

The effects of workplace leisure behavior on work-related behavior

Angela R. Lebbon
City University of New York

Dene T. Hurley
City University of New York

ABSTRACT

Recent survey research suggests that workplace leisure behavior can improve employee motivation without detrimental effects on work. This study examined the effects of workplace leisure behavior with 6 participants who transcribed articles in a simulated office setting over the course of 2-5 weeks. Data were analyzed with descriptive and inferential statistics. Results show workplace leisure behavior had a significant negative correlation with productivity when leisure levels were greater than 40% of total work hours. Additionally, we cautiously conclude that spending less than 15% of total work hours on leisure has a beneficial impact on productivity. Lastly, the presence of an authority figure resulted in a significantly stronger negative correlation between leisure and work behavior, however, feedback mitigated the negative effects of workplace leisure behavior.

Keywords: Workplace leisure behavior, motivation, observation, feedback

INTRODUCTION

Corporations have great desire and need to improve employee motivation, yet many struggle to find solutions that work. If a solution does work, corporations often struggle to maintain those improvements across months and years. Survey research has found that 44% of employees feel unmotivated to work (Mercer, 2011), and 55% of workers are unsatisfied with their current job (The Conference Board, 2010). Furthermore, although U.S. employees work longer hours with less vacation time than employees working in the European Union, productivity remains at similar levels as those in the European Union (Scott, 2009).

Motivation is of great interest to corporations because unmotivated employees typically spend part of their workday engaging in workplace leisure behavior (WLB) such as Internet use, instant messaging, text messaging, and personal phone calls. One of the most prevalent WLB activities is Internet use, where nearly 60% of employees report using the Internet daily for communication and informational purposes (Zhang, 2004). Previous research has found that Internet use improves communication between employees, saves time, increases informational searching and learning, and enhances the workplace, thus making for more productive employees (Anandarajan, Simmers, & Igbaria, 2000; Belanger & Slyke, 2002; Guthrie & Gary, 1996, Oravec, 2002). For example, Sanchez et al., (2006) investigated the effects of Internet usage on employees' productivity at 464 Spanish manufacturing and service firms. Data on Internet use were collected via telephone interviews wherein managers estimated the average amount of time their employees used the Internet for both work-related and non-work-related reasons. To measure productivity, data on the total annual hours worked were gathered from the Spanish National Institute. Results suggest that Internet usage for work-related reasons had a positive relationship with productivity when Internet use was, on average, less than 10% of the employees' total work hours. Not surprisingly, the researchers also found when Internet use reached 83% of total work-hours, a decrease in productivity was observed.

Furthermore, employees report on average that a quarter of their workday is spent on the Internet for personal reasons (Cheng, 2008; Ramayah, 2010). Employees reason that personal Internet use is appropriate in the workplace because of the following: a) they have the ability to multi-task between work-related tasks and non-work-related tasks (Kenyon, 2008); b) they need mental breaks to improve their concentration (Coker, 2011); c) they deserve it for working hard (Lim, 2002); d) it is retribution for unbalanced workload between employees (Lim, 2002); e) it is enjoyable and rewarding (Anandarajan & Simmers, 2002), and f) there is a strong history of such behavior resulting in immediate reinforcers (Garrett & Danziger, 2008). Regardless of the reasons for WLB, recent survey research suggests WLB might actually improve employee motivation without detriment to the quality or productivity of their work (Coker, 2011). Coker surveyed 268 employees regarding their workplace Internet leisure behavior (WILB) and found that WILB may be more beneficial for employees' productivity than previously suspected. Data were collected by asking employees to estimate the occurrence, frequency, and duration of 17 different types of Internet behavior while at work. Participants also reported the number of hours worked per week, which "was used to estimate the percentage of time each respondent usually spent WILBing" (p. 243). Coker found that WILB resulted in 9% more productivity and that work became negatively affected when Internet use averaged 12% or more of employees' total work hours.

