Engagement Survey Technical Report

Eagle I.O

Most recently updated 2020-11-05

Contents

1	Ho	me	5
2	Inti	roduction	7
	2.1	Intended Structure	8
3	Inst	trument creation	11
	3.1	Item generation	11
	3.2	Content Validation	12
	3.3	Administration condition	12
4	Res	pults	15
	4.1	Pilot	15
		4.1.1 Sampling strategy (pilot)	16
	4.2	Demographic Information	16
	4.3	Construct and Criterion-related Validation	17
5	Fut	ure plans	19
	5.1	Things to do	19
6	Aut	thor bios	21
7	Ref	erences	23

4 CONTENTS	S
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A	Tim	teline of events	25
	A.1	Feb 20.2020 (Considering removing fulfillment)	25
	A.2	Definitional amendments as of $02.24.2020$	25
	A.3	Definitions as of $5/19/2020$	26
В	Pilo	t conditions	27
\mathbf{C}	Qua	litative item characteristics	33
	C.1	Frequency distributions by dimension	34
	C.2	Tables of qualitative indices	36

Home



This is a report that documents the technical details regarding the development of the Eagle I.O Engagement survey.

Introduction



Work engagement is the mental state where employees...

- ...feel full with physical energy (Vigor)
- ...are enthusiastic about the content of their work and the things they do $(\mathbf{Dedication})$
- ullet ...are so immersed in their work activities that time seems to fly ${f (Absorption)}$

These above definitions come from Bakker and Demerouti.

The tripartite substantive model of employee engagement is also partially informed by the definitions provided with the Utrecht Work Engagement Scale [Schaufeli and Bakker, b].

We lost the document where we had saved the citations for the creation of our engagement dimensions. we found it today (02/04/2020). Three out of the four dimensions (Dedication, Vigor, and Absorbtion) came from Schaufeli et al., and we are trying to find where Fulfillment came from. We are also trying to improve the definition of each domain by looking at the current items and conducting a Modified Q sort (not correct name) to create piles of items that have commonalities within each domain.

2.1 Intended Structure

At some point we decided to attempt an *a priori* bi-factor structure, whereby each of the substantive dimensions (Dedication, Vigor, and Absorption)¹ could further be deconstructed into the attitudinal elements of Cognition, Affect, and Behavior. Through item-writing and revision, it began to dawn on us that the substantive elements may already reflect the Cognition (Vigor), Affect (Absorption), and Behavioral (Dedication) dimensions.

As of August, 2012, we could not locate a source article that made this alignment explicit, so we persisted through crafting items that reflected Cognitive, Affective, and Behavioral indicators of each substantive dimension.

The most relevant acknowledgement of this potential confound was made by Schaufeli et al. (p. ??):

Hence, engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption. Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective cognitive state that is not focused on any particular object, event, individual, or behavior. Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge. Instead of involvement we prefer to use the term dedication. Although, involvement – like dedication (see above) – is usually defined in terms of psychological identification with one's work or one's job (Kanungo, 1982; Lawler and Hall, 1970), whereby the latter goes one step beyond, both quantitatively as well as qualitatively. In a qualitative sense, dedication refers to a particularly

¹We also discovered at this point that some contagious agent has infiltrated the minds of people working on this project, such that the word, "absorption" confounds our spelling abilities, and roughly 50% of the time ends up being spelled (misspelled?), "absorbtion"...

strong involvement that goes one step further than the usual level of identification.

The survey is intentionally complex in terms of item and scale associations. There are three substantive engagement dimensions as well as three attitudinal dimensions, and item cross-loadings are intended to fully exhaust the 3 x 3 conditions (e.g., each item loads on one substantive and one attitudinal dimension):

Substantive	Attitudinal
Dedication	Affective
Absorption	Behavioral
Vigor	Cognitive

The feedback report uses the terms, "feel", "do", and "think" instead of the Psychological literature-based affect, behavior, and cognition [see, for example, Eagly and Chaiken, 1993].

