CHAPTER 8

Measuring Your Organization's Boardroom Language

Thus far, this book has explored the boardroom language of David's advisers, more specifically, the actions of Joab, commander of the royal army, were closely scrutinized to understand better the dilemma of serving king-think. Next, the personality of Gad was explored for how to speak in the life of a person blinded by narcissism. While discussing the ramifications of organizational dis-eases, this book utilized the literature to understand best practices for speaking out against immoral behaviours, particularly in a nonviolent way. Additionally, this study confronted the reality that often the best prescription to break the fever of organizational dis-ease is to shake up the top executives or convince them of the nobility of stepping down. Finally, the role of organizational elders was discussed, and it was pointed out that at the end of the day, the people had the influence to turn the ship around. The question became, "Were they willing to step it up?"

As entities prepare to navigate the plethora of challenges affiliated with a twenty-first-century workforce, it would be an unwise gesture to expect top executives to have all the answers and to be constantly on top of their game. For organizations to thrive in the information age, those who sit around the literal or metaphorical boardroom must find and activate their voice. This voice could very well be the difference between success and defeat, relevance or irrelevance, life and death. If the premise of this book is that boardroom boldness is the ultimate competitive edge, the question before the reader now becomes, "What is the organization's boardroom language of your team?" It has been determined that there are five concepts affiliated

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with Boardroom Boldness. The following is an attempt to understand if there are one or more scales that support the theory of this book.

The Boardroom Boldness Language Scale

In the context of the information age and the onslaught of tools such as Total Quality Management, Process Management, and Six Sigma Lean, it can be argued that unless one is adequately taking a measure of work, it is not leadership. To the credit of practitioners and scholars, the literature has shifted from merely watching the bottom line to monitoring the overall organization. To illustrate, Frost suggests that organizations are now inquiring about four key elements, which the Balanced Scorecard Model wants to understand:

- Financial—How do we look to shareholders?
- Processes—Are we improving how work is done?
- Growth—Are we renewing for continued growth?
- Customers—How do we look to our customers?[1]

The challenge of this book is to embrace a Balanced Scorecard approach that sufficiently addresses the research question and produces a reliable and a validated scale to measure corporate boardroom boldness languages. Such an endeavor could help to mitigate ethical mishaps and help organizations to optimize performance proactively (Tables 8.1, 8.2, 8.3).

Step 1: Determine Clearly What It Is You Want to Measure

The development of boardroom boldness scale(s) utilized the guidance of DeVellis, who contends that the construction of a tool to measure a phenomenon should adhere to eight guidelines. The first step involves determining clearly what it is one wants to measure. Although this is an obvious point, DeVellis encourages the researcher to think through questions such as, "Should the scale be based on theory, or should you strike out in new intellectual directions? How specific should the measure be? Should some aspect of the phenomenon be emphasized more than others?"[2]

[1] Frost, Bob. 2000. *Measuring Performance*. Dallas, TX: Measurement International.

[2] Devellis, Robert F. 2003. *Scale Development Theory and Applications*. London: Sage Publications.

Table 8.1 Boardroom boldness items

Item no	*Item*	*Concept*	*Source*
1	If my leader gives me an unethical order, I will salute and give it a 101 percent effort to accomplish the mission	Shut up	Lindsay (2012)
2	Unethical orders should be accomplished with extraordinary effort	Shut up	Lindsay (2012)
3	It is my duty to not only comply with an unethical order but to go one step beyond it	Shut up	Lindsay (2012)
4	If given the opportunity to champion an unethical order from a leader I respect, I will gladly execute it and go one step further	Shut up	Lindsay (2012)
5	If my leader issues me an immoral order, I will salute and give it a bare minimum effort to accomplish the mission	Shut up	Gibney (2005)
6	Immoral orders should be accomplished with bare minimum effort	Shut up	Gibney (2005)
7	It is my duty to comply with an immoral order	Shut up	Gibney (2005)
8	If given the opportunity to comply with an immoral order from a leader I respect, I will execute it and do nothing more	Shut up	Gibney (2005)
9	If my leader directs me to accomplish an unprincipled mission, I will secretly try to sabotage it innovately	Shut up	I Chr 21:4–6
10	Unprincipled orders should be sabotaged with creative energy	Shut up	I Chr 21:4–6
11	It is my duty to not only disrupt an unprincipled order but to also undermine it in a unique manner	Shut up	I Chr 21:4–6
12	If given the opportunity to interrupt an unprincipled order from a leader I respect, I would use my best imaginative option to stop it	Shut up	I Chr 21:4–6
13	When communicating with my direct supervisor, I prefer to use stories to try to change their point of view, particularly when they are wrong	Speak in	Copenhaver (1994)
14	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is with an appropriate story	Speak in	Copenhaver (1994)
15	When a relevant historical narrative is provided to my leader, it can help them to make a moral decision	Speak in	Copenhaver (1994)
16	If my leader directs me to accomplish an unprincipled mission, I would use a values-based story to convince them to rescind the order	Speak in	Copenhaver (1994)

(*continued*)

Table 8.1 (continued)

Item no	*Item*	*Concept*	*Source*
17	When communicating with my direct supervisor, I favor partnering with others to try to change their point of view, particularly when they are wrong	Speak in	Yulk (2010)
18	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is to create organizational allies	Speak in	Yulk (2010)
19	When different respected followers convey the same message to my leader, it can sway them to do the right thing	Speak in	Yulk (2010)
20	If my leader directs me to accomplish an unprincipled mission, I would use a team of fellow followers to convince them to rescind the order	Speak in	Yulk (2010)
21	When communicating with my direct supervisor, it is important to me to stand on right principles to try to change their point of view	Speak in	I Chr 21:9–12
22	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is with a values-centric, direct approach	Speak in	I Chr 21:9–12
23	If a person in the organization with a strong values-based reputation approached my leader, it can sway them to do the right thing	Speak in	I Chr 21:9–12
24	If my leader directs me to accomplish an unprincipled mission, approaching them privately while standing on what is right can convince them to rescind the order	Speak in	I Chr 21:9–12
25	When I feel powerless in an unethical organization, I find myself using cynical conversations to make myself feel better	Speak out	Num 16
26	Unethical orders should be accomplished pessimistically	Speak out	Num 16
27	It is an acceptable organizational practice to insert negativity into the job as the team performs an unethical order	Speak out	Num 16
28	If given the opportunity to champion an unethical order from a leader I respect, I would execute it and complain to everyone along the way	Speak out	Num 16
29	When I feel powerless in an immoral organization, I have no problem leaking information to different outlets to expose the problem	Speak out	Chenoweth and Stephan (2011)

