The Effects of Public Posting on Job Performance with and without Supervisory Participation

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Western Michigan University

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THE EFFECTS OF PUBLIC POSTING ON JOB PERFORMANCE
WITH AND WITHOUT SUPERVISORY PARTICIPATION

by

Jan Marie Miller

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THE EFFECTS OF PUBLIC POSTING ON JOB PERFORMANCE
WITH AND WITHOUT SUPERVISORY PARTICIPATION

Jan Marie Miller, M.A.
Western Michigan University, 1991

The intervention was tested using a sequential presentation of conditions to assess the performance of clerical employees in a university admissions office. Ten workers received feedback on completion of mailroom tasks on a daily basis. Tasks included time of mail delivery and accuracy and quantity of responses to information requests. For mail delivery, two intervention elements were applied. First, group performance data were posted publicly. Second, verbal feedback from a supervisor was added to public posting. Improvement in time of mail delivery was observed when public posting was implemented; however, no reliable improvements were observed when supervisor feedback was added. For accuracy of response to information requests, only one intervention was implemented, combined public posting and supervisor feedback. The data indicated that a small, but stable, increase in accuracy occurred under this condition, and that accuracy eventually reached 90% or above (as compared to an average baseline level of 75%). Although plans called for assessment of feedback effects on the quantity of information requests processed, initial measurement of performance in this area led to performance improvements to the extent that most requests were processed, leaving no opportunity for variation in performance.
ACKNOWLEDGEMENTS

I wish to acknowledge the staff in the Office of Undergraduate Admissions at Western Michigan University, Kalamazoo for their support and participation during the course of my research.

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Finally, I wish to thank my loving parents for their continual support and encouragement throughout my studies and research.

Jan Marie Miller
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Western Michigan University, 1991
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CHAPTER I

INTRODUCTION

A review of the literature on feedback has shown that a great deal of research has been conducted on the effects of feedback on job performance (Kim & Hammer, 1976; Kreitner, Reif, & Morris, 1977; McCuddy & Griggs, 1984; Quilitch, 1978; Stoerzinger, Johnston, Pisor, & Monroe, 1978). Feedback, which provides information to employees about their past performance, has been used to improve productivity in a wide range of work settings (Balcazar, Hopkins, & Suarez, 1986). Balcazar's et al. (1986) review of 126 applications of feedback in organizations revealed that feedback systems assumed many different forms, such as graphic, written, verbal, or verbal and graphic. It was noted that graphic information produced more consistent effects than other forms, and that feedback alone produced lower levels of consistent effects (28%) than feedback combined with goal setting (53%).

While considerable research has been conducted on the effects of feedback strategies in general (Burgio, Whitman, & Reid, 1983; Erez, 1977; Ivancevich, 1982), many studies have focused specifically on the effects of public posting on employee performance. A large body of evidence suggests that public posting can yield effective results (Balcazar et al. 1986; Brown, Willis, & Reid, 1981; Greene, Willis, Levy, & Bailey, 1978; Kreitner et al. 1977; McCuddy & Griggs 1984; Newby & Robinson, 1983; Norstrom, Lorenzi, & Hall, in press; Prue & Fairbank, 1981; Quilitch, 1978; Van Houten, Hill, & Parsons, 1975). In these studies, most of the displays were posted in the form of graphs where the employees could see their performance on a daily, weekly, or monthly basis.

1
Public posting, combined with supervisory feedback also has resulted in increases in job performance. Frost, Hopkins, and Conrad (1981) conducted a study in a manufacturing department and used an ABAB design to examine the usefulness of feedback and contingent social reinforcement in modifying work performance that was closely tied to machine operations. A new graph was mounted on the wall each day to represent the time, in minutes, required to completely prep and fill rosin bags. The experimenter, while marking the graph, made comments if the performance was good or better than the last performance; if the performance was slower than the last one, the supervisor simply stated the total cycle time and left the area. Managers made remarks or asked questions about work performance represented by the graph; however, no specific schedule for comments was used. The results indicated improved prep time, but no change in fill time.

