Online Supplemental Materials for:

Patterns of Career Decision-Making Difficulties in 16 Countries: A Person-Centered Investigation

Table of Contents:

Supplemental Material A

Previous Clustering Studies of Career Indecision Types

Paper	Algorithm	Clustered Sample	Clustering Measures (and Number of Derived Indicators)		Types (and Relative Frequency)
Lucas and Epperson (1986)	Hierarchical Ward	USA 274 undergraduate students only undecided	- Career Salience Questionnaire (1) - **My Vocational Situation** (3) - Life Style Inventory (3)	- Locus of Control Scale (1) - Self Esteem Scale (1) - State-Trait Anxiety Inventory (2)	- *close to deciding* (22%) - *lacking occupational information* (25%) - *anxious and unclear on goals* (31%)
Fuqua et al. (1988)	Centroid BMDP2M	USA 155 high school students	- **Career Decision Scale** (1) - **Identity Scale** (1)	- Locus of Control Scale (1) - State-Trait Anxiety Inventory (2)	- *career decided* (42%) - *developmentally undecided* (23%) - *moderately indecisive* (28%) - *anxious and indecisive* (8%)
Larson et al. (1988)	Centroid FASTCLUS	USA 87 undergraduate students only undecided	- **Career Decision Scale** (1) - **Career Planning Inventory** (8) - Vocational Preference Inventory (2)	- Problem Solving Inventory (1)	- planless avoiders (21%) - informed indecisives (5%) - confident but uninformed (25%) - uninformed (49%)
Lucas and Epperson (1988)	Hierarchical Ward	USA 302 undergraduate students only undecided	- Career Salience Questionnaire (1) - **My Vocational Situation** (3) - Life Style Inventory (3)	- Locus of Control Scale (1) - Self Esteem Scale (1) - State-Trait Anxiety Inventory (2)	- happy and work oriented (18%) - caught in a dilemma (19%) - undecided and limited interests (23%) - anxious and unclear on goals (18%) - happy and playful (17%)
Lucas and Epperson (1990)	Hierarchical Ward	USA 196 undergraduate students only undecided	- **My Vocational Situation** (3) - Career Salience Questionnaire (1) - Life Style Inventory (3)	- Locus of Control Scale (1) - Self Esteem Scale (1) - State-Trait Anxiety Inventory (2)	- *anxious and unclear on goals* (21%) - *anxious and caught in a dilemma* (20%) - *in need of information* (30%) - *happy and work oriented* (18%) - *happy and playful* (11%)
Savickas and Jarjoura (1991)	Hierarchical Ward	USA 368 undergraduate students	- **Career Decision Scale** (16)	- State-Trait Anxiety Inventory (1)	- implementing a choice (29%) - specifying a choice (29%) - crystallizing preferences (17%) - unrealistic, learning to compromise (15%) - indecisive, learning to make decision (7%)

Paper	Algorithm	Clustered Sample	Clustering Measures (and Number of Derived Indicators)		Types (and Relative Frequency)
Callanan and Greenhaus (1992)	Centroid FASTCLUS	USA 397 workers in banking	- **Career Indecision Status** (2) - Career Management Assistance (1) - **Sources of Career Indecision** (7)	- Age (1) - State-Trait Anxiety Inventory (1) - Tenure (2)	- chronic indecision (31%) - developmental indecision (28%) - vigilant decidedness (17%) - hypervigilant decidedness (24%)
Wanberg and Muchinsky (1992)	Hierarchical Ward	USA 390 undergraduate students	- **Career Decision Profile** (5) - **My Vocational Situation** (2)	- Internal, Powerful Others and Chance (3) - Janis Field Feelings of Inadequacy Scale (1) - State-Trait Anxiety Inventory (1)	- confident-decided (20%) - concerned-decided (39%) - indifferent-undecided (25%) - anxious-undecided (15%)
Chartrand et al. (1994)	Centroid FASTCLUS	USA 325 undergraduate students	- **Career Factors Inventory** (4)		- developmentally undecided (31%) - ready to decide (6%) - indecisive (37%) - choice anxious (23%)
Rojewski (1994)	Hierarchical Ward	USA 189 junior high students	- **Career Decision Scale** (16)		- crystallizing preferences (40%) - transitional indecision (38%) - chronic indecision (22%)
Meldahl and Muchinsky (1997)	Hierarchical Ward	USA 183 undergraduate students women	- Biographical Questionnaire (5) - **Career Decision Profile (6)**	- Perceived Stress Scale (1) - Positive and Negative Affect Schedule (2) - State-Trait Anxiety Inventory (2)	- *neurotic indecisive* (52%) - *decided* (48%)
		USA 151 undergraduate students men	- Biographical Questionnaire (5) - **Career Decision Profile (6)**	- Perceived Stress Scale (1) - Positive and Negative Affect Schedule (2) - State-Trait Anxiety Inventory (2)	- *neurotic indecisive* (40%) - *emotionally stable* (60%)
Larson and Majors (1998)	Hierarchical Ward	USA 125 high school students	- Academic Major Decidedness (1) - Career Barriers Inventory (1) - Career Decision Self-Efficacy (1) - **Coping with Career Indecision (1)**	- Positive and Negative Affect Schedule (2) - Problem Solving Inventory (1)	- low agency/high distress (26%) - high agency/high distress (37%) - high agency/low distress (22%) - low agency/low distress (15%)