(*continued*)

Table 8.1 (continued)

Item no	*Item*	*Concept*	*Source*
30	Unethical orders should be reported to the media to resolve the issue	Speak out	Chenoweth and Stephan (2011)
31	It is my duty to call an anonymous hotline to stop an unethical order or practice	Speak out	Chenoweth and Stephan (2011)
32	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by secretly reporting it	Speak out	Chenoweth and Stephan (2011)
33	When I feel powerless in an unprincipled organization, I have no problem speaking out in a public and nonviolent manner	Speak out	Engler and Engler (2016)
34	Unethical orders should be resisted with the tool of striking	Speak out	Engler and Engler (2016)
35	It is my duty to join fellow organizational protesters to stop an unethical order or practice	Speak out	Engler and Engler (2016)
36	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by protesting in a public way	Speak out	Engler and Engler (2016)
37	If I worked in an unethical organization, resisting flawed practices until fired is an honorable gesture	Step down	Gordon (2012)
38	Unethical orders should be resisted, even if it leads to being fired	Step down	Gordon (2012)
39	It is my duty to resist until being fired to stop an unethical order or practice	Step down	Gordon (2012)
40	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by resisting until being fired	Step down	Gordon (2012)
41	If I were employed by an institution that suddenly adopted an immoral policy, retirement is an appropriate tool to convey a principled message	Step down	Felice (2009)
42	Unethical orders should be resisted by retiring if I had tenure	Step down	Felice (2009)
43	It is my duty to send a message by retiring if I had tenure to stop an unethical order or practice	Step down	Felice (2009)
44	If given the opportunity to execute an unethical order from a leader I respect, I would retire to send a message and show my loyalty to the organization	Step down	Felice (2009)

(*continued*)

Table 8.1 (continued)

Item no	*Item*	*Concept*	*Source*
45	If I were employed by an institution that suddenly adopted an immoral policy, a letter of resignation is an appropriate tool to convey a moral message	Step down	Felice (2009)
46	Unethical orders should be resisted by resigning	Step down	Felice (2009)
47	It is my duty to send a message by resigning to protest an unethical order or practice	Step down	I Chr 21:16–17
48	If given the opportunity to execute an unethical order from a leader I respect, I would resign to send a message and show my loyalty to the organization	Step down	I Chr 21:16–17
49	If a leader implements an immoral policy, I will exercise the moral fortitude to turn things around	Step it up	Ex 17:11–13
50	It is my belief that followers of this organization are on one accord, work with urgency, embrace prayer as tool for change and are proactive	Step it up	Ex 17:11–13
51	My executive leader is willing to accept responsibility for wrong actions, listens actively, is a lifelong learning, and empowers the team to accomplish the mission	Step it up	Ex 17:11–13

Table 8.2 Age

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	18–29	96	37.5	37.5	37.5
	30–44	90	35.2	35.2	72.7
	45–60	33	12.9	12.9	85.5
	>60	37	14.5	14.5	100.0
	Total	256	100.0	100.0	

Table 8.3 Gender

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	Male	84	32.8	32.8	32.8
	Female	172	67.2	67.2	100.0
	Total	256	100.0	100.0	

Therefore, this process attempted to gage the most advantageous way to measure the intangibles of boardroom language as delineated in this book to create a scale that evaluated an organizational citizen's propensity to:

1. Shut up—To instantaneously and silently obey orders.
2. Speak in—The ability to utilize truth as a tool to transform a leader's paradigm and their toxic behavior.
3. Speak out—The utilization of peaceful and purposeful means to adjudicate a wrong in a public manner.
4. Step down—The ability of a leader to remove themselves for the health of the organization as well as themselves.
5. Step it up—The ability of the organizational citizen to proactively act to heal and transform the culture.

Step 2: Generate an Item Pool

DeVellis contends that the second step of scale development is to generate an item pool and offers several practical recommendations, which include: (a) devise a large pool of items; (b) utilize language that is easy for a reading level between the fifth and seventh grades (this is the level for newspapers); and (c) write positively worded items.[3] Taking account of DeVillis' insights, Table 8.1 shows the initial item pool for the five scales.

Table 8.4 Income

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	$0–$9999	36	14.1	14.1	14.1
	$10,000–$24,999	25	9.8	9.8	23.8
	$25,000–$49,999	59	23.0	23.0	46.9
	$50,000–$74,999	39	15.2	15.2	62.1
	$75,000–$99,999	38	14.8	14.8	77.0
	$100,000–$124,999	14	5.5	5.5	82.4
	$125,000–$149,999	4	1.6	1.6	84.0
	$150,000–$174,999	7	2.7	2.7	86.7
	$175,000–$199,999	4	1.6	1.6	88.3
	$200,000+	6	2.3	2.3	90.6
	Prefer not to answer	24	9.4	9.4	100.0
	Total	256	100.0	100.0	

[3] Ibid.

Step 3: Determine the Format for Measurement

The third step of scale development is to establish the format for measurement. Although DeVellis suggests that steps two and three are related, he stresses that careful consideration should be given to the format. Thus, this endeavor proposed utilizing a seven-item Likert design. DeVellis indicates that "a good Likert item should state the opinion, attitude, belief, or other construct under study in clear terms."[4] As such, the following composition guided the items.