Instrument creation



3.1 Item generation

After content validation but prior to settling on 4 candidate items per 3x3 condition, there was a dearth of items within some of the Affective, Cognitive, or Behavioral item groupings. We generated additional candidates at this point and have these items located here (Montclair State University e-mail needed to access). It was from this larger list of (reduced) candidate items that the 36

pilot candidates were identified (and in some cases modified, edited, or otherwise further crafted)

3.2 Content Validation

7 Eagle I.O consultants were twice instructed to place each of 34 items into one of three categories: Absorption, Dedication, or Vigor, and Cognitive, Affective, or Behavioral. Instructions asked each rater to:

INSTRUCTIONS: Place an "X" in the column that you feel is the best fit for each item (only one "X" per row please)

3.3 Administration condition

In order to randomize the administration of conditions, we asked respondents to indicate their birth month:

• January \rightarrow March: LINK ONE • April \rightarrow June: LINK TWO

• July \rightarrow September: LINK THREE • October \rightarrow December: LINK FOUR

The substantive scale definitions provided for ratings were:

- Absorption: Being fully immersed in one's work, where time passes quickly and one has difficulty detaching from work tasks
- Vigor: Experiencing persistent levels of energy, effort, and enthusiasm while working
- Dedication: Experiencing pride and challenge in ones work, as well as strong feelings of support from and loyalty toward the organization

The attitudinal scale definitions were:

- Cognitive: Pertaining to thoughts or general mental processes (for example what someone thinks)
- Affective: Pertaining to feelings or emotions (for example, how someone feels)
- Behavioral: Pertaining to acts or actions (for example, what someone does)

The goal was to identify item(s) that were equally and heavily implicated with one substantive and one attitudinal scale.

Initial rating convergence for Absorption:

```
##
            Cognitive
## Absorption 1 2 4 5 6 7
           1 2 1 0 1 0 0
##
           2 0 0 0 0 0 0
##
           4 1 1 0 0 0 0
           5 0 1 0 0 0 0
##
##
           6000000
           7020000
##
##
            Affective
## Absorption 1 2 3 4 5 6 7
##
           1 0 1 0 0 1 1 0
           2 0 0 0 0 0 0 0
##
##
           4 0 0 0 0 1 0 0
           5 0 0 0 0 0 0 0
##
##
           60000000
##
           70200000
##
            Behavioral
## Absorption 1 2 3 5 6 7
           1 1 0 0 1 0 0
##
           2 0 0 0 0 0 1
           4 0 0 0 0 2 0
##
##
           5 0 0 0 1 1 0
##
           6000001
##
           7 0 0 2 0 0 1
```

Initial rating convergence for Vigor:

```
{\tt Cognitive}
##
## Vigor 1 2 4 5 6 7
       1 0 0 1 0 0 1
##
##
       2 1 1 0 0 0 0
       3 0 1 0 1 0 0
       5 0 0 0 0 0 0
##
##
       6 2 1 0 0 0 0
##
       7 2 0 0 0 0 0
##
        Affective
```

Vigor 1 2 3 4 5 6 7

```
##
      1 0 0 1 0 0 0 0
##
      20000000
##
      3 0 1 0 0 1 0 0
##
      5 0 0 0 0 0 1 0
##
      6 0 0 0 0 1 1 1
##
      70001031
##
       Behavioral
## Vigor 1 2 3 5 6 7
      1 0 0 0 0 1 1
##
      2 0 0 0 1 1 0
##
      3 0 0 0 0 1 0
##
      5 1 0 0 0 0 1
##
      6 1 0 0 1 0 0
      7 2 1 0 0 0 1
##
```

Initial rating convergence for Dedication:

```
##
            Cognitive
## Dedication 1 2 4 5 6 7
           1 1 0 0 0 0 0
           2000000
           3 0 0 0 1 0 0
##
##
           6 0 0 1 0 0 1
           7 0 2 0 4 1 1
##
##
           Affective
## Dedication 1 2 3 4 5 6 7
           1 0 0 0 0 0 0 1
##
##
           2 0 0 0 0 0 1 0
##
           3 0 1 0 0 0 0 0
##
           6 0 0 1 0 0 0 0
##
           7 1 3 0 0 1 0 1
           Behavioral
## Dedication 1 2 3 5 6 7
          1000020
##
           2 1 0 0 0 0 0
##
           3 0 0 0 0 0 0
           6000000
##
##
           7 1 2 0 2 0 0
```

Results



4.1 Pilot

The pilot administrations consisted of 36 items that were presented in one of four administration groupings (see Appendix B): 1) within substantive dimension (attitudinally grouped [but randomized within blocks of 4]), 2) within attitudinal dimension (substantively grouped [but randomized within blocks of

4]), 3) within substantive dimension (randomly distributed by attitude), and 4) within attitudinal dimension (randomly presented by substance).¹

The four "experimental" conditions therefore prioritized and reflected the 3x3 groupings or one of the organization schemes (cognitive, affective, and behavioral or dedication, absorption, and vigor).