Paper	Algorithm	Clustered Sample	Clustering Measures (and Number of Derived Indicators)		Types (and Relative Frequency)
Kelly and Pulver (2003)	Hierarchical Ward	USA 566 undergraduate students	- **Career Factors Inventory** (4)	- Five Factor Inventory (5) - Scholastic Assessment Tests (2)	- well-adjusted information seekers (43%) - neurotic indecisive (25%) - low ability information seekers (21%) uncommitted extraverts (11%)
Akos et al. (2004)	Hierarchical MEG	USA 629 junior high students	- **Career Factors Inventory** (4)		- average information/high decision (21%) - high information/average decision (16%) - average information and decision (13%) - high information/low decision (11%) - average information/low decision (16%) - high information/very high decision (10%) - low information/average decision (13%)
Rochlen et al. (2004)	Centroid K-means	USA 86 students who were seeking career counseling	- Attitudes Toward Counseling (2) - Career Anxiety Measure (1) - **Career Decision Profile** (4) - **My Vocational Situation** (3) - Outcome Questionnaire (1)		- uncertain/minimal distress (59%) - undecided/distressed (41%)
Guay et al. (2006)	Probabilistic SAS TRAJ	Canada 325 college students	- **Career Decision Scale** (1 × 3)		- decided (48%) - developmental indecision (27%) - chronic indecision (25%)
Argyropoulou et al. (2007)	Hierarchical Ward	Greece 848 high school students	- **Career Decision Scale** (16)		- decided (40%) - exploring possibilities (28%) - undecided (31%)
Multon et al. (2007)	Hierarchical Ward	USA 278 counseling clients	- **Career Decision Profile** (5) - Career Transition Inventory (5) - Goal Instability Scale (1) - **My Vocational Situation** (1)	- Brief Symptom Inventory (1) - Hope Scale (1)	- *healthy but need support* (32%) - *clear about career choices* (16%) - *distressed but moderately decided* (18%) - *distressed and undecided* (34%)
Feldt et al. (2011)	Hierarchical Ward	USA 180 undergraduate students	- **Career Decision Scale** (2)	- Five Factor Inventory (5)	- seriously undecided (20%) - very decided (58%) - developmentally undecided (22%)

Paper	Algorithm	Clustered Sample	Clustering Measures (and Number of Derived Indicators)		Types (and Relative Frequency)
Germeijs et al. (2012)	Probabilistic LCA	Belgium 655 high school students	- **Study Choice Task Inventory** (6)		- achievement (21%) - foreclosure (32%) - moratorium (16%) - diffused (31%)
Santos and Ferreira (2012)	Hierarchical average linkage	Portugal 362 high school students	- **Indecisiveness Scale** (1) - **My Vocational Situation** (1)	- Locus of Control Scale (1) - Rosenberg Self Esteem Scale (1) - State-Trait Anxiety Inventory (1)	- career-decided and confident (39%) - developmentally undecided (40%) - chronically undecided (21%)
Lee et al. (2013)	Probabilistic LCA	South Korea 6,908 junior high students	- Career Decidedness (1) - **Career Maturity Scale** (3) - Educational Decidedness (1)		- career prepared (67%) - confused (28%) - career unprepared (5%)
Levin et al. (2022)	Probabilistic LPA	USA 8,918 users of an online career counseling service	- **Career Decision-Making Difficulties Questionnaire** (10)		- unmotivated (6%) - indecisive (31%) - unrealistic (12%) - uninformed (39%) - conflicted (12%)
Milot-Lapointe et al. (2022)	Probabilistic LPA	Canada 111 counseling clients	- **Career Decision-Making Difficulties Questionnaire** (3)	- Outcome Questionnaire (3)	- uncertain/minimal distress (44%) - undecided/distressed (56%)

Note. Measures of career indecision are presented in **Bold.** Type labels in *italics* were drafted by the authors of the present study (for the cases where labels were not formulated in the respective original publication).

Supplemental Material B

Procedure for Profile Model Comparison and Selection

To identify the optimal number of profiles, we adapted and expanded the procedure outlined by Ram and Grimm (2009) with insights reported by Hofmans et al. (2020) and Spurk et al. (2020). Specifically, our elaborated procedure comprised five steps: (1) preliminary quality inspections, (2) inspection of relative frequencies of profiles, (3) comparison of fit indices, (4) evaluation of the qualitative distinctiveness of profiles, and (5) inspection of classification quality.

Step 1: Preliminary Quality Inspections

A preliminary step included the inspection of the estimation outputs for error messages and out-of-bound parameters. We did not advance to the subsequent step until any error was corrected.

Step 2: Inspection of Relative Frequencies

As Spurk et al. (2020) noted, profile size (i.e., its relative frequency) provides information about the parsimony and meaningfulness of profile solutions. Profiles with a negligible number of cases result in lower power and lower precision relative to the other larger profiles, making their inclusion redundant. To increase the power and precision of our profile solutions, we rejected solutions that included profiles with fewer than 5% or 25 participants at the level of each country-language sample (and above the preferable rule of thumb of RF > 1%; Lubke & Neale, 2006; Spurk et al., 2020).

Step 3: Inspection of Fit Indices

Next, the statistical fit indices of each model were compared to determine which represented the best fit to the data. This step involved comparing the models using the Akaike's information criterion (AIC), Bayesian information criterion (BIC), and the sample-size adjusted BIC (SABIC). Better fitting Solutions show a decrease in AIC, BIC, and SABIC. However, because these tests are all influenced by sample size, they often support adding profiles (Marsh

et al., 2009). To overcome this limitation, we also considered the point at which differences in log-likelihood (LL) values reached a plateau on a visual representation (i.e., an elbow) as a guide for model selection. It should be noted that in this research, we did not inspect the results of the Bootstrapped Likelihood Ratio Test and the Lo-Mendell-Rubin Test because these tests are not available for multigroup latent profile analyses in Mplus (see Morin et al., 2016).