Regardless of the benefits of minimal WLB, resistance persists with researchers recommending that corporations implement stricter internet policies (Ramayah, 2010), and more

and more corporations are following suit by creating social media policies, monitoring social media activities, and/or utilizing software to block specific WLB (SHRM, 2012). As noted by Holland (2011), this issue is receiving great attention and concern from corporations regarding how to address employees' WLB, and whether official media policies should be implemented company wide. Given that researchers have found that higher levels of leisure behavior outside of the workplace is correlated with lower levels of exhaustion and minimizes motivational issues on the job (Stanton-Rich & Iso-Ahola, 1998), the question remains if transferring leisure behavior to the workplace would also be beneficial for improving low levels of motivation.

Before a recommendation can be made to corporations to punish or endorse WLB, research with behavioral measures is necessary to examine the impact of WLB on work behavior. While previous survey research results are interesting, methodological limitations are present and include measuring productivity with the annual or weekly hours worked and having individuals estimate Internet usage instead of utilizing a behavioral data collection system. Data collected via surveys involves employees recalling their behavior over the course of weeks and months, in the absence of self-monitoring and recording their behavior. Behavioral research has found that individuals are often inaccurate when reporting their own levels of behavior, especially with retrospective self-reporting, due to problems with memory recollection (even if individuals are attempting to be honest) or due to individuals referring to the most recent instances of behavior instead of aggregating weeks or months worth of behavior (Donaldson & Grant-Vallone, 2002; Rhodes & Dean, 2009; Spector, 1994). Lastly, given that some analysts estimate WLB costs \$544 billion a year (Malachowski, 2006), and given the lack of behavioral research supporting survey results, an investigation into the effects of WLB on work behavior via direct observation is warranted. Therefore, the primary objective of the current research is to examine the effects of WLB on individuals' productivity and quality of work through behavioral measures. Additionally, the current research aims to examine the effects of an authority figure's presence and feedback on WLB and work behavior.

METHODOLOGY

Participants

Participants in this study were 6 undergraduate students enrolled at a large college. Participants were paid \$7.00 per hour for their participation. In order to be eligible for the current study, participants had to demonstrate the ability to touch-type on a computer.

Setting

The current study was conducted in a 3.7 x 2.4 m laboratory room. The laboratory room was furnished to simulate an office setting, equipped with a desk, computer, adjustable office chair, radio, and bookshelf containing various books and a .15 x .10 m wireless hidden camera (with audio capability) located in a picture frame. The hidden camera directed a signal to a wireless receiver connected to a television and DVD player, which allowed monitoring of participant behavior when the authority figure was not in the room observing the participant.

Experimental Task

Participants engaged in a computer-typing task that involved typing articles into a Microsoft Word ® document in order to simulate a transcriptionist office job. Participants were presented a different article each session. One session lasted 35 min (5-min review of work behavior definitions followed by 30-min of typing). In order to simulate the routine of coming to the office and working multiple days a week, the number of sessions for each participant ranged from 13-22 sessions over the course of 2-5 weeks.

Dependent Variables

The dependent variables were (a) productivity and quality of work behavior, (b) time spent on-task, and (c) workplace leisure behavior. Work behavior involved the number of words and spelling errors typed in a Microsoft Word ® document. Words and spelling errors were recorded utilizing a frequency count in 20-s intervals by a Visual Basic Editor macro embedded into the Microsoft Word ® file. Time on-task was the duration spent transcribing the article into a Microsoft Word ® file. Trained research assistants watching video from the hidden camera scored time on-task in 1-s intervals. Workplace leisure behavior included any behavior individuals engaged in while off-task during the sessions, and was scored in 1-s intervals by research assistants watching the hidden camera videos. Participants were allowed to decide if and when they needed breaks during the session. When a break was taken, participants were allowed to engage in any off-task, WLB they wanted. Participants were told before each session that computer games and the Internet were accessible on the computer. The following behaviors were scored as WLB: a) talking on the phone, b) texting on the phone, c) playing computer games, d) using an mp3 player, e) using the internet by clicking, typing, or reading information on a website, f) reading non-internet material such as a book, g) eating food, h) drinking beverages, i) leaving the computer workstation and exiting the room, j) and relaxing behavior which included stretching.

