

Supplementary Appendix. *Using the ARS.*

Inconsistency Subscale of the ARS

Inconsistency item pairs	Example variable names
----- (ARS-18 items) -----	
I am an active person. I have an active lifestyle.	inconsistency1.1 inconsistency1.2
I enjoy the company of my friends. I like to spend time with my friends.	inconsistency2.1 inconsistency2.2
I enjoy relaxing in my free time. In my time off I like to relax.	inconsistency3.1 inconsistency3.2
I am a very energetic person. I have a lot of energy.	inconsistency4.1 inconsistency4.2
It frustrates me when people keep me waiting. It's annoying when people are late.	inconsistency5.1 inconsistency5.2
I spend most of my time worrying. I worry about things a lot.	inconsistency6.1 inconsistency6.2
----- (additional item pairs in the ARS-33) -----	
I find it easy to open up to my friends. It's easy for me to confide in my friends.	inconsistency7.1 inconsistency7.2
I am a very considerate person. I always try to be considerate of other people.	inconsistency8.1 inconsistency8.2
Occasionally people annoy me. Sometimes I find people irritating.	inconsistency9.1 inconsistency9.2
I am a happy person. I am usually happy.	inconsistency10.1 inconsistency10.2
I am a lively person. I tend to be pretty lively.	inconsistency11.1 inconsistency11.2

Infrequency Subscale of the ARS

Infrequency Items	Example variable names
----- (ARS-18 items) -----	
I don't like getting speeding tickets. (R)	infrequent1
It feels good to be appreciated. (R)	infrequent2
I'd rather be hated than loved.	infrequent3
I enjoy the music of Marlene Sandersfield.	infrequent4
My favorite subject is agronomy.	infrequent5
I don't like being ridiculed or humiliated. (R)	infrequent6
----- (additional items in the ARS-33) -----	
I enjoy receiving telemarketers' calls.	infrequent7
My main interests are coin collecting and interpretive dancing.	infrequent8
I'd be happy if I won the lottery. (R)	infrequent9
I love going to the DMV (Department of Motor Vehicles).	infrequent10
I look forward to my time off. (R)	infrequent11

FIRST HALF OF ITEMS AS THEY WOULD BE PRESENTED IN A STUDY:

In general...	Not at all TRUE	A little TRUE	Some- what TRUE	Mostly TRUE	Very TRUE
I am an active person					
I enjoy the company of my friends					
I don't like getting speeding tickets					
I look forward to my time off					
I find it easy to open up to my friends					
I am a very considerate person					
I enjoy the music of Marlene Sandersfield					
I spend most of my time worrying					
Occasionally people annoy me					
My favorite subject is agronomy					
I am a happy person					
I don't like being ridiculed or humiliated					
I am a very energetic person.					
I am a lively person					
I love going to the DMV (Department of Motor Vehicles)					
It frustrates me when people keep me waiting.					
I enjoy relaxing in my free time					

SECOND HALF OF ITEMS AS THEY WOULD BE PRESENTED IN A STUDY:

In general...	Not at all TRUE	A little TRUE	Some- what TRUE	Mostly TRUE	Very TRUE
I have an active lifestyle					
I like to spend time with my friends					
I enjoy receiving telemarketers' calls					
It feels good to be appreciated					
It's easy for me to confide in my friends					
I always try to be considerate of other people					
I'd rather be hated than loved					
I worry about things a lot					
Sometimes I find people irritating					
I'd be happy if I won the lottery					
I am usually happy					
My main interests are coin collecting and interpretive dancing					
I have a lot of energy.					
I tend to be pretty lively					
It's annoying when people are late.					
In my time off I like to relax					

CALCULATING TOTALS

INCONSISTENCY SCALE: Sum the absolute differences for each item pair. Calculate the absolute differences before summing so that if a participant skips some items, they will still get a total.

SPSS SYNTAX:

* Calculate absolute difference scores for each item pair.

COMPUTE incon1 = ABS(inconsistency1.1 - inconsistency1.2).

COMPUTE incon2 = ABS(inconsistency2.1 - inconsistency2.2).

COMPUTE incon3 = ABS(inconsistency3.1 - inconsistency3.2).

COMPUTE incon4 = ABS(inconsistency4.1 - inconsistency4.2).

COMPUTE incon5 = ABS(inconsistency5.1 - inconsistency5.2).

COMPUTE incon6 = ABS(inconsistency6.1 - inconsistency6.2).

COMPUTE incon7 = ABS(inconsistency7.1 - inconsistency7.2).

COMPUTE incon8 = ABS(inconsistency8.1 - inconsistency8.2).

COMPUTE incon9 = ABS(inconsistency9.1 - inconsistency9.2).

COMPUTE incon10 = ABS(inconsistency10.1 - inconsistency10.2).

COMPUTE incon11 = ABS(inconsistency11.1 - inconsistency11.2).

* Sum the absolute difference scores.

COMPUTE inconsistency=0.

COMPUTE inconsistency =

sum(incon1,incon2,incon3,incon4,incon5,incon6,incon7,incon8,incon9,incon10,incon11).

EXECUTE .

NOTE: Using "sum" in SPSS will calculate a total even if some items are missing. If you do not use this approach (and instead try to sum the absolute values of the differences of those item pairs in a single compute statement), then people who accidentally fail to answer a single one of the inconsistency questions may not get a total. With the syntax above, everyone will get a total score.

INFREQUENCY SCALE: Sum the items after recoding into the correct directions.

You should first recode the items so that the most common response is a zero and each successive response increases by one unit.

The following items should be coded with *Not at all True* = 0 and *Very True* = 4:

infrequent3, infrequent4, infrequent5, infrequent7, infrequent8, infrequent10

The following items should be coded with *Not at all True* = 4 and *Very True* = 0:

infrequent1, infrequent2, infrequent6, infrequent9, infrequent11

After recoding the items, simply sum them. In SPSS, the following syntax will provide totals even if a subject skips a few of the items:

SPSS SYNTAX:

COMPUTE infrequency = sum(infrequent1,infrequent2,infrequent3,infrequent4,infrequent5,
infrequent6,infrequent7,infrequent8,infrequent9,infrequent10,infrequent11) .

EXECUTE .

CUTSCORES

We used ROC analyses (across 3 large samples) to examine the hit and error rates for identifying computer generated lines of random data (from actual data) to find the optimal cutscores for each scale (high hit rates at identifying random data with low false positives). We further confirmed these cutscores by examining levels of inattention (using indirect behavioral measures) in the people identified as excessively inattentive by these cutscores. Finally, we verified these cutscores by identifying items that yielded the greatest increase in power when used to clean data prior to analyses.

ARS-33 cutscores:

Inconsistency = 10.5

Infrequency = 11.5

ARS-18 cutscores:

Inconsistency = 6.5

Infrequency = 7.5

Typically, we identify potentially problematic individuals with each scale separately:

SPSS SYNTAX:

```
COMPUTE toinfreq = 0 .
```

```
IF (infrequency > 11.5) toinfreq = 1 .
```

```
COMPUTE tooincon = 0 .
```

```
IF (inconsistency > 10.5) tooincon = 1 .
```

```
EXECUTE .
```

We then exclude participants from analyses if they are identified by either scale:

SPSS SYNTAX:

```
COMPUTE exclude = 0 .
```

```
IF (toinfreq = 1 OR tooincon = 1) exclude = 1 .
```

```
EXECUTE .
```