1	–	7
Not at all		All the time

Step 4: Have the Initial Item Pool Reviewed by Experts

The fourth step of scale development is to have the original item pool reviewed by a panel of experts. DeVellis defines an expert as "colleagues who have worked extensively with the construct in question or related phenomena."[5] The panel for this study consisted of five scholars with a strong command of instrument development. Their task, as delineated by DeVellis, was multifaceted and included:

1. Confirm or invalidate the selected definitions of the phenomenon. More specifically, the experts were asked to rate online how relevant they thought each item was with regards to measuring the various phenomena (1 = very relevant, 2 = somewhat relevant, 3 = neutral, 4 = related to the concept, 5 = very related to the concept).
2. Comment freely on individual items for improvement.
3. Evaluate each item's clarity and conciseness.
4. Point out additional ways to tap into the phenomena that the researcher may have failed to include.
5. In addition to rating the items, the major feedback from the panel was included.

[4] Ibid. p. 80.
[5] Ibid. p. 86.

Step 5: Consider Inclusion of Validation Items

The fifth step of scale development revolved around the inclusion of validated items. To this end, a decision was made to include all items that received a rating of neutral or better from the panel of scholars. This process discarded item 47 due to redundancy and wording.

Step 6: Administer Items to a Development Sample

The sixth step of a scale development as prescribed by DeVellis is to administer the scale to a sample. There is much debate on what constitutes an adequate number for a sample size. Nummally and Bernstein contend that the sample should include at least 300 people, since such a figure will proactively defuse the unstable factor regarding patterns of covariation among the myriad items.[6] Whereas, DeVellis suggests that 5–10 participants per item is acceptable. To this end, the sample size peaked at 340.

A web-based company was utilized to help randomly solicit participants who were informed that they were invited to take a survey that would take approximately 10–15 minutes to complete, and that their participation would help to understand a follower's propensity better to speak out or to obey an unethical order. The survey was available to those with access to the Internet and who lived in the United States. The participants understood that if they did not feel comfortable completing the confidential survey, they could opt out at any time.

Step 7: Evaluate the Items

DeVellis suggests that the seventh step of scale development is to evaluate the items. The primary intent of item analysis is to identify entries that form a consistent internal scale and to eliminate other items. This study adhered to such guidance by employing version 25 of the Statistical Package for Social Scientists (SPSS) to understand if there were one or more scales affiliated with the five concepts of this book. First, a decision was made to remove items that were either incomplete or contained flawed data. Although 340 participants initially engaged in the study, 84 entries were discarded, which reduced the sample size to 256. It should be noted that the new sample size, N = 256, remained within DeVellis' five per item guidance and is therefore adequate for scale development.

[6]Nunnally, Jum C., and Ira H. Bernstein. 1978. *Psychometric Theory.* USA: McGraw-Hill.

Table 8.5 Region

		Frequency	*Percent*	*Valid percent*	*Cumulative percent*
Valid	New England	22	8.6	8.6	8.6
	Middle Atlantic	27	10.5	10.5	19.1
	East North Central	30	11.7	11.7	30.9
	West North Central	9	3.5	3.5	34.4
	South Atlantic	56	21.9	21.9	56.3
	East South Central	17	6.6	6.6	62.9
	West South Central	25	9.8	9.8	72.7
	Mountain	33	12.9	12.9	85.5
	Pacific	37	14.5	14.5	100.0
	Total	256	100.0	100.0	

The demographics of the sample as depicted in Tables 8.2, 8.3, 8.4, and 8.5 was 37.5 percent between the ages of 18–29, 35.2 percent were 30–44, 12.9 percent were 45–60 and 14.5 percent were 60 or older. There were 67.2 percent female and 32.8 percent male, with a household income that ranged from $0–$9999 to $200,000+. The sample were located across the USA, 8.6 percent of the sample were from New England, 10.5 percent from the Middle Atlantic, 11.7 percent from the East North Central, 3.5 percent from the West North Central, 21.9 percent from the South Atlantic, 6.6 percent from the East South Central, 9.8 percent from the West South Central, 12.9 percent from the Mountain and 14.5 percent were from the Pacific region. Ethnic demographics were not collected in the survey.

Data Analysis of the Shut-Up Concept

SPSS version 25 was employed to perform an analysis of the data. Specifically, Pearson correlation was applied to items SU1, SU2, SU3, SU4, SU5, SU6, SU7, SU8, SU9, SU10, SU11 and SU12 (see Table 8.1) to measure the degree of linear relationship between two or more variables.

As depicted in Table 8.6, there was evidence of a positive relationship between the variables at the 0.01 level (one-tailed) and the 0.05 level (two-tailed). Hair et al. contend that the correlated variables suggest the direct oblique rotation solution is appropriate for exploratory factor analysis in such a case. Moreover, the literature suggests that items that load at 0.40 or above are acceptable in factor analysis.[7] To this end, loadings that fail under this threshold were suppressed.

[7]Hair, Joseph F, William C Black, Barry J Babin, and Rolph E Anderson. 2003. *Multivariate Data Analysis.* Upper Saddle River: Prentice Hall.

Table 8.6 Shut-up correlation matrix

Item	*SU1*	*SU2*	*SU3*	*SU4*	*SU5*	*SU6*	*SU7*	*SU8*	*SU9*	*SU10*	*SU11*	*SU12*
SU1	1.00											
SU2	0.81**	1.00										
SU3	0.71**	0.73**	1.00									
SU4	0.75**	0.75**	0.74**	1.00								
SU5	0.41**	0.40**	0.29**	0.43**	1.00							
SU6	0.41**	0.39**	0.34**	0.43**	0.69**	1.00						
SU7	0.69**	0.74**	0.61**	0.72**	0.42**	0.32**	1.00					
SU8	0.69**	0.62**	0.50**	0.61**	0.53**	0.41**	0.75**	1.00				
SU9	0.13*	0.19**	00.9	0.15*	0.40**	0.35**	0.19**	0.24**	1.00			
SU10	0.12*	0.15*	0.08	0.15*	0.37**	0.35**	0.15*	0.23**	0.78**	1.00		
SU11	0.05	0.13*	0.08	0.13*	0.27**	0.29**	0.08	0.10	0.61**	0.69**	1.00	
SU12	−0.12*	−0.08	−0.09	−0.08	0.19**	0.19**	−0.13*	−0.06	0.41**	0.51**	0.63**	1.00

*Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

The Kaiser-Meyer-Olkin (KMO) test and the Bartlett test of sphericity were conducted. KMO accesses how suitable data is for factor analysis, and measures sampling adequacy for each variable in the model. Additionally, the KMO measures the proportion of variance among variables that might be common variance.[8] The value returns of the KMO range from 0 to 1. Kaiser provides the following rule of thumb for the values returned (0.00–0.49 unacceptable, 0.50–0.59 miserable, 0.60–0.69 mediocre, 0.70–0.79 middling, 0.80–0.89 meritorious and 0.90–1.00 marvelous).[9] The KMO returned a value of 0.860. The Bartlett test of sphericity is "a statistical test for the presence of correlations among variables… It provides statistical significance that the correlation matrix has significant correlations among at least some of the variables."[10] Thus, the KMO and the p-value that registered at 0.000 suggest there was enough evidence to conduct a factor analysis.