Independent Variables

The independent variables were the presence of an authority figure (i.e., the lead researcher who was a female) and feedback on performance. All participants were overtly observed by the authority figure during the course of the study, however, only half of the participants received feedback.

EXPERIMENTAL DESIGN

A single-subject, multiple baseline design across participants was employed to expose participants to the authority figure and to feedback. Additionally, participants were randomly assigned to one of two groups. Both groups were exposed to Baseline, however, the first group (2 males, 1 female) was assigned to the Observation group (Group A) and the second group (2 males, 1 female) was assigned to the Observation and Feedback group (Group B).

Baseline

During Baseline, participants were provided the definitions of work behavior before each session for 5 min. This handout stated that certain work behaviors were important to transcribing articles and included: a) time on-task: time spent working on transcriptions; b) quantity of work: number of words transcribed; and c) quality of work: number of spelling errors. Participants were then presented an article and asked to type it into a Microsoft Word ® file for 30 min.

Observation (Group A)

Participants in the Observation group continued to receive the definitions handout before being asked to type an article for 30 min. After 10 min of typing elapsed, the authority figure entered the room to observe the participant's work behavior for 10 min (approx. 10:01-20:01). The authority figure informed the participant that she would be present for the next 10 min to observe his/her work behavior. In order to minimize distraction during the task, the authority figure did not talk with the participant. During the observation period, the authority figure sat with a clipboard, paper, and pencil approximately 1.2 m from the participant and periodically wrote on the paper to simulate scoring and recording of behavior. After 10 min of observation, the authority figure told the participant that the observation was over, but to continue working until the end of the session (approximately 20:01-30:00).

Observation and Feedback (Group B)

Participants in the Observation and Feedback group were exposed to the authority figure in the same fashion as participants in the Observation group, however, they additionally received feedback on their work performance from the previous session. For example, at the beginning of the 10th session, participant 2 received performance feedback from his/her 9th session which consisted of the following: "During your last session, your work behavior was scored. You spent X minutes on-task out of the 30 minute session; You typed X number of words; and You typed X number of spelling errors."

RESULTS

To determine the effects of WLB, an authority figure's presence, and feedback on participants' work behavior, descriptive statistics were conducted on the following four variables: WLB, time on-task, words typed, and spelling errors typed. Next, correlation analyses among these variables were conducted to establish the strength and direction of the linear relationship between the four variables. A regression analysis was additionally conducted to establish whether any productivity differences between the two groups were attributed to varying typing skills. Lastly, a regression analysis and scatterplot was used to examine varying WLB percentages and its effects on productivity to follow-up Coker's (2011) survey results. Data were only analyzed during periods when the authority figure was not observing participants' behavior (i.e., 0:00-10:00 and 20:01-30:01) in order to capture representations of naturally occurring behavior, and to prevent inflations in data that would be observed during the authority figure's presence due to reactivity (Lebbon, Sigurjónsson, & Austin, 2012).

Table 1 compares the descriptive statistics for all four variables for participants during baseline and intervention. Data show the average time spent on WLB increased from 399.4 during baseline to 510.2 during intervention (combined Groups A & B). Meanwhile, the mean values for the remaining dependent variables (time on-task, errors and words typed) declined during intervention. The large standard deviation values for both WLB and time on-task suggest that the average variation of time spent by participants around the mean value was larger compared with word and error counts. The rise in those deviation values during intervention indicates greater variations in time spent on WLB and time spent on-task when the authority figure was present.

Table 2 presents the correlation coefficients for the same four variables for all participants. Based on the Pearson Correlation coefficient test, the correlation coefficients for WLB, time on-task, words, and errors are all found to be significant at 5% level. WLB has a significant negative correlation with time on-task, words, and errors. This suggests that an increase in leisure behavior lowered the participants' productivity (as captured by words typed), quality of work (as captured by errors) and time spent on-task or vice versa. This inverse relationship is particularly strong (over 0.7) with time on-task and words typed, yet appears to be weaker with respect to quality of work.