We chose to control the order of item administration because of our *a priori* specification of a bi-factor structure, with the expectation that item ordering would serve as a response cue, yeilding stronger factor structural support based on the organization scheme.

4.1.1 Sampling strategy (pilot)

Snowball sampling to reduce final instrument from 36 candidate items (4 per "cell").

Sampling plan (aim for 250 total responses):

- Eagle I.O members reach out via e-mail draft e-mail that asks to forward along.
- facebook post (MSU I.O)
- LinkedIn (put on next agenda)
- first-year students (Paulina posts in group-chat)
 - mentors also mention to mentees
 - contact lists from Catrina

4.2 Demographic Information

These are to be included in future administrations in an attempt to develop marketable norms:

- employees who work overtime vs. those who do not
- employees who get paid for overtime vs. those who don't receive compensation for extra hours worked 2

¹Decision was made on 10/13 to have the order of presentation *randomized* within each of the broader organization blocks (for example, Condition 3: all Affective, Cognitive, and Behavioral Absorption items were randomly administered, then all ABC Dedication items, etc [although DAC was also randomized by block such that not every respondent had the same DAC ordering])

²I was thinking about this because at my job I have been working 12+ hours some days yet I do not get overtime pay. Not sure if this would work for what we are doing and I know my work experiences are not universal (nor should they be) haha!

4.3 Construct and Criterion-related Validation

Use Gallup for construct validation [Thackray]. Also the Utrecht Work Engagement Scale [UWES; Schaufeli et al., Schaufeli and Bakker, a]

Future plans



Development of the feedback report will occur in stages:

- 1. Static .pdf
- 2. Dynamic dashboard
- 3. Optimize interpretation (invite contributions of cognitive psychologists and/or graphic designers)

5.1 Things to do

- Finalize items
- Get survey into Qualtrics for pilot testing

• Work on feedback report

Author bios

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References

Eagly and Chaiken [1993] Simpson [; Harter et al.; Kahn; Leiter and Maslach; R Core Team, 2020; Allaire et al., 2020; Rothbard; Saks; Schaufeli et al.; Simpson]

Appendix A

Timeline of events

Here is Eagle IO's initial definition of engagement (Spring 2019):

A state of personal immersion in work characterized by enthusiasm, dedication, and personal investment, expressed cognitively, affectively, and behaviorally in the proactive pursuit of advancing organizational goals.

This definition was created by Eagle IO Spring 2019, and modified by Dr. Kulas and Renata Fall 2019 to include the four dimensions of Fulfillment, Absorbtion, Dedication, and Vigor.

A.1 Feb 20.2020 (Considering removing fulfillment)

Fulfillment: finding meaning in one's work, while having a sense of autonomy, growth, usefulness, achievement, and feeling appreciated by org. [Satisfaction(?)]

Decided to operationalize fullfillment as an *outcome* of engagement rather than a definitional element

A.2 Definitional amendments as of 02.24.2020

Absorption: being fully concentrated and happily immersed in ones work (time passes quickly and has difficulty detaching from ones work; Schaufeli et al., 2002)

Dedication/Commitment: being strongly involved in one's work and experiencing a sense of enthusiasm, inspiration, pride, and challenge. (Schaufeli et al., 2002) Identifying as an organizational member/ambassador

include identification with the organization, a sense of "oneness" seeking continuous leanning and improvement getting rid of challenge altogether moving inspiration and pride to other categories

dedication: seeking continuous imporvement and demonstrating initiative

Vigor: investing consistent effort, persistence, energy, and mental resilience while working (Schaufeli et al., 2002) maybe add enthusiasm here as well

Vigor: Experiencing persistent levels of energy and enthusiasm while working

potential to change from affective, cognitive, and behavioral to whether their engagement comes from content/satisfaction with the organization or the people they work with.