Komaki, Barwick, and Scott (1978) used a within-subject, multiple baseline with reversal design to improve safety practices in a food manufacturing plant. The intervention consisted of two elements: a training presentation in which employees received safety information, and reinforcement of desired behaviors. A graph was posted within the working area; additionally supervisors provided verbal feedback when they saw an employee performing safely. During intervention, the percentage of safe performances increased dramatically, and returned to baseline levels during a reversal phase.

Komaki, Collins, and Penn (1982) examined safety performance in four departments of a processing plant. They used a multiple baseline across groups design, which included changes in both antecedent and consequent stimuli. In the antecedent control condition, rules were explained, displayed, and discussed at weekly meetings. The consequence condition entailed explanation and posting of a feedback graph, delivery of verbal feedback and discussion of the feedback at the
weekly meetings. The results showed a mixed effect across the baseline and antecedent conditions, with two departments showing no significant changes and two showing significant improvements. However, all four departments showed improvements following the addition of the consequences.

McCuddy and Griggs (1984) conducted a study in an engineering department in which an Engineering Project Scheduling Board (EPSB) was posted to provide the current status of all special projects. This study involved participative goal setting in which the manager and the employee mutually agreed on the project to be placed on the EPSB, along with the project's due date. During individual goal setting meetings, the manager also reviewed each week's figures with appropriate persons. The results showed a reduction of the engineers' missed completion dates.

Quilitch's (1978) study involved the posting of a "Grooves and Gripes Bulletin Board" at a mental health setting. The employees were encouraged to submit written suggestions that were answered by the manager and publicly posted on the bulletin board. The manager provided feedback in the form of a "thank you" reply for each suggestion submitted. The rate of suggestions increased as a result of manager's feedback delivered in the form of prompts and publicly-posted replies.

Stoerzinger et al. (1978) used a Production Display Board to present performance feedback to employees in a houseware division of a company. This board allowed the workers to see their previous weekly production rate, the daily production for the current week, and their progress toward the current weekly goal. The operations director was encouraged by a member of the project staff to praise good performance. The implementation of the feedback system resulted in an increase in the mean number of items processed per hour.

The studies described above demonstrated that a combination of public display of performance and supervisory feedback can produce desirable effects on performance,
suggesting that employers should more actively participate in the delivery of feedback. However, more research is required to determine specifically the separate contributions of public posting and supervisory feedback. A review of articles from the last 15 years in four major journals indicated that only one study attempted to analyze directly the separate effects of these two components (Greene et al., 1978).

Greene et al. (1978) conducted two experiments at a hospital for the mentally retarded. In Experiment 1, client participation in a toilet-training program was measured while performance was publicly displayed. In Experiment 2, client performance was measured during two physical-therapy programs: range-of-motion and ambulation. In this experiment, staff received immediate feedback, and the effects of supervisory feedback alone were compared with those produced by public posting combined with supervisory feedback. The results from the first experiment showed an improvement in the implementation of the toilet-training program. The results from the second experiment showed that when supervisory feedback was isolated, the effects were neither substantial nor stable. However, when feedback was combined with public posting, the improvement was significant and stable.

The purpose of the present study was to extend the research described above by: (a) studying the effects of supervisor feedback and public posting combined on work performance, and (b) assessing the separate effects of supervisory feedback and public posting on job performance. The independent examination of these two components will help to ascertain whether one component yields more meaningful results than the other.
CHAPTER II

METHODS

Setting

The study was conducted in the Undergraduate Admissions Operations Center at Western Michigan University. The Operations Center consists of one large room in which the following staff worked: Supervisor of Operations, four Credit Evaluators, four Application Processors, two Mailroom Clerks, and several student staff. All employees, except for the student staff, were full-time employees, each having a desk, phone, and computer terminal.