Table 3 presents the descriptive statistics for Group A (Observation) and Group B (Observation and Feedback) during baseline and intervention. Comparing these two groups in general, Group A had greater increases in the average time spent on WLB during intervention while the average time on-task, words, and errors had greater decreases than Group B. More specifically, from baseline to intervention Group A's WLB increased 163 min, time on-task decreased 163 min, spelling errors decreased by roughly 2, and words decreased by 113. Conversely, Group B's WLB increased 60 min, time on-task decreased 96 min, spelling errors decreased by 1.4, and words decreased by 80. In addition, variations around those mean values (as captured by the standard deviation) for each of the variables are also higher for Group A in all cases. These data suggest that the presence of an authority figure can have a detrimental effects on performance when the observation is over, with a rise in WLB as well. However, it should be noted that Group B's smaller increases in WLB, and smaller decreases in time on-task, words, and errors suggest the importance of delivering performance feedback, and its sustaining effects after observation ceases.

Table 4 presents the correlation coefficients for Groups A and B during baseline and intervention. According to the Pearson Correlation coefficient test during baseline, the coefficients are negatively significant at 5% level for all variables except between leisure and error for Group A, which was insignificant. During intervention, the negative correlation between leisure and words was significantly stronger for Group B, rising from -0.63 to -0.80. Meanwhile, the strength of the negative relationship between WLB and time on-task declined during intervention for Group B, which further indicates the benefits of delivering performance feedback.

To help determine whether typing skill had an impact on productivity and quality of work, the following regression models were conducted during baseline and intervention:

$$\text{Model A: } \text{Words typed} = \alpha + \beta(\text{typing ability})$$

$$\text{Model B: } \text{Errors} = \alpha + \beta(\text{typing ability})$$

Typing ability is measured by the number of words typed per minute by each participant. The regression results show that typing ability has no significant effect on productivity or quality of work for participants in both groups (see Table 5 for these data).

To examine the impact of WLB on productivity and to attempt replication of Coker's (2011) survey results, regression models were conducted on four ranges of WLB percentage. These four ranges include 0.9%-15% WLB, 15.01% to 40% WLB, 40.01% to 100% WLB, and the entire range of 0.9% to 100% WLB. The findings of this regression are displayed in Table 6, which shows that as the percentage share of leisure rises during baseline (for combined Groups A and B), the coefficient for productivity changed from positive (for up to 40% WLB) to negative (for between 40.01% to 100% WLB). The positive effect on productivity for up to 40% of WLB was not significant while the coefficient for the higher leisure share (40%- 100% WLB) was negatively significant at 5% level. Nonetheless, these results generally point to lower productivity level (as measured by words typed) as the share of time spent on leisure rises. For every percentage increase in leisure, those participants who spent 0.9% to 15% on leisure typed an additional 4.80 words while those that spent 15%-40% on leisure gained only 1.08 words; this suggests 73% decline in productivity level as the percentage share of workplace leisure moves into a higher share of up to 40%. Productivity level declines even more rapidly as the share of leisure increased beyond 40%. The percentage share at which point leisure becomes detrimental to productivity was found to be at 60% WLB.

Table 6 also shows the regression results for the effect of percentage share of leisure spent on productivity during intervention for combined Groups A and B. While the initial impact of leisure on productivity was positive (although not statistically significant), once the share of leisure increased beyond 15.01%, it was found to have a negative effect on words typed. This negative impact was not significant until the share of leisure was 45% and higher. Again, a one percentage rise in leisure for 0.9%-15% WLB, productivity was found to increase by 10.63 words. Once participants increased their leisure time share to the range of 15.01% to 40%, a one percentage rise in leisure resulted in a 3.36 word decline, representing a 131.6% drop in productivity between the two groups of participants. Interestingly, this decline in productivity slowed as participants' share of leisure rises.