A principle component analysis was conducted on items SU1–SU12. O'Rourke and Hatcher posited that the best method to understand oblique rotation is to, "always review the pattern matrix to determine which groups of variables are measuring a given factor, for purposes of interpreting the meaning of that factor."[11] To this end, a pattern matrix was generated and two factors for the shut-up concept were identified. The analysis also identified cross-loadings on items SU5 and SU6. Hair et al. maintain that when a variable is found to have more than one significant loading, it becomes a candidate for deletion.[12] As such, these items were deleted, and a component analysis was employed on the remaining ten items.

An interpretation of Table 8.7 reveals no additional cross-loadings and the existence of two factors. Component 1 factored items SU1, SU2, SU3, SU4, SU7 and SU8 that were labeled *shut-up and comply*. Component 2 was comprised of items SU9, SU10, SU11, and SU12 that were labeled *shut-up and sabotage*as depicted in Table 8.9. A reliability analysis was conducted that produced a Cronbach's alpha, which "is a single correlation coefficient that is an estimate of the average of all the correlation coefficients of the items within a test. If alpha is high (0.80 or higher), then this suggests that all the items are

[8] Glen, Stephanie. 2016. "Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy." *How to Statistics*. May 11. Accessed December 23, 2017. http://www.statisticshowto.com/kaiser-meyer-olkin/

[9] Kaiser, H. 1974. "An index of factor simplicity." *Psychometrika* 39: 31–36.

[10] Hair, Joseph F, William C Black, Barry J Babin, and Rolph E Anderson. 2003. *Multivariate Data Analysis*. Upper Saddle River: Prentice Hall. p. 104.

[11] O'Rourke, Norm, and Larry Hatcher. 2013. *A Step-by-Step Approach to Using SAS for Factor Analysis and Structural Equation Modeling 2nd Edition*. North Carolina: SAS Institute Inc. p. 72.

[12] Ibid.

Table 8.7 Regenerated shut-up pattern matrix

	Component	
	1	*2*
SU1 Leader unethical order 101 percent effort mission	0.903	
SU2 Unethical orders extraordinary effort	0.897	
SU3 Duty to not only comply unethical order one step beyond	0.830	
SU4 Champion unethical order respected leader	0.879	
SU7 Duty to comply with an immoral order	0.871	
SU8 Immoral order from a leader I respect nothing more	0.794	
SU9 Leader secretly try to sabotage it innovately		0.824
SU10 Unprincipled orders sabotaged with creative energy		0.884
SU11 Duty to not only disrupt an unprincipled order		0.873
SU12 Unprincipled order best imaginative option to stop it		0.769

Table 8.8 Shut-up and comply scale

Item no	*Item*
SU3	It is my duty to not only comply with an unethical order but to go one step beyond it
SU4	If given the opportunity to champion an unethical order from a leader I respect, I will gladly execute it and go one step further
SU7	It is my duty to comply with an immoral order
SU8	If given the opportunity to comply with an immoral order from a leader I respect, I will execute it and do nothing more

reliable, and the entire test is internally consistent."[13] To this end, Cronbach's alpha with no alterations for *shut-up and comply* rendered a score of 0.93 with N = 6. DeVellis asserts, however, that the last step in scale development is to maximize the scale length. Once the item reliability has been established, DeVellis posited that a researcher should spend time thinking about brevity, "when the researcher has 'reliability to spare,' it may be appropriate to buy a shorter scale at the price of a little less reliability."[14] As such, the item-total statistic matrix was inspected, and several items were recommended for

[13] Ho, Robert. 2006. *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*. New York: Chapman & Hall/CRC. p. 240.

[14] DeVellis, Robert F. 2017. *Scale Development Theory and Applications*. London: Sage Publications. p. 146.

Table 8.9 Shut-up and sabotage scale

Item no	*Item*
SU9	If my leader directs me to accomplish an unprincipled mission, I will secretly try to sabotage it innovately
SU10	Unprincipled orders should be sabotaged with creative energy
SU11	It is my duty to not only disrupt an unprincipled order but to also undermine it in a unique manner
SU12	If given the opportunity to interrupt an unprincipled order from a leader I respect, I would use my best imaginative option to stop it

removal. More specifically, it was found that the deleted αs were the same for two items—SU1 and SU2, which were removed—and the renewed Cronbach alpha for *shut-up and comply* became 0.88 with N = 4. Cronbach's alpha with no alterations rendered a score of 0.86 with N = 4 for *Shut-up and sabotage*. While Cronbach's alpha for *shut-up and sabotage* could be improved slightly, a decision was made not to remove an article so that both factors had four items.

Data Analysis of the Speak-In Concept

SPSS version 25 was employed to perform an analysis of the *speak-in* concept. Specifically, Pearson correlation was applied to items SI13, SI14, SI15, SI16, SI17, SI18, SI19, SI20, SI21, SI22, SI23 and SI24 with the intent to measure the degree of linear relationship between two or more variables.

As depicted in Table 8.10, this process revealed that there was evidence of a positive relationship between the variables at the 0.01 level (two-tailed). Hair et al. contend the correlated variables suggest that the direct oblique rotation solution is appropriate for exploratory factor analysis in such a case. Moreover, the literature suggests that items that load at 0.40 or above are acceptable in factor analysis.[15] To this end, loadings that fail under this threshold were suppressed.

