Factors affecting the credibility of reference letters.

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FACTORs AFFECTING THE CREDIBILITY OF REFERENCE LETTERS

by

Vandana Juneja

A Thesis
Submitted to the Faculty of Graduate Studies and Research
through the Faculty of Business Administration
in Partial Fulfillment of the Requirements for
the Degree of Master of Business Administration at the
University of Windsor

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1995

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ABSTRACT:

The purpose of this study is to investigate factors which affect the perceived credibility of letters of reference. More specifically, two factors, those being length of the letter and quality of writing style, are examined. The study questions whether longer or shorter reference letters have different levels of perceived credibility. It also proposes that as the quality of writing style of reference letters improves, their perceived credibility increases. Participants in the study included a random sample of 110 recruiters from various companies in Canada, particularly in the Toronto, Ontario area. Each participant received one of six variations of reference letters representing either a long or a short version of length and a good, average or poor version of quality. One standard questionnaire regarding the letters of reference was also received by each subject. Results of the empirical study suggest that the length of a letter does not affect perceived credibility. Findings also indicate that writing style does affect the perceived credibility of reference letters, although not exactly as predicted. Finally, additional analysis was conducted to determine whether letter length and quality of writing style affect a recruiter's overall assessment of a candidate. However, closer examination revealed that the analysis of overall assessment was measuring a similar construct to that of perceived credibility. Thus, the additional analysis was not examined to a greater extent. Implications of these findings and possible future research on this topic are discussed.
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1. INTRODUCTION

In today's post-recession economy, employers must strive for an objective and effective recruiting process. Such a process must encourage the hiring of employees who will best aid organizations in increasing their competitiveness in a global market. Employers must therefore be aware of factors, both valid and invalid, which influence the recruiting process.

One screening device in the recruiting process is the letter of reference. Most letters of reference are favourable to the recommendee (Peres and Garcia, 1962) and thus, the readers of these letters must attempt to form decisions by using factors other than favourability of the letter (Templer and Thacker, 1986). One such factor which has been suggested as being critical is the credibility of the letter (Knouse, 1983). In this context, credibility is a perception by the reader based on the believability or trustworthiness of the letter writer and a judgment of the likelihood of the letter's predictions turning out to be accurate (Templer and Thacker, 1986). This study will examine reference letters and factors which affect their credibility.

The purpose of this study is to examine how the credibility of reference letters is affected by variations in two factors. These factors are length of the letter of reference and the quality of writing style used by the individual who writes the letter.
II. REVIEW OF THE LITERATURE

Prior to exploring the relationships of various factors with the credibility of reference letters, it would be beneficial to review existing research which has been conducted. The following section presents a discussion of literature relevant to the study of reference letters.

In past research, Muchinsky (1979) stated that letters of reference are perhaps the most under-researched personnel selection device. Furthermore, the majority of past literature on letters of reference is prescriptive rather than empirical. According to Mosel and Goheen (1958), reference letters have received almost no empirical study. One decade later, in 1968, literature indicated once more that psychological and personnel management literature contain only occasional articles on the subject of references, while articles based on research on the subject are virtually non-existent (Browning, 1968). In more recent years, however, research on the subject of reference letters appears to have increased.

Recent research in Canada indicates that reference letters are utilized in the selection procedures of about two-thirds of Canadian organizations (Thacker and Cattaneo, 1992). According to this 1992 study, 65% of Canadian organizations use letters of reference. Categorically, 74% of small businesses utilize reference letters, while 66% and 57% of medium and large businesses use them, respectively. This data suggests that most organizations use letters of reference. More importantly, approximately three-
quarters of small businesses surveyed incorporate the letter of reference into their selection processes. Such letters may be critical for small businesses, as these organizations often might not have extensive resources for the use of other complex selection devices. According to Szonyi and Steinhoff (1982), "...there are over 1 million business firms of all sizes in Canada, excluding small, independent farmers. All studies of these statistics show that at least 95 percent of these firms are 'small'..." Because small businesses are such a large part of the Canadian economy, research which could help them make better selection decisions represents a valuable contribution.

The usefulness of letters of reference goes beyond their use in the selection of employees. As Halatin (1980) explained, reference letters can be used by both prospective and present employers. Letters of reference can aid prospective employers in considering potential candidates, while present employers can use such letters when determining promotions, transfers, or terminations. Letters of reference are also utilized by colleges and universities when selecting students for various programs, awards, and scholarships. In other fields, letters of reference may be used to provide support in legal proceedings, or to obtain various types of security clearance within the workplace. (Halatin, 1980)

While letters of reference are found to be useful in various realms of society, it is evident that readers of these letters may have different motives in requesting them. Beason and Belt (1976) conducted a survey of 150 public sector and 100 private sector employers regarding the use of references. Forty-eight percent of the respondents
indicated that references were merely a device for substantiating information provided directly by the applicant, thirty percent viewed references as a means to obtain additional information about the applicant, and twenty-one percent claimed that references might uncover negative information about the applicant. Thus, several reasons exist for the use of reference letters. On a generalized basis, however, reference letters are utilized in personnel selection "...because they utilize the judgments and information of persons familiar with the applicant." (Muchinsky, 1979)

Because letters of reference are used extensively by many individuals, a question arises regarding what the writers and readers of these letters wish to accomplish. Van Atta (1969) discusses whether a letter should be a positively biased description prepared by a positively biased judge or whether it should be an accurate report prepared by a positively biased or possibly neutral judge. If the goal is to achieve the best possible position, the letter of reference should be positively biased, whereas if the goal is to facilitate placement, a letter containing an accurate description is more useful (Van Atta, 1969). This suggests that readers and writers might not always have similar goals regarding what a letter of reference should accomplish. Van Atta (1969) also states that the way in which one writes letters of reference also depends on convention. For example, an objective description might seem negative in a field of positively biased letters, thus lowering the chances of a recommendee. As a result, it might be important for both readers and writers to recognize different tones which might be present in various letters.
Research indicates that although objective descriptions would be useful in letters of reference, the majority of letters provide information with a positive bias. Siskind (1966) studied reference letters of 33 applicants for psychology internships and stated, "Mine eyes have seen a host of angels!" He found that 87% of all evaluative or descriptive statements in his sample were positive, while only 13% indicated a lack of knowledge or included shortcomings. As a result, he concluded that letters of reference appeared quite unrealistic in their descriptions of interns (Siskind, 1966). Similarly, Solway, Mock, Bostick and Reck (1977) conducted a study and found that only 3% of all statements made on behalf of psychology intern applicants were negative, while 97% were positive. Miller and Van Rybroek (1988) referred to this positive bias in reference letters as "letter inflation." They studied a random sample of intern applicant files and found that 55% were rated "...at the top." Thus, they stated that "...insofar as 55% of applicants in what should have been a roughly normal distribution could not possibly fit into a 10%- or 15%-wide shelf at the top of the candidate pyramid, some individuals must have gotten there as a result of letter inflation" (Miller and Van Rybroek, 1988).

Miller and Van Rybroek (1988) suggest two potential effects of inflated recommendations. First, such letters of reference lose their value as a source from which to make judgments. If the majority of candidates are described in positive terms, a "ceiling effect" is quickly reached and letters become less useful in discriminating among applicants. Second, an accurate, objective, and useful letter may harm a candidate. If the letters of most applicants overstate their qualities, the slightest piece of negative
information or the mention of a deficiency can appear to be less than favourable in comparison to others.

As stated by Levine and Rudolph (1977), one expects that "Reference givers who have closely and frequently observed an applicant performing a job similar to the job being applied for can provide the most potentially useful information" (Reilly and Chao, 1982). However, the true usefulness of reference letters depends on a number of factors. The most important factor is the accuracy of the letter (Thacker, 1995). If all letters tend to be favourable to the recommendee, as indicated by Peres and Garcia (1962), then it is important to be able to discern clear and true differences between various letters.

In order to determine whether letters of reference are useful, it is necessary to understand the issue of their validity. According to Stone and Meltz (1988), validity refers to the degree to which a measure accurately predicts job performance. Selection instruments are valid to the extent that these predictors measure or are significantly related to work behaviours, job products, or outcomes. Thus, validation is required to ensure that predictors are, in fact, able to make useful discriminations among individuals on the basis of their likely success on a job. Research indicates that the validity of reference letters is questionable. A study conducted by Mosel & Goheen (1958) concluded that reference letters show no consistent or sizeable relationship with present job success. In a comparative study between alternative selection procedures, Reilly and Chao (1982) found that "...while the studies reviewed indicated that reference letters have some predictive
value, the level of validity was considerably lower than that reported for tests." Stone and Meltz (1988) concluded that validities between letters of reference and job performance are typically very low, ranging from 0.08 to 0.14.

Reasons for the low validity of reference letters include the following: First, there is a lack of standardization of letters (Stone and Meltz, 1988). Thus, letter writers are free to include or omit information of their own choosing and each writer may have a different, arbitrary style of writing. Second, there is a problem of self-selection, as an individual applicant often selects the letter writer (Stone and Meltz, 1988). With such self-selection, it is highly likely that letters of reference will be positive, or favourable to the applicant. This results in what Miller and Van Rybroek (1988) termed "letter inflation," in which letters of reference are positively biased. The third issue regarding low validity is that a restriction of range occurs, as there is a tendency for all letters to be very favourable (Muchinsky, 1979). The restriction in range is often due to severe leniency errors, as referees tend to emphasize a candidate's good points while playing down the poor ones. As stated by Muchinsky (1979), "The restriction invariably occurs at the high end of the scale with many applicants being evaluated more positively." Finally, Aamodt, Bryan and Whitcomb (1993) discuss three additional factors which contribute to low letter validity. First, letters of reference that are confidential tend to be less lenient; thus, they are more lenient when confidentiality is not a factor, as referees are more likely to provide positive information if they know that the applicant will see the letter. As a result, such letters will be more positive than they should be based on the applicant's actual performance. Second,
knowledge of the applicant affects the validity of a reference letter. Frequently, the individual writing a letter of reference "...either does not know the applicant well or has not observed all aspects of the applicant's behaviour" (Aamodt, Bryan and Whitecomb, 1993). Finally, as stated by Aamodt, Bryan and Whitecomb (1993), there generally tends to be a lack of agreement between two people who provide references for the same person. This low reliability of reference letters also limits their potential validity.