Lastly, the scatterplots in Figures 1 and 2 summarize the relationship between WLB and work behavior. Overall, there was a strong, negative correlation between WLB and productivity during baseline and intervention for combined Groups A and B. There was a weak, negative correlation between WLB and quality of work during baseline and intervention for combined Groups A and B. That is, increases in WLB were correlated with decreases in productivity but not work quality.

DISCUSSION

This study examined the effects of WLB on individuals' productivity and quality of work, along with the effects of an authority figure's presence and feedback on WLB and work behavior. It was found that micromanaging by observing work behavior lead to an increase in WLB and a decrease in productivity; however, the delivery of performance feedback mitigated the increase in WLB and the decrease in productivity. In general, this study also suggests that minimal WLB is not detrimental to the productivity of workers engaging in data-entry jobs, which supports Coker (2011) and Sanchez et al. (2006) findings. Results suggest that WLB has a negatively, significant correlation with productivity when WLB reached 40% or greater, in comparison to Coker's 12% and Sanchez's 83% Internet use. In addition, with these findings one can cautiously conclude that spending less than 15% of total work hours on leisure has a

beneficial impact on productivity, thus replicating Coker and Sanchez findings that workplace leisure behavior below 12% and 10%, respectively, may be beneficial for employees.

Strengths of this study include collecting behavioral data on participants' WLB and work behavior in order to replicate Coker (2011) and Sanchez et al. (2006) survey results. This study also focused on one type of job (such as data entry or transcriptionist), instead of Coker who examined managers, administrators, scientists, doctors, lawyers, clerical, sales, service workers, among others. Given the range of careers and task responsibilities associated with each job in Coker's research, the current study controls for varying job demands by selecting one task for all participants. Another advantage of the current study is that high levels of concentration and cognitive effort were not required to engage in the task, yet participants' WLB remained detrimental to their work. This caveat is important given that researchers have noted that WLB can have both positive and negative effects on behavior, and the negative effects can be especially detrimental if WLB disrupts concentration during cognitively challenging tasks (Coker, 2011; Jett & George, 2003).

Conversely, the limitations with the current study involve not controlling the percentage of WLB for all participants, and thereby, allowing participants to access leisure activities at will for the durations they chose. This experimental arrangement occurred as a result of the human subject research ethics board requiring that participants be informed before each session that they could take a break when they felt fatigued or needed a break; this methodology resulted in participants engaging in WLB every session for inconsistent durations within the sessions.

FUTURE RESEARCH

Future examinations of WLB should focus on applied settings with automatic data collection of work and WLB. Furthermore, WLB should be examined with different careers and work responsibilities as all are not the same in terms of mental and physical effort, or time needed to complete a task; such contingencies on work responsibilities may produce different results in regards to the benefits of WLB on work-behavior. For example, research has shown that individuals working in research and developmental divisions were more productive when they used the Internet for work purposes (see Kafouros, 2006 for a brief review). Therefore, it is possible that careers where employees engage in creative tasks or research activities may benefit more from WLB than work activities involving long periods of concentration such as data-driven outputs, reading, or writing.

Future research could also benefit by examining the threshold of WLB for which it is not detrimental to productivity and improves quality or creativity. That is, what percentage of WLB yields improvements in productivity, quality, and/or creativity? Likewise, is there a specific schedule of WLB that leads to more productive and/or higher quality of work? For instance, will shorter WLB sessions at higher frequencies (i.e., 5 min of WLB six times per day) lead to higher levels of productivity, or will longer WLB sessions at lower frequencies (e.g., 30 min of WLB one time per day)(Coker, 2011)? Given the inconsistent results on the percentage of WLB being detrimental to productivity, and given the lack of data on different WLB frequencies, more research should be conducted before one prescribes recommendations to organizations on what their media policies should be. Holland (2011) concurs stating, "What is clear is that organizational policies and guidelines need to state what is accepted usage of these mediums and what safeguards need to be developed..." (p. 2). Regardless of the recent research showing that minimal WLB may be beneficial for productivity and concentration, nearly 33% of 141

corporations surveyed said they had disciplined an employee who violated the company's social media policy (SHRM, 2012).