Step 4: Evaluation of the Qualitative Distinctiveness of Profiles

We then compared possible solutions deemed adequate in the preceding steps by inspecting whether increasing the number of profiles led to new variable formations (e.g., a qualitatively new profile). A solution with an additional profile qualitatively equivalent to a preexisting one (i.e., a similar pattern of difficulties with only mean level differences) was considered inferior to a solution comprising fewer profiles.

Step 5: Evaluation of Classification Quality

Finally, we evaluated the classification quality of the models using entropy and average posterior probabilities. More defined classifications are indicated by higher entropy values and average posterior probability values closer to 1. Entropy values above .80 are considered desirable, and values between .60 and .80 are deemed acceptable (Jung & Wickrama, 2008). The minimal value for average posterior probability should be 0.80 for a reliable profile (Celeux & Soromenho, 1996).

Supplemental Material C

Procedure for Computing Ipsative Scores

Ipsative scores were calculated for all participants by normalizing each participant's 10 CDDQ scale scores with the mean and standard deviation of their ratings across the 10 scores. Specifically, we first calculated each participant's 10 CDDQ scale scores as the mean of the items included in each of the 10 CDDQ scales. Then, we subtracted the grand mean of each participant's 10 CDDQ scores (averaged across all scales separately for each participant) from each of the 10 scores to obtain *difference scores*. Finally, we divided the 10 difference scores by the standard deviation of each participant's 10 CDDQ scores to normalize the scores and obtain the *ipsative scores*.

Ipsative scores may be computed in Excel or in SPSS. The following *R* syntax can be used to compute the 10 CDDQ ipsative scores:

```
# select the variables from the data frame df for which ipsative scores should be computed and save them in the new data frame variables
variables = df[, c('Rm', 'Ri', 'Rd', 'Lp', 'Ls', 'Lo', 'La', 'Iu', 'Ii', 'Ie')]

# transpose the rows and columns of the data frame variables using the function t
variables = t(variables)

# compute ipsative scores using the function scale
Variables = scale(variables, center = TRUE, scale = TRUE)

# transpose back the rows and columns of the data frame variables using the function t
variables = t(variables)
```

Supplemental Material D

Mean Ipsative and Standardized Scores for Profile Centroids

	unmotivated		*unrealistic*		*generally uninformed*		*occupations-uninformed*		*conflicted-uninformed*		*externally conflicted*		*internally conflicted*	
	I	Z	I	Z	I	Z	I	Z	I	Z	I	Z	I	Z
Rm	**1.94**	**1.60**	0.27	-0.45	-0.25	-0.09	-0.16	-0.20	-1.02	-0.08	0.06	0.22	-0.08	-0.06
Ri	0.00	-0.13	**0.50**	-0.39	-0.35	0.22	0.02	-0.03	-0.57	0.24	-0.20	-0.05	**0.42**	**0.36**
Rd	-0.42	-0.52	**1.15**	**0.39**	-0.53	-0.14	0.04	0.04	-0.77	-0.05	-0.13	0.02	-0.34	-0.34
Lp	-0.09	-0.14	-0.45	-0.84	**0.56**	**0.73**	0.09	-0.05	0.10	**0.58**	-0.40	-0.17	-0.08	-0.08
Ls	-0.05	-0.10	-0.58	-0.91	**0.78**	**0.84**	-0.64	-0.53	**0.34**	**0.71**	-0.57	-0.24	**0.39**	0.20
Lo	-0.26	-0.22	-0.61	-0.95	**0.51**	**0.69**	**0.97**	**0.56**	0.25	**0.67**	-0.54	-0.27	-0.50	-0.37
La	-0.54	-0.38	-0.41	-0.82	**0.60**	**0.73**	**0.54**	0.26	**0.44**	**0.79**	-0.63	-0.31	-0.68	-0.48
Iu	-0.29	-0.21	-0.30	-0.79	0.05	0.37	-0.21	-0.21	**0.33**	**0.80**	-0.03	0.08	**0.71**	**0.45**
Ii	-0.04	-0.07	-0.26	-0.83	-0.14	0.29	-0.16	-0.16	0.17	**0.77**	0.18	0.22	**0.86**	**0.58**
Ie	-0.36	-0.23	0.04	-0.51	-0.78	-0.34	-0.47	-0.37	**1.10**	**1.42**	**1.95**	**1.51**	-0.34	-0.22

Note. I = ipsative scores; Z = standardized scores; Rm = lack of motivation; Ri = general indecisiveness; Rd = dysfunctional beliefs; Lp = lack of information about the decision-making process; Ls = lack of information about the self; Lo = lack of information about occupations; La = lack of information about ways of obtaining additional information; Iu = unreliable information; Ii = internal conflicts; Ie = external conflicts. Values above 0.30 are presented in **bold**.

Supplemental Material E1

Multigroup Latent Profile Analysis Within Country-Language Samples:

Mplus Code for a Distributional Similarity Model Across Two Random Subsamples

```
DATA: FILE IS total.txt;
VARIABLE:
NAMES ARE Age Gender I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 RCA Certainty Efficacy S_Index
Random;
USEVARIABLES ARE I1 I2 I3 I4 I5 I6 I7 I8 I9 I10;
! The following line specifies selecting the data of only the USA sample.
USEOBS S_INDEX EQ 4;
! In the following line, the variable RANDOM specifies in which of two random subsamples
each participant is included.
knownclass = CB(RANDOM = 1 RANDOM = 2);
! In the following line, the CLASSES function labels the two categorical variables: CB
(representing the random subsamples) and C (estimated in the analyses, in this example,
requesting 8 profiles).
CLASSES = CB(2) C(8);
DEFINE:
STANDARDIZE I1-I10;
ANALYSIS:
TYPE = MIXTURE;
STARTS = 1000 100;
! In the following lines, the model is specified. In order to estimate a distributional similarity
model, means and class sizes are freely estimated in all profiles but constrained to be equal
across the two random subsamples. The variances are constrained to be equal across both and
the two random subsamples.
MODEL:
%OVERALL%
MODEL C:
%C#1%
[I1-I10](m1-m10);
I1-I10(v1-v10);
%C#2%
[I1-I10](m11-m20);
I1-I10(v1-v10);
%C#3%
[I1-I10](m21-m30);
I1-I10(v1-v10);
%C#4%
[I1-I10](m31-m40);
I1-I10(v1-v10);
%C#5%
[I1-I10](m41-m50);
I1-I10(v1-v10);
%C#6%
[I1-I10](m51-m60);
I1-I10(v1-v10);
```

```
%C#7%
[I1-I10](m61-m70);
I1-I10(v1-v10);
%C#8%
[I1-I10](m71-m80);
I1-I10(v1-v10);
OUTPUT:
STDYX SAMPSTAT CINTERVAL SVALUES RESIDUAL TECH1 TECH7;
```

Supplemental Material E2

Multigroup Latent Profile Analysis across Country-Language Samples:

Mplus Code for a Dispersion Similarity Model Across 18 Country-Language Samples

```
DATA: FILE IS filename.txt;
VARIABLE:
NAMES ARE Age Gender I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 RCA Certainty Efficacy S_Index
Random;
USEVARIABLES ARE I1 I2 I3 I4 I5 I6 I7 I8 I9 I10;
! In the following line, the variable S_INDEX specifies the country-language sample in which
each participant is included.
knownclass = CO(S_INDEX = 1 S_INDEX = 2 S_INDEX = 3 S_INDEX = 4 S_INDEX = 5
S_INDEX = 6 S_INDEX = 7 S_INDEX = 8 S_INDEX = 9 S_INDEX = 10 S_INDEX = 11
S_INDEX = 12 S_INDEX = 13 S_INDEX = 14 S_INDEX = 15 S_INDEX = 16 S_INDEX =
17 S_INDEX = 18);
! In the following line, the CLASSES function labels the two categorical variables: CO
(representing the country-language samples) and C (estimated in the analyses, in this example,
requesting 7 profiles).
CLASSES = CO(18) C(7);
DEFINE:
STANDARDIZE I1-I10;
ANALYSIS:
TYPE = MIXTURE;
STARTS = 1000 100;
MODEL:
%OVERALL%
! The following statements in the %OVERALL% section indicate that the class sizes are freely
estimated in all country-language samples.
C#1-C#7 ON CO;
MODEL C:
! In the following lines, the model is further specified. In order to estimate a dispersion
similarity model, means are freely estimated in all profiles but constrained to be equal across
the 18 country-language samples. The variances are constrained to be equal across the 18
country-language samples.
%C#1%
[I1-I10](m1-m10);
I1-I10(v1-v10);
%C#2%
[I1-I10](m11-m20);
I1-I10(v1-v10);
%C#3%
[I1-I10](m21-m30);
I1-I10(v1-v10);
%C#4%
[I1-I10](m31-m40);
I1-I10(v1-v10);
%C#5%
[I1-I10](m41-m50);
```

```
I1-I10(v1-v10);
%C#6%
[I1-I10](m51-m60);
I1-I10(v1-v10);
%C#7%
[I1-I10](m61-m70);
I1-I10(v1-v10);
OUTPUT:
STDYX SAMPSTAT CINTERVAL SVALUES RESIDUAL TECH1 TECH7;
SAVEDATA: FILE = 7profiles.csv;
                Save = CPROBABILITIES;
```

Supplemental Material E3

Latent Profile Analysis across Country-Language Samples with Predictors:

Mplus Code for a 3-Step Analysis with Auxiliary Variables as Latent Class Predictors

```
DATA: File is filname.txt;
VARIABLE:
NAMES ARE Age Gender I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 RCA Certainty Efficacy S_Index
Random;
USEVARIABLES ARE Age Gender I1 I2 I3 I4 I5 I6 I7 I8 I9 I10;
MISSING ARE ALL (-999);
CLASSES = C(7);
AUXILIARY = Age(R3STEP) Gender(R3STEP)
DEFINE:
STANDARDIZE I1-I10;
ANALYSIS:
TYPE = MIXTURE;
STARTS = 0;
MODEL:
%OVERALL%
%C#1%
[I1@-.363]; [I2@-.349]; [I3@-.533]; [I4@.560]; [I5@.781];
[I6@.510]; [I7@.595]; [I8@.049]; [I9@-.139]; [I10@-.777];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#2%
[I1@-.081]; [I2@.418]; [I3@-.336]; [I4@-.076]; [I5@.385];
[I6@-.496]; [I7@-.681]; [I8@.705]; [I9@.863]; [I10@-.342];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#3%
[I1@.060]; [I2@-.200]; [I3@-.129]; [I4@-.404]; [I5@-.573];
[I6@-.539]; [I7@-.632]; [I8@-.027]; [I9@.181]; [I10@1.954];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#4%
[I1@-.155]; [I2@.017]; [I3@.038]; [I4@.093]; [I5@-.638];
[I6@.972]; [I7@.544]; [I8@-.206]; [I9@-.157]; [I10@-.468];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#5%
[I1@.268]; [I2@.502]; [I3@1.150]; [I4@-.448]; [I5@-.582];
[I6@-.605]; [I7@-.410]; [I8@-.295]; [I9@-.255]; [I10@.035];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#6%
[I1@1.943]; [I2@.002]; [I3@-.417]; [I4@-.089]; [I5@-.048];
[I6@-.263]; [I7@-.540]; [I8@-.285]; [I9@-.038]; [I10@-.359];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
```