The uncertainty regarding letter validity stems from the fact that research has not been able to determine what specifically makes a letter either "good" or "bad." The problem of restriction of range occurs because a tendency exists for all letters to be very favourable. Thus, one must differentiate favourable letters based on an additional factor. In order to further an understanding of a letter's usefulness, it would be valuable to address the question of what makes a letter of reference credible. Thus, according to Templer and Thacker (1986), if all letters are favourable, the most credible should be selected over the less credible to continue in the selection process. However, prior to addressing the credibility of reference letters, there are four additional factors which might affect the usefulness of letters and of the information which they contain. These factors are vividness of language, referent status, the use of negative information, and confidentiality.

Ralston and Thamelung (1988) studied the effect of vividness of language in letters of reference. While some letters in the study utilized vivid language, contrasting letters
contained 'pallid' or bland, un-exciting language. The study requested that 120 personnel administrators read either a favourable-vivid, unfavourable-vivid, favourable-pallid, or unfavourable-pallid letter of reference regarding an applicant for a management position. Results indicated that vividness of language did influence perceived favourableness of information in the letter. However, vividness of language did not affect a subject's willingness to recommend an applicant (Ralston and Thameling, 1988). Thus, although vividness of language does affect the perceived information value of a letter, it does not affect the evaluation of candidates.

Ralston and Yoder (1989) conducted a study to determine the impact that a referent's status has on the evaluations of job applicants. They hypothesized that applicants having reference letters written by high-status and unknown-status referents would be evaluated more favourably than applicants with letters from a low-status referent. Similarly, they hypothesized that information provided by high-status and unknown-status sources would be perceived as more valuable than information given by a low-status referent. The sample was composed of 300 randomly selected personnel directors from the 1987 American Society for Personnel Administration. Results indicated that a letter from a high-status referent produced a more favourable evaluation than a letter from a low- or unknown-status referent. Similarly, information from high-status referents was viewed as more valuable than the same information provided by low- or unknown-status referents. No significant differences were found between letters from low-status and unknown-status referents (Ralston and Yoder, 1989). These findings
suggest that if equally-qualified applicants have similar references, "... the referent's status might be a critical factor that influences an employer's selection decision" (Ralston and Yoder, 1989).

Mebane (1989) conducted a study in which she surveyed 165 graduate instructors and clinical staff who read and write reference letters for clinical internship applicants. Writers were asked what they would do if asked to write reference letters for students about whom they know negative information. They were also asked whether they would tell a student their feelings about the negative information. Findings indicated that the majority of the subjects would disclose negative information in a letter of reference, and that they generally would tell the student. Furthermore, they felt obligated to both the student and the letter recipient. The readers of the letters, however, did not think that the writers would disclose negative information and also thought that the writers would feel more obligated to the student than to the letter recipient (Mebane, 1989). This leads to the possibility that readers and writers of reference letters do not always have similar goals or feelings of obligation.

One final factor to be explored prior to that of credibility is the confidentiality of reference letters. As found by Aamodt, Bryan and Whitcomb (1993), the confidentiality of reference letters has an effect on their validity. Confidential letters tend to be less lenient, while non-confidential letters are more lenient. Thus, non-confidential letters have a potentially lower validity level, as writers might be influenced by the knowledge that the
individual whom they are describing will be permitted to examine the letters. In an academic context, the Family Education Rights and Privacy Act (1974) gave applicants the right to inspect letters written about them. According to Curtis (1974), "...college admissions officers noted that passage of the Family Education Rights and Privacy Act resulted in increasingly bland and less useful letters of recommendation." This also suggests that confidentiality has an effect on letter validity. Finally, Ceci and Peters (1984) conducted a study in which students requested reference letters, both confidential and non-confidential, from faculty advisors on different occasions. Results showed significant differences between the confidential and non-confidential letters: students were, in fact, rated significantly lower in the confidential letters (Ceci and Peters, 1984). This also indicates an effect on validity, as readers may or may not assign a higher value to confidential letters due to their knowledge that such letters provide lower ratings.

The issue of credibility is important in understanding both the usefulness and accuracy of letters of reference. Some factors which might influence credibility of reference letters are the use of specific examples, length of the letter, and quality of writing style. These factors have been studied in the work of Knouse (1983) and that of Templer and Thacker (1986). Knouse (1983) studied the responses of U.S. personnel directors to letters of reference, while Templer and Thacker (1986) utilized a Canadian sample of university students to follow up on Knouse's work.
Knouse (1983) examined the issue of credibility of reference letters, utilizing a sample of ninety-eight personnel directors. The primary finding of this study was that the use of specific examples enhanced the perceived credibility of the letter writer. Judgments indicated that the letter writer knew the candidate better and was better at writing letters of reference. Findings also concluded that specific examples led to more positive perceptions of the recommendee. As a result of these findings, Knouse determined that the use of specific examples in letters of reference does have an impact on credibility (Knouse, 1983).

Building upon Knouse's work, Templer and Thacker re-examined the use of specific examples and its impact on credibility (Templer and Thacker, 1986). They studied whether it is specific examples per se, or other confounding factors not examined in Knouse's example-specific letter which are linked to perceived credibility. Two confounding factors which they studied are described below, as these factors will also be examined in the present study.

a. LENGTH OF LETTER

Knouse examined the credibility of two types of letters; one version included specific examples and the other version did not. Knouse's no-example letter was approximately two-thirds the length of his example letter (274 vs. 410 words). Templer and Thacker (1986) hypothesized that it may be that simply increasing the length of a letter raises its credibility, whether or not specific examples are present. In their study, Templer and Thacker (1986) increased the length of the no-example letter to be equivalent
to that of the example letter. Once again, results showed a significant effect for examples, suggesting that Knouse was correct in concluding that it is examples, and not the length of the letter, that increases the credibility.

b. WRITING STYLE

Knouse reported that the writer of the specific examples letter was perceived to be better at writing reference letters than the writer of the no-examples letter. Based on this, Templer and Thacker (1986) hypothesized that well-written letters are judged to be more credible than poorly written letters, irrespective of the use of examples. In their study, Templer and Thacker (1986) found that a letter that was written poorly was perceived as being less credible than a well-written letter.

Although the quantity of research regarding reference letters has been increasing, the majority of the literature originates in the U.S. This indicates a need for Canadian research on the subject, as letters of reference are utilized by approximately two-thirds of Canadian organizations (Thacker and Cattaneo, 1992). Furthermore, at least 95% of Canadian firms are classified as 'small' (Szonyi and Steinhoff, 1982) and 74% of these small businesses use letters of reference (Thacker and Cattaneo, 1992). Due to the extensive use of letters of reference in Canada, the present study will focus on a Canadian sample.
III. RESEARCH QUESTION & HYPOTHESIS

This study will test a research question regarding how length affects the credibility of reference letters. The study will also test a hypothesis regarding how quality of writing style affects letter credibility.

"Specific examples" has already been established by Knouse, Templer and Thacker as a factor which enhances the credibility of reference letters (Knouse, 1983; Templer and Thacker, 1986). Thus, this particular factor will not be manipulated in this study. Rather, all letters which are utilized in the study will include specific examples. In short, the finding that the use of specific examples enhances the credibility of the reference letter (Knouse, 1983; Templer and Thacker, 1986) will be assumed to be true.

Previous research by Knouse (1983) confounded the length of reference letters and the use of examples (the examples letter being longer). Templer and Thacker (1986) increased the length of the no-examples letter so that both the examples and no-examples letters were of equal length. Nevertheless, the letter which utilized specific examples was still found to be more credible. This suggests that it was indeed the examples and not the length of the letter which produced the higher credibility. What remains to be examined is whether length of a letter per se enhances credibility. Two possibilities exist. First, longer letters with no additional information might increase credibility simply because they are longer. Second, it is possible that longer letters are perceived as being too verbose and
thus, result in less credibility. Thus, in the present study, the length of letters will vary, while the use of specific examples will remain constant. This serves as a rationale for the

*research question:*

Is a difference in perceived credibility of letters of reference based on the *length of the letters*? Holding all other factors constant, will a letter of greater length be perceived as being either more or less credible than a letter of shorter length?

Templer and Thacker (1986) demonstrated that reference letters written in a "poor" writing style were perceived as being less credible than letters written in a "good" writing style. However, the extent of this relationship is not clear. That is, it is questionable whether the perceived credibility of reference letters continues to improve as writing style improves. This leads to the *hypothesis:*

A relationship will exist between the perceived credibility of letters of reference and the *quality of writing style of the letters.* More specifically, as writing style improves from poor to average to good, perceived credibility of the letter also improves.

**IV. METHODOLOGY**

**CONSTRUCTION, DESCRIPTION AND ASSESSMENT OF LETTERS OF REFERENCE:**

The "good" letter used by Knouse (1983) was obtained and used as a model for the development of the various versions of letters of reference.¹ The letter was written on university letterhead. It recommended George Williams, a senior management major, as an applicant for a non-specified job. The letter was signed by the student's teacher and

¹Templer and Thacker (1986) also used the Knouse letter as a model for their letters of reference.
advisor, Dr. Charles M. Johnson, an Associate Professor of Management. It described course work undertaken by the student, participation in a research project directed by the writer, future goals of the student, and college leadership roles which the student had held. This basic letter was written in an overall positive tone. Subsequently, several variations of the basic letter were made in order to allow for changes in the independent variables. A copy of the basic letter can be found in Appendix A.

In order to test for the LENGTH OF THE LETTER, a longer version of the basic letter was constructed. The letter was constructed carefully, so that additional information was not included in the longer letter. Rather, the same information was portrayed in a more verbose format. The short letter was lengthened by adding synonyms and re-statements while avoiding the inclusion of specific additional information. For example, the sentence "I have known George as a student, advisee, and research assistant for four years." was lengthened to "I have known George as a student, advisee, and research assistant for four years and am pleased to be able to provide you with my perception of him as a potential employee." (please refer to Appendix B). In total, eleven additional sentences were added in the construction of the longer version of the letter. As a result, the shorter version of the letter was 1 page in length and the longer version was 1 1/2 pages long. More specifically, for "good" quality letters, the short version was 418 words, while the long version was 593 words. Similarly, for "average" and "poor" quality letters, short versions were 419 and 408 words, respectively and long versions were 596 and 595 words, respectively.
In order to test for the independent variable QUALITY OF WRITING STYLE, considerable effort was put into developing three versions of the basic letter. One letter was written using "good" writing style and another utilized an "average" style. In addition, a third letter utilizing a "poorer" style of writing was written. These letters were classified as having "good," "average," and "poor" writing styles, respectively, in order to test for a continuous relationship between writing style and letter credibility. Although the writing style of the letters varied, they were constructed in a manner such that their content and meaning remained the same.

