Journal of Forensic & Investigative Accounting
Vol. 6, Issue 1, January - June, 2014

The Anatomy of a Whistle-Blower Letter: A Descriptive Study

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I. INTRODUCTION

Many employees spend much time deliberating whether to report illegal conduct. Attitudes towards whistle-blowers have evolved over time from an "internal snitch" to a "corporate watchdog." Whistle-blowers face personal and professional pressures, including demotion, divorce, personal lawsuits, and impaired health, especially if their claims are not supported. While such high-profile whistle-blowers as Enron's whistle-blower Sharron Watkins and WorldCom's whistle-blower Cynthia Cooper have received such kudos as becoming *Time Magazine's* person of the year, Madoff's whistle-blower, Harry Markopolas, spent over ten years alerting the US Securities and Exchange Commission of the Madoff fraud with no success. Similarly, HealthSouth's bookkeeper, Michael Vines, left the company after unsuccessfully attempting to alert the company's external auditors of the internal corporate fraud schemes. Martin (1999), Sieber (1998) and others find management often not following-up on employees' reported questionable incidents due to such factors as the employee's credibility and lack of sufficient evidence.

Despite federal protection such as the Dodd-Frank, Sarbanes Oxley Act, and The Whistle-Blower Protection Act of 1989, many employees still decide ***not*** to blow the whistle for many complex reasons. Fewer than three in five employees actually report alleged misconduct (Ethics Resource Center, (ERC) 2009). According to Sieber (1998, p.7) "…most whistle-

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blowers are naïve about the precautions they should take, the amount of evidence they must bring forth, and about the fact that virtually no one will be on their side when the case gets underway." Most of the documented fraud reporting literature (e.g., ERC 2011) focuses on the messenger's concern of corporate retaliation. Instead, not reporting fraud could arise from not knowing ***how*** to report the fraud. For example, what information should the claim report include; what position within the company should the potential whistle-blower hold; how much detail should the report include; and should the report use the first-person or third-person?

A review of the literature suggests that credible and persuasive letter writing contains self-interest, writing complexity, and specificity, which we use to compare successful[1] and unsuccessful[2] whistle-blower letters.[3] Results of LIWC (2007) content analysis show that unlike unsuccessful whistle-blower letters, successful ones (1) are more complex, containing more words per sentence and six letter words; (2) contain more examples related to perception; and (3) have greater specificity by using numerals, commas, and quotation marks. Our findings can improve training programs and help employees better report evidence when drafting a whistle-blower letter, and could encourage more employees with pertinent information to come forward with their evidence by increasing their self-confidence when reporting to their supervisors or external auditors. As shown in Figure 1 (ERC 2009), 73% of survey participants will report misconduct when they feel "very well prepared" to report this type of information.

[Insert Figure 1 about here]

[1] For purposes of this study, a successful whistle-blower claim is one that results in a prosecution in a United States (US) court of law.

[2] Based on our conversations with a Big Four accounting firm contact, unsuccessful letters were deemed so because they did not result in a prosecution. Due to the sensitivity of the issues, no further information is available.

[3] Due to data availability, our study focuses on written whistle-blower claims versus oral claims. However, we believe our results will be generalizable to all forms of whistle-blower communications, including e-mail claims

The next section of the paper develops our hypotheses and research questions, followed by a discussion of our research method and results. The final section of the paper addresses the study's implications and its limitations.

II. BACKGROUND AND RESEARCH QUESTIONS

Many whistle-blowers are driven by altruism, tending to be highly moralistic individuals who can overcome insecurity by releasing information. Many also are strong-willed, will go against social conventions, and rely on moral theories that emphasize rights. But they often make some common mistakes that can lead to unsuccessful claims (Martin, 1999), such as:

1. Trusting too much;
2. Not having enough evidence;
3. Using the wrong style;
4. Not waiting for the right opportunity;
5. Not building support;
6. Playing the opponent's game; and
7. Not knowing when to stop

We focus on using the appropriate style and building support. Martin (1999) argues that many whistle-blowers often first believe that their company will support and investigate the claim, which improper written and oral communications can often impair. Prior studies have examined word usage, word count, tone, and syntax in recommendation letters, fundraising letters, and management discussion and analysis (MDA). MDA is an integral part of a company's financial statements and is management's narrative relating to past, present, and future firm performance. For example, Churyk, *et al*. (2009) examine contextual differences between the MDA of fraudulent firms (required to restate financial statements) and a matched sample of non-fraudulent (non-restating) firms. The contextual differences were derived from the deception detection literature. Findings indicate that fraudulent firms' MDA contained lower

lexical diversity, lower number of colons, lower positive emotion, and a lower use of present tense verbs. Fraudulent firms' MDA also contained greater total words, lower use of semicolons, lower frequency of "for example," and lower amounts of optimism and energy. Stated another way, credible (non-fraudulent) firms' MDAs contain higher lexical diversity (greater range of vocabulary), more colons and semi-colons, more examples, more present tense verbs, and have a higher amount of optimism. Combined with the credibility literature discussed below, these results can help make whistle-blower letters more successful.