After completing individual Q-sorts (Kulas and Renata) we decided to revisit the definitions and build them up a little to make the difference between them more noticeable.

A.3 Definitions as of 5/19/2020

Absorption: Being fully immersed in one's work, where time passes quickly and one has difficulty detaching from work tasks

Vigor: Experiencing persistent levels of energy, effort, and enthusiasm while working

Dedication: Experiencing pride and challenge in ones work, as well as strong feelings of support from and loyalty toward the organization

With these definitions we ordered all the items according to the ones we individually selected for each category and created an item bank with the remaining items. Together we placed the items in the bank into the agreed upon categories.

Appendix B

Pilot conditions

Our four orderings of items were randomized within dimension (Affective, Behavioral, Cognitive or Dedication, Absorption, Vigor), "block" (Qualtrics designation for groupings of items), and item. The elements that were randomized are identified in the following tables by randomized element (A, B, C, or D):

Table B.1: Pilot administration ordering Condition 1

Condition1	Substantiv
I'm able to concentrate on my work without distractions	Absorption
I have a hard time detaching mentally from my work	Absorption
Time passes quickly while I'm working	Absorption
I find it difficult to mentally disconnect from work	Absorption
I enjoy thinking about work even when I'm not at work	Absorption
Most days, I feel happiest when the workday is soon to be complete (r)	Absorption
I am happiest when I am immersed in a project	Absorption
I love starting my workday.	Absorption
I devote more time than is expected of me.	Absorption
I have to be reminded to take breaks while I'm at work	Absorption
I never miss a work deadline.	Absorption
I never allow distractions to interfere with my work	Absorption
I devote my full attention to my work tasks throughout the day	Vigor
Thinking about work saps my energy (r)	Vigor
I would rather direct my focus toward a work task than a personal task	Vigor
I'm able to maintain good levels of energy throughout the workday	Vigor
I enjoy spending time completing my job tasks.	Vigor
Most days I feel enthusiastic about starting my work day.	Vigor
I feel motivated to go beyond what is asked of me	Vigor
This job drains my energy (r)	Vigor
When work is slow I find ways to be productive.	Vigor
I express enthusiasm for my job while at work	Vigor
I try my best to perform well at work	Vigor
If I notice my energy level is low, I take corrective steps to re-energize.	Vigor
I plan my future with this company.	Dedication
I believe this company cares about my career goals	Dedication
I often think about finding another job (r)	Dedication
This organization challenges me to work at my full potential	Dedication
I am proud to be a member of this organization.	Dedication
I feel supported by my supervisor when I fail at a task	Dedication
I feel proud of my accomplishments within this organization	Dedication
My job makes me feel like I'm part of something meaningful	Dedication
I make valued contributions to the organization	Dedication
I embrace challenging situations at work.	Dedication
I speak positively about this organization to others.	Dedication
This organization provides the resources necessary for me to successfully perform my job	Dedication