In order to ensure that the letters did in fact represent "good," "average," and "poor" writing styles, they were evaluated by a staff member of the University of Windsor Academic Writing Centre.² According to the staff member, the good letter was judged as having a "...pleasing style with balanced structures, light conversational tone, and logical transitions between ideas." The average and poor style variations were designed to contain the same content and meaning as the good version, but incorporated a number of changes in style which resulted in them being considered average and poor in style when evaluated by an expert in the field. The average letter exhibited errors in diction, awkward phrases and a lack of a professional business-like tone. For example, the average version of the letter stated "Overall, George has done pretty well academically..." rather than the more appropriate "Overall, George has done very well academically." The average letter also contained the sentence "He wants to begin as an assistant manager and move on to

² Thanks are extended to Ron Dumouchelle for his help in evaluating the letters of reference used in this study.
department head..." rather than the more business-like sentence "He would like to begin as an assistant manager and progress to department head." The poor version used simpler and less sophisticated words and phrases such as "He always did good, getting two A's and two B's..." instead of "He consistently did very well, earning two A's and two B's..." and "He gotta hold of 12 local businesses..." instead of "He contacted 12 local businesses." Furthermore, the poor version changed the order of words in a manner which made the style of the letter less elegant. This was primarily achieved by utilizing incorrect syntax. For example, the poor letter stated "George took the following courses while he was a management major from me..." rather than "While he was a management major, George took the following courses from me."

In total, differences in quality of writing style consisted of twenty-five changes over the entire letter. All changes made were limited to modifications which would not alter the content of the letter. (please refer to Appendix B for sample copies of each letter)

When construction of the reference letters was complete, six final variations existed. These letters were classified as:

1. good/short
2. average/short
3. poor/short
4. good/long
5. average/long
6. poor/long
Copies of the aforementioned letters can be found in Appendix B. Differences between the letters are also highlighted in the appendix.

PRE-TESTING OF THE LETTERS

To be assured that the letters were written in good, average and poor writing styles, two methods of evaluation were used. As noted above, the letters of reference were evaluated by a staff member of the University of Windsor Academic Writing Centre. As an expert, he suggested that the three letters were as designed; that is, they portrayed good, average, and poor writing styles. This provides a form of content validity. A letter to confirm assessment of the letters from the Academic Writing Centre is located in Appendix C. Second, a sample of M.B.A. students was utilized, with each student being asked to read a combination of three letters. Each combination consisted of a good, average, and poor letter distributed in various orders. For example, one student might have received a good/average/poor sequence of letters, while another student might have received a poor/good/average sequence. This was to ensure that an error did not occur due to an ordering effect. Students were asked to rank their combinations of letters according to quality of writing style where a rank of "1" was the best quality and "3" was the worst. Results of this survey can be found in Appendix D. The findings indicate that there was a significant difference between the mean ranks of the three variations of letters. It was found that the letter previously assessed as "good" was ranked as having the best quality, the letter assessed as "average" had a middle level of quality and the letter assessed as "poor" exhibited the worst quality of writing style. As a result, these letters
were subsequently classified as "good," "average," and "poor" quality letters, respectively.³

**SAMPLING PROCEDURES:**

The target population consisted of recruiters from organizations within Canada. This group of recruiters represents those who hire university students from various faculties. The list of recruiters was obtained from The Career Directory (1994), a resource located at the University of Windsor Student Placement Office. A minimum sample of at least 60 recruiters was required for the study (i.e., a sample of 10 recruiters per cell). In order to obtain a sample of at least 60 recruiters, a survey package was mailed to 300 recruiters chosen in a random manner from The Career Directory. The procedure for choosing the recruiters was originally to select every second entry in the directory. This provided a sample of 206 recruiters. Subsequently, it was decided that the sample be enlarged. Every second remaining entry in the directory was chosen until a sample of 300 was obtained.

**ADMINISTRATION OF THE QUESTIONNAIRE:**

Data were collected through the use of a questionnaire sent to respondents through the mail. An advantage of this method is that a geographically dispersed sample of subjects which might otherwise be difficult to reach can be contacted simultaneously.

³ One common sentence was removed from all six variations of the letter after the ratings were completed. The sentence was removed for formatting reasons, in order to ensure that the "short" letters would not be more than one page in length. Thus, the ratings were completed when the aforementioned sentence was still part of the letters. However, because the sentence was common to all letters, its removal should not affect the rating of any of the letters.
and at relatively low cost. Furthermore, surveys can be filled out at a time which is convenient for respondents. As a result, it is more likely that respondents will take time to think about their replies, thus increasing the probability of obtaining more valid responses. This method is particularly useful for hard-to-reach respondents who place a high value on responding to surveys at their own convenience. In surveying recruiters of students in various organizations, a mail survey proved to be an appropriate method of collecting data.

Procedure:

A package was mailed to each subject selected to be a part of the study. Each package contained the following:

1. introductory letter
2. ONE of the six variations of reference letters
3. evaluation questionnaire
4. pre-stamped return envelope

The introductory letter provided the recruiters with basic information and requested their support and participation in the study. Although the letter emphasized the fact that the study was being completed as a requirement for partial fulfillment of the M.B.A. degree at the University of Windsor, participation was voluntary. A copy of this letter can be found in Appendix E. In order to encourage a higher response rate, those contacted were offered a report of the results. A pre-stamped return envelope was also included in the package in order to encourage a higher response rate (Zikmund, 1994). Finally, to further encourage participation, a follow-up letter was sent to potential respondents one week after the initial mailing of surveys. Please refer to Appendix F for a copy of this letter.
QUESTIONNAIRE DESIGN:

The present study used eight items developed specifically for this research. Four items were designed to measure the perceived credibility of the letter. The measure of credibility looked at perceived realism, accuracy, credibility of the source of information, and accuracy of prediction. These four items were utilized to form a scale of credibility in an attempt to replicate the scale utilized by Templer and Thacker (1986). Because the present study is intended to further the work of Templer and Thacker (1986), it follows that an identical scale of credibility should be used. Three other items in the questionnaire were designed to measure the overall assessment of a candidate. The measure of overall candidate assessment looked at willingness to interview the candidate, candidate excellence, and how well the writer knows the candidate. Finally, as a reliability check for writing style, respondents were asked whether they perceived the letter in question as being very well written. Answers were recorded on a seven-point scale which ranged from "strongly disagree" to "strongly agree." A sample copy of the questionnaire can be found in Appendix G.

RELIABILITY:

The analysis of credibility was based primarily on items 1, 3, 4, and 7 of the questionnaire. These four items were utilized to form a scale of perceived credibility. To support additional analyses, an overall assessment of the candidate was based on items 2, 5, and 6 of the questionnaire. These three items were utilized to form a scale of the
recruiter's assessment of the candidate. To determine the reliability of the credibility and assessment scales, a Cronbach alpha will be computed.

**RESEARCH DESIGN:**

There are two independent variables in this study, those being length of letter and quality of writing style. Length has two levels (short and long) and quality of writing style has three (good, average and poor). Therefore, a 2x3 analysis of variance will be completed first in order to determine if there are any significant effects. If the ANOVA is significant, then the Duncan post hoc test will be conducted to determine which means are significantly different from each other.

**V. RESULTS**

Please refer to **Appendix H** for the frequency distributions of each of the variables used in this study. **Appendix I** clarifies the variable labels which were used in the credibility questionnaire and **Appendix J** provides the coding manual of the questionnaire. Written comments which respondents noted on questionnaires can be found in **Appendix K**. Please also note that any terms which might require further explanation are defined in a Glossary of Terms located in **Appendix L**.
RESPONSE RATES:

From the 300 recruiters who were asked to participate in the study, 110 surveys were returned, resulting in a 37% response rate. Table 1 provides a breakdown of the response rate for each of the six cells studied.

Table 1:
Letters of Reference Returned by Respondents

<table>
<thead>
<tr>
<th>QUALITY/LENGTH</th>
<th>short</th>
<th>long</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td>23</td>
<td>18</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>(42.6%)</td>
<td>(32.1%)</td>
<td>(37.3%)</td>
</tr>
<tr>
<td>average</td>
<td>13</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>(24.1%)</td>
<td>(37.5%)</td>
<td>(30.9%)</td>
</tr>
<tr>
<td>poor</td>
<td>18</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>(33.3%)</td>
<td>(30.4%)</td>
<td>(31.8%)</td>
</tr>
<tr>
<td>TOTALS</td>
<td>54</td>
<td>56</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>(49.1%)</td>
<td>(50.9%)</td>
<td>(100.0%)</td>
</tr>
</tbody>
</table>

DATA ANALYSIS:

Table 2 provides the correlations between the variables of study.

Table 2:
Correlation Values

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>quality</th>
<th>credibility</th>
<th>assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>length</td>
<td>0.0053</td>
<td>0.0091</td>
<td>0.0062</td>
</tr>
<tr>
<td>quality</td>
<td></td>
<td>0.2099</td>
<td>0.2466</td>
</tr>
<tr>
<td>credibility</td>
<td></td>
<td></td>
<td>0.8016</td>
</tr>
</tbody>
</table>

The alpha values for the credibility and assessment scales were found to be 0.7637 and 0.7731, respectively. This is an unusual finding, as the alpha values (i.e., internal consistency) for each individual scale are less than the correlation between the two scales.
(i.e., $0.76$ and $0.77 < 0.80$). This unusual finding will be addressed later in the Discussion section.

To determine whether credibility is significantly affected by either length or quality of writing style, an ANOVA was conducted. For mean credibility scores, please refer to Table 3.

| Table 3: Means for Length of Letter and Quality of Writing Style on Credibility |
|---------------------------------|-------|--------|-------|
| Main Effects                   | Levels | N*    | Mean  | F Value |
| Length                         | Short  | 51    | 15.4706| 0.0086  |
|                                | Long   | 54    | 15.3889|          |
| Writing Style                  | Good   | 39    | 16.1282| 3.3599**|
|                                | Average| 33    | 16.2424|          |
|                                | Poor   | 33    | 13.7879|          |

** Two Way Interaction
Length x Writing Style          0.383

* Note that the size of N's was not identical because the exact number of recruiters returning questionnaires was not identical between the various letter variations.