The KMO test and the Bartlett test of sphericity were conducted. The KMO returned a value of 0.89 and the p-value registered at 0.000 which suggest there was enough evidence to conduct a factor analysis.

[15]Hair, Joseph F, William C Black, Barry J Babin, and Rolph E Anderson. 2003. *Multivariate Data Analysis*. Upper Saddle River: Prentice Hall.

Table 8.10 Speak-in correlation matrix

Item	*SI13*	*SI14*	*SI15*	*SI16*	*SI17*	*SI18*	*SI19*	*SI20*	*SI21*	*SI22*	*SI23*	*SI24*
SI13	1.00											
SI14	0.60**	1.00										
SI15	0.50**	0.58**	1.00									
SI16	0.49**	0.51**	0.70**	1.00								
SI17	0.52**	0.48**	0.52**	0.58**	1.00							
SI18	0.49**	0.45**	0.48**	0.54**	0.62**	1.00						
SI19	0.42**	0.48**	0.67**	0.61**	0.56**	0.61**	1.00					
SI20	0.47**	0.43**	0.48**	0.54**	0.72**	0.63**	0.59**	1.00				
SI21	0.32**	0.21**	0.36**	0.45**	0.33**	0.29**	0.38**	0.39**	1.00			
SI22	0.24**	0.24**	0.36**	0.37**	0.24**	0.29**	0.34**	0.38**	0.64**	1.00		
SI23	0.22**	0.25**	0.46**	0.44**	0.28**	0.28**	0.43**	0.37**	0.54**	0.66**	1.00	
SI24	0.28**	0.33**	0.45**	0.41**	0.24**	0.29**	0.36**	0.31**	0.39**	0.51**	0.57**	1.00

**Correlation is significant at the 0.01 level (2-tailed)

[b]Listwise N = 256

Table 8.11 Speak-in pattern matrix

	Component	
	1	*2*
SI13 Stories when they are wrong	0.770	
SI14 Change is with an appropriate story	0.771	
SI15 Historical narrative moral decision	0.677	
SI16 Unprincipled mission values-based story	0.684	
SI17 Partnering others to change their point of view	0.865	
SI18 Create organizational allies	0.809	
SI19 Different respected followers sway	0.712	
SI20 A team of fellow followers rescind the order	0.741	
SI21 Stand on right principles		0.748
SI22 A values-based direct approach		0.898
SI23 A strong values-based reputation		0.866
SI24 Approaching them privately		0.699

Extraction method: principal component analysis
Rotation method: Oblimin with Kaiser normalization

[a]Rotation converged in 4 iterations

A principle component analysis was conducted on items SI13–SI24. O'Rourke and Hatcher posited that the best method to understand oblique rotation is to, "always review the pattern matrix to determine which groups of variables are measuring a given factor, for purposes of interpreting the meaning of that factor."[16] To this end, a pattern matrix was generated and two factors for the speak-in concept identified.

As depicted in Table 8.11, component 1 factored items SI13, SI14, SI15, S16, SI17, SI18, SI19 and SI20 that were labeled *speak-in with a parable*. Component 2 was comprised of items SI21, SI22, SI23 and SI24 that were labeled *speak-in on principles*. A reliability analysis was conducted on *speak-in with a parable* that produced a Cronbach's alpha score of 0.90 with N = 8. DeVellis again asserts that "when the researcher has 'reliability to spare,' it may be appropriate to buy a shorter scale at the price of a little less reliability."[17] As such, the item-total statistic matrix was inspected, and several items were recommended for removal. A decision was made to remove those items with the lowest αs. Hence, items SI16, SI17, SI19,

[16]O'Rourke, Norm, and Larry Hatcher. 2013. *A Step-by-Step Approach to Using SAS for Factor Analysis and Structural Equation Modeling 2nd Edition*. North Carolina: SAS Institute Inc. p. 72.

[17]DeVellis, Robert F. 2017. *Scale Development Theory and Applications*. London: Sage Publications. p. 146.

Table 8.12 Speak-in with a parable scale

Item no	*Item*
SI13	When communicating with my direct supervisor, I prefer to use stories to try to change their point of view particularly when they are wrong
SI14	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is with an appropriate story
SI15	When a relevant historical narrative is provided to my leader, it can help them to make a moral decision
SI18	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is to create organizational allies

Table 8.13 Speak-in on principles

Item no	*Item*
SI21	When communicating with my direct supervisor, it is important to me to stand on right principles to try to change their point of view
SI22	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is with a values centric direct approach
SI23	If a person in the organization with a strong values-based reputation approached my leader, it can sway them to do the right thing
SI24	If my leader directs me to accomplish an unprincipled mission, approaching them privately while standing on what is right can convince them to rescind the order

and SI20 were removed and the renewed Cronbach's alpha for *speak-in with a parable* decreased to 0.81 with N = 4. Cronbach's alpha rendered a score of 0.82 with N = 4 for *speak-in on principles*. An examination of the item-total statistic matrix showed that the removal of additional items would not improve α for *speak-in on principles*.

Data Analysis of the Speak-Out Concept

SPSS version 25 was employed to perform an analysis of the *speak-out concept*. Specifically, Pearson correlation was applied to items SO25, SO26, SO27, SO28, SO29, SO30, SO31, SO32, SO33, S034, SO35 and SO36 with the intent to measure the degree of linear relationship between two or more variables.