Table B.2: Pilot administration ordering Condition 2

		I •
Condition2	Substantive	Attitudi
I'm able to concentrate on my work without distractions	Absorption	Cognitiv
I have a hard time detaching mentally from my work	Absorption	Cognitiv
Time passes quickly while I'm working	Absorption	Cognitiv
I find it difficult to mentally disconnect from work	Absorption	Cognitiv
I devote my full attention to my work tasks throughout the day	Vigor	Cognitiv
Thinking about work saps my energy (r)	Vigor	Cognitiv
I would rather direct my focus toward a work task than a personal task	Vigor	Cognitiv
I'm able to maintain good levels of energy throughout the workday	Vigor	Cognitiv
I plan my future with this company.	Dedication	Cognitiv
I believe this company cares about my career goals	Dedication	Cognitiv
I often think about finding another job (r)	Dedication	Cognitiv
This organization challenges me to work at my full potential	Dedication	Cognitiv
I enjoy thinking about work even when I'm not at work	Absorption	Affective
Most days, I feel happiest when the workday is soon to be complete (r)	Absorption	Affective
I am happiest when I am immersed in a project	Absorption	Affective
I love starting my workday.	Absorption	Affective
I enjoy spending time completing my job tasks.	Vigor	Affective
Most days I feel enthusiastic about starting my work day.	Vigor	Affective
I feel motivated to go beyond what is asked of me	Vigor	Affective
This job drains my energy (r)	Vigor	Affective
I am proud to be a member of this organization.	Dedication	Affective
I feel supported by my supervisor when I fail at a task	Dedication	Affective
I feel proud of my accomplishments within this organization	Dedication	Affective
My job makes me feel like I'm part of something meaningful	Dedication	Affective
I devote more time than is expected of me.	Absorption	Behavio
I have to be reminded to take breaks while I'm at work	Absorption	Behavio
I never miss a work deadline.	Absorption	Behavio
I never allow distractions to interfere with my work	Absorption	Behavio
When work is slow I find ways to be productive.	Vigor	Behavio
I express enthusiasm for my job while at work	Vigor	Behavio
I try my best to perform well at work	Vigor	Behavio
If I notice my energy level is low, I take corrective steps to re-energize.	Vigor	Behavio
I make valued contributions to the organization	Dedication	Behavio
I embrace challenging situations at work.	Dedication	Behavio
I speak positively about this organization to others.	Dedication	Behavio
This organization provides the resources necessary for me to successfully perform my job	Dedication	Behavio

Table B.3: Pilot administration ordering Condition 3

Condition3	Substantiv
I'm able to concentrate on my work without distractions	Absorption
I enjoy thinking about work even when I'm not at work	Absorption
I devote more time than is expected of me.	Absorption
I have a hard time detaching mentally from my work	Absorption
Most days, I feel happiest when the workday is soon to be complete (r)	Absorption
I have to be reminded to take breaks while I'm at work	Absorption
Time passes quickly while I'm working	Absorption
I am happiest when I am immersed in a project	Absorption
I never miss a work deadline.	Absorption
I find it difficult to mentally disconnect from work	Absorption
I love starting my workday.	Absorption
I never allow distractions to interfere with my work	Absorption
I devote my full attention to my work tasks throughout the day	Vigor
I enjoy spending time completing my job tasks.	Vigor
When work is slow I find ways to be productive.	Vigor
Thinking about work saps my energy (r)	Vigor
Most days I feel enthusiastic about starting my work day.	Vigor
I express enthusiasm for my job while at work	Vigor
I would rather direct my focus toward a work task than a personal task	Vigor
I feel motivated to go beyond what is asked of me	Vigor
I try my best to perform well at work	Vigor
I'm able to maintain good levels of energy throughout the workday	Vigor
This job drains my energy (r)	Vigor
If I notice my energy level is low, I take corrective steps to re-energize.	Vigor
I plan my future with this company.	Dedication
I am proud to be a member of this organization.	Dedication
I make valued contributions to the organization	Dedication
I believe this company cares about my career goals	Dedication
I feel supported by my supervisor when I fail at a task	Dedication
I embrace challenging situations at work.	Dedication
I often think about finding another job (r)	Dedication
I feel proud of my accomplishments within this organization	Dedication
I speak positively about this organization to others.	Dedication
This organization challenges me to work at my full potential	Dedication
My job makes me feel like I'm part of something meaningful	Dedication
This organization provides the resources necessary for me to successfully perform my job	Dedication