I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#7%
[I1@-1.024]; [I2@-.567]; [I3@-.772]; [I4@.102]; [I5@.341];
[I6@.250]; [I7@.444]; [I8@.333]; [I9@.170]; [I10@1.104];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;

Supplemental Material E4

Latent Profile Analysis across Country-Language Samples with Distal Outcomes:

Mplus Code for a BCH Analysis with Auxiliary Variables as Class Distal Outcomes

```
DATA: File is filname.txt;
VARIABLE:
NAMES ARE Age Gender I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 RCA Certainty Efficacy S_Index
Random;
USEVARIABLES ARE Age Gender I1 I2 I3 I4 I5 I6 I7 I8 I9 I10;
MISSING ARE ALL (-999);
CLASSES = C(7);
AUXILIARY = RCA(BCH) Certainty(BCH) Efficacy(BCH)
DEFINE:
STANDARDIZE I1-I10;
ANALYSIS:
TYPE = MIXTURE;
STARTS = 0;
MODEL:
%OVERALL%
%C#1%
[I1@-.363]; [I2@-.349]; [I3@-.533]; [I4@.560]; [I5@.781];
[I6@.510]; [I7@.595]; [I8@.049]; [I9@-.139]; [I10@-.777];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#2%
[I1@-.081]; [I2@.418]; [I3@-.336]; [I4@-.076]; [I5@.385];
[I6@-.496]; [I7@-.681]; [I8@.705]; [I9@.863]; [I10@-.342];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#3%
[I1@.060]; [I2@-.200]; [I3@-.129]; [I4@-.404]; [I5@-.573];
[I6@-.539]; [I7@-.632]; [I8@-.027]; [I9@.181]; [I10@1.954];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#4%
[I1@-.155]; [I2@.017]; [I3@.038]; [I4@.093]; [I5@-.638];
[I6@.972]; [I7@.544]; [I8@-.206]; [I9@-.157]; [I10@-.468];
I1@.567; I2@.845; I3@.491; I4@.852; I5@.656;
I6@.670; I7@.709; I8@.904; I9@.895; I10@.329;
%C#5%
[I1@.268]; [I2@.502]; [I3@1.150]; [I4@-.448]; [I5@-.582];
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Supplemental Material F

Measurement Invariance of the CDDQ Across Gender

We performed a series of multi-group confirmatory factor analyses to estimate the measurement invariance of the CDDQ across gender (i.e., women and men). Analyses were performed using the weighted least squares mean and variance-adjusted (WLSMV) estimator in line with the recommendations of Levin et al. (2023). Nevertheless, validation of the measurement invariance of the CDDQ across gender was also obtained using the maximum likelihood (ML) estimator. The initial configural model tested the equivalence of the factor structure across compared groups (i.e., the number of factors and patterns of factor loadings). The configural model demonstrated good fit (CFI = .986, RMSEA = .041, 95% CI [.040, .041], SRMR = .039). Then, in the metric model, factor loadings were constrained to be equal across groups. Results indicated that the metric model also demonstrated a good fit and was similar to the configural model (CFI = .985, RMSEA = .041, 95% CI [.041, .042], SRMR = .041, ΔCFI < .010, ΔRMSEA < .015, and ΔSRMR < .010). Finally, in the scalar model, indicator intercepts were constrained to be equal across groups. Results indicated that the scalar model, too, demonstrated a good fit and was similar to the configural model (CFI = .985, RMSEA = .041, 95% CI [.041, .042], SRMR = .040, ΔCFI < .010, ΔRMSEA < .015, and ΔSRMR < .010). These results support the measurement invariance of the hypothesized model underlying the CDDQ (32-10-3-1) at the level of scalar invariance across gender.

Supplemental Material G

Description of the Seven Career Indecision Types

Unmotivated

The *unmotivated* type includes individuals insufficiently motivated to make a career choice (7% of the total sample). Consistent with the results of Levin et al. (2022), age was not a meaningful predictor of this type, whereas men were almost twice as likely as women to be classified as *unmotivated*. Then, the career decision status of individuals classified as *unmotivated* was relatively uniformly distributed. Furthermore, the *unmotivated* type was associated with medium-high levels of decision certainty and career decision self-efficacy. These characteristics overlap with those reported for parallel types identified in previous research using measures other than the CDDQ (*ready to decide* in Chartrand et al., 1994; *cluster 5* in Lucas & Epperson, 1990; *crystallizing preferences* in Rojewski, 1994).

Unrealistic

The *unrealistic* type includes individuals who endorsed dysfunctional beliefs about the career decision-making process (26% of the total sample). Consistent with the results of Levin et al. (2022), age and gender were not meaningful predictors of this type. Then, this type included the most decided individuals (73% indicated considering one specific alternative) and was also associated with the highest levels of decision certainty and career decision self-efficacy. Apart from Levin et al. (2022), no previous study reported a type associated with salient career decision-making dysfunctional beliefs.

Generally Uninformed

The *generally uninformed* type included individuals lacking information about the decision-making process, the self, occupations, and ways of obtaining additional information (25% of the total sample). Consistent with the results of Levin et al. (2022), age and gender were not meaningful predictors of this type. Then, the *generally uninformed* type was

associated with low levels of decidedness, decision certainty, and decision-making self-efficacy These characteristics overlap with those reported for parallel types identified in previous research using measures other than the CDDQ (*developmentally undecided* in Chartrand et al., 1994; *developmentally undecided* in Feldt et al., 2011; *diffused* in Germeijs et al., 2012; *developmental indecision* in Guay et al., 2006; *well-adjusted information seekers* in Kelly & Pulver, 2003; *confident but uninformed* in Larson et al., 1988; *transitional indecision* in Rojewski, 1994; *developmentally undecided* in Santos & Ferreira, 2012).

Occupations-Uninformed

The *occupations-uninformed* type included individuals lacking information about occupations (11% of the total sample). Age and gender were not meaningful predictors of this type. Then, in contrast to the *generally uninformed* type, this type was associated with a relatively advanced career decision status (50% indicated considering one specific alternative), high decision certainty, and medium-high career decision-making self-efficacy. These characteristics overlap with those reported for parallel types identified in previous studies using measures other than the CDDQ (*uninformed* in Larson et al., 1988; *cluster 2* in Lucas & Epperson, 1986; *specifying a choice* in Savickas & Jarjoura, 1991).

Conflicted-Uninformed

The *conflicted-uninformed* type included individuals whose most salient difficulties related to external conflicts, with additional salient difficulties associated with unreliable information and internal conflicts and to lacking information about the decision-making process, the self, occupations, and ways of obtaining additional information (12% of the total sample). Age and gender were not meaningful predictors of this type. Then, the characteristics of this type were relatively comparable to those of the *generally uninformed* type: individuals classified as *conflicted-uninformed* were among the least decided and reported low decision certainty and career decision self-efficacy. These characteristics