Lastly, future researchers should examine how long it takes individuals, in general, to disengage from WLB and restore their work behavior. Given that WLB is an escape from work and relieves stress, boredom, and/or mental and physical exhaustion, and given that the act of WLB is reinforcing and encourages one to click on more and more links, employees will find it difficult to exercise self control and stop that reinforcing behavior. It has been argued "moderate amounts of WILB [workplace Internet leisure behavior] may be construed as an enjoyable volitional activity, much like visiting a café for coffee with friends at work" (Coker, 2011, p.241). We argue that talking with a co-worker is not the same as surfing the Internet due to the varying consequences involved in both activities. That is, the Internet can be continuously accessed without any prompt to end that Internet activity. Yet, when engaging with a co-worker, the interaction will only continue as long as that co-worker interacts with the individual; the moment the co-worker goes back to work, he/she has ended access to the activity and the reinforcers that accompany that activity. Thus, these two activities may provide the necessary break from work, but the duration from which concentration is restored differs greatly depending on the individual's ability to end their interaction with the reinforcing activity and return to their work responsibilities. On that note, it may be of great value to create computer software that provides immediate feedback to employees informing them how long they have been engaging in workplace leisure behavior. This feedback presents an opportunity for employees to be aware when they are entering an amount of WLB that will start to negatively affect their productivity, and prompts them to disengage from the reinforcing activity and return to their work activities.

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TABLE 1**Descriptive Statistics for all Variables (Combined for Groups A & B)**

	Baseline				Intervention			
	WLB	On-Task	Errors	Words	WLB	On-Task	Errors	Words
Mean	399.4	798.8	6.6	427.5	510.2	669.6	5.1	330.7
Median	359	841	5	423	556	635	4	320
Std. Dev.	342.6	345.2	4.5	165.9	378.1	384.9	4.2	164.9
Range	1181	1181	17	666	1093	1197	18	681
Minimum	11	8	0	39	0	0	0	74
Maximum	1192	1189	17	705	1093	1197	18	755
Sum	19569	39140	326	20947	33163	43524	330	21494
Count	49	49	49	49	65	65	65	65

TABLE 2**Correlational Analysis for all Variables (Combined for Groups A & B)**

	Baseline ¹				Intervention ²			
	WLB	On-Task	Errors	Words	WLB	On-Task	Errors	Words
WLB	1				1			
On-Task	-0.99956	1			-0.92283	1		
Errors	-0.32924	0.32988	1		-0.39069	0.45154	1	
Words	-0.71212	0.71521	0.46130	1	-0.79879	0.86252	0.42098	1

¹ Critical value is 0.279 (n=50) at 5% significance level.

² Critical value is 0.244 (n=65) at 5% significance level.

TABLE 3**Descriptive Statistics for all Variables**

	Baseline				Intervention			
	WLB	On-Task	Errors	Words	WLB	On-Task	Errors	Words
Group A								
Mean	329.208	870.792	7.542	504.917	492.688	707.125	5.750	391.219
Median	378	822	7.5	520	549.5	678	5	348
Std. Dev.	244.807	244.807	3.799	119.633	319.067	322.895	3.818	176.468
Range	713	713	14	377	1019	1024	14	653
Min.	25	462	2	300	62	112	0	102
Max.	738	1175	16	677	1081	1136	14	755
Sum	7901	20899	181	12118	15766	22628	184	12519
Count	24	24	24	24	32	32	32	32
Group B								
Mean	466.720	729.640	5.800	353.160	527.182	633.212	4.424	271.970
Median	328	872	3	357	648	488	3	301
Std. Dev.	409.440	413.255	5.050	172.022	432.103	438.775	4.430	130.429
Range	1181	1181	17	666	1093	1197	18	408
Min.	11	8	0	39	0	0	0	74
Max.	1192	1189	17	705	1093	1197	18	482
Sum	11668	18241	145	8829	17397	20896	146	8975
Count	25	25	25	25	33	33	33	33