** p<0.05

** Research Question:**

With regards to length of letters, the results do not indicate that mean credibility is significantly different for short and long letters ($F=0.012, p>0.05$). As a result, it is not possible to conclude, as suggested in the Research Question, that length has a significant effect on the credibility of a letter of reference.
Hypothesis:

In terms of quality of writing style, results indicate that mean credibility scores are significantly different for quality of writing style ($F = 3.288, p<0.05$). This indicates that overall, quality of writing style does have a significant effect on the credibility of a reference letter. However, it must be determined where the differences in mean credibility scores lie. In order to determine this, a Duncan post hoc test was conducted. The results of the test indicate that there is a significant difference in credibility between good and poor letters ($mean=4.1463$ and $2.0000$ respectively) and between average and poor letters ($mean=3.147$ and $2.0000$ respectively). However, a significant difference does not exist between good and average letters ($mean=4.1463$ and $3.1471$ respectively). As a result, it is not possible to conclude that the Hypothesis is true. Although quality of writing style does have a significant effect on credibility, it cannot be concluded that this effect is continuous.

In an attempt to understand the findings for the Hypothesis, a manipulation check was incorporated into the present study. This involved an analysis of how respondents rated the quality of the letters. This analysis tested whether respondents rated the quality of letters similarly to the way in which they were originally classified. The response to question 8 of the questionnaire (please refer to Appendix G) indicated whether respondents thought the letters they received were very well written. In order to determine whether the original quality classifications of the letters had a significant effect
on respondent rating of how well the letters were written, an ANOVA was conducted.

Please refer to Table 4 for mean respondent rating scores.

<table>
<thead>
<tr>
<th>Table 4: Means for Quality of Writing Style on Respondent Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effect</strong></td>
</tr>
<tr>
<td>Writing Style</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

* p<0.05

In terms of quality, results indicate that mean respondent rating scores are different for each quality of writing style. This indicates that the quality of the letters had a significant effect on the rating which they received from respondents (F=13.458, p<0.05). However, it must be determined where the differences in mean respondent rating scores lie. To test for significant differences in means, a Duncan post hoc test was conducted. Results indicate that there is a significant difference between good and poor letters (means=4.1463 and 2.0000 respectively) and between average and poor letters (means=3.1471 and 2.0000 respectively), but not between good and average letters (means=4.1463 and 3.1471 respectively). Thus, although respondents were able to differentiate between good and poor letters and between average and poor letters, they did not perceive a significant difference between good and average letters.

Additional Analysis:

An additional analysis was conducted with regards to the overall assessment of the candidate in question in the reference letters. This assessment was based on items 2, 5, and 6 of the questionnaire (please refer to Appendix G). These items consider whether
the recruiters would call the candidate for an interview, whether they perceive the individual as an overall excellent candidate, and whether they believe that the writer of the letter knows the candidate very well.

To determine whether length and quality of writing style significantly affect the overall assessment of candidates, an ANOVA was conducted. For mean assessment scores, please refer to Table 5.

| Table 5: Means for Length of Letter and Quality of Writing Style on Overall Assessment of Candidate |
|---------------------------------------------------------------|-----|---------|-----|
| **Main Effects**                                              | **Levels** | **N**  | **Mean** | **F Value** |
| Length                                                        | Short    | 51     | 12.9216 | 0.4551     |
|                                                              | Long     | 54     | 12.4717 |             |
| Writing Style                                                 | Good     | 39     | 13.3846 | 4.1334**    |
|                                                              | Average  | 32     | 13.2500 |             |
|                                                              | Poor     | 33     | 11.3333 |             |

| **Two Way Interaction**                                       | **Length x Writing Style** | **0.271** |

* Note that the size of N's was not identical because the exact number of recruiters returning questionnaires was not identical between the various letter variations. ** p<0.05

The results of this analysis were consistent with the analysis pertaining to credibility. When analyzing the effect of length and writing style on overall assessment of a candidate, the following results were found: The length of a reference letter does not have a significant effect on a candidate's overall assessment (F=0.425, p>0.05). The quality of writing style used in a reference letter has a significant effect on the overall assessment of a candidate (F=4.025, p<0.05). However, a multiple comparison procedure
must be conducted to determine which means are significantly different. To determine this, a Duncan post hoc test was conducted. Results indicate that the mean assessment scores of good and poor letters of reference (means = 13.3846 and 11.3333 respectively) and those of average and poor letters (means = 13.2500 and 11.3333 respectively) are significantly different. However, a significant difference does not exist between good and average letters (means 13.3846 and 13.2500 respectively). It can be concluded that there is a significant difference in overall candidate assessment between good and poor letters and between average and poor letters of reference. However, there is not a significant difference in overall assessment between good and average quality letters. Thus, it can not be concluded that the effect of quality of writing style has a continuous effect on overall assessment.

Although not specific to this study, the relationship between credibility of a letter of reference and the final assessment made by the reader might be of interest. If the sample size was much larger, path analysis could be used to confirm the notion that credibility is, in fact, an intervening variable between quality of writing style and overall assessment of the candidate. However, closer examination of the correlations between the variables (please refer to Table 2) reveals that the credibility measure and the overall assessment measure are highly correlated. More specifically, the correlation between the credibility and assessment scales is approximately 0.80, while the alpha values for the two scales are 0.76 and 0.77, respectively. Thus, the items within each scale are reasonably correlated, as indicated by alpha, the measure of internal consistency. However, the
correlation between the scales is higher than the correlations within the scales. This suggests that both scales are measuring a single construct. As a result, the analysis of overall candidate assessment appears to be redundant and thus, further path analysis would not be appropriate.

VI. DISCUSSION

RESPONSE RATES:

In order to obtain a reasonable sample with which to work, a sample size of at least 60 respondents was required, with 10 respondents required for each cell. Responses received exceeded these numbers, thus allowing for a more complete sample. The largest response was obtained for the “good/short” letter, with 23 responses or 42.6% of the entire sample, while the smallest response was obtained for the “average/short” letter, with 13 responses or 24.1% of the entire sample. All other cells had response rates ranging between the two extremes. When mailing the letters and questionnaires to recruiters, there was a question as to whether “good” quality letters would receive better response rates than “poor” quality letters, due to the fact that recruiters might take the “good” letters more seriously and thus be more likely to respond. This did not, however, appear to be the case, as 31.8% of the total sample belonged to the “poor” cells.
RESEARCH QUESTION:

It was not possible to conclude that length has a significant effect on the credibility of a letter of reference. That is, neither the shorter nor the longer letter was found to be more credible. As a result, the Research Question was not supported. This does not imply that longer letters containing *additional* information are not more credible than shorter letters. It should be noted that the longer letters used in this study *did not* contain any additional information. "Fillers" were used to increase the length without adding new content. Generally, however, longer letters, as a function of being longer, *do* provide more information than shorter letters. Thus, what this research suggests is that "fillers" which increase the length of letters without adding new content do not enhance credibility. The finding that longer letters with such "fillers" do not enhance credibility supports the research of Knouse (1983) and Templer and Thacker (1986). Their research found that it was other factors such as examples, not length, which enhanced credibility.

Although the research suggests that there is no relationship between length and credibility, it is possible that the difference between the short and long versions of reference letters was not significantly large enough for respondents to differentiate between them. The short letter is 1 page in length, while the long letter is 1 1/2 pages. Thus, it is possible that respondents did not perceive a difference in the length of the letters and therefore did not perceive a difference in credibility between short and long letters. The issue of whether or not respondents perceived a difference in length between short and long letters is not known, however, because the questionnaire used in the study
did not ask whether each respondent perceived the reference letter in question as "long" or "short."

HYPOTHESIS:

The results of this study suggest that quality of writing style does have a significant effect on the credibility of reference letters. Good and average letters were perceived as being more credible than the poor letters. However, a significant difference does not exist between good and average letters. As a result, the Hypothesis is not supported. Although quality of writing style does have a significant effect on credibility, based on this research, it can not be concluded that the effect is continuous.

As the analyses of quality of writing style suggested, respondents did not rank the quality of letters classified as "good" higher than that of those classified as "average." Thus, although letters were originally classified as good, average and poor quality, recruiters distinguished between only good and poor letters and between average and poor letters. The perception of poor letters was evident in written comments made by respondents. Such comments indicated that the letters classified as "poor" were considered to be very poorly written with very poor English and errors in diction and grammar (please refer to Appendix K for verbatim comments). Respondents did not, however, perceive "good" quality letters to be better than "average" quality letters. This issue will be discussed later as a limitation of the study.
Four possible explanations for why the results did not measure a significant difference in credibility between good and average letters are as follows. First, quality of letters might influence credibility only to a certain level, beyond which improvements in quality are not relevant and do not affect perceived credibility. Credibility appears to reach a threshold once a basic level of quality is reached. Once the average level of quality is reached, it is possible that further improvements in the quality of writing style do not have an impact on credibility. Second, and perhaps a more plausible explanation, might be that recruiters did not perceive a difference in quality of writing style between letters of reference classified as good and average. Thus, if recruiters were unable to perceive a difference in quality between good and average letters, it follows that results would not measure a difference in credibility between the good and average letters, even if a continuous effect does exist. Third, it is possible that the questionnaire used in the study may not have been sensitive enough to detect differences in perceived credibility. And finally, each recruiter was able to see only one individual letter and thus, there was no real basis for a comparison to be made. That is, the study utilized a between subjects design, in which each subject reads only one letter, whereas a within subjects design, in which each subject reads all letters, might have been more appropriate.

An additional analysis tested whether both length and quality of writing style have a significant effect on the overall assessment of a candidate. Results revealed similar findings to those for credibility. An examination of the correlations in Table 2 reveals a possible explanation for this finding. The correlation between credibility and assessment
was found to have a higher magnitude than the correlations for each of the individual scales of credibility and overall assessment. That is, the correlation between the scales was found to be higher than the correlations within the scales. Due to this high intercorrelation discussed in the results, it was concluded that the analysis of credibility and assessment were actually measuring the same construct. Thus, credibility was not found to be an intervening variable between writing style and assessment.