Subjects

Two mailroom clerks and eight student workers in the mailroom area served as subjects. The mailroom clerks were full-time employees whose duties included: (a) preparation and distribution of mail to assist in the expeditious processing of applications, responses to requests, and dissemination of information; (b) maintenance of the filing system to insure accessibility to student information; (c) monitoring of supply inventory to insure availability of documents; (d) updating of requests for information (i.e., the Western Information Control System or WICS) data files to assist in student recruitment efforts; and (e) training and supervision of student employees to assist in accurate information input and dissemination. The student workers were responsible for assisting in the updating of the WICS data files, and input/dissemination of information relevant to admissions. All subjects engaged in the tasks selected for the study.
Dependent Variable

Time of mail delivery and quantity and accuracy of WICS card entry were recorded each day, Monday through Friday. Three Application Processors were selected to record the time. They were supplied with (3x5) tally cards on which they recorded their individual code, the day's date and the latest time at which mail was delivered. At the end of each work day, the experimenters collected the tally cards and recorded the data.

Determination of mean time of mail delivery was achieved by converting the "standard times" recorded on the tally cards to a "universal time" system (civil and military reckoning), calculating the mean time and converting the "universal time" back to "standard time." The above conversions were made each day to determine a mean time of delivery from all of the data submitted.

In order to determine the quantity and accuracy of WICS data entry, the mailroom employees were given written instructions to place the WICS cards in a box marked "WICS ENTERED" after they had been entered on the computer. At the end of the work day, the experimenters reviewed information in the boxes and recorded the quantity and accuracy of WICS card entry. A detailed account of the procedures for assessing the accuracy of WICS card entry is provided in the section entitled Reliability Measures.

Independent Variable

The independent variable consisted of two conditions: (1) public posting of performance data alone, and (2) public posting combined with supervisor feedback. During the "public posting only" phase, a data display board was conspicuously posted on a file cabinet in the mailroom area. Figure 1 shows a sample of the way in
Figure 1. Sample of Data Posted in the Mailroom Area During the Public Posting Condition.
which data were posted. The information consisted of a graph which depicted the mean mail delivery time for each day and showed performance data for all mailroom staff combined. At no time were individual performance data displayed. Delivery times were added each day throughout this phase.

Mailroom employees were instructed in how to read the graph. The instructions were limited to verbal information on what the graph depicted. The display board was posted in the mailroom area in the presence of the mailroom employees by an experimenter. Before leaving the mailroom area, the experimenter explained to those present, the purpose of the graph and how to read the data displayed. These same instructions and explanation were, on a different occasion, provided to those mailroom employees who were not present during the initial posting.

During the "public posting with supervisory feedback" phase, the mean time of mail delivery and the mean percentage of correct WICS were graphically posted on the display board by the experimenter. This phase also entailed the Supervisor providing verbal feedback regarding posted performance data. The Supervisor was provided with an information sheet indicating the time of mail delivery and the percentage of correct WICS. This allowed her to observe any changes or trends in performance and to prepare the appropriate feedback message prior to entering the mailroom area. The Supervisor's feedback entailed verbal information relevant to the data posted on the display board. Feedback was delivered once each day although no specific schedule for feedback was used.

Procedures and Experimental Design

As required by the Human Subjects Institutional Review Board (HSIRB), all mailroom participants received informed consent forms, describing the study. A form was signed by each participant and returned to the experimenter prior to the onset of
the study. Copies of the informed consent form and HSIRB approval letter are contained in Appendices A and B.

**Design**

The intervention was tested using a sequential presentation of conditions. The job elements consisted of office mail delivery and WICS data entry. The effects of feedback on mail time delivery were assessed using an ABC design. "A" represented the baseline condition, "B" represented the public posting phase, and "C" represented the combined public posting and supervisor feedback phase. The effects of feedback on the quantity of WICS card entry were assessed using an AB design, where "A" represented the baseline condition and "B" represented the filing system phase. The effects of feedback on WICS card accuracy were assessed using an AB design, where "A" represented the baseline condition and "B" represented the combined public posting and supervisor feedback phase. For the accuracy of WICS data entry, only combined public posting and supervisor feedback were applied. Although an assessment of public posting alone was planned, this could not be done due to the completion of all WICS data entry, which prevented further assessment of change.