Table 8.14 showed there was evidence of a positive relationship between the variables at the 0.01 level (two-tailed). Hair et al. contend the correlated variables suggest that the direct oblique rotation solution is appropriate for exploratory factor analysis in such a case. Additionally, the

Table 8.14 Speak-out correlation matrix

Item	*SO25*	*SO26*	*SO27*	*SO28*	*SO29*	*SO30*	*SO31*	*SO32*	*SO33*	*SO34*	*SO35*	*SO36*
SO25	1.00											
SO26	0.34**	1.00										
SO27	0.42**	0.48**	1.00									
SO28	0.48**	0.49**	0.54**	1.00								
SO29	0.38**	0.30**	0.49**	0.37**	1.00							
SO30	0.32**	0.38**	0.42**	0.43**	0.60**	1.00						
SO31	0.10	0.04	0.18**	0.10	0.28**	0.20**	1.00					
SO32	0.12	0.30**	0.32**	0.23**	0.32**	0.39**	0.55**	1.00				
SO33	0.11	0.20**	0.26**	0.22**	0.40**	0.47**	0.31**	0.40**	1.00			
SO34	0.31**	0.27**	0.39**	0.29**	0.46**	0.48**	0.35**	0.25**	0.39**	1.00		
SO35	0.19**	0.08	0.21**	0.18**	0.35**	0.34**	0.39**	0.24**	0.43**	0.58**	1.00	
SO36	0.26**	0.28**	0.37**	0.32**	0.48**	0.57**	0.38**	0.46**	0.60**	0.64**	0.61**	1.00

**Correlation is significant at the 0.01 level (2-tailed)

[b]Listwise N = 256

literature suggests that items that load at 0.40 or above are acceptable in factor analysis.[18] In a similar vein as the *shut-up* and *speak-in* concepts, loadings that failed under this threshold were suppressed.

The KMO test and Bartlett test of sphericity were conducted. The KMO returned a value of 0.85 and the p-value registered at 0.000, which suggested there was enough evidence to conduct a factor analysis.

A principle component analysis was conducted on items SO25–SO36. O'Rourke and Hatcher posited that the best method to understand oblique rotation is to, "always review the pattern matrix to determine which groups of variables are measuring a given factor, for purposes of interpreting the meaning of that factor."[19] To this end, a pattern matrix was generated and two factors for the speak-out concept identified. Moreover, the analysis also identified cross-loadings on items SO29 and SO30. Hair et al. maintain that when a variable is found to have more than one significant loading, it becomes a candidate for deletion.[20] To this end, these items were deleted, and a component analysis was employed on the remaining ten items.

As depicted in Table 8.15, component 1 factored items SO31, SO32, SO33, SO34, SO35, and SO36 that were labeled *speak-out nonviolently*. A

Table 8.15 Speak-out pattern matrix

	Component	
	1	*2*
SO25 Cynical conversations		0.713
SO26 Unethical orders accomplished pessimistically		0.769
SO27 Insert negativity performs an unethical order		0.739
SO28 Complain along the way		0.821
SO31 Anonymous hotline unethical order	0.746	
SO32 Respect loyalty secretly reporting	0.606	
SO33 Speaking out nonviolent manner	0.704	
SO34 Unethical orders resisted striking	0.658	
SO35 Join protesters stop unethical practice	0.788	
SO36 Protesting in a public way	0.796	

Extraction method: principal component analysis
Rotation method: Oblimin with Kaiser normalization

[a]Rotation converged in four iterations

[18]Hair, Joseph F, William C Black, Barry J Babin, and Rolph E Anderson. 2003. *Multivariate Data Analysis*. Upper Saddle River: Prentice Hall.

[19]O'Rourke, Norm, and Larry Hatcher. 2013. *A Step-by-Step Approach to Using SAS for Factor Analysis and Structural Equation Modeling 2nd Edition*. North Carolina: SAS Institute Inc. p. 72.

[20]Ibid.

Table 8.16 Speak-out nonviolently scale

Item no	*Item*
SO33	When I feel powerless in an unprincipled organization, I have no problem speaking out in a public and nonviolent manner
SO34	Unethical orders should be resisted with the tool of striking
SO35	It is my duty to join fellow organizational protesters to stop an unethical order or practice
SO36	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by protesting in a public way

Table 8.17 Speak-out negatively scale

Item no	*Item*
SO25	When I feel powerless in an unethical organization, I find myself using cynical conversations to make myself feel better
SO26	Unethical orders should be accomplished pessimistically
SO27	It is an acceptable organizational practice to insert negativity into the job as the team performs an unethical order
SO28	If given the opportunity to champion an unethical order from a leader I respect, I would execute it and complain to everyone along the way

reliability analysis was conducted on *speak-out nonviolently* that produced a Cronbach's alpha score of 0.82 with N = 6. An examination of the item-total statistic matrix showed that the removal of additional items would not improve α. However, DeVellis posited that a researcher should spend time thinking about brevity.[21] To this end, an analysis of the item-total statistic matrix revealed that the removal of items with the lowest scores, SO31 and SO32, would not negatively impact α. Once Cronbach's alpha was recalculated, the score remained at 0.82 with N = 4. Component 2 was comprised of items SO25, SO26, SO27 and SO28 that were labeled *speak-out negatively*. A reliability analysis was conducted on *speak-out negatively* that produced a Cronbach's alpha score of 0.77 with N = 4. An inspection of the item-total statistic matrix showed that the removal of additional items would not improve α.

[21] DeVellis, Robert F. 2017. *Scale Development Theory and Applications*. London: Sage Publications. p. 146.

Data Analysis of the Step-Down Concept

SPSS version 25 was employed to perform an analysis of the *step-down concept*. Specifically, Pearson correlation was applied to items SD37, SD38, SD39, SD40, SD41, SD42, SD43, SD44, SD45, SD46, and SD47 with the intent to measure the degree of linear relationship between two or more variables.

Table 8.18 showed that there was evidence of a positive relationship between the variables at the 0.01 level (two-tailed). Hair et al. contend the correlated variables suggest that the direct oblique rotation solution is appropriate for exploratory factor analysis in such a case. Moreover, the literature suggests that items that load at 0.40 or above are acceptable in factor analysis.[22] In keeping with the other concepts, loadings that fail under this threshold were suppressed.

The KMO test and Bartlett test of sphericity were conducted. The KMO returned a value of 0.85 and the p-value registered at 0.000 which suggest there was enough evidence to conduct a factor analysis.

A principle component analysis was conducted on items SD37–SD47. O'Rourke and Hatcher posited that the best method to understand oblique rotation is to, "always review the pattern matrix to determine which groups of variables are measuring a given factor, for purposes of interpreting the meaning of that factor."[23] To this end, a pattern matrix was generated, and two factors for the step-down concept were identified.

As depicted in Table 8.19, component 1 factored items SD41, SD42, SD43, SD44, SD45, SD46 and SD47 which were labeled *step-down by resigning*. A reliability analysis was conducted on *step-down by resigning* that produced a Cronbach's alpha score of 0.91 with N = 7.