The quality of writing style of reference letters was found to have a significant effect on the overall assessment of a candidate. A Duncan post hoc test indicated that there is a significant difference in overall candidate assessment between good and poor letters and between average and poor letters of reference. However, there is not a significant difference in overall assessment between good and average quality letters. These findings mirror the findings with respect to credibility. Thus, it can not be concluded that the effect of quality of writing style has a continuous effect on overall assessment. Reasons for this inability to find a continuous relationship might be similar to those discussed for credibility. First, as discussed for credibility, it is possible that quality of writing style is important for recruiters only to a certain level, beyond which further improvements do not significantly affect overall assessment of candidates. Second, recruiters did not perceive the quality of "good" letters as better than that of "average" letters and thus, it follows that they would not find a significant difference for the overall assessment of candidates of good and average letters. This finding is interesting in terms of both reading and writing letters of reference. A letter's writing style should be a
reflection on the writer of the letter, not the candidate about whom he or she is writing. Thus, as the finding confirms, readers of reference letters do not assess candidates differently based on a minimal difference in the quality of writing style (i.e., good vs. average), provided that an average level is reached. However, if a basic level of quality is not reached, the reader's assessment of the candidate will be lower. As a result, writers of reference letters must ensure that a basic level of quality is reached so that their writing styles do not affect candidates in an adverse manner.

In analyzing the correlations among the variables of study, an additional relationship became a possibility. Because quality was found to have a significant effect on both the credibility of a reference letter and the overall assessment of a candidate, the possibility arose that credibility is an intervening variable between quality of writing style and the overall assessment of a candidate. That is, quality of writing style affects the credibility of a reference letter which, in turn, leads to an overall assessment of a candidate. However, due to the high intercorrelation discussed in the results, it was concluded that the analysis of credibility and assessment were actually measuring the same construct. Thus, credibility was not found to be an intervening variable between writing style and assessment.
LIMITATIONS:

A number of limitations were present in the research. Four main limitations relate to the methods used for testing letters, items used to construct the scale of credibility, questions asked in the questionnaire, and the two variables which were studied.

Although respondents were able to differentiate between good and poor letters and between average and poor letters, results did not measure a significant difference between good and average letters. This might be explained, in part, by the methodology used in the study. When pre-testing of the reference letters was conducted with M.B.A. students, each respondent was given three letters to read and was asked to rank them in order of quality (i.e., within subjects design). However, when the actual research was conducted with recruiters, each respondent was given only one letter and was asked to complete a questionnaire regarding the single letter (i.e., between subjects design). Comparing the two methods, there is a possibility that it was more difficult to perceive the level of quality of the average and good letters when reading one letter in isolation, as opposed to reading all three letters together and being required to rank them. Thus, the methodology that required M.B.A. students to differentiate between good, average and poor letters by reading and ranking all three may not be advisable when the research requires subjects to receive only one. The ranking method utilized in the pre-testing of the letters might have been too liberal, as differences are more easily perceived when reading all levels of quality together. The method used in the actual research might have been more realistic, as recruiters in actual hiring situations do receive only one letter of reference, as opposed to
three versions of the same letter. It is recommended that individuals conducting future research should be consistent in the use of testing procedures. In this study, it might have been more appropriate to use a seven-point item questionnaire similar to the one used by recruiters and have each M.B.A. student rate only one of the letters.

Although the four items which made up the scale of credibility were used in order to replicate the scale utilized by Templer and Thacker (1986), they may not have been the most appropriate items. For example, item 4, "The candidate would be an excellent employee," might have been better utilized as part of the scale for overall candidate assessment rather than for credibility. Furthermore, item 4 is so similar to item 5 ("Overall, this is an excellent candidate") that respondents might not have distinguished between the two and thus, it might have been more appropriate to include only one of the two items in the questionnaire. Finally, there may be little relevance to whether specific items were included in the scale for credibility or for overall assessment, as it was eventually concluded that the two scales were measuring a similar construct. Thus, although the items used in this study did replicate those of the study conducted by Templer and Thacker (1986), future studies might carefully consider the items prior to using them.

When reading written comments on returned questionnaires (please refer to Appendix K for verbatim comments), it became apparent that respondents were unable to make certain decisions or statements without further information. For example, when
asked to respond to the statement, "I would definitely call this candidate in for an interview." respondents indicated that it would depend upon the job for which the candidate was applying. Also, when asked to respond to the statement, "Overall, this is an excellent candidate," recruiters stated that they could only comment if they knew for what the person was a candidate. Thus, responses to such questions (please refer to questions 2 and 5, Appendix E) might not have been as accurate or valid as they could have been due to the fact that the questions asked were not specific enough.

Although the two potential factors affecting credibility, length and writing style, were tested as two independent variables, the possibility exists that they are not independent but rather, that they are interrelated. The ideal situation would be that the two variables were independent. However, the possibility exists that a change in the length of a letter has an effect on quality of writing style. It is uncertain whether this effect would be positive or negative. Quality might be perceived as better, with the use of more detailed, impressive language. It might also be perceived as poorer, as business letters are expected to be concise. Longer letters might be perceived as being too verbose and indirect. However, after conducting the research, results indicate that the two factors are not interrelated, as there was not a significant difference between longer and shorter letters.
FUTURE RESEARCH:

Throughout the course of this study, various ideas which might prove interesting for future research became apparent.

As discussed earlier, it was found that length does not affect credibility of reference letters, nor does it affect the overall assessment of a candidate. It is possible, however, that the length of letters might affect other aspects of the hiring process, such as whether or not a letter is read in its entirety or whether it is in fact read at all. As mentioned earlier, time constraints might cause recruiters to screen letters for reading based on their length. Future research might address this issue by studying reading patterns of recruiters who receive letters of reference.

Whether or not a reference letter is read in full or read at all, the possibility exists that the content of the letter is, in fact, not as relevant as other factors. It may be that the important quality of a reference letter is the person by whom it is written. In a past study, Ralston and Yoder (1989) found that information provided by high-status referents is viewed as being more valuable than that of low- or unknown-status referents. With regards to credibility, it is possible that quality of writing style or content do not affect the credibility of letters as much as the individual who writes the letter. The hypothesis arises that the more important or well known the writer of the letter is, the more credible the letter of reference will be. For example, in the extreme, a letter from Lee Iacocca might
be perceived as more credible than one from John Doe, an average individual. Future research might study this issue by testing identical letters of reference written by individuals of varying levels of status, importance and visibility.

It might also be interesting to further develop the work of Ralston and Yoder (1989). As discussed previously, their findings indicated that information provided by high-status referents is viewed as being more valuable than that of low- or unknown-status referents. It might be valuable to study whether such information is still perceived as being more valuable if the high-status referent lacks specific knowledge about the candidate, while the low- and unknown-status referents know the candidate very well. That is, a lack of knowledge about a candidate might lower letter credibility, regardless of referent status.

To further develop the idea that the person who writes a letter of reference is an important factor in its perceived credibility, it is also possible that a letter written by an individual with a higher level of education is perceived as more credible than one written by an individual with a relatively lower level of education. Future research might address this issue by testing identical reference letters written by individuals possessing varying levels of education.
VII. CONCLUSIONS

The results of this study found that length significantly affects neither the credibility of a reference letter nor the overall assessment of a candidate. As a result, it appears that writers of letters of reference need not be overly concerned with the length of letters that they write. However, it would be interesting to learn whether or not length affects other aspects of the hiring process, such as whether or not the letter is read in its entirety or whether it is read at all.

Although, for one reason or another, credibility is not significantly different between good and average letters, there is a significant difference in credibility between good and poor and between average and poor letters. Similar to the findings of Templer and Thacker (1986), quality of writing style appears to be an important factor to consider when writing a letter of reference. Thus, for the writer of the letter of reference, rewriting and editing of letters is clearly worthwhile, as improvements to a certain level can result in the credibility not being influenced by inappropriate factors and thus, make the letter more useful.

Regarding the choice of the sample to use, this study focused on a different group of people than that of the study conducted by Templer and Thacker (1986). Questionnaires were distributed to recruiters rather than to university students, thus resulting in a more realistic sample. These recruiters had indicated that they hire university students from various faculties. As a result, it was evident that they were actively
involved in the recruiting process and were therefore more familiar with evaluating letters of reference. Although the focus of the sample was different than that of the previous study, one group was not necessarily more valid than the other. Rather, responses from recruiters may simply provide a different perspective than those of undergraduate students. Furthermore, certain questions regarding hiring (please see questions 2 and 4 in Appendix G) may have been less meaningful for students than for recruiters, as undergraduates do not have extensive experience with the hiring process. Studies by Knouse (1983) and Templer and Thacker (1986) concluded that quality of writing style does have a significant effect on the credibility of reference letters. The fact that this study found similar results while utilizing a sample of recruiters, rather than personnel directors or undergraduate students, further validates the conclusion that quality of writing style does indeed affect credibility.

In addition to judging reference letters on the basis of their credibility, one might consider their usefulness from another point of view. Reference letters have been shown to exhibit low levels of validity in the hiring process (Stone and Meltz, 1988). This suggests that the level of usefulness of reference letters might be low regardless of their credibility. If validity is low, then letters of reference do not show a significant relationship with present job success. If it is possible to increase this validity in some way, it would prove to be beneficial to individuals relying on such letters. For example, if structured letters such as those often required for graduate schools are used, the likelihood of obtaining similar information for all candidates will improve. This should affect
reliability to some extent which, in turn, can then impact on validity. However, if validity is not addressed and does not improve, the question arises as to whether letters of reference should be used at all. Perhaps, then, other selection devices should be relied upon to a greater extent.

Finally, in further exploration of the usefulness of reference letters, written comments on returned questionnaires (please refer to Appendix K for verbatim comments), indicated that although letters might be used in business situations, they must be combined with other selection devices. Recruiters are not willing to make decisions based on reference letters alone. For example, when asked to respond to the statement, "I would definitely call this candidate in for an interview," respondents indicated that such a decision would not be based on one letter alone, but rather, that a resume would be utilized first. Furthermore, when asked to respond to the statement, "The candidate would be an excellent employee," recruiters indicated that such information could not be determined based on one letter. Finally, general comments made by recruiters indicated that letters of reference are not relied upon heavily. Thus, it appears as though reference letters are most useful as a primary screening device. To further understand this point, one must recognize that a fair, standardized selection process might involve large numbers of applicants who must all be given equal opportunities at success. Thus, it will be most efficient to use the reference letter as an initial screening device to lower the number of individuals in the applicant pool. It is interesting to note that the mere request of three letters of reference serves as an initial screening device in itself. An applicant is regarded
as “out of pool” if he can not find three people to write such letters and “in the pool” if he can (Thacker, 1995). This implies that some candidates can be eliminated quickly if the letter of reference is utilized as an initial screening device. Following the initial process, one can then proceed to use more costly and sophisticated screening methods (i.e., interviews) later in the selection process, when fewer applicants are involved.
REFERENCES:


(14) Miller, R.K. and Van Rybroek, G.J., "Internship letters of recommendation: Where are the other 90%?", Professional Psychology: Research & Practice, 1988 Feb, 19(1), 115-117.


