

He Wrote, She Wrote: Gender Similarities and Differences in Written Business Communication

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The purpose of this research study is to determine whether there are differences between how men and women communicate through written business communication. The study focuses on four aspects of business writing including length of response, readability of the writing, me versus you orientation, and overall positive or negative tone of written communication. No statistically significant differences were found between males and females in the sample used when analyzing the first three variables. However, the use of positive language, as measured by overall positive or negative tone in each writing sample, was more prevalent with women than men.

INTRODUCTION

As a whole, society accepts, and even expects, differences between men and women in the workplace. These differences, often related to leadership and communication style, result in a litany of books and articles in popular media explaining the differences and providing advice on how to work with men and/or women. A recent online search (November 10, 2015) of Amazon books using the search string “Women in Business” resulted in 2,366 hits; the Barnes and Noble site returned a more modest, but still large, 874 listings. From the broad sociological tome *Men are from Mars, Women are from Venus* (Gray, 1992) to today and the targeted-to-women-in-leadership-positions, *Lean In* (Sandberg, 2013); the popular press highlights the differences between the genders and recently focuses on the challenges that women face, especially in the business field.

Popular business communications textbooks, as well as a quick online search, will provide many results touting the differences between how males and females communicate. These sources consistently indicate gender differences do exist in nonverbal communication, management styles, small group communication, dyadic communication, and oral communication. However, much of the academic research has failed to find significant differences between the two (Hyde, 2005; Mehl, Vazire, Ramirez-Esparza, Slatcher, and Pennebaker, 2007).

On one hand, promoting the gender equality status are academic researchers who use mostly objective measures. On the other hand are 2,366 authors (and a large number of book buyers) who feel, using

subjective experiences, the potential differences between men and women in business warrant further inquiry.

The purpose of this research study is to determine whether there are differences between how men and women communicate through written business communication. The study focuses on four aspects of business writing including (1) length of response, (2) readability of the writing, (3) *me* versus *you* orientation, and (4) overall tone (positive or negative) of written communication. The specific contribution of this research is to measure the differences, using both subjective and objective techniques, to determine if any differences exist between the business writing of males and females.

LITERATURE REVIEW

Communication skills are the most valuable soft skills. In a *Wall Street Journal* survey, business school recruiters ranked 20 skills in terms of importance for business graduates. Communication and interpersonal skills ranked first with 89 percent of recruiters considering them extremely important (Alsop, 2004).

Smetzer and Werbel (1986) summarize how some of the stereotypes about women and communication came into being. Some studies found that women demonstrate ineffective communication characteristics such as verbosity, constrained vocabulary, and indirect requests (Thorne & Henley, 1975). Other writers concluded that the differences were based on opinion, speculation, introspection, tentative findings, and personal experience (Bradley, 1981; Barryman, 1980).

Another basis of the debate on gender studies can be traced to biological and social variances. A few studies will be mentioned briefly, but a full discussion is beyond the scope of this study which focuses specifically on business writing. Because biology establishes the norms of behavior, it makes sense to explore the science behind gender differences to gain insight and perspectives.

Women Communicate Differently than Men

Biology

Science tells us that male and female brains function differently. For example, studies indicate that men's brains are 10 percent larger than women's brains. But before accepting that as evidence of male superiority, be aware that the same science suggests that men only use half their brains at a time. When men perform a specific task, brain activity is only registered in the side of the brain where that function resides. That, the scientists tell us, enables men to be better at abstract reasoning and to possess stronger navigational abilities and motor skills. Women, on the other hand, have a larger Corpus Callosum—the area at the base of the brain containing nerve endings which connect both sides of the brain. This causes brain activity to occur on both sides of the brain simultaneously, allowing women to incorporate an emotion assessment with stated facts in a way men do not. This is how the notion of women's intuition evolved (Brady, 2006).