As alluded to before, DeVellis contends that "when the researcher has 'reliability to spare,' it may be appropriate to buy a shorter scale at the price of a little less reliability."[24] Thus, the item-total statistic matrix was inspected, and several items were recommended for removal. A decision was made to remove the three items with the lowest α's—SD42, SD44 and SD47. Once these items were removed, a Cronbach's alpha for *step-down by resigning*

[22] Hair, Joseph F, William C Black, Barry J Babin, and Rolph E Anderson. 2003. *Multivariate Data Analysis*. Upper Saddle River: Prentice Hall.

[23] O'Rourke, Norm, and Larry Hatcher. 2013. *A Step-by-Step Approach to Using SAS for Factor Analysis and Structural Equation Modeling 2nd Edition*. North Carolina: SAS Institute Inc. p. 72.

[24] DeVellis, Robert F. 2017. *Scale Development Theory and Applications*. London: Sage Publications. p. 146.

Table 8.18 Step-down correlation matrix

Item	*SD37*	*SD38*	*SD39*	*SD40*	*SD41*	*SD42*	*SD43*	*SD44*	*SD45*	*SD46*	*SD47*
SD37	1.00										
SD38	0.55**	1.00									
SD39	0.64**	0.83**	1.00								
SD40	0.55**	0.70**	0.69**	1.00							
SD41	0.24**	0.36**	0.33**	0.39**	1.00						
SD42	0.43**	0.41**	0.42**	0.38**	0.70**	1.00					
SD43	0.32**	0.23**	0.31**	0.35**	0.58**	0.74**	1.00				
SD44	0.30**	0.41**	0.37**	0.43**	0.75**	0.72**	0.66**	1.00			
SD45	0.38**	0.48**	0.51**	0.53**	0.50**	0.48**	0.55**	0.53**	1.00		
SD46	0.35**	0.50**	0.48**	0.35**	0.52**	0.56**	0.32**	0.64**	0.53**	1.00	
SD47	0.33**	0.44**	0.45**	0.50**	0.51**	0.56**	0.55**	0.65**	0.71**	0.66**	1.00

**Correlation is significant at the 0.01 level (2-tailed)

[b]Listwise N = 256

Table 8.19 Step-down pattern matrix

	Component	
	1	*2*
SD37 Resisting until fired		0.773
SD38 Resisted even if it leads to being fired		0.900
SD39 Duty to resist until fired		0.930
SD40 Leader respect resisting until being fired		0.796
SD41 Retirement is an appropriate principled message	0.878	
SD42 Retiring if I had the tenure	0.855	
SD43 Duty retiring stop unethical order or practice	0.873	
SD44 Leader respect retire	0.909	
SD45 A letter of resignation	0.553	
SD46 Resist by resigning	0.581	
SD47 Leader I respect resign loyalty to the organization	0.691	

Extraction method: principal component analysis
Rotation method: Oblimin with Kaiser normalization

[a]Rotation converged in five iterations

Table 8.20 Step-down by resigning scale

item no	*Item*
SD41	If I were employed by an institution that suddenly adopted an immoral policy, retirement is an appropriate tool to convey a principled message
SD43	It is my duty to send a message by retiring if I had the tenure to stop an unethical order or practice
SD45	If I were employed by an institution that suddenly adopted an immoral policy, a letter of resignation is an appropriate tool to convey a moral message
SD46	Unethical orders should be resisted by resigning

Table 8.21 Step-down by resisting scale

Item no	*Item*
SD37	If I worked in an unethical organization, resisting flawed practices until fired is an honorable gesture
SD38	Unethical orders should be resisted even if it leads to being fired
SD39	It is my duty to resist until being fired to stop an unethical order or practice
SD40	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by resisting until being fired

regenerated a score of 0.79 with N = 4. Component 2 was comprised of items SD37, SD38, SD39 and SD40 that were labeled *step-down by resisting*. A reliability analysis was conducted on *step-down by resisting* that produced a Cronbach's alpha score of 0.88 with N = 4. Although Cronbach's alpha for *step-down by resisting* could be improved slightly, a decision was made not to remove an item for the sake of factor consistency.

Data Analysis of the Step-It-Up Concept

SPSS version 25 was employed to perform an analysis of the *step-it-up concept*. Specifically, Pearson correlation was applied to items SIU48, SIU49, and SIU50 with the intent to measure the degree of linear relationship between two or more variables.

Table 8.22 showed that there was evidence of a positive relationship between the variables at the 0.01 level (two-tailed). Hair et al. contend the correlated variables suggest that the direct oblique rotation solution is appropriate for exploratory factor analysis in such a case. Moreover, the literature suggests that items that load at 0.40 or above are acceptable in factor analysis.[25] In keeping with the other concepts, loadings that fail under this threshold were suppressed.

The KMO test and Bartlett test of sphericity were conducted. The KMO returned a value of 0.67 and the p-value registered at 0.000 which suggest there was enough evidence to conduct a factor analysis.

A principle component analysis was conducted on items SIU48–SIU50. O'Rourke and Hatcher posited that the best method to understand oblique

Table 8.22 Step-it-up correlation matrix

Item	*SIU48*	*SIU49*	*SIU50*
SIU48	1.00		
SIU49	0.50**	1.00	
SIU50	0.45**	0.45**	1.00

**Correlation is significant at the 0.01 level (2-tailed)

[b]Listwise N = 256

[25]Hair, Joseph F, William C Black, Barry J Babin, and Rolph E Anderson. 2003. *Multivariate Data Analysis*. Upper Saddle River: Prentice Hall.

rotation is to, "always review the pattern matrix to determine which groups of variables are measuring a given factor, for purposes of interpreting the meaning of that factor."[26] To this end, a pattern matrix was generated, and two factors for the step-down concept were identified.

As depicted in Table 8.23, component 1 factored items SIU48 and SIU49 that were labeled *step-it-up morally*. Component 2 factored item SIU50 that were labeled *step-it-out with reflective leadership*. *Step-it-up morally* and *step-it-out with reflective leadership* were deemed empirically unsuitable for scale development because there were two items or fewer in the components.[27] Thus, no further analysis was warranted for the *step-it-up* concept.