Table B.4: Pilot administration ordering Condition 4

Condition4	Substantive	Attitudi
I'm able to concentrate on my work without distractions	Absorption	Cognitiv
I devote my full attention to my work tasks throughout the day	Vigor	Cognitiv
I plan my future with this company.	Dedication	Cognitiv
I have a hard time detaching mentally from my work	Absorption	Cognitiv
Thinking about work saps my energy (r)	Vigor	Cognitiv
I believe this company cares about my career goals	Dedication	Cognitiv
Time passes quickly while I'm working	Absorption	Cognitiv
I would rather direct my focus toward a work task than a personal task	Vigor	Cognitiv
I often think about finding another job (r)	Dedication	Cognitiv
I find it difficult to mentally disconnect from work	Absorption	Cognitiv
I'm able to maintain good levels of energy throughout the workday	Vigor	Cognitiv
This organization challenges me to work at my full potential	Dedication	Cognitiv
I enjoy thinking about work even when I'm not at work	Absorption	Affective
I enjoy spending time completing my job tasks.	Vigor	Affective
I am proud to be a member of this organization.	Dedication	Affective
Most days, I feel happiest when the workday is soon to be complete (r)	Absorption	Affective
Most days I feel enthusiastic about starting my work day.	Vigor	Affective
I feel supported by my supervisor when I fail at a task	Dedication	Affective
I am happiest when I am immersed in a project	Absorption	Affective
I feel motivated to go beyond what is asked of me	Vigor	Affective
I feel proud of my accomplishments within this organization	Dedication	Affective
I love starting my workday.	Absorption	Affective
This job drains my energy (r)	Vigor	Affective
My job makes me feel like I'm part of something meaningful	Dedication	Affective
I devote more time than is expected of me.	Absorption	Behavio
When work is slow I find ways to be productive.	Vigor	Behavio
I make valued contributions to the organization	Dedication	Behavio
I have to be reminded to take breaks while I'm at work	Absorption	Behavio
I express enthusiasm for my job while at work	Vigor	Behavio
I embrace challenging situations at work.	Dedication	Behavio
I never miss a work deadline.	Absorption	Behavio
I try my best to perform well at work	Vigor	Behavio
I speak positively about this organization to others.	Dedication	Behavio
I never allow distractions to interfere with my work	Absorption	Behavio
If I notice my energy level is low, I take corrective steps to re-energize.	Vigor	Behavio
This organization provides the resources necessary for me to successfully perform my job	Dedication	Behavio
	1	1

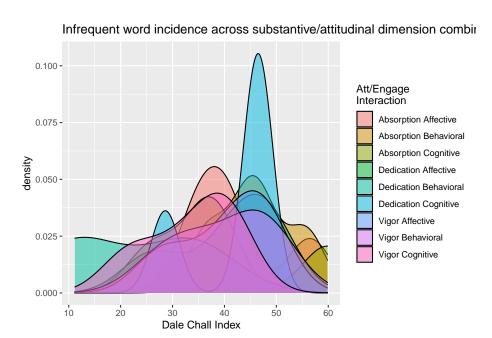
Appendix C

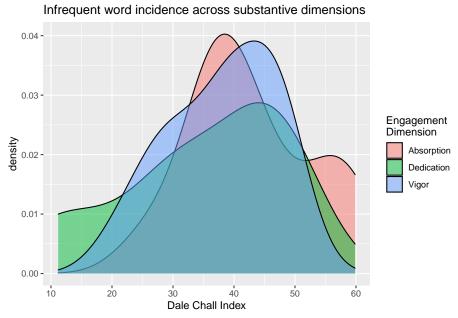
Qualitative item characteristics

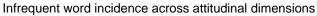
Quentada reading ability of final items as well as overlapping histograms by scale. Using package quanteda in R version 4.0.3 (2020-10-10). The Flesch-Kincaid is the same grade level index that's currently used by Microsoft Word [Kincaid et al.]. "Dale.Chall" reflects N_{wd} ["difficulty" of words; Chall and Dale]. $N_{wf}=$ the number of words matching the Dale-Chall List of 3000 "familiar words". $N_{wd}=$ number of "difficult" words not matching the Dale-Chall list of "familiar" words.

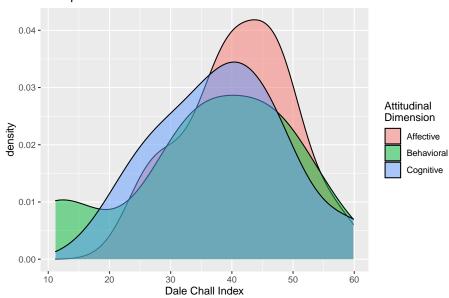
The average Flesch-Kincaied (e.g., reading grade) was 6.2 (sd=3.04). The average Dale-Chall index was 38.61 (sd=11.11).