It is important to note that the science is controversial. This is because the results can only be claimed when looking at large groups of men and women. In a one-on-one comparison, the differences do not emerge. Some of these roles are based on false beliefs about the nature and scope of the biological differences between the genders, e.g., the view that women are not capable of leading because they are too emotional or that men cannot be nurturers. The “facts” continue to be subject to revisions, reinterpretations, and criticisms (Brady, 2006).

Sociology

Many of the norms we see in today's workplace have their roots on the playground. Think back to your own childhood. Boys were “rewarded” when they competed, challenged, and won. Girls were “praised” and “rewarded” when they acquiesced, accommodated, and compromised. Girls got better results phrasing ideas as suggestions rather than orders, while boys stated opinions in the strongest possible terms and waited to be challenged. One rarely heard a little boy on the playground being told,

“don't be so bossy!” Boys learned early on to use conversation to inform or instruct, while girls learned to use conversation to interact and connect (Brady, 2006).

Over the course of history, these cultural norms have designated specific behaviors as “masculine” or “feminine” despite the fact that both sexes may display the behavior. In addition, society still perpetuates a gender based standards of behavior—standards that require women to behave modestly and unselfishly and to avoid promoting their own self-interest (Babcock & Laschever, 2003). Women learn quite early in life, competing and winning against a man can threaten his socially defined masculinity (Babcock & Laschever, 2003).

People typically approach new situations by measuring them against past experiences. As we mature from boys and girls to men and women and move from the playground to the workplace, the established cultural norms create a unique problem for women. Because the world of work was established by men, the “acceptable” behaviors are disproportionately masculine.

In a *Fortune* article, small differences between the numbers of negative comments used by women reviewers and men reviewers were found (Snyder, 2014). She did find that women used 50% more words. However, when the target of the review was a woman, the tone was more negative toward the woman. It is unclear if she was the only evaluator of the tone. Snyder (2015) also found that women used more words in their resumes than men. It must be noted that the samples Snyder used were non-random and focused on the technology industry. (Also, she heads a consulting firm that analyzes writing for gender bias.)

Men and Women Communicate the Same

A cross-gender and cross-cultural team of researchers analyzed data from 396 participants (210 women and 186 men) between 1998 and 2004 (Mehl, Vazire, Ramirez-Esparza, Slatcher, & Pennebaker, 2007). Participants wore voice recorders over a period of several days, and their word use was extrapolated from the number of recorded words. The data failed to reveal a reliable gender difference in daily word use. Women and men both used on average about 16,000 words per day, with very large individual differences around this mean. They concluded, on the basis of available empirical evidence, that the widespread and highly publicized stereotype about female talkativeness is unfounded. In other words, women do not talk any more than men do—this is an urban legend. Men and women tend to talk about the same amount of time, with wide variations between individuals—some men talk a lot, some do not; some women talk a lot, some do not (Mehl et al, 2007).

Two studies in the late 1980s in the *Journal of Business Communication* debunked much of the differences in writing differences (Smeltzer & Werbel, 1986; Sterkel, 1988). Further research shows that gender differences are vastly overestimated, and the two sexes are more similar in personality, communication, cognitive ability, and leadership than realized, according to a review of 46 meta-analyses conducted over the last 20 years (Hyde, 2005).

According to the meta-analysis of studies on gender differences reported in the *American Psychologist*, males and females from childhood to adulthood are more alike than different on most, but not all, psychological variables (Hyde, 2005). Psychological differences based on gender were examined in studies that looked at a number of psychological traits and abilities to determine how much gender influenced an outcome. The traits and variables examined were cognitive abilities, verbal and nonverbal communication, social or psychological traits like aggression or leadership, psychological well-being like self-esteem, motor behaviors like throwing distance, and moral reasoning. Gender differences accounted for either zero or a very small effect for most of the psychological variables examined (Hyde, 2005). Only motor behaviors (throwing distance), some aspects of sexuality, and heightened physical aggression showed marked gender differences.