To better understand factors of persuasive letters, we reviewed the letter writing literature. Credibility is a main theme across the literature (Knouse 1983; Yalch and Elmore-Yalch 1984; Wiener, LaForge, and Goolsby 1990; Artz and Tybout 1999; Templer and Thacker 2007; and Goering, Connor, Nagelhout, and Steinberg 2011). Two measures of credibility appear to dominate; the quantification of examples and the number of examples including those based on personal experience (e.g. direct observations).

Investigating credibility, Knouse (1983) finds that credibility is demonstrated by numerical specificity (clarification through the use of numbers) and example specificity (clarification through the use of examples). Examining letters of recommendation that contain specific versus nonspecific information, numerical data versus nonspecific adjective modifiers, and favorable versus unfavorable statements reveals that example specificity enhances the letter writer's perceived credibility. Shannon and Weaver (1949) also suggest that numerical specificity, as suggested by information theory, reduces uncertainty. We thus examine if credibility, measured by specificity, impacts whistle-blower claims.

Goering, *et al.* (2011) examine the level of persuasiveness in fundraising letters, finding that persuasive letters contain both high credibility and readability. Credibility often provides

the reader with examples from the writer's own experiences, which Artz and Tybout (1999) demonstrated previously. Readability is measured by an index such as Flesch Reading Ease (see Reinstein and Houston 2004). Results indicate that higher persuasiveness and higher readability lead to higher donations from direct mail inquires. Given whistle-blower letters should persuade readers to follow through on investigations that will lead to a prosecution, we believe that fundraising letters will serve as a good example for understanding the linguistic qualities of a strong whistle-blower letter. However, whistle-blower letters, similar to MDA, are more technical than fundraising letters and thus, similar to MDA, we would expect lower readability (greater lexical diversity) in successful whistle-blower letters compared to unsuccessful whistle-blower letters.

Yalch and Elmore-Yalch (1984) (Elaboration Likelihood Model – ELM) find that author's "greater expertise," including quantitative information often leads to greater persuasion. Artz and Tybout (1999) find quantitative information increasing cognitive processing resources, while reducing the willingness to focus on the message information and instead focus on source expertise. But non-quantitative messages require subjects to process information leaving room for reader interpretation. We thus expect to find successful whistle-blower letters to contain more quantitative information, enhancing source credibility and resulting in greater persuasion.

Wiener, *et al*. (1990) extend Yalch and Elmore-Yalch's work (1984) by investigating self -interest besides the impact of quantitative information on letter writing. They examine source expertise by the strength of the message via investigating the number of support arguments. Findings indicate that expertise is tied to a strong message and a strong message contains quantitative claims. Self-interest appears to increase expertise which increases persuasion but only when the message is strong (i.e., the message contains examples).

Templer and Thacker (2007) examine the credibility of a sample of employment letters of recommendation. They vary the number of examples, style of writing, and length of personal association, finding that more examples are associated with better and more credible letters. The manner in which a letter is constructed also influences the reader. "Better" written letters are perceived to be more credible. However, the length of personal association was not significant.

Psychological processes arise when whistle-blowers report incidents. Prior research (Knouse 1983, Yalch and Elmore-Yalch 1984; Wiener, *et al*. 1990; Artz and Tybout 1999; Templer and Thacker 2007; Churyk, *et al*. 2009; and Goering, *et al*. 2011) identifies characteristics associated with credible, persuasive letters. However, few studies investigate the components of whistle-blower letters due to lack of accessibility. Due to the sensitive nature of such letters, this current study seems vital to improving corporate governance—including encouraging more whistle-blowers to come forward. Based upon the literature review and persuasive and credible variables such as self-reference, writing complexity, and specificity, this investigation should help us understand which components lead to an effective whistle-blower letter.