**Baseline**

During baseline, the quantity and accuracy of WICS data entry in addition to the time of mail delivery were recorded. Quantity and accuracy of WICS data entry were recorded by the experimenters at the end of each work day. Quantity of WICS data entry was based on the total number of all WICS cards entered each day. Accuracy of WICS data entry was based on a 10% sample of WICS cards entered each day.

Three Processors were selected to record time of mail delivery. Each received a job aid that described step-by-step instructions for collection of data. Meetings were
arranged with data recorders to clarify the contents of their job aids and to answer any questions relevant to their involvement.

The Processors' job aid instructed them to record the time their mail was delivered each day. Each Processor was supplied with five tally cards each week and instructed to record on their tally card, their assigned code, the day's date and the time their mail was delivered to them if they were present. If they were not present, they were instructed to indicate this on their tally card. Finally, the job aid instructed them not to discuss information recorded and indicated that their tally cards would be collected at the end of each work day.

Public Posting Alone

The display board was posted on the file cabinet, by an experimenter at the beginning of the work day in the presence of the mailroom employees. The board contained a graph which displayed the mean time of mail delivery for each work day. No other information on mailroom performance was provided during this phase. This phase enabled mailroom employees to review visually their level of performance.

Public Posting and Supervisor Feedback

The Supervisor of Operations received a job aid describing her role as a feedback provider. The Supervisor was instructed to enter the mailroom area once a day, observe the graph in the presence of the mailroom employees and to describe the relationship between the most recent data displayed and previous data points. If current data points were higher than previous days' data, the Supervisor praised the workers for their performance improvement. If, however, the current data showed a decrease in comparison to previous data, the Supervisor conveyed this information to the workers. Verbal feedback was always based on group performance. At no time
were individual performance levels assessed or discussed. The mailroom employees were also encouraged to ask questions or make comments regarding the data on the posted graphs or the Supervisor's feedback.

Before leaving the mailroom area, the Supervisor was required to obtain the initials of all workers who received the feedback on the Supervisor's tally card. Once the Supervisor returned to her desk, the date of feedback delivery and any additional comments were recorded on a data form.

**Other Experimental Conditions**

Quantity of WICS cards entered was never publicly posted in the mailroom area because performance was relatively high and stable throughout the study. The filing system for the WICS cards was introduced on day three of week three of data collection. This change entailed organizing the WICS cards according to the date entered on the card and placing them in filing boxes, labeled "WICS TO BE ENTERED." The purpose was threefold: (1) to help organize the cards to enable the workers to organize their tasks, (2) to allow the cards to be entered on the computer on a first-come first-served basis, and (3) to allow the workers to visually determine whether they were behind or on schedule in terms of getting the data entered on the computer.

**Reliability Measures**

Reliability of supervisor feedback delivery was determined by collecting the Supervisor's tally card each day and verifying whether the Supervisor's tally card contained the mailroom workers' initials. Workers' initials were indicative of their presence during feedback delivery. Table 1 shows the reliability measures of feedback delivery from Weeks 8 through 16. The reliability measures of 100%
indicated consistent feedback delivery. One verification of feedback delivery showed a reliability measure of 60%, indicating that feedback was delivered three out of five days during Week 11. Two verifications showed reliability measures of 80%, in which feedback was delivered four out of five days during Weeks 10 and 12; this was assumed to be the result of task disruptions due to office holiday celebrations and the initiation of a new semester. Two other verifications showed reliability measures of 80%, indicating feedback delivery four out of five days during Weeks 15 and 16.