C.1 Frequency distributions by dimension

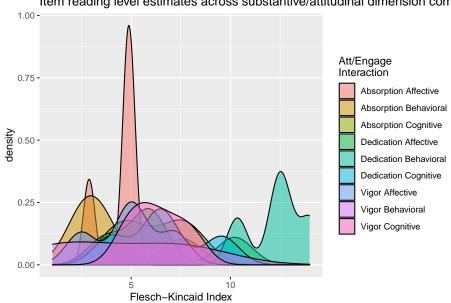


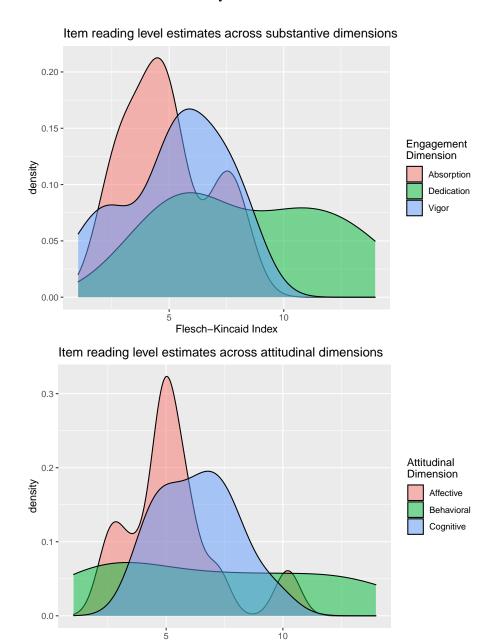






Item reading level estimates across substantive/attitudinal dimension comb





C.2 Tables of qualitative indices

Flesch-Kincaid Index

Table C.1: Organized by Flesch-Kincaid aka Reading Level

	document	Substantive	Att
36	This organization provides the resources necessary for me to successfully perform my job	Dedication	Be
35	I speak positively about this organization to others.	Dedication	Be
33	I make valued contributions to the organization	Dedication	Be
34	I embrace challenging situations at work.	Dedication	Be
31	I feel proud of my accomplishments within this organization	Dedication	Aff
28	This organization challenges me to work at my full potential	Dedication	Co
24	If I notice my energy level is low, I take corrective steps to re-energize.	Vigor	Be
16	I'm able to maintain good levels of energy throughout the workday	Vigor	Co
1	I'm able to concentrate on my work without distractions	Absorption	Co
4	I find it difficult to mentally disconnect from work	Absorption	Co
12	I never allow distractions to interfere with my work	Absorption	Be
18	Most days I feel enthusiastic about starting my work day.	Vigor	Aff
15	I would rather direct my focus toward a work task than a personal task	Vigor	Co
27	I often think about finding another job (r)	Dedication	Co
22	I express enthusiasm for my job while at work	Vigor	Be
26	I believe this company cares about my career goals	Dedication	Co
29	I am proud to be a member of this organization.	Dedication	Aff
30	I feel supported by my supervisor when I fail at a task	Dedication	Aff
14	Thinking about work saps my energy (r)	Vigor	Co
17	I enjoy spending time completing my job tasks.	Vigor	Aff
6	Most days, I feel happiest when the workday is soon to be complete (r)	Absorption	Aff
2	I have a hard time detaching mentally from my work	Absorption	Co
7	I am happiest when I am immersed in a project	Absorption	Aff
13	I devote my full attention to my work tasks throughout the day	Vigor	Co
5	I enjoy thinking about work even when I'm not at work	Absorption	Aff
19	I feel motivated to go beyond what is asked of me	Vigor	Aff
3	Time passes quickly while I'm working	Absorption	Co
25	I plan my future with this company.	Dedication	Co
32	My job makes me feel like I'm part of something meaningful	Dedication	Aff
9	I devote more time than is expected of me.	Absorption	Be
8	I love starting my workday.	Absorption	Aff
10	I have to be reminded to take breaks while I'm at work	Absorption	Be
11	I never miss a work deadline.	Absorption	Be
20	This job drains my energy (r)	Vigor	Aff
21	When work is slow I find ways to be productive.	Vigor	Be
23	I try my best to perform well at work	Vigor	Be
-			