III. RESEARCH QUESTION

To help grasp the content of successful whistle-blower letters, we investigate the following measures based upon the above literature: (1) self-interest which is measured by using first-person singular words (I, me, mine); (2) writing complexity measured using total word count, words with six or more letters, words per sentence and the Flesch reading ease; and (3) strong/credible/specific messages measured by the writer providing detailed personal examples (perception, causation), lists of examples (numerals and quantifiers) and stylistic example

writing (commas, colons, semi-colons, quotation marks, or parentheses). Table 1 provides a description of each variable along with the hypothesized direction. We expect to find each of these variables to be significant for persuasive and effective whistle-blower letters.

[Insert Table 1 about here]

III. SAMPLE AND METHODOLOGY

Our sample contains two small sample groups of US whistle-blower letters: seven successful letters retrieved via an Internet search and six unsuccessful ones retrieved from a Big Four accounting firm contact.[4] All unsuccessful whistle-blower letters were kept confidential and anonymous. We were thus unaware of such information as the firm name, employee's name, or company location, but we were told the letters were unsuccessful.

We used the Linguistic Inquiry Word Count Program (LIWC, 2007) to perform content analysis on both whistle-blower letter samples. LIWC was developed by researchers at the University of Texas at Austin and the University of Aukland, New Zealand based upon four decades of literature relating to emotional, cognitive, and structural components of verbal and written speech samples.[5] LIWC analyzes emotional, cognitive, and structural components present in written speech; it identifies parts of speech and syntax and analyzes the frequencies of occurrences of the variables. All variables except word count and words per sentence are standardized as a percentage of total words. For example, Table 1 shows that on average, 2.94% of the successful whistle-blower letters are comprised of first person singular words (I, me, my).

[4] As described in footnote 1, for purposes of this study, a successful whistle-blower claim is one that results in a prosecution in a US court of law.

[5] See Pennebaker and Francis (1996) for one of the first LIWC external validity tests.

Due to the small sample sizes of whistle-blower letters, we used nonparametric statistics (univariate and two-sample) to examine the medians.

[Insert Table 2 about here]

Results and Discussion

Successful Whistle-Blower Letters

Successful whistle-blower letters should contain self-references, have more written complexity, and provide specificity using examples and grammatical structure. Table 2 shows all variables of interest differing statistically from zero. Successful whistle-blower letters are comprised of 2.1% (sig = 0.02) self-reference. Their writing contains 2,361 words (sig = 0.02) of which 27.19 % (sig = 0.02) of the words are over five letters. The letters contain 26.49 (sig = 0.02) words per sentence and have a readability of 37.6% (sig = 0.02). The letters contain many personal examples (0.91% perception, sig = 0.02; 1.94% causation, sig = 0.03), and their format contains multiple lists and stylistic example indicators ranging from 0.09% (sig = 0.02) usage of colons to 4.55% (sig = 0.02) usage of commas.

Unsuccessful Whistle-Blower Letters

Unlike successful whistle-blower letters, not all variables in unsuccessful ones (e.g. self-reference, writing complexity and specificity) differ statistically from zero (see Table 3). For example, while 2.1% of the unsuccessful letters contain self-interest terms, this variable is not statistically significant (sig = 0.13). But all writing complexity variables statistically are significant. Unsuccessful letters contain 327 words (sig = 0.03) of which 22.3% (sig = 0.03) contain over five letters per word. The letters contain 19.4 (sig = 0.03) words per sentence with a readability of 56.9% (sig = 0.03). Very few unsuccessful whistle-blower letters contain significant examples. For instance, the only statistically significant example variables are

causation examples (1.66%, sig = .03) and perhaps the use of commas (1.81%, sig = 0.06). Because some variables are not individually statistically significant, we examine whether they statistically differ between the two groups of letters (successful and unsuccessful).

[Insert Table 3 about here]

Comparison of Whistle-Blower Letters

Table 4 contains the comparison results, showing significant differences between successful and unsuccessful letters:[6] readability (sig = 0.01), total words (sig = 0.03), words per sentence (sig = 0.03), six letter or more words (sig = 0.03), perception (sig = 0.03), use of numerals (sig = 0.03), use of commas (sig = 0.03), and use of quotation marks (sig = 0.03). The results imply that successful whistle-blower letters have higher written complexity (less readability and greater total words, words per sentence, and six letter or more words), use more perception examples, more lists of examples (numerals), more commas, and more quotation marks in comparison to unsuccessful whistle-blower letters. Thus, while unsuccessful letters contained many of the same individually significant characteristics as successful ones (e.g. numerals), they contained inadequate characteristics to convince the reader to pursue a formal investigation.