Table 1

<table>
<thead>
<tr>
<th>Weeks of Feedback Delivery</th>
<th>Weekly Reliability Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>10</td>
<td>80%</td>
</tr>
<tr>
<td>11</td>
<td>60%</td>
</tr>
<tr>
<td>12</td>
<td>80%</td>
</tr>
<tr>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>14</td>
<td>100%</td>
</tr>
<tr>
<td>15</td>
<td>80%</td>
</tr>
<tr>
<td>16</td>
<td>80%</td>
</tr>
</tbody>
</table>

Reliability of the mean time of mail delivery was determined by randomly selecting one day per week and comparing the times recorded by the three Processors. Table 2 shows the number of observations in which the observers' times differed and
the degree of difference between the observers' reported times. Four observations were reported in which times differed by fifteen minutes or less; two in which the times were within thirty minutes or less; three observations in which the difference was one hour or less; and five instances in which the difference was greater than one hour. Although it was assumed that mail would be delivered to each person at about the same time each day, this was not found to be true. Thus, the discrepancies in times reported across observers could have been the result of differences in delivery time and not necessarily disagreement with respect to a single time of delivery for all persons. These observations were based on the times recorded by staff who were present at their desk when their mail was delivered. If an observer was not present at his/her desk during mail delivery, no times were recorded. The observer indicated that he/she was absent by placing a check mark in the "absent" box on the data form.

Table 2
Frequency of Ranges of Difference in Times of Delivery Recorded by the Observers

<table>
<thead>
<tr>
<th>Difference in Minutes Between Report of Observers</th>
<th>Number of Observations in Which Observers Differed</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Minutes or Less</td>
<td>4</td>
</tr>
<tr>
<td>30 Minutes or Less</td>
<td>2</td>
</tr>
<tr>
<td>1 Hour or Less</td>
<td>3</td>
</tr>
<tr>
<td>Greater Than One Hour</td>
<td>5</td>
</tr>
</tbody>
</table>

Reliability for the accuracy of WICS card entry was determined by taking a random selection of ten percent of the WICS cards placed in the "entered" box and checking computer files to verify entries each day. A checklist was used to compare
the information on the WICS cards to that on the computer to determine whether the information was accurately entered. An agreement was counted when all items on the card agreed with those entered into the computer. A disagreement was counted if any item on the card disagreed with the information in the computer. The formula used to calculate reliability entailed dividing the number of agreements by the number of agreements and disagreements, and multiplying that number by 100. Reliability averaged 80.17% for the accuracy of WICS card entry with an averaged weekly reliability ranging from 67% to 96%.
CHAPTER III

RESULTS

Figure 2 shows the mean time of mail delivery and mean percentage of correct WICS entered over a 16-week period. The mean time of mail delivery during the baseline phase was 3:18 p.m. This phase was immediately followed by the public posting phase in which the mean time was decreased to 2:22 p.m. This time decreased further during the public posting and supervisor feedback phase to 2:15 p.m. Thus, mail was reported as being delivered at earlier times following each phase implementation, with the largest reduction occurring between baseline and the public posting phase.

The mean percentage of correct WICS entered during the baseline phase was 76.6%. This percentage increased to 83.1% during the public posting and supervisor feedback phase (a 6.5% increase in the accuracy).

Figure 3 shows the number of WICS cards entered during a 14-week period. The mean during the baseline phase was 591.33 and increased immediately following the implementation of the filing system to 1063.16. The mean change indicates a 79% increase in the number of WICS cards entered after the filing system was implemented. The filing system phase could not be extended to the 16th week due to the completion of all WICS cards, thus precluding any further WICS entry and data collection.

Table 3 depicts the means and ranges for each task across phases. The mean time of mail delivery across phases ranged from 2:15 p.m. to 3:18 p.m. During baseline, the mean ranged from 3:05 p.m. to 3:36 p.m.; means ranged from 1:44 p.m. to 3:28 p.m.
Figure 2. Mean Time of Mail Delivery and Mean Percentage of WICS Entered Correctly per Week.
p.m. during the posting only phase, and 1:54 p.m. to 2:29 p.m. during the posting and feedback phase. The means for the percentage of correct WICS across phases ranged from 76.6% to 83.1%, with ranges from 67% to 86.5% during baseline and 67% to 96% during the posting and feedback phase. The mean number of WICS cards entered across phases ranged from 591.33 to 1063.16; weekly means ranged from 471 to 783 during baseline and from 498 to 1610 during the filing system phase.
Table 3
Performance Means and Ranges for Mail Room Tasks for Baseline and Intervention Conditions