(22) Siskind, G., "Mine eyes have seen a host of angels". American Psychologist, 1966, 21, 804-806.


APPENDIX A:

THE BASIC LETTER OF REFERENCE
Dear Sir/Madam:

I am writing to recommend George Williams as a very good prospective employee for your company. I have known George as a student, advisor, and research assistant for four years.

George took several courses from me while he was a Management major here: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He did consistently very well earning two As and two Bs in these courses. George has a definite interest in the people side of management as evidenced in the good work he has done in my courses. He also has a strong quantitative background. He has taken Differential and Integral Calculus, Intermediate Calculus, Introduction to Computer Programming for Business, Introduction to COBOL, and Introductory and Advanced Operations Research. He received five As and two Bs in these courses. Overall, he has done very well academically; he has a 3.25 Grade Point Average for coursework in his major area and a 3.45 Grade Point Average for all coursework. I would rank him as among the top three students in our program at this time.

In his senior year, George assisted me in a research project investigating how managers employ intrinsic rewards as motivational devices for their subordinates. George was involved in every stage of the project. Initially he did a literature review entailing over 75 sources. He then wrote 35 prototype survey questions of which we used 20 in the final survey. He contacted 12 local businesses as possible research sites; we eventually were able to use four of these sites, where George helped me administer 250 surveys. Finally, he keypunched the data and ran the statistical computer program we wrote together.

In my role as his advisor I have had the opportunity to talk to George over two dozen times about his future plans. He would like to begin as an assistant manager and progress to department head by his tenth year on the job. By his twenty-fifth year he would like to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I should like to comment on his leadership skills. He is an organizer and actively seeks leadership roles. Currently, he is president of the Management Club, treasurer for Alpha Mi Alpha fraternity, and is on the executive board of the Business Forum.

In sum, I believe George Williams would be a most valuable asset to your company.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
APPENDIX B:

SIX VARIATIONS OF REFERENCE LETTERS
WITH DIFFERENCES HIGHLIGHTED

The following letters represent the six variations of letters used in this study. These versions are: good/short, average/short, poor/short, good/long, average/long and poor/long in that order. The differences between the letters are also highlighted. Differences in quality of writing style (i.e., differences between good, average and poor letters) are underlined while differences in length (i.e., additions made to create longer letters) are italicized.
Dear Sir/Madam:

I am writing to you to recommend George Williams as a very good prospective employee for your company. I have known George as a student, advisee, and research assistant for four years.

While he was a management major, George took the following courses from me: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He consistently did very well, earning two A’s and two B’s in these courses. George has a definite interest in the people side of management as evidenced in the consistently fine work which he has produced in my courses. Furthermore, he also has a strong quantitative background. He achieved five A’s and two B’s in these courses. Overall, George has done very well academically; he has achieved a 3.25 Grade Point Average for course work in his major area and a 3.45 Grade Point Average for all course work. I would rank him among the top three students in our program at this time.

In his senior year, George assisted me in a research project which investigated how managers employ intrinsic rewards as motivational devices for their subordinates. George was involved in every stage of the project. Initially, he conducted a literature review entailing over 75 sources. He then wrote 35 prototype survey questions, 20 of which we used in the final survey. He contacted 12 local businesses as possible research sites and we were eventually able to use four of the sites. George helped me administer 250 surveys at the research sites. Finally, he keypunched the data and ran the statistical program which we wrote together.

In my role as his advisor, I have had the opportunity to talk to George about his future plans more than twenty times. He would like to begin as an assistant manager and progress to department head by his tenth year on the job. By his twenty-fifth year, he would like to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I would like to comment on his leadership skills. He is an organizer who actively seeks leadership roles. Currently, he is president of the Management Club, serves as treasurer for Alpha Mu Alpha fraternity, and is on the executive board of the Business Forum.

In sum, I believe George Williams would be a most valuable asset to your company. If you would like any further information regarding Mr. Williams, please do not hesitate to contact me.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
Dear Sir/Madam:

I am writing to you to recommend George Williams as a very good prospective employee for your company. I have known George as a student, advisee, and research assistant for a period of four years.

While he was a management major, George took from me the following courses: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He always did very well, getting two A's and two B's in these courses. George has a definite interest in the people side of management as can be seen in the consistently good work he produced in my courses. Furthermore, he also has a strong quantitative background. He achieved five A's and two B's in these courses. Overall, George has done pretty well academically; he has achieved a 3.25 Grade Point Average for course work in his major area and a 3.45 Grade Point Average for all course work. I would rank him among the top three students at this time in our program.

In his senior year, George helped me in a research project which investigated how managers employ intrinsic rewards as motivational devices for their subordinates. George took part in every stage of the project. Initially, he did a literature review entailing over 75 sources. He then wrote 35 prototype survey questions and we used 20 of them in the final survey. He got a hold of 12 local businesses as possible research sites and we were eventually able to use four of the sites. George helped me administer 250 surveys at the research sites. Finally, he keypunched the data and ran the statistical program which we wrote together.

In my role as his advisor, I have had the opportunity to talk to George about his future plans more than two dozen times. He wants to begin as an assistant manager and move on to department head by his tenth year on the job. By his twenty-fifth year, he wants to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I want to comment on his leadership skills. He is an organizer who actively seeks leadership roles. Currently, he is president of the Management Club, treasurer for Alpha Mu Alpha fraternity, and on the executive board of the Business Forum.

In sum, I believe George Williams would be the most valuable asset to your company. If you want any more information regarding Mr. Williams, please do not hesitate to contact me.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
Dear Sir/Madam:

I am writing to you in order to recommend George Williams as a very good prospective employee for your company. I knew George as a student, advisee, and research assistant during four years.

George took the following courses while he was a management major from me: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He always did good, getting two A’s and two B’s in these courses. George has a definite interest in the people side of management as could be seen in the good work he always produced in my courses. Also, he has a strong quantitative background. He got five A’s and two B’s in these courses. Overall, George has done academically pretty good; he has achieved a 3.25 Grade Point Average for course work in his major area and a 3.45 Grade Point Average for all course work. I will rank him as among the top three students at this time in our program.

George helped me in a research project in his senior year which investigated how managers employ intrinsic rewards as motivational devices for their subordinates. George was in every stage of the project. First, he did a literature review entailing over 75 sources. He then wrote 35 prototype survey questions, and we used 20 of them in the final survey. He gotta hold of 12 local businesses as possible research sites and we were eventually able to use four of the sites. George helped me administer 250 surveys there. Finally, he keypunched the data and ran the statistical program which we wrote together.

In my role as his advisor, I have had the opportunity to talk to George more than two dozen times about his future plans. He wanted to begin as an assistant manager and then be department head by his tenth year on the job. By his twenty-fifth year, he wanted to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I wanted to comment on his leadership skills. He is an organizer who seeks actively leadership roles. He is now president of the management Club, treasurer for Alpha Mu Alpha fraternity, on the executive board of the Business Forum.

In sum, I believe George Williams is a most valuable asset to your company. If you want any more information, please do not hesitate to contact me regarding Mr. Williams.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
Dear Sir/Madam:

I am writing to you to recommend George Williams as a very good prospective employee for your company. I have known George as a student, advisee, and research assistant for four years and am pleased to be able to provide you with my perception of him as a potential employee.

While he was a management major, George took the following courses from me: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He consistently did very well, earning two A's and two B's in these courses. George has a definite interest in the people side of management as evidenced in the consistently fine work which he has produced in my courses. Furthermore, he also has a strong quantitative background. He achieved five A's and two B's in these courses. Overall, George has done very well academically; he has achieved a 3.25 Grade Point Average for course work in his major area and a 3.45 Grade Point Average for all course work. I would rank him among the top three students in our program at this time. I believe that his interest in working with people is extremely important in today's workplace. Furthermore, he has performed well in my courses, particularly those which are more quantitative. George's capabilities in the realms of both people and technical specialization suggest that he will provide a welcome breadth of competence to the position.

In his senior year, George assisted me in a research project which investigated how managers employ intrinsic rewards as motivational devices for their subordinates. George was involved in every stage of the project. Initially, he conducted a literature review entailing over 75 sources. He then wrote 35 prototype survey questions, 20 of which we used in the final survey. He contacted 12 local businesses as possible research sites and we were eventually able to use four of the sites. George helped me administer 250 surveys at the research sites. Finally, he keypunched the data and ran the statistical program which we wrote together. He was helpful in all aspects of the research. I found him to be a valuable asset throughout the project. It is difficult to say how smoothly the project would have progressed without his help. Suffice it to say, I was quite happy not to have to conduct the project without George.

In my role as his advisor, I have had the opportunity to talk to George about his future plans more than a dozen times. He would like to begin as an assistant manager and progress to department head by his tenth year on the job. By his twenty-fifth year, he would like to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I would like to comment on his leadership skills. He is an organizer who actively seeks
leadership roles. Currently, he is president of the Management Club, serves as treasurer for Alpha Mu Alpha fraternity, and is on the executive board of the Business Forum. In today’s workplace, it is going to be important to have strong, enthusiastic and highly motivated leaders to take organizations into the twenty-first century. George has the skills, interest and motivation to be one of those leaders.

In sum, I believe George Williams would be a most valuable asset to your company. It is my opinion that George would be an excellent addition to any company. If you would like any further information regarding Mr. Williams, please do not hesitate to contact me.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
Dear Sir/Madam:

I am writing to you to recommend George Williams as a very good prospective employee for your company. I have known George as a student, advisee, and research assistant for a period of four years and am happy to tell you what my perception of him as a potential employee is.

While he was a management major, George took from me the following courses: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He always did very well, getting two A's and two B's in these courses. George has a definite interest in the people side of management as can be seen in the consistently good work he produced in my courses. Furthermore, he also has a strong quantitative background. He achieved five A's and two B's in these courses. Overall, George has done pretty well academically; he has achieved a 3.25 Grade Point Average for course work in his major area and a 3.45 Grade Point Average for all course work. I would rank him among the top three students at this time in our program. I think that his interest in working in today's workplace with people is extremely important. Furthermore, in my courses he has done well, especially the more quantitative ones. George's capabilities in the areas of both people and technical specialization suggest that he will bring a breadth of competence to the position that is welcome.