These findings indicate some differences between successful and unsuccessful whistle-blower letters. The letter writer's credibility is crucial and often relates to having personal knowledge of an incident (self-reference) and multiple examples demonstrating this knowledge (specificity). The letter's complexity also associates with credible writing. Using the analyses, we recommend that potential whistle-blowers ensure that their letters contain (1) self-reference,

[6] Even though the research is exploratory, based upon the literature, we are able to predict directions and therefore use one-tail tests.

indicating first-hand knowledge of the incident, (2) a higher level of writing, and (3) as many examples (numeric lists, quantifiers, causal relationships, citations, and explanations) requiring the use of various styles (commas, semi-colons, parentheses, and quotations) as possible documenting the incident. We also recommend that employers provide employees with this information in educational programs to increase employee willingness to report potential fraud.

IV. CONCLUSION

This study investigates characteristics of successful whistle-blower letters in order to recommend how potential whistle-blowers should convey witnessed incidents. These results should provide guidance for employees on what to include in written whistle-blower communications. Employers should use these results to enhance training materials to include how to raise issues in addition to training related to spurring valid whistle-blower allegations. Limitations of this study are related to the small sample size and the anonymity of the unsuccessful letters, which future research could include obtaining larger samples for analysis to determine if the results stand up.

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Figure 1: Reporting Preparedness (Source: Ethics Resource Center 2009)

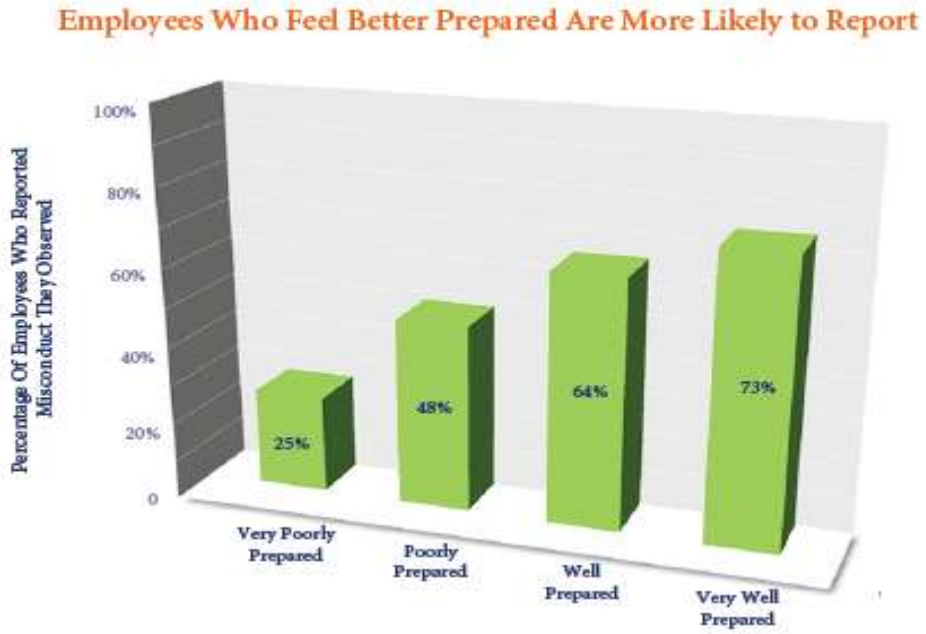

Table 1: Variables and Predicted Directions

Category	Variable	Direction: Successful vs. Unsuccessful
Self interest		
	I (first person singular, e.g. I, me,mine) _The number of occurrences divided by total number of words.	>
Complexity		
	Readability (Flesch reading ease) – The number of syllables divided by the average words per sentence. Longer sentences and longer words leader to greater reading difficulty and thus, a lower Flesch score.	<
	Words with six or more letters – The number of occurrences divided by total number of words.	>
	Words per sentence – Mean words per sentence.	>
	Total words – Word count.	>
Credibility/specificity		
	Perception (e.g. observing, heard, feeling) – The number of occurrences divided by total number of words.	>
	Causation (e.g. because, hence) - The number of occurrences divided by total number of words.	>
	Numerals - The number of occurrences divided by total number of words.	>
	Comma - The number of occurrences divided by total number of words.	>
	Colon - The number of occurrences divided by total number of words.	>
	Semicolons - The number of occurrences divided by total number of words.	>
	Quotation marks - The number of occurrences divided by total number of words.	>
	Parentheses - The number of occurrences divided by total number of words.	>