TABLE 4**Correlational Analysis for all Variables**

	Baseline				Intervention			
	WLB	On-Task	Errors	Words	WLB	On-Task	Errors	Words
Group A¹								
WLB	1				1			
On-Task	-1	1			-0.99877	1		
Errors	-0.18044	0.18044	1		-0.43614	0.43318	1	
Words	-0.91157	0.91157	0.07529	1	-0.95894	0.95813	0.35448	1
Group B²								
WLB	1				1			
On-Task	-0.99940	1			-0.88417	1		
Errors	-0.35638	0.35629	1		-0.36132	0.45246	1	
Words	-0.63496	0.63895	0.60369	1	-0.80254	0.91109	0.46080	1

¹ Critical value for Group A's baseline is 0.404 (n=24) at 5% significance level whereas the critical value during intervention is 0.361 (n=30) at 5% significance level.

² Critical value for Group B's baseline is 0.396 (n=25) at 5% significance level whereas the critical value during intervention is 0.336 (n=25) at 5% significance level.

TABLE 5**Regression Results for Effect of Typing Ability (Combined for Groups A & B)**

	Model A: Baseline		Model A: Intervention		Model B: Baseline		Model B: Intervention	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
α	694.95	0.002	402.45	0	17.83	0.01	7.48	0.06
β	-5.332	0.345	-1.36	0.528	-0.289	0.1	-0.046	0.46
R-Square	0.04		0.02		0.12		0.02	
F-Statistics	0.93		0.411		2.95		0.557	
Model A:	Productivity = F(typing)							
Model B:	Quality = F(typing)							

TABLE 6**Regression Results for Effect of WLB on Words Typed (Combined for Groups A & B)**

	Coefficient	Std. Error	t-Stat	p-value	r-Square	Sample Size
Baseline						
0.9-15 % WLB						
Intercept	479.86	64.99	7.38	0.00*	0.00	19
WLB (in %)	4.80	9.82	0.49	0.63		
15.01-40 % WLB						
Intercept	474.25	133.85	3.54	0.01*	0.00	11
WLB (in %)	1.08	4.53	0.24	0.82		
40.01-100 % WLB						
Intercept	759.45	42.36	17.93	0.00*	0.88	19
WLB (in %)	-7.24	0.64	-11.29	0.00*		
0.9-100 % WLB						
Intercept	565.40	25.19	22.44	0.00*	0.53	49
WLB (in %)	-4.17	0.58	-7.23	0.00*		
Intervention						
0.9-15% WLB						
Intercept	398.13	75.37	5.28	0.00*	0.06	21
WLB (in %)	10.63	9.20	1.15	0.26		
15.01-40% WLB						
Intercept	546.20	89.46	6.11	0.00*	0.12	9
WLB (in %)	-3.36	3.37	-1.00	0.35		
40.01-100% WLB						
Intercept	527.54	43.57	12.11	0.00*	0.63	34
WLB (in %)	-4.52	0.61	-7.44	0.00*		
0.9-100% WLB						
Intercept	527.10	18.24	28.89	0.00*	0.73	64
WLB (in %)	-4.45	0.34	-13.03	0.00*		

* Statistically significant at 5% level.

FIGURE 1

Curvilinear relationship between WLB and work behavior during baseline for combined Groups A & B.