Furthermore, gender differences seem to depend on the context in which they were measured (Hyde, 2005). In studies where gender norms are removed, researchers demonstrated how important gender roles and social context were in determining a person's actions. In one study where participants in the experimental group were told that they were not identified as male or female nor wore any identification,

neither sex conformed to a stereotyped image when given the opportunity to act aggressively. They did the opposite to what was expected (Hyde, 2005).

HYPOTHESES

Despite urban legends to the contrary, research indicates that men and women use the same number of words in written communication (Smeltzer&Werbel, 1986; Sterkel, 1988), electronic communication (Wright & Wright, 2014), and oral communication (Mehl et al, 2007). However, the male-dominated nature of business still exists and shows differences between the genders (Snyder, 2014). Based upon the biological brain studies, men are more focused on one topic at a time and thus would use a more complex language than women. Women are thought to have a more relationship-orientated communication style (Brady, 2006), which is indicated by a more caring, concerned style of communication focusing on the receiver. As a part of the relationship-orientated style, the woman will want the receiver to feel better about themselves. Men are more focused on the task and, therefore, will use a neutral or negative tone.

To test these assumptions, the researchers have developed the following hypotheses:

H1: Women will have longer responses than men.

H2: Men will use a higher complexity of wording; therefore, their writing will have a more difficult readability level.

H3: Women will have a higher usage of you-oriented language than men.

H4: Women will use a more positive tone in their communication than men.

METHODS

The study included 218 writing samples from 123 male and 95 female students in sophomore-level business communications courses collected over three semesters. After obtaining IRB approval for the study, students were asked to consent to having their writing samples included in the research study. All identifying information was removed from each writing sample and replaced with only the gender of the participant.

As part of their first exam administered using the Blackboard course management system, participants were given the following scenario and asked to write a memo to the employees who displayed poor business etiquette during a lunch with a high-profile client.

As the local manager of an international accounting firm, you place high priority on professional etiquette. Not only does it communicate respect to your clients, it also instills confidence in your firm by showing that you and your staff are aware of and able to meet the expectations of almost any audience. Earlier today, you took four recently hired college graduates to lunch with an important client. You've done this for years and it's usually an upbeat experience for everyone, but today's lunch was a disaster. One of the new employees made not one, not two, but three calls on his mobile phone during lunch. Another interrupted the client several times and even got into a mild argument. The third employee kept making sarcastic jokes about politics, making everyone at the table uncomfortable. And the fourth showed up dressed like she was expecting to bale hay or work in a coal mine, not having a business lunch in a posh restaurant. You've already called the client to apologize, but now you need to coach these employees on proper business etiquette. In the space below, draft a brief memo to these employees, explaining why etiquette is so important to the company's success—and to their individual careers. (Bovée & Thill, 2014, p. 58)

Including the writing task as part of an exam helped to ensure participants took the task seriously and encouraged them to give their best effort in the writing assignment. This was also the first exam, which

was administered before students had learned about positive and negative tone or direct and indirect organizational patterns in the course.

Responses were copied into a Microsoft Word document along with only the writer's gender. Using the built-in features of the word processing software, the following data were obtained for each writing sample: number of words, number of characters, number of paragraphs, number of sentences, number of sentences per paragraph, number of words per sentence, number of characters per word, percent passive sentences, Flesch Reading Ease score, and Flesch-Kincaid Grade Level score. The Flesch Reading Ease formula is one of the oldest and considered one of the most accurate readability formulas. This formula uses the average sentence length and average number of syllables per word to derive a score between 0 and 100, with a higher number indicating an easier reading level. The Flesch-Kincaid Grade Level formula uses similar metrics and converts the result to a grade level that can be equated with the number of years of education required to easily comprehend a passage of text (ReadabilityFormulas.com). Both of these measures are calculated by Microsoft Word using the program's built-in readability statistics.

Further analysis of each writing sample was conducted to collect additional information for each sample. The number of *me* words (I, me, my) and the number of *you* words (you, your) were counted and compared to obtain the overall *you* or *me* orientation of each sample. The number of *you* and *me* words per number of sentences and per total words for each sample was also calculated. Samples with equal numbers of *you* and *me* words were labeled as *neutral*.