Table 2: Successful Whistle-Blower Letters[a]

		Mean	Median	Standard Deviation	Minimum	Maximum	Median Univariate Significance Level
Self interest							
	I (first person singular)	2.94	2.05	2.58	0.95	8.45	0.0156*
Complexity							
	Readability (Flesch reading ease)	39.17	37.60	10.25	28.50	54.50	0.0156*
	Words with six or more letters	26.18	27.19	3.34	21.42	29.71	0.0156*
	Words per sentence	28.60	26.49	7.77	18.20	39.27	0.0156*
	Total words	3654.29	2361.00	3124.00	343.00	9384.00	0.0156*
Credibility/specificity							
	Perception (observing, heard, feeling)	0.92	0.91	0.29	0.42	1.20	0.0156*
	Causation (because, hence)	1.69	1.94	1.03	0.00	2.63	0.0313*
	Numerals	1.77	1.19	1.22	0.67	3.81	0.0156*
	Comma	4.59	4.55	1.07	3.24	6.62	0.0156*
	Colon	0.58	0.09	0.94	0.00	2.62	0.0156*
	Semicolons	0.65	0.09	1.39	0.00	3.79	0.0313*
	Quotation marks	1.07	1.45	0.55	0.29	1.53	0.0156*
	Parentheses	0.43	0.41	0.34	0.00	1.09	0.0313*

[a] All variable means/medians are percentages (e.g. successful "I" median = 2.05%) expect for words per sentence and total words.
*Significant at the 5% level; **Significant at the 10% level

Table 3: Unsuccessful Whistle-Blower Letters[a]

		Mean	Median	Std. Deviation	Minimum	Maximum	Median Univariate significance level
Self interest							
	I (first person singular)	2.35	2.09	2.26	0.00	5.61	0.1250
Complexity							
	Flesch reading ease	55.37	56.90	10.70	36.00	65.60	0.0313*
	Words with six or more letters	23.90	22.25	3.67	20.86	30.37	0.0313*
	Words per sentence	20.76	19.40	5.96	15.13	31.15	0.0313*
	Total words	722.50	327.00	1112.00	70.00	2979.00	0.0313*
Credibility/specificity							
	Perception (observing, heard, feeling)	0.56	0.43	0.65	0.00	1.76	0.1250
	Causation (because, hence)	1.86	1.66	0.85	0.88	2.86	0.0313*
	Numerals	0.44	0.26	0.52	0.00	1.32	0.1250
	Comma	2.07	1.81	1.63	0.00	4.01	0.0625**
	Colon	0.14	0.10	0.16	0.00	0.36	0.2500
	Semicolons	0.92	0.15	0.13	0.00	0.27	0.2500
	Quotation marks	0.19	0.00	0.30	0.00	0.71	0.5000
	Parentheses	0.50	0.39	0.54	0.00	1.43	0.1250

[a] All variable means/medians are percentages (e.g. unsuccessful "I" median = 2.09%) expect for words per sentence and total words.
*Significant at the 5% level; **Significant at the 10% level

Table 4: Comparison of Whistle-Blower Letters[a, b]

		Median - Successful Letters	Median – Unsuccessful Letters	Successful vs. Unsuccessful Median Test Values
Self interest				
	I (first person singular)	2.05	2.09	0.4023
Complexity				
	Readability (Flesch reading ease)	37.60	56.90	0.0084*
	Words with six or more letters	27.19	22.25	0.0289*
	Words per sentence	26.49	19.40	0.0289*
	Total words	2361.00	327.00	0.0289*
Credibility/specificity				
	Perception (observing, heard, feeling)	0.91	0.43	0.0289*
	Causation (because, hence)	1.94	1.66	0.4023
	Numerals	1.19	0.26	0.0289*
	Comma	4.55	1.81	0.0289*
	Colon	0.09	0.10	0.4023
	Semicolons	0.09	0.15	0.2048
	Quotation marks	1.45	0.00	0.0289*
	Parentheses	0.41	0.39	0.4023

[a] Although the research is exploratory, we use one-tail tests due to predictions from the literature..
[b] All variable means/medians are percentages (e.g. successful "I" median = 2.05%) expect for words per sentence and total words.
*Significant at the 5% level