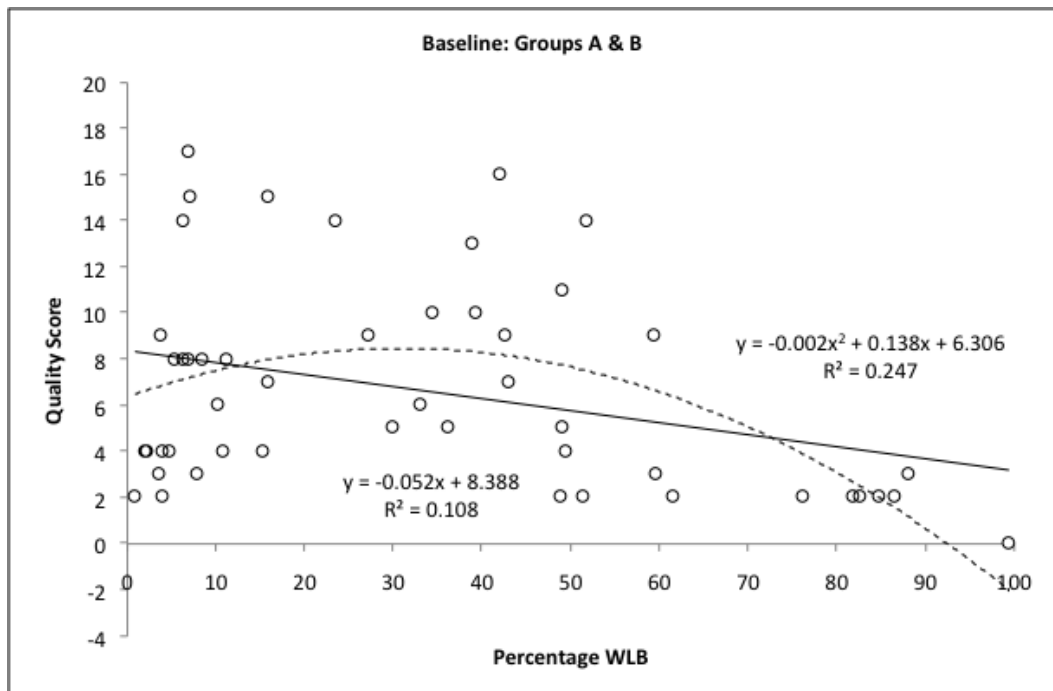
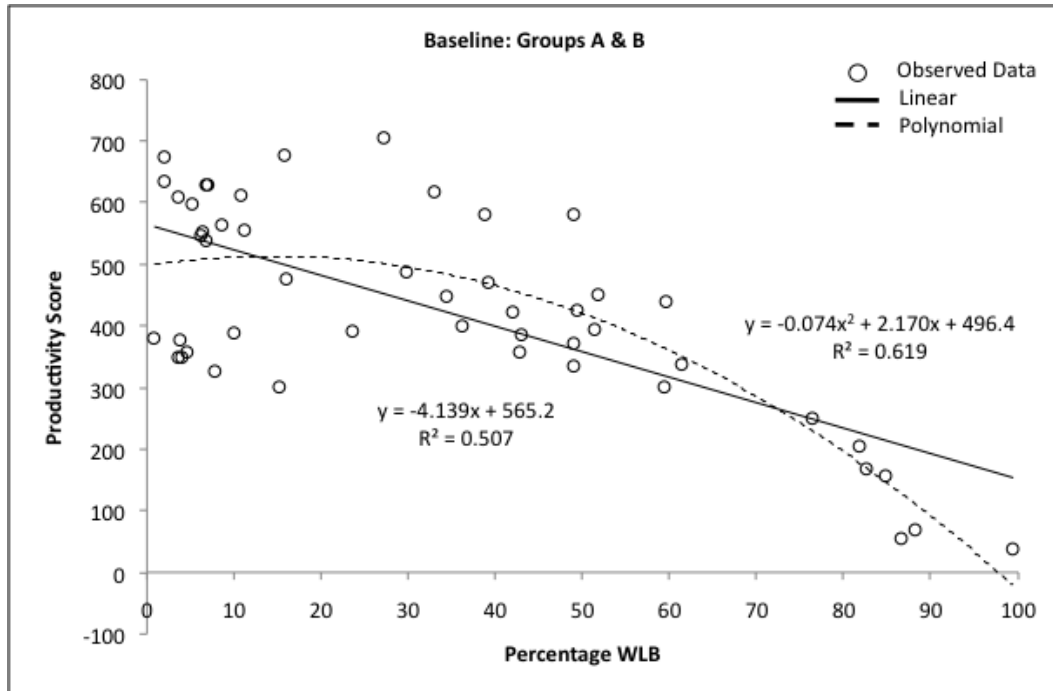


FIGURE 2

Curvilinear relationship between WLB and work behavior during intervention for combined Groups A & B.