Individual sentences in each sample were also scrutinized to aid in determining whether each writing sample had an overall positive or overall negative tone. The first sentence of each sample was labeled as positive, neutral, or negative. The remainder of each sample, along with the opening sentence, was read to determine whether the writing sample had an overall positive or negative tone. This analysis was conducted and recorded separately by two business communication professors, each with years of experience teaching business communications. Any items on which the first two reviewers disagreed were referred to a third reviewer, a veteran management professor, for a final determination of overall tone. Both genders were represented by the reviewers.

RESULTS

The analysis was designed to assess four aspects of the writing samples, including length of response, readability of the writing, *me* versus *you* orientation, and overall tone (positive or negative), as summarized in the four research hypotheses. Relevant measures related to length of response are summarized in Table 1.

TABLE 1
LENGTH OF RESPONSE

Gender	N	Words			Characters			Sentences		
		Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Male	123	37	450	169.91	144	2165	796.41	2	30	9.64
Female	95	61	436	168.06	294	2003	796.83	2	29	10.54

A single factor ANOVA was performed on the number of words, number of characters, and number of sentences, and there were no statistically significant differences found between the males and females regarding number of words ($p = .87$), number of characters ($p = .99$) or number of sentences ($p = .19$). To assess differences in individual sentence length, an additional single factor ANOVA was performed on the number of words per sentence, and no statistically significant differences were found ($p = .39$). Thus, we reject the hypothesis that women will have longer responses than men.

To evaluate the readability level of the writing samples, two measures were used, both of which were calculated by Microsoft Word. The Flesch Reading Ease score, a number from 0 to 100 with higher numbers representing easier reading levels, resulted in an average score of 61.03 for females and 65.78 for males. The single factor ANOVA revealed that this was not a statistically significant difference ($p = .28$). The Flesch-Kincaid Grade Level, in which scores correspond to number of years of education required, averaged 8.85 for females and 8.89 for males. The single factor ANOVA revealed that this was also not a statistically significant difference ($p = .91$). Thus we reject the second hypothesis which is that men will use a higher complexity of wording; therefore, their writing will have a more difficult readability level.

To measure the *me* or *you* orientation of a writing sample, the number of *me* words (I, me, my) and the number of *you* words (you, your) were compared. Samples were labeled as either *me*-oriented or *you*-oriented. Writing samples with equal numbers of *me* and *you* words, or no *me* and *you* words were labeled neutral. To test for any statistically significant differences between males and females, the Crosstabs with Chi-square procedure in SPSS was used, and the results are provided in Table 2.

TABLE 2
ME, YOU, OR NEUTRAL ORIENTATION BY GENDER

			Orientation			Total
			Me	You	Neutral	
Gender	Male	Count	12	103	8	123
		Expected Count	11.8	100.4	10.7	123.0
	Female	Count	9	75	11	95
		Expected Count	9.2	77.6	8.3	95.0
Total	Count	21	178	19	218	
	Expected Count	21.0	178.0	19.0	218.0	

In Table 2, the count rows show the number of writing samples that were *me*-, *you*-, or *neutral*-oriented for both males and females. Overall the samples were predominately *you*-oriented, with 84% of the males and 80% of the females writing *you*-oriented messages. The expected count rows show the number of samples expected for each orientation if the orientation of the samples were statistically independent from gender. In all cases, the count and expected count do not differ significantly from each other at the .05 level ($p = .42$). Therefore, the third hypothesis that women will have a higher usage of *you*-oriented language than men fails.