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Baseline</th>
<th>Posting</th>
<th>Posting and Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time of Mail Delivery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3:18</td>
<td>2:22</td>
<td>2:15</td>
</tr>
<tr>
<td>Range</td>
<td>3:05 to 3:36</td>
<td>1:44 to 3:28</td>
<td>1:54 to 2:29</td>
</tr>
<tr>
<td><strong>Percent Correct WICS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>76.6%</td>
<td>---</td>
<td>83.1%</td>
</tr>
<tr>
<td>Range</td>
<td>67% to 86.5%</td>
<td>---</td>
<td>67.2% to 96%</td>
</tr>
<tr>
<td><strong>Number of WICS Cards Entered</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>591.33</td>
<td>---</td>
<td>1063.16</td>
</tr>
<tr>
<td>Range</td>
<td>471 to 783</td>
<td>---</td>
<td>498 to 1610</td>
</tr>
</tbody>
</table>

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CHAPTER IV

DISCUSSION

The results of this study demonstrated that feedback regarding employees' past performance can improve performance of typical office and clerical tasks. The mean time of mail delivery and mean percentage of correct WICS were assessed during the baseline, public posting alone, and/or public posting with supervisory feedback phases. The mean time of mail delivery showed a large decrease between the baseline and public posting phase. No reliable improvements were observed when supervisor feedback was added to public posting. The percentage of correct WICS cards entered increased by a small but steady amount across weeks following the implementation of the public posting with supervisory feedback phase.

The quantity of WICS cards entered was assessed separately. The implementation of the structured filing system in order to measure performance led to a substantial increase in the number of WICS cards entered. This increase was large enough to eliminate the work backlog in this area and preclude any further intervention.

Though the changes in the quantity of WICS data entry were unanticipated, the effect was, indeed, large. As previously noted, the changes represented a 79% increase in the number of WICS cards entered. A plausible explanation could be attributed to the structure of the filing system. The WICS cards were systematically arranged in the filing boxes in the order in which they arrived in the mailroom area. The assumption is that the visual inspection of the ordered WICS cards may have provided the mailroom workers with some information on the volume of WICS cards
yet to be entered. That is, the workers may have visually determined whether they were behind or on schedule in terms of getting the data entered on the computer.

In general, the results lend support to existing research on the effects of feedback strategies in improving job performance (Balcazar et al., 1986). The procedures and results of the present study closely resembled the study conducted by Frost et al. (1981), in that it entailed the use of more than one type of feedback strategy. Frost et al. (1981) provided workers with graphic and verbal feedback on their performance on a daily basis and observed an improvement in one of the two tasks assessed. A study by Greene et al. (1978) also demonstrated the positive effects on job performance when public posting and supervisory feedback were combined.

Despite the success of the present study, several problems should be noted. First, prior to the baseline condition, the mailroom clerk received a memo from the Chief of Operations in which clerks were instructed to deliver mail no later than 2:00 p.m. each day. The memo also included information on the expected time frame of WICS entry: a one-week turn-around time was specified. Thus, worker performance may have been influenced by the instructions contained in the memo. However, the specific effects of this uncontrolled variable are unclear.

Second, a change in mailroom clerks also took place during the study. The first two weeks reflected the performance of one mailroom clerk and the student workers. Another mailroom clerk was hired and began work during the third week of data collection. Weeks 3 through 11 represented the performance of two mailroom clerks in addition to the student workers. A final change occurred during the 12th week of data collection when the mailroom clerk, present during the initiation of the study, was absent due to a job change. After the 12th week, the data reflect mailroom tasks performed by the newly hired mailroom clerk and the student workers. These changes in staffing could have accounted for some of the observed changes in
performance (i.e., for the changes in performance across tasks, especially during the 3rd and 12th weeks of data collection).