overlap with those reported for parallel types identified in previous studies using measures other than the CDDQ (*chronic indecision* in Callanan & Greenhaus, 1992; *indecisive* in Chartrand et al., 1994; *seriously undecided* in Feldt et al., 2011; *chronic indecision* in Guay et al., 2006; *neurotic indecisive* in Kelly & Pulver, 2003; *chronic indecision* in Rojewski, 1994; *chronically undecided* in Santos & Ferreira, 2012; *indecisive* in Savickas & Jarjoura, 1991; *anxious-undecided* in Wanberg & Muchinsky, 1992).

Externally Conflicted

External conflicts were the most salient difficulty of the *externally conflicted* type (8% of the total sample). Age and gender were not meaningful predictors of this type. Then the degree of decidedness of individuals classified as *externally conflicted* was relatively high (48% indicated considering one specific alternative). They also had medium-high career decision-making self-efficacy but were less sure of their decisions than others. To the best of our knowledge, a parallel type was identified in only one previous study (*uncommitted extraverts* in Kelly & Pulver, 2003).

Internally Conflicted

Internal conflicts were the most salient difficulty of the *internally conflicted* type (10% of the total sample). Age and gender were not meaningful predictors of this type. Then, the *internally conflicted* type was characterized by low decidedness (only 37% indicated they were considering one specific alternative), low decision certainty, and medium-high career decision self-efficacy. These characteristics overlap with those reported for parallel types identified in previous studies using measures other than the CDDQ (*informed indecisives* in Larson et al., 1988; *caught in a dilemma* in Lucas & Epperson, 1988).

Supplemental Material H

Sample Recruitment Information

Africa

South Africa (English) 1

See Cortes et al. (2014) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (N = 782) after the university granted permission. An e-mail with information and a link to the study was sent to students, and the measures were administered online. Participation was voluntary, and no compensation was provided. 64% of participants identified as women and 36% as men. 59% of participants were between 21 to 29. 91% were white.

South Africa (English) 2

See Levin et al. (2020) for a full description of the recruitment procedures. Participants for this counseling sample (N = 747) were recruited from the database of an online career counseling website. Participants completed the measures online to receive personalized feedback. Participation was voluntary. 65% of participants identified as women and 35% as men, M_{age} = 21.46 (SD = 5.97).

Togo (French) 1

This sample was not part of a previously published study. Participants were recruited for this student sample (N = 559) after receiving institutional permission. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. 43% of participants identified as women and 57% as men, M_{age} = 17.98 (SD = 1.89).

Togo (French) 2

This sample was not part of a previously published study. Participants were recruited for this high school sample (N = 107) after receiving permission from the school principal. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. 44% of participants identified as women and 56% as men, M_{age} = 22.01 (SD = 2.74).

America

Canada (English) 1

See Levin et al. (2020) for a full description of the recruitment procedures. Participants who chose to fill out an online assessment of career indecision to receive personalized feedback were recruited for this sample (N = 4,058). Participants completed the measures online to receive personalized feedback. Participation was voluntary. 69% of participants identified as women and 31% as men, M_{age} = 25.45 (SD = 8.32).

Canada (French) 1

See Sovet et al. (2017) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 1,130) after schools granted permission. A link was sent to consenting schools for the study, and the measures were administered online. Participation was voluntary, and no compensation was provided. 59% of participants identified as women and 41% as men, M_{age} = 17.41 (SD = 0.59).

USA (English) 1

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (N = 383) after the university granted permission. Measures were administered online. Participation was voluntary, and no compensation was provided. 73% of

participants identified as women and 25% as men (2% had missing values), M_{age} = 22.01 (*SD* = 4.67).

USA (English) 2

See Xu and Tracey (2014) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (*N* = 275) from career development or university orientation classes. Measures were administered online. Participation was voluntary, and an extra credit opportunity was given for participation. 60% of participants identified as women and 40% as men, M_{age} = 18.43 (*SD* = 1.17). 64% were white.

USA (English) 3

See Xu et al. (2014) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (*N* = 253) from career development, introduction to psychology, or university orientation classes. No information was reported regarding the mode of administration. Participation was voluntary, and an extra credit opportunity was given for participation. 65% of participants identified as women, 35% as men ("mixed" was indicated for 1 participant), M_{age} = 19.37 (*SD* = 2.27). 51% were White.

Asia

China (English) 1

This sample was not part of a previously published study. Participants were recruited for this student sample (*N* = 66) from a university in Hong Kong. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 62% of participants identified as women and 38% as men, M_{age} = 20.91 (*SD* = 1.80).

China (English) 2

This sample was not part of a previously published study. Participants were recruited for this student sample (N = 200) by quota sampling in libraries of different universities in Hong Kong. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. 58% of participants identified as women and 42% as men, M_{age} = 21.25 (SD = 0.94).

China (English) 3

See Levin et al. (2020) for a full description of the recruitment procedures. Participants for this counseling sample (N = 718) were recruited from the database of an online career counseling website. Participants completed the measures online to receive personalized feedback. Participation was voluntary. 66% of participants identified as women and 34% as men, M_{age} = 24.12 (SD = 4.97).

India (English) 1

This sample was not part of a previously published study. Participants were recruited for this student sample (N = 125) among students born in India in seven high schools and one college. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. Participants were in the age range of 18 to 25. The researchers did not provide additional demographic information.

India (English) 2

This sample was not part of a previously published study. Participants were recruited for this student sample (N = 125) among international students in five universities in India. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. Participants were in the age range of 18 to 25. The researchers did not provide additional individual demographic information.