In his senior year, George helped me in a research project which investigated how managers employ intrinsic rewards as motivational devices for their subordinates. George took part in every stage of the project. Initially, he did a literature review entailing over 75 sources. He then wrote 35 prototype survey questions and we used 20 of them in the final survey. He got a hold of 12 local businesses as possible research sites and we were eventually able to use four of the sites. George helped me administer 250 surveys at the research sites. Finally, he keypunched the data and ran the statistical program which we wrote together. He was helpful in all aspects of the research. I found him throughout the project to be a valuable asset. It is difficult to say without his help how smoothly the project would have progressed. It is sufficient to say that I was quite happy not to have to do the project without George.

In my role as his advisor, I have had the opportunity to talk to George about his future plans more than two dozen times. He wants to begin as an assistant manager and move on to department head by his tenth year on the job. By his twenty-fifth year, he wants to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I want to comment on his leadership skills. He is an organizer who actively seeks...
leadership roles. Currently, he is president of the Management Club, treasurer for Alpha Mu Alpha fraternity, and on the executive board of the Business Forum. In today's workplace, to take organizations into the twenty-first century, it would be important to have strong, enthusiastic and highly motivated leaders. George is going to have the skills, interest and motivation to be one of those leaders.

In sum, I believe George Williams would be a most valuable asset to your company. I think that George would be very good person to add to any company. If you want any more information regarding Mr. Williams, please do not hesitate to contact me.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
Dear Sir/Madam:

I am writing to you to recommend George Williams as a very good prospective employee for your company. I knew George as a student, advisee, and research assistant during four years and am glad to be able to tell you what I think about him being a potential employee of yours.

George took the following courses while he was a management major from me: Introductory Management, Industrial Motivation, Personnel Management, and Principles of Supervision. He always did good, getting two A’s and two B’s in these courses. George has a definite interest in the people side of management as could be seen in the good work he always produced in my courses. Also, he has a strong quantitative background. He got five A’s and two B’s in these courses. Overall, George has done academically pretty good; he has achieved a 3.25 Grade Point Average for course work in his major area and a 3.45 Grade Point Average for all course work. I will rank him as among the top three students at this time in our program. I think that his interest in working in today’s workplace with people is really important. On top of that, in my courses he has done good, especially in the more quantitative ones. George’s capabilities in the areas of both people and technical specialization tells me that he will bring a breadth of competence to the position that is welcome.

George helped me in a research project in his senior year which investigated how managers employ intrinsic rewards as motivational devices for their subordinates. George was involved in every stage of the project. First, he did a literature review entailing over 75 sources. He then wrote 35 prototype survey questions, 20 of them in the final survey. He gotta hold of 12 local businesses as possible research sites and we were eventually able to use four of the sites. George helped me administer 250 surveys at the research sites. Finally, he keypunched the data and ran the statistical program which we wrote together. He was helpful in every part of the research. I thought throughout the project that he was a really good asset. It isn’t easy to say without his help how smoothly the project would have gone on. It is suffice that I was really happy not to have to do the project without George.

In my role as his advisor, I have had the opportunity to talk to George more than two dozen times about his future plans. He wanted to begin as an assistant manager and then be department head by his tenth year on the job. By his twenty-fifth year, he would like to be a vice president. Obviously, he has ambitious goals for the future.

Finally, I wanted to comment on his leadership skills. He is an organizer who seeks actively
leadership roles. He is now president of the management Club, treasurer for Alpha Mu Alpha fraternity, on the executive board of the Business Forum. *In today's workplace, to take organizations into the twenty-first century, it would be important to have strong, enthusiastic and really motivated leaders. To be one of those leaders George is going to have the skills, interest and motivation.*

In sum, I believe George Williams is a most valuable asset to your company. *I think that to add to any company, George would be a really good person.* If you want any information, please do not hesitate to contact me.

Sincerely yours,

Charles M. Johnson, Ph.D.
Associate Professor of Management
APPENDIX C:

ASSESSMENT OF LETTERS OF REFERENCE FROM
THE UNIVERSITY OF WINDSOR
ACADEMIC WRITING CENTRE
27 March 1995

FROM: Ron Dumouchelle, AWC

TO WHOM IT MAY CONCERN

SUBJECT: Sample letters of Vandana Juneja, MBA Candidate

I have examined the long and short sample letters supplied by Vandana Juneja and find them to be good, average and poor examples of reference letters.

While the three long and three short letters are, in essence, the same, in that they each contain the same information, they are subtly different with respect to style, syntax, diction and sentence structure.

Whereas the good letters effect a pleasing style with balanced structures, light conversational tone, and logical transitions between ideas, for example, the poor letters exhibit awkward, if not incorrect, syntax, inappropriate word choices and repetitive sentence patterns. The average letters differ from the others mainly in diction, some awkward phrases and an absence of the business-like tone which characterizes the good letters.

This assessment is based on over twenty years experience evaluating written work and would, I believe, be corroborated by any evaluator whose business it is to assess the merits and weaknesses of all manner of written work from business letters and technical articles to academic dissertations.

I expect that an average to accomplished reader of reference letters would spot the differences in these letters and possibly make inferences about the writers of the letters based on these differences.
APPENDIX D:

M.B.A. STUDENT RANKINGS OF REFERENCE LETTER WRITING STYLES
Rankings by a sample of 30 M.B.A. students yielded the following results, where "1" represents a ranking of "GOOD"; "2" represents a ranking of "AVERAGE"; and "3" represents a ranking of "POOR" writing style.

<table>
<thead>
<tr>
<th>&quot;GOOD&quot; LETTERS</th>
<th>&quot;AVERAGE&quot; LETTERS</th>
<th>&quot;POOR&quot; LETTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;1&quot; 27 respondents</td>
<td>&quot;1&quot; 3 respondents</td>
<td>&quot;1&quot; 0 respondents</td>
</tr>
<tr>
<td>&quot;2&quot; 3 respondents</td>
<td>&quot;2&quot; 25 respondents</td>
<td>&quot;2&quot; 2 respondents</td>
</tr>
<tr>
<td>&quot;3&quot; 0 respondents</td>
<td>&quot;3&quot; 2 respondents</td>
<td>&quot;3&quot; 28 respondents</td>
</tr>
</tbody>
</table>

A Friedman Two-Way Analysis of Variance by Ranks was conducted to determine whether or not there was a significant difference in the M.B.A. student ranking of the "GOOD," "AVERAGE," and "POOR" letters of reference. To complete the test, the following hypotheses were made:

\[ H_0: \] The three variations of letters ("GOOD," "AVERAGE," and "POOR") are of equal quality of writing style.

\[ H_1: \] At least one of the three letters is of better or poorer quality of writing style than the others.

The letters were ranked on a scale of 1 to 3 with 1 being the best quality of writing style and 3 being the worst. Thus, if the results of the Friedman Two-Way ANOVA are significant, then the variable with the lowest mean rank is the letter with the best writing style.

Friedman Two-Way ANOVA for 30 Cases:

<table>
<thead>
<tr>
<th>MEAN RANK</th>
<th>VARIABLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.10</td>
<td>GOOD</td>
<td>GOOD LETTER</td>
</tr>
<tr>
<td>1.97</td>
<td>AVERAGE</td>
<td>AVERAGE LETTER</td>
</tr>
<tr>
<td>2.93</td>
<td>POOR</td>
<td>POOR LETTER</td>
</tr>
</tbody>
</table>

Relevant Data:

<table>
<thead>
<tr>
<th>Cases</th>
<th>Chi Square</th>
<th>Degrees of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>50.467</td>
<td>2</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Since the level of significance of 0.00 is below the critical level of 0.05, it is possible to reject the null hypothesis and determine that the letters are not of equal quality. The probability of committing a Type I error is minimal. The test result illustrates that the ranking of the "GOOD" letter as the best quality letter was not simply due to chance. The "GOOD" letter does have the best quality of writing style, as it has the lowest mean rank in the above table.
To determine whether a significant difference in quality of writing style exists between the "AVERAGE" and "POOR" letters, the Friedman analysis was conducted with only the two variables AVERAGE and POOR.

Friedman Two-Way ANOVA for 30 Cases:

<table>
<thead>
<tr>
<th>MEAN RANK</th>
<th>VARIABLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.07</td>
<td>AVERAGE</td>
<td>AVERAGE LETTER</td>
</tr>
<tr>
<td>1.93</td>
<td>POOR</td>
<td>POOR LETTER</td>
</tr>
</tbody>
</table>

Relevant Data:

<table>
<thead>
<tr>
<th>Cases</th>
<th>Chi Square</th>
<th>Degrees of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>22.533</td>
<td>1</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The "AVERAGE" letter has the lower mean rank and the level of significance is below 0.05. Thus, the "AVERAGE" letter is written with better writing style than the "POOR" letter. There is a low probability of incorrectly stating that the two variables are not of equal quality.

The above Friedman analyses indicate that the null hypothesis can be rejected. The "GOOD," "AVERAGE," and "POOR" variations of letters are not of equal quality of writing style. According to the sample of M.B.A. students utilized, the three variations of the letters are ranked as having good, average and poor writing styles, respectively.
APPENDIX E:

INTRODUCTORY LETTER TO POTENTIAL SURVEY RESPONDENTS
Dear Sir/Madam:

You have been randomly selected to participate in a research study on letters of reference. I am completing this study as a requirement for partial fulfillment of my M.B.A. degree at the University of Windsor. The research is being conducted on factors which affect the credibility of reference letters. I am particularly interested in your participation in this study, as there is presently a lack of Canadian research on the topic of reference letters. It is my goal that research on this topic will benefit employers such as yourself in the future.

Your participation involves reading the enclosed letter of reference and completing the attached questionnaire related to the letter. This participation only takes a few minutes and would be greatly appreciated.

**Your responses will be kept confidential.** Please do not put your name or identify yourself or your company in any way on the questionnaire. The questionnaire has an identification number so that I may check your company name off my mailing list when your questionnaire is returned. This way I can send follow-up letters only to those individuals who do not respond immediately. Your company's name will never be placed on the questionnaire. When you have completed the questionnaire, please place it in the stamped, addressed envelope provided and mail it directly to the Faculty of Business, Administrative Studies, University of Windsor, Attention: Vandana Juneja.