Table C.2: Organized by Dale Chall aka includes Difficult Words

	document	Subst
36	This organization provides the resources necessary for me to successfully perform my job	Dedic
34	I embrace challenging situations at work.	Dedic
16	I'm able to maintain good levels of energy throughout the workday	Vigor
4	I find it difficult to mentally disconnect from work	Abso
31	I feel proud of my accomplishments within this organization	Dedic
20	This job drains my energy (r)	Vigor
24	If I notice my energy level is low, I take corrective steps to re-energize.	Vigor
28	This organization challenges me to work at my full potential	Dedic
14	Thinking about work saps my energy (r)	Vigor
33	I make valued contributions to the organization	Dedic
6	Most days, I feel happiest when the workday is soon to be complete (r)	Abso
35	I speak positively about this organization to others.	Dedic
1	I'm able to concentrate on my work without distractions	Abso
12	I never allow distractions to interfere with my work	Abso
22	I express enthusiasm for my job while at work	Vigor
2	I have a hard time detaching mentally from my work	Abso
7	I am happiest when I am immersed in a project	Abso
19	I feel motivated to go beyond what is asked of me	Vigor
13	I devote my full attention to my work tasks throughout the day	Vigor
30	I feel supported by my supervisor when I fail at a task	Dedic
15	I would rather direct my focus toward a work task than a personal task	Vigor
8	I love starting my workday.	Abso
11	I never miss a work deadline.	Abso
25	I plan my future with this company.	Dedic
_17	I enjoy spending time completing my job tasks.	Vigor
_27	I often think about finding another job (r)	Dedic
9	I devote more time than is expected of me.	Abso
_23	I try my best to perform well at work	Vigor
_26	I believe this company cares about my career goals	Dedic
_18	Most days I feel enthusiastic about starting my work day.	Vigor
21	When work is slow I find ways to be productive.	Vigor
_29	I am proud to be a member of this organization.	Dedi
32	My job makes me feel like I'm part of something meaningful	Dedic
_10	I have to be reminded to take breaks while I'm at work	Abso
5	I enjoy thinking about work even when I'm not at work	Abso
3	Time passes quickly while I'm working	Abso

Bibliography

- JJ Allaire, Yihui Xie, Jonathan McPherson, Javier Luraschi, Kevin Ushey, Aron Atkins, Hadley Wickham, Joe Cheng, Winston Chang, and Richard Iannone. *rmarkdown: Dynamic Documents for R*, 2020. URL https://CRAN.R-project.org/package=rmarkdown. R package version 2.3.
- Arnold B. Bakker and Evangelia Demerouti. Job demands—resources theory: taking stock and looking forward. 22(3):273. Publisher: Educational Publishing Foundation.
- J. S. Chall and E. Dale. Readability revisited: The new Dale-Chall readability formula. Cambridge, MA: Brookline Books.
- Alice H. Eagly and Shelly Chaiken. *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers, 1993.
- James K. Harter, Frank L. Schmidt, and Theodore L. Hayes. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. 87(2):268.
- William A. Kahn. Psychological conditions of personal engagement and disengagement at work. 33(4):692–724.
- J. Peter Kincaid, Robert P. Fishburne Jr, Richard L. Rogers, and Brad S. Chissom. Derivation of new readability formulas (automated readability index, fog count and flesch reading ease formula) for navy enlisted personnel.
- Michael P. Leiter and Christina Maslach. Areas of worklife: A structured approach to organizational predictors of job burnout. 3(1):91–134.
- R Core Team. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria, 2020. URL https://www.R-project.org/.
- Nancy P. Rothbard. Enriching or depleting? the dynamics of engagement in work and family roles. 46(4):655-684.
- Alan M. Saks. Antecedents and consequences of employee engagement.

40 BIBLIOGRAPHY

Wilmar B. Schaufeli and Arnold B. Bakker. Defining and measuring work engagement: Bringing clarity to the concept. 12:10–24, a.

- Wilmar B. Schaufeli and Arnold B. Bakker. Utrecht work engagement scale. 1, b
- Wilmar B. Schaufeli, Marisa Salanova, Vicente González-Romá, and Arnold B. Bakker. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. 3(1):71–92.
- Michelle R. Simpson. Engagement at work: A review of the literature. 46(7): 1012-1024.
- John Thackray. The Gallup Q12. Gallup Management Journal.