India (English) 3

See Levin et al. (2020) for a full description of the recruitment procedures. Participants for this counseling sample (N = 397) were recruited from the database of an online career counseling website. Participants completed the measures online to receive personalized feedback. Participation was voluntary. 46% of participants identified as women and 54% as men, M_{age} = 25.13 (SD = 7.55).

Malaysia (English) 1

This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited from two colleges for this pre-academic program sample (N = 657). Measures were administered individually. Participation was voluntary, and no compensation was provided. 58% of participants identified as women and 42% as men, M_{age} = 17.90 (SD = 0.48).

Malaysia (English) 2

This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this mixed sample (N = 179) via convenience and snowball sampling. Participants who were either studying or working on data collection were invited to participate. Measures were administered online. Participation was voluntary, and no compensation was provided. 55% of participants identified as women and 45% as men, M_{age} = 23.31 (SD = 4.42).

Malaysia (English) 3

This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (N = 141) from two universities. Participants were invited to participate during classes, and measures were group-administered. Participation was voluntary, and no compensation was provided. 70% of participants identified as women and 30% as men. Participants' age ranged between 21 and 25 (M_{age} = 22), but the researchers did not provide demographic information.

South Korea (South Korean) 1

See Sovet and Metz (2014) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 613) after school principals granted permission. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 62% of participants identified as women and 38% as men, M_{age} = 15.49 (SD = 0.61).

South Korea (South Korean) 2

See Sovet et al. (2015) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants for this student sample (N = 854) were recruited during a psychology course presented by the local instructors from one South Korean private college and two public universities. Participation was voluntary, and no compensation was provided. 57% of participants identified as women and 41% as men (2% had missing values), M_{age} = 22.24 (SD = 3.83).

Australia

Australia (English) 1

See Levin et al. (2020) for a full description of the recruitment procedures. Participants for this counseling sample (N = 4,620) were recruited from the database of an online career counseling website. Participants completed the measures online to receive personalized feedback. Participation was voluntary. 61% of participants identified as women and 39% as men, M_{age} = 18.12 (SD = 6.76).

Europe

Croatia (Croatian) 1

See Babarovic and Sverko (2016) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 801) after schools granted permission. Measures were group-administered in classes. Participation was voluntary, and personalized feedback was offered as an incentive. 61% of participants identified as women and 37% as men (2% had missing values), M_{age} = 17.39 (SD = 1.48).

Croatia (Croatian) 2

See Babarovic and Sverko (2019) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 568) after schools granted permission. A link was sent to consenting schools for the study, and the measures were administered online. Participation was voluntary, and participation in a raffle was offered as an incentive. 72% of participants identified as women and 28% as men, M_{age} = 17.41 (SD = 0.59).

France (French) 1

See Sovet and Metz (2014) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 575) after school principals granted permission. Measures were group-administered in schools. Participation was voluntary, and no compensation was provided. 67% of participants identified as women and 33% as men, M_{age} = 16.08 (SD = 0.56).

France (French) 2

See Rossier et al. (2021) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023).

Participants for this mixed sample (N = 935) were collected among the general population of compulsory school, high school, and university students. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. 80% of participants identified as women and 20% as men, M_{age} = 19.57 (SD = 2.12).

France (French) 3

See Storme et al. (2019) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (N = 412) from a course on human resource management for business administration students. Measures were filled out online. Participation was voluntary, and no compensation was provided. 58% of participants identified as women and 42% as men, M_{age} = 20.77 (SD = 1.18).

Greece (Greek) 1

See Vaiopoulou et al. (2019) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (N = 818) in two universities. A link was sent to consenting schools for the study, and the measures were administered online. Participation was voluntary, and participation in a raffle was offered as an incentive. 78% of participants identified as women and 22% as men (1% had missing values), M_{age} = 21.50 (SD = 3.50).

Greece (Greek) 2

See Koumoundourou et al. (2011) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 289) after receiving permission from the school administration. Measures were group-administered in classes. Participation

was voluntary, and no compensation was provided. 57% of participants identified as women and 43% as men, M_{age} = 15.11 (*SD* = 0.41).

Greece (Greek) 3

See Koumoundourou et al. (2010) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (*N* = 214) after receiving permission from the school administration. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 62% of participants identified as women and 38% as men , M_{age} = 16.67 (*SD* = 0.89).

Greece (Greek) 4

See Kontzinou and Koumoundourou (2013) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (*N* = 285) after receiving permission from the school administration. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 55% of participants identified as women and 45% as men (1% had missing values), M_{age} = 16.89 (*SD* = 0.64).

Greece (Greek) 5

See Koumoundourou and Kassotakis (2007) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (*N* = 269) after receiving permission from the school administration. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 58% of participants identified as women and 42% as men, M_{age} = 16.73 (*SD* = 0.84).

Greece (Greek) 6

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 200) after receiving permission from the school administration. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 60% of participants identified as women and 40% as men, M_{age} = 16.52 (SD = 0.88).

Greece (Greek) 7

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 532) after receiving permission from the school administration. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 57% of participants identified as women and 43% as men, M_{age} = 14.95 (SD = 0.94).

