (.92) and the lowest intercorrelation was between EC and CA (.56). The other intercorrelations were .84 (CA – CTI Total Score), .78 (EC- CTI Total Score), .70 (DMC-EC), and .65 (DMC-CA) (Sampson et al. 1996b). After the findings we concluded that the fundamental factor structure of the translated CTI replicated the original English language version.

Reliabilities of the Finnish CTI scores reported by internal consistency coefficient alphas were α = .94 for the Total score, α = .89 for the DMC-scale, α = .87 for the CA-scale, and α =. 71 for the EC-scale. The corresponding values using normative data collected from U.S. college students showed that the internal consistency coefficients were α =.96 for the Total score, α = .94 for the DMC-scale, α = .88 for the CA-scale, and α =. 77 for the EC-scale. The lower number of items compromising the EC scale may have contributed to the lower reliability estimates for these scales. Nevertheless, the coefficient alphas for the corresponding scales of the two versions were considered as highly comparable.

Items Needing Revision or Elimination

Identifying items with the need for revision or elimination were made on basis of three analyses: (a) recognition of the weakest loading items, (b) analyses of the factor structure and related items, and (c) analyses items of which did not load on either the original U.S or Finnish factor solutions. This identification was meaningful for the consideration of adaptation of the CTI to Finland.

In the Finnish factor solution the weakest loadings occurred on, item number 2, "*Almost all occupational information is slanted toward making the occupation look good'* and, item number 39, "*Finding a good job in my field is just a matter of luck*". The communalities of both items were low.

In the Finnish DMC-factor 12 of the 14 items keyed to this factor in the original CTI received loadings of over .40 (Table 1). The differences were in items 16 and 43. The item number 16, *"I've tried to find a good occupation many times before, but I can't ever arrive at good decisions"* did not load on any of Finnish factors.

The item number 43, *"I am embarrassed to let others know I haven't chosen a field of study or occupation"* was loaded on the Finnish EC-factor. *"*

There existed differences in the CA- factor in two items (Table 1).. They all loaded to the Finnish CA-factor only. They were item, number 45, *"There are so many occupations I like, I'll never be able to sort through them to find ones I like better than others"*, and item number 40, *"Making career choice is so complicated, I am unable to keep track of where I am in the process"*. In these items results could demonstrate the possible difficulties with complex items, where respondents were asked to take into account two aspects in same item. However, only a few instances of this problem were found among the CTI items. On the EC-factor all five items keyed to this factor received loadings of .40 on the original EC- factor (Sampson et al., 1996b).

There were two items, which loaded on this factor on the Finnish version of the CTI, but which did not load on the original CTI (Sampson et al., 1996b). They were items, number 41, *"My achievements must surpass my mother's or father's or my brother's or sister's"* and, number 19, *"If I change my field of study or occupation, I will feel like a failure"*. The results from both of these items indicate that Finnish and the U.S. students regard possible conflict with the closest ones in different ways and that the EC-factor may be contextually bound. Finally, it was noted that there existed 13 items which did not load on either to Finnish or the U.S. versions of the CTI (Table 1).

Discussion

There appear to be only a few previous studies investigating how the CTI has been used in cultural and educational settings outside the U.S (Lerkkanen, 2002; Björnsdottir et al., 2010). The aim of present study was to examine the adaptation versus adoption of the Career Thoughts Inventory (CTI, Sampson et al., 1996a) in Finland as a measure readiness for career decision-making. The findings of an exploratory factor analysis revealed that the interpretation of the factor structure of the Finnish CTI was consistent with the original version (Sampson et al., 1996b). Moreover, internal consistency coefficients of the English and Finnish versions of the CTI are regarded as comparable. Finally, several of the items of the DMC and the CA scales require modification to capture similar meanings and there are some items that load differently on the respective scales. Despite these promising results, the Finnish CTI needs further study with heterogeneous Finnish samples for validation and greater generalizability in Finland. With adjustments to items and scales the Finnish CTI gives guidelines for adaptation of contextualized readiness measure in career decision-making.

Factor Structure of the CTI

Because the factor structure was fundamentally replicated we concluded that the Finnish CTI is a valid representation of the CIP theory advanced in the U.S. Nevertheless we noted than not all the 48 items of the CTI loaded on the respective three factors in exactly the same way. Thus, the adapted version of the Finnish CTI will contain some alterations in the domains of items comprising the factor scales. The External Conflict (EC) factor appears to require more study and investigation than the DMC or CA factors before implementation in practice. The results of the analyses could be interpreted that the EC construct itself may be sensitive to cultural differences. In a same result was found in previous studies showed that the EC had a lower correlation to Career Decision-Making Difficulties (CDDQ) than the other CTI factors have (Kleiman et al., 2004). We believe the dimensions of family influences, informational support, emotional support, financial support, family expectations and role models should be emphasized in the further studies.