Finally, the overall tone of each writing sample was assessed. Some samples were more clearly positive or negative, while others were more ambiguous—usually with a combination of positive and negative groups of sentences. This ambiguousness was evident in that the first two reviewers (one male and one female) assessed the overall positive or negative tone of the message and disagreed on 37 (17%) of the 218 writing samples. In determining the overall tone of these samples (tie-breaking), the third reviewer was in agreement with each of the first two reviewers an approximately equal number of times. Because of this potential error in the assessment of tone, the researchers set a higher cutoff point (.1) for the level of significance in testing the fourth hypothesis.

To test for any statistically significant differences between the tone of males and females, the Crosstabs with Chi-square procedure in SPSS was used, and the results are provided in Table 3.

TABLE 3
POSITIVE OR NEGATIVE TONE BY GENDER

			Tone		Total
			Negative	Positive	
Gender	Male	Count	80	43	123
		Expected Count	73.3	49.7	123.0
	Female	Count	50	45	95
		Expected Count	56.7	38.3	95.0
Total	Count	130	88	218	
	Expected Count	130.0	88.0	218.0	

In Table 3, the count rows show the number of writing samples that were negative or positive in tone for both males and females. Both males and females wrote a higher number of negative messages than positive messages with 65% of the males and 53% of the females writing negative messages. The expected count rows show the number of samples expected for each tone if the tone of the samples were statistically independent from gender. These differences are statistically significant at the .1 level ($p = .06$). Therefore, the fourth hypothesis that women will use a more positive tone than men is accepted.

DISCUSSION

There were no statistically significant differences found between the genders when testing the first three hypotheses. Males and females in the sample used the same number and range of words, sentences, and characters; similar complexity of language as measured by readability statistics, and similar amounts of *you-*, *me-*, and *neutral-*oriented language.

However, the use of positive language, as measured by overall positive or negative tone in each writing sample, was more prevalent with women than men. Men were more likely to use negative tone in their admonitions to their subordinates in the writing scenario. While the cutoff value for statistical significance was relaxed to .1 when testing the fourth hypotheses, the actual Pearson Chi-square value of .064 revealed only a 6.4% chance of being wrong when rejecting the null hypotheses. Given that so many of the p -values on previous tests were quite high, showing no statistically significant differences, the researchers feel confident that overall positive or negative tone differences between the business writing of males and females presents the most likely potential for gender differences in business writing and, therefore, warrants further study.

Regarding the ability to determine overall positive or negative tone, the number of disparities among the reviewers (17%) attests to the subjectivity of this measure. The nature of the writing scenario, itself, likely required a more negatively-toned message from the manager to his or her subordinates. This made it difficult to write a more positive message, even if the writer would normally attempt to do so. Many of the writing samples began clearly positively or negatively and then changed tone, whether it was in the second sentence or second paragraph. For example, one writing sample was very positive, supportive, and instructive in tone throughout most of the message, and then closed with a threat to replace the worker if the situation ever happened again.

APPLICATION

This study shows that written business communication might be affected by gender differences. Awareness is the first step towards attitudinal change. Men should not be judged harshly because they use aggressive language in their written communication, nor should women be judged weak because of their more positive focus.

We, as academics, are not sure if we want to suggest that women should write like men in order to get ahead. Nor do we suggest that men should write like women. (As educators, we want them both to write better!) We only suggest that individuals should be judged on their own merit and not stereotyped by gender.

CALL FOR FURTHER RESEARCH

The subject of differences in positive or negative tone could be further explored with similar studies using a variety of additional writing scenarios. Additional measures should be investigated and utilized to more objectively determine the positive or negative tone of the writing samples. Assessing writing samples from both male and female business persons with varying levels of experience and responsibilities, rather than traditional college sophomores, would also enhance the quality of the writing samples, and thus the study.

Differences in gender of the written communication's target audience should also be further explored. The writing scenario used in this study included a mixed group of new employees; one was identified as a male, one was a female, and two were not identified by gender. Snyder (2014) and others indicate that women are reviewed and mentored differently than men. We may quantitatively discover a cycle where girls are taught to be more passive, aggressive women are punished for assertive behavior, and yet men cannot figure out why there aren't more women in the C suite and boardroom.

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