Step 8: Optimize Scale Length

The last step in scale development according to DeVellis is to optimize the scale length. Once the item reliability has been established, DeVellis' guidance that a researcher should spend time thinking about brevity was followed. Although shortness of the scales may potentially threaten reliability, it may also increase the probability of participation due to time constraints. This point may particularly resonate within today's high-paced culture. Upon removal of the "bad" items as driven by statistical

Table 8.23 Step-it-up pattern matrix

	Component	
	1	*2*
SIU 48 Moral fortitude turn things around	0.864	
SIU 49 One accord urgency prayer proactive	0.869	
SIU 50 Responsibility listens actively lifelong learner empowers		1.000

Extraction method: principal component analysis
Rotation method: Oblimin with Kaiser normalization

[a]Rotation converged in three iterations

[26]O'Rourke, Norm, and Larry Hatcher. 2013. *A Step-by-Step Approach to Using SAS for Factor Analysis and Structural Equation Modeling 2nd Edition*. North Carolina: SAS Institute Inc. p. 72.

[27]Raubenheimer, J. E. 2004. "An item selection procedure to maximize scale reliabilty and validity." *South African Journal of Industial Psychology, Vol 30 No 4* 59–64.

examination, the ensuing items upheld as sub-scales. The brevity of such instruments, to conclude this analysis, may be sufficiently tailored for a twenty-first-century organization that is constantly competing for time.

Discussion

The chief hope of this chapter was to understand if the concepts affiliated with boardroom boldness language could be developed into a scientific instrument. The findings of this study can potentially help decisions-makers do three things: (1) make better empirical choices; (2) better manage the ethical health of cultures; and (3) help decision-makers to understand the climate of followership better. Moreover, the empirical establishment of the eight sub-scales as outlined in Tables 8.24, 8.25, 8.26, 8.27, 8.28, 8.29, 8.30, and 8.31 can help to advance a reseacher's understanding of an influencer's propensity to follow unethical orders blindly or to utilize their moral imagination to stop king-think.

Table 8.24 Shut-up and comply scale

Item no	*Item*
SU1	It is my duty to not only comply with an unethical order but to go one step beyond it
SU2	If given the opportunity to champion an unethical order from a leader I respect, I will gladly execute it and go one step further
SU3	It is my duty to comply with an immoral order
SU4	If given the opportunity to comply with an immoral order from a leader I respect, I will execute it and do nothing more

Table 8.25 Shut-up and sabotage scale

Item no	*Item*
SU1	If my leader directs me to accomplish an unprincipled mission, I will secretly try to sabotage it innovately
SU2	Unprincipled orders should be sabotaged with creative energy
SU3	It is my duty to not only disrupt an unprincipled order but to also undermine it in a unique manner
SU4	If given the opportunity to interrupt an unprincipled order from a leader I respect, I would use my best imaginative option to stop it

Limitations

This aspect of the book had several limitations. First, the study did not collect demographic data about the participants' levels of followership or their ethnic data. This ommision could have potentially skewed the data. In a similar vein, participants in the study were overwhelmingly female. A more balanced data collection could have provided a different outcome.

Table 8.26 Speak-in with a parable scale

Item no	*Item*
SI1	When communicating with my direct supervisor, I prefer to use stories to try to change their point of view particularly when they are wrong
SI2	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is with an appropriate story
SI3	When a relevant historical narrative is provided to my leader, it can help them to make a moral decision
SI4	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is to create organizational allies

Table 8.27 Speak-in on principles scale

Item no	*Item*
SI1	When communicating with my direct supervisor, it is important to me to stand on right principles to try to change their point of view
SI2	When my organization is confronted with an ethical dilemma, the best course of action to help my leader to change is with a values centric direct approach
SI3	If a person in the organization with a strong values-based reputation approached my leader, it can sway them to do the right thing
SI4	If my leader directs me to accomplish an unprincipled mission, approaching them privately while standing on what is right can convince them to rescind the order

Table 8.28 Speak-out negatively scale

Item no	*Item*
SO1	When I feel powerless in an unethical organization, I find myself using cynical conversations to make myself feel better
SO2	Unethical orders should be accomplished pessimistically
SO3	It is an acceptable organizational practice to insert negativity into the job as the team performs an unethical order
SO4	If given the opportunity to champion an unethical order from a leader I respect, I would execute it and complain to everyone along the way

Table 8.29 Speak-out nonviolently scale

Item no	*Item*
SO1	When I feel powerless in an unprincipled organization, I have no problem speaking out in a public and nonviolent manner
SO2	Unethical orders should be resisted with the tool of striking
SO3	It is my duty to join fellow organizational protesters to stop an unethical order or practice
SO4	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by protesting in a public way

Table 8.30 Step-down by resisting scale

Item no	*Item*
SD1	If I worked in an unethical organization, resisting flawed practices until fired is an honorable gesture
SD2	Unethical orders should be resisted even if it leads to being fired
SD3	It is my duty to resist until being fired to stop an unethical order or practice
SD4	If given the opportunity to execute an unethical order from a leader I respect, I would demonstrate my loyalty to the organization by resisting until being fired

Table 8.31 Step-down by resigning scale

Item no	*Item*
SD1	If I were employed by an institution that suddenly adopted an immoral policy, retirement is an appropriate tool to convey a principled message
SD2	It is my duty to send a message by retiring if I had the tenure to stop an unethical order or practice
SD3	If I were employed by an institution that suddenly adopted an immoral policy, a letter of resignation is an appropriate tool to convey a moral message
SD4	Unethical orders should be resisted by resigning

Although the Cronbach's alpha score for *step-down by resigning* was lower than the other sub-scales, at 0.79 with N = 4, the brevity of the scale may be worth the exchange. Moreover, this study could be improved by generating a larger and better quality of pool items for the *step-it-up* concept. This, coupled with the inclusion of a more purposeful demographic, could bring more empirical rigor to the study. As the construct of followership continues to develop, this section should not be viewed as an exhaustive attempt to explore the spiritual facet of leading upward, but as an initial attempt to understand and scientifically codify the phenomenon.