Poland (Polish) 1

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 222) after permission was granted from the school administration. Participants were invited to participate during classes, and measures were group-administered. Participation was voluntary, and no compensation was provided. 57% of participants identified as women and 43% as men, M_{age} = 17.65 (SD = 0.50).

Poland (Polish) 2

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 300) after permission was granted from the school administration. Participants were invited to participate during classes, and measures were group-

administered. Participation was voluntary, and no compensation was provided. 54% of participants identified as women and 46% as men, M_{age} = 17.04 (*SD* = 1.43).

Poland (Polish) 3

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this student sample (*N* = 188) from different departments in one university. Participants were invited to participate during classes, and measures were group-administered. Participation was voluntary, and no compensation was provided. 74% of participants identified as women and 26% as men, M_{age} = 23.31 (*SD* = 4.42).

Switzerland (French) 1

This sample was not part of a previously published study. This mixed sample (N = 477) was recruited from the general population of compulsory school, high school, university students, and working adults. Measures were completed online. Participation was voluntary, and no compensation was provided. 76% of participants identified as women and 23% as men ("other" was indicated for 4 participants), M_{age} = 19.79 (*SD* = 4.34).

Switzerland (French) 2

See Rossier et al. (2021) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants for this counseling sample (*N* = 170) were collected among a population of Swiss individuals seeking career counseling. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. 48% of participants identified as women and 52% as men, M_{age} = 18.99 (*SD* = 2.86).

Switzerland (French) 3

See Atitsogbe et al. (2018) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023).

Participants for this student sample (N = 413) were notified about the study through flyers distributed in two universities either during classes or on campus. Measures were administered online. Participation was voluntary, and all participants received a shopping gift card as compensation. 46% of participants identified as women and 54% as men, M_{age} = 18.99 (SD = 2.86).

Switzerland (French) 4

See Rossier et al. (2021) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants for this mixed sample (N = 643) were recruited from the general population of compulsory school, high school, and university students. Measures were completed individually using a paper-and-pencil version. Participation was voluntary, and no compensation was provided. 47% of participants identified as women and 53% as men, M_{age} = 15.77 (SD = 2.65).

Middle East

Israel (Arabic) 1

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 360) from four schools serving the Arabic population in northern Israel. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 56% of participants identified as women and 44% as men, M_{age} = 17.03 (SD = 0.40).

Israel (Arabic) 2

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants were recruited for this

high school sample (N = 1,175) from 15 schools serving the Arabic population across Israel. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 56% of participants identified as women and 36% as men (8% had missing values), M_{age} = 17.04 (SD = 0.30).

Israel (Hebrew) 1

See Anghel and Gati (2021) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this pre-academic sample (N = 234) from a pre-college preparatory program of one university. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 51% of participants identified as women and 49% as men, M_{age} = 21.97 (SD = 2.59).

Israel (Hebrew) 2

See Lipshits-Braziler et al. (2015) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this pre-academic sample (N = 251) from a pre-college preparatory program of one university. Measures were group-administered in classes. Participation was voluntary, and no compensation was provided. 39% of participants identified as women and 61% as men, M_{age} = 22.77 (SD = 2.85).

Israel (Hebrew) 3

See Perez and Gati (2017) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this counseling sample (N = 379) from young adults interested in career guidance services offered in community centers. Measures were individually administered online (n = 237) or using a paper-and-pencil version (n = 142). Participation

was voluntary, and no compensation was provided. 60% of participants identified as women and 40% as men, M_{age} = 22.04 (*SD* = 2.24).

Israel (Hebrew) 4

See Lipshits-Braziler et al. (2016) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this pre-academic sample (*N* = 254) from individuals visiting the admission website of one university and interested in online career counseling. Participants completed the measures online to receive personalized feedback. Participation was voluntary. 73% of participants identified as women and 27% as men, M_{age} = 21.72 (*SD* = 2.37).

Israel (Hebrew) 5

The contributing authors did not publish this sample, but it was included in a published structural validation study (Levin et al., 2023). Participants for this counseling sample (*N* = 2,818) were recruited from the database of an online career counseling website. Participants completed the measures online to receive personalized feedback. Participation was voluntary. 66% of participants identified as women and 34% as men, M_{age} = 24.10 (*SD* = 6.62).

Turkey (Turkish) 1

See Bacanli (2016) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants for this high school sample (*N* = 2,509) were recruited after receiving permission from the Directorate of National Education for data collection in nine high schools. Measures were group-administered by school counselors in classes. Participation was voluntary, and no compensation was offered. 53% of participants identified as women and 47% as men, M_{age} = 16.28 (*SD* = 0.92).

Turkey (Turkish) 2

See Doğan & Bacanli (2012) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants for this high school sample (N = 400) were recruited after receiving permission from school principals. Measures were group-administered in classes. Participation was voluntary, and no compensation was offered. 55% of participants identified as women and 45% as men. Participants' ages were not recorded.

Turkey (Turkish) 3

See Tagay (2014) for a full description of the recruitment procedures. This sample was also included in a published structural validation study (Levin et al., 2023). Participants were recruited for this high school sample (N = 298) from one high school. No information was reported regarding the recruitment and administration procedure. 51% of participants identified as women and 49% as men, M_{age} = 15.38 (SD = 1.03).

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