In the Commitment Anxiety (CA) factor the differences could be attributed to differences in educational systems. Higher education in Finland is relatively inexpensive for the individual. An inappropriate choice in selecting a field of study may have fewer economic consequences to significant others in Finland than in the U.S. Another potential reason for national differences might be attributed to timing for selecting a field of study. In Finland, students are required to choose their field of study before beginning studies, whereas in the U.S., many college students can take up to two years before choosing a field of study. The ability to postpone choosing a field of study in the U.S. may extend and heighten parental concern over choice of major field or career for a longer period of time. Similar findings have been noticed when the U.S. and Israeli students was compared by Emotional and Personality Career Difficulties (EPCD) (Saka et al., 2008).

Limitations of the Study

There were some inherent limitations in this study to take consideration. First, the comparison samples of college students may not be equivalent in terms of representing their respective nationalities. The U.S. samples were national in scope whereas the Finnish samples were taken from a single institution. Future research could include broader, more heterogeneous population in Finland. Second, the conditions of administration may have varied across samples. The Finnish data were collected during first two weeks of Polytechnic studies when students had not yet fully engaged in study and might not have experienced any difficulties that would cause them to doubt their career choices. The sample in Finland was comprised of

freshmen only whereas the U.S. sample was also comprised of sophomores, juniors, and seniors. In the future research, data should be collected at several points as students' progress from the beginning to completion of their studies.

Implications of the Study

In countries where individuals take an active part in making their own career choices, similarities are likely to exist in the nature of negative career thoughts associated with career decision-making. The specific nature and amount of negative career thoughts likely varies among countries. Achieving a better understanding of the similarities and differences in negative career thoughts as a measurement of readiness in various countries will help practitioners to design and deliver more effective career services. Regarding implications for the adaptation of the CTI in Finland and given the evidence of reliability, content validity, and factorial validity of the scores that currently exists for the Finnish version of the CTI, we believe that this paper could give information in developing further measures of readiness for career problem solving and decision-making.

The results of this study demonstrated that the CTI, based on CIP theory, is not universal and should not be adopted as a measure without further validation research. The Finnish and Icelandic results indicated some culture-bounded aspects. Outside the U.S. there exist needs for changes in items, scales and also further studies about norms. However, in terms of broader issues, the potential benefit of conducting adaptation procedures of the CTI in a different national context includes identifying similarities and differences between nationalities. Such an understanding can assist in specifying negative career thoughts that may be universal across nations, as well as clarifying variations in career thoughts among individuals in different countries that can lead to enhancing the delivery of career services to meet specific student needs.

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Table 1

Factor Loadings and Communality Estimates for the Three CTI Factors in the Finnish Sample and U.S. Factors (Sampson et al., 1996b)

	Finnish Loadings				U.S. Factors
Item	DMC	CA	EC	h^2	
1	.67	.00	- .29	.39	DMC
2	.24	.11	.05	.11	
3	.40	.25	.15	.40	DMC
4	.36	.27	.17	.39	DMC
5	.67	.04	- .05	.44	DMC
6	- .20	.17	.47	.26	EC
7	.13	.19	.33	.27	
8	.22	.10	.35	.29	
9	- .12	- .02	.61	.32	EC
10	.25	- .22	.41	.24	
11	.54	.09	.14	.43	DMC
12	.64	.20	- .03	.54	DMC
13	.66	.04	.00	.45	DMC
14	- .01	.09	.53	.33	EC
15	.29	- .06	.24	.17	
16	.12	.19	.29	.23	DMC
17	.14	.62	- .05	.44	CA
18	.27	.00	.27	.20	
19	.11	- .03	.45	.24	
20	.44	.28	.19	.52	DMC
21	- .04	.64	.12	.46	CA
22	- .04	.78	.03	.61	CA

23	.04	.16	.48	.35	EC
24	.24	.07	.25	.20	
25	.50	.47	- .08	.59	
26	.14	.67	- .02	.52	CA
27	.48	.10	.27	.48	DMC
28	.40	.31	.19	.50	DMC
29	- .01	.76	- .09	.52	CA
30	- .04	.78	.00	.58	CA
31	.17	.35	.14	.28	
32	- .06	.12	.29	.11	CA
33	.15	.29	.21	.26	
34	.24	.18	.26	.27	
35	.15	.59	- .01	.44	CA
36	.33	.45	.08	.48	DMC
37	.13	- .03	.37	.18	
38	- .03	.67	.02	.44	CA
39	- .08	.20	.24	.12	
40	.15	.44	.29	.50	
41	- .12	.08	.52	.28	
42	.38	.14	.08	.25	
43	.07	.02	.56	.35	DMC
44	.46	.20	.27	.53	DMC
45	.05	.76	.00	.61	
46	.10	- .10	.57	.33	EC
47	.33	.02	.40	.38	CA
48	.49	.00	.34	.48	

Note. DMC = Decision-Making Confusion, CA = Commitment Anxiety, EC = External Conflict.