To show my appreciation, I would be happy to provide you with a copy of the results of this research. If you would like to receive a summary of the results, please write "copy of results requested" on the back of the return envelope and print your name and company address below it OR send such a request in a separate envelope. **Please do not put this information on the questionnaire itself.**

Should you require further information or clarification regarding this research study, please feel free to contact me at (519) 258-1217.

Your cooperation and assistance in this research project would be greatly appreciated.

Sincerely,

Vandana Juneja
M.B.A. student, University of Windsor
APPENDIX F:

FOLLOW-UP LETTER TO POTENTIAL SURVEY RESPONDENTS
Dear Sir/Madam:

As you may recall, you have been randomly selected to participate in a research study on letters of reference. I am completing this study as a requirement for partial fulfillment of my M.B.A. degree at the University of Windsor. The research is being conducted on factors which affect the credibility of reference letters. I am particularly interested in your participation in this study, as there is presently a lack of Canadian research on the topic of reference letters. It is my goal that research on this topic will benefit employers such as yourself in the future.

Your participation involves reading a letter of reference and completing a questionnaire related to the letter. An envelope containing these items was sent to you approximately two weeks ago. Your participation would be greatly appreciated as a 100 percent response rate is important to the completion of my study.

I would like to remind you that your responses will be kept confidential. Please do not put your name or identify yourself or your company in any way on the questionnaire. When you have completed the questionnaire, please place it in the stamped, addressed envelope provided and mail it directly to the Faculty of Business, Administrative Studies, University of Windsor, Attention: Vandana Juneja.

Should you require further information or clarification regarding this research study, please feel free to contact me at (519) 258-1217.

Sincerely,

Vandana Juneja
M.B.A. student, University of Windsor
APPENDIX G:

SAMPLE QUESTIONNAIRE
Dear Respondent: After reading the attached letter of reference, please answer the following questions by circling the number which most represents the degree to which you agree or disagree with the following statements. For all questions, the following definitions apply:

1 = strongly agree, 2 = disagree, 3 = slightly agree  
4 = neither agree nor disagree  
5 = slightly agree, 6 = agree, 7 = strongly agree

1. The letter provides a realistic view of the candidate.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

2. I would definitely call this candidate in for an interview.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

3. This letter is an accurate reflection of the candidate's potential  
strongly disagree 1 2 3 4 5 6 7 strongly agree

4. The candidate would be an excellent employee.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

5. Overall, this is an excellent candidate.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

6. The writer of the letter knows the candidate very well.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

7. The writer of this letter is a credible source of information.  
strongly disagree 1 2 3 4 5 6 7 strongly agree

8. The letter is very well written.  
strongly disagree 1 2 3 4 5 6 7 strongly agree
APPENDIX H:

FREQUENCIES FOR TOTAL SAMPLE
1. The letter provides a realistic view of the candidate.

<table>
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<tr>
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<td>16</td>
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2. I would definitely call this candidate in for an interview.

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3. This letter is an accurate reflection of the candidate's potential.

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4. The candidate would be an excellent employee.

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5. Overall, this is an excellent candidate.

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6. The writer of the letter knows the candidate very well.

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7. The writer of this letter is a credible source of information.

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8. The letter is very well written.

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APPENDIX 1:

VARIABLES FOR QUESTIONNAIRE
ID                  questionnaire identification number

REALIST            letter provides a realistic view of candidate

INTERV             would definitely call candidate for an interview

POTEN              letter is accurate reflection of candidate's potential

EMPLOYEE           candidate would be an excellent employee

EXCELL             overall, excellent candidate

KNOWS              writer of letter knows candidate very well

CREDIBLE           writer of letter is credible source of information

WRITTEN            letter is very well written

VERSION            version of letter of reference

QUALITY            quality of writing style

LENGTH             length of letter of reference
APPENDIX J:

CODING MANUAL FOR QUESTIONNAIRE
<table>
<thead>
<tr>
<th>QUESTION</th>
<th>VARIABLE NAME</th>
<th>CODES</th>
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| 6 | KNOWS    | 1 | STRONGLY DISAGREE |
|   |          | 2 | DISAGREE           |
|   |          | 3 | SLIGHTLY DISAGREE  |
|   |          | 4 | NEITHER AGREE NOR DISAGREE |
|   |          | 5 | SLIGHTLY AGREE     |
|   |          | 6 | AGREE              |
|   |          | 7 | STRONGLY AGREE     |

| 7 | CREDIBLE | 1 | STRONGLY DISAGREE |
|   |          | 2 | DISAGREE           |
|   |          | 3 | SLIGHTLY DISAGREE  |
|   |          | 4 | NEITHER AGREE NOR DISAGREE |
|   |          | 5 | SLIGHTLY AGREE     |
|   |          | 6 | AGREE              |
|   |          | 7 | STRONGLY AGREE     |

| 8 | WRITTEN  | 1 | STRONGLY DISAGREE |
|   |          | 2 | DISAGREE           |
|   |          | 3 | SLIGHTLY DISAGREE  |
|   |          | 4 | NEITHER AGREE NOR DISAGREE |
|   |          | 5 | SLIGHTLY AGREE     |
|   |          | 6 | AGREE              |
|   |          | 7 | STRONGLY AGREE     |
APPENDIX K:

WRITTEN RESPONSES ON QUESTIONNAIRES
QUESTION 1:
-if the author is being honest and objective
-too flowery and academic (pl)
-I don't know the candidate to say that it's realistic (gl)
-the view is realistic in the environment in which the experience took place, more importantly how transferable is the experience from the academic environment to the business environment, if I am asked about the "realistic view" in a business environment my answer would be very different

QUESTION 2:
-it would depend upon the job
-decision would be based on resume not reference letter
-for what job? (ps)
-based on this, NO! (gl)
-not on basis of the letter alone (as)
-I would consult reference info after interviewing (gl)
-only if I had a need for someone and if that need required a significant amount of research work as a part of the overall duties (gl)
-not based on one letter

QUESTION 3:
-can not judge accurately; potential for what?
-appears to be bright, ambitious and hard working (pl)
-a reflection (reverse image) of potential? It may be indicative or suggest potential yet interested in business environment

QUESTION 4:
-this can't be determined from a letter of reference; much depends on the corporate expectations and requirements of the job
-unknown from one letter? (gl)
-demands a conclusion that can not be supported based on the letter (gl)

QUESTION 5:
-I could only comment if I knew for what the person was a candidate
-please define excellent; candidate for what?
-excellent?
-it sounds like the person is excellent but as a candidate for what?
QUESTION 6:
-maybe, but I don't take everything at face value

QUESTION 7:
-the poor use of grammar and awkward wording is a great distraction, no professional should sign this letter! (pl)
-based upon what?

QUESTION 8:
-too detailed on academics; not enough info on candidate's skill set (gs)
-very poorly done; it greatly impacts my view in a negative way (pl)
-very poor English (ps)
-pedantic and too verbose (gl)
-errors in diction and grammar are inconsistent with the title of the author of the letter, leading me to suspect that the letter is fake (ps)
-grammar, grammar, grammar; the negative response I had to the letter taints my perspective of the candidate

GENERAL:
-what are his people skills?
-I never take reference letters at face value; I always verify them with a telephone reference check
-I do not rely too heavily on reference letters unless I know the writer
-too many people do not reference properly; we ask for a list of 10 to 12 references, both business and personal and then conduct our validation
-what work experience?
-strengths/shortcomings - development needed
-no/limited comment on: -leadership ability
-people skills
-maturity
-thinking skills--judgment/analytical ability/creativity
-generally, I believe reference letters are not worth the paper they are printed on, except to verify facts--dates, responsibilities, etc.
APPENDIX I:

GLOSSARY OF TERMS
ANOVA (ANALYSIS OF VARIANCE):  
A bivariate statistical technique which compares the means of samples from two populations to determine if their differences are statistically significant. The ratio of the variance between groups to the variance within groups gives an F-statistic. The F-distribution is a measure used to determine whether the variability of the two samples differs significantly. If the observed statistic is greater than the test value for some level of significance, the hypothesis that there is no significant difference in the means of the sample groups may be rejected.

CHI-SQUARE TEST:  
A non-parametric statistical test which determines whether or not there is a significant difference between observed values found in the sample and the expected values to be found if the null hypothesis were true.

DUNCAN POST HOC TEST:  
A multiple comparison procedure used to determine which means are significantly different from each other once a significant F value indicates that population means are probably not all equal. This is a more liberal test than the Scheffé test.

FRIEDMAN TWO-WAY ANALYSIS OF VARIANCE BY RANKS:  
A non-parametric statistical test designed to determine whether or not particular items are ranked evenly by respondents. The test concerns the variance among the column means of random variables and is designed to determine whether or not a significant difference exists between these means. The null hypothesis for the test states that any difference between means are only due to chance.

HYPOTHESIS:  
Tentative explanation about the relationship between variables, includes both null and alternative hypotheses.

Null Hypothesis (H₀): Status quo condition that is to be tested.

Alternative Hypothesis (H₁): States the opposite of the null hypothesis.

LEVEL OF SIGNIFICANCE:  
The level of risk of incorrectly rejecting the null hypothesis. It is referred to as the critical level of significance and has a value of 0.05.

MEAN RANK:  
Rank sum divided by the number of cases.

RANK SUM:  
The number of respondents who give a particular answer, multiplied by the value assigned to the answer.
**SCHEFFE MULTIPLE COMPARISON TEST:**
A type of post hoc statistical test which has a strict criterion such that the overall probability of making a Type I error over all tests is less than 0.05.

**TYPE I ERROR:**
The error of rejecting the null hypothesis when the null hypothesis is in fact correct.

**TYPE II ERROR:**
The error of not rejecting the null hypothesis when the alternative hypothesis is actually true.

**VALID PERCENT:**
Percentage of respondents who answered the questions properly. More specifically, the number of cases with a particular value divided by the number of cases with valid (non-missing) values.
VITA AUCTORIS

NAME: Vandana Juneja

PLACE OF BIRTH: Hamilton, Ontario

YEAR OF BIRTH: 1971

EDUCATION:

Westdale Secondary School, Hamilton, Ontario
1985-1990

McMaster University, Hamilton, Ontario
1990-1994 B.Comm

University of Windsor, Windsor, Ontario
1994-1995 M.B.A.