Finally, the measurement of mail delivery times is open to question. The Processors were selected to record the time of mail delivery based on the fact that mail was delivered to each of them in the same area at the same time. This information was obtained from the Supervisor. It was assumed that if each was present to receive his/her mail, the times recorded should be approximately the same if not identical due to the close proximity of their desks. Unfortunately, the data show that the times recorded differed considerably among the recorders. Table 2 shows the number of observations in which the recorders' times differed within minutes and hours. In this context, the experimenter determined that mail was delivered to Processors more than once a day. This being the case, one recorder could have recorded the only time in which he/she was present when mail was delivered (e.g., first mail delivery for a given day), while another recorder could have recorded the only time in which he/she was present to receive mail (e.g., the second mail delivery of the day). This raises an important issue as to whether mail was consistently delivered to each recorder in the area once a day, or whether the differences in recorded times represented different times in which a mailroom worker entered the area to deliver mail.

Performance feedback represents an important field of performance management. As previously noted, extensive research has been conducted in ascertaining the effects of feedback, in its various forms, on job performance. The present study was limited in scope in that it only involved a limited test of the relative effects of public posting and supervisor feedback. For mail delivery, both feedback components (public posting alone and public posting combined with supervisor feedback) were implemented. However, this was not the case with the assessment of WICS card entry. Public posting alone was never implemented for WICS card entry. Separate
components were implemented (filing system/public posting combined with supervisor feedback) to determine the effects on the quantity and accuracy of WICS card entry. Though the results were favorable, in that performance improved in all tasks assessed, the field of performance feedback merits further research.

To conduct a component analysis of public posting alone and public posting combined with supervisor feedback (graphic and verbal feedback), the scope of future research would need to encompass the implementation of each feedback component across all tasks, within the context of a multiple baseline design. Public posting and supervisory feedback could both be isolated and arranged differently to determine their individual effects before determining their combined effects. Additionally, the present study focused on group performance due to the fact that all mailroom workers performed the same tasks; however, future research could be extended to include individual performance across tasks, and comparisons made between other subjects performing similar tasks.

In summary, the present study showed improvements in all tasks assessed during a sequential presentation of conditions. The study represented a very practical method of assessing job performance, in addition to involving the Supervisor in its operation. It was practical in that it required no monetary obligations on the part of the organization, and involved minimal time and effort to assess the performance of several workers.
Appendix A

Informed Consent Form
INFORMED CONSENT FOR PARTICIPATION IN AN INVESTIGATION

You are invited to participate in a research study entitled “The Effects of Public Posting With and Without Supervisor Involvement on Job Performance.” The research is being done by Jan Miller as part of the requirements for a Master’s Thesis at Western Michigan University. The purpose of this research is to test the effectiveness of a performance feedback system in improving the timeliness and accuracy of mail delivery and other mail room tasks in the Undergraduate Admissions Operations Center at Western Michigan University.

Your identity will remain confidential in all aspects of the study. We have received assurance from supervisors that this information will not, in any way, affect your employment status. By signing this document you will be giving us permission to use the data collected as part of this project for scientific presentations and/or other research purposes. However, in all cases, your identity will remain confidential.

The risks to you from participation in this research project are minimal and participation is voluntary. You may choose not to participate in this project or withdraw anytime without penalty.

If you have questions now or at anytime, you may contact Jan Miller at 387-2289 or Dr. William Redmon (faculty advisor) at 387-4485.

Your signature indicates that you have read and understood the above information and that you agree to participate in this study.

Signature ____________________________________ Date ____________

Signature of Investigator _______________________________ Date __________
Appendix B

Approval Letter From the Human Subjects Institutional Review Board
This letter will serve as confirmation that your research protocol, "Effects of Public Posting on Job Performance With and Without Supervisory Participation" has been approved at no more than minimal risk after full review by the HSIRB with the following qualifications:

1. Add a contingency statement to the protocol that the study will not be conducted with just one subject.

2. Explain precisely who the "researchers" will be.

Please submit these revisions to my office so that we can sign off on your protocol. If you have any further questions, please contact me at 387-2647.
BIBLIOGRAPHY


