

Optimal Levels of Writing Management: A Re-Analysis of Boice (1983)

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Abstract

A re-analysis of data originally presented in Boice (1983) confirmed that those who wrote daily in regularly scheduled writing sessions produced more writing and more new ideas than those who wrote "only when they felt like it." Writers who wrote to avoid punishment (donating money to a despised charity) wrote more and produced more ideas, but the re-analysis revealed that they were less efficient than other groups, producing fewer ideas per page written.

Boice (1983) concluded that regularly scheduled writing sessions encouraged more writing and the emergence of more creative ideas than did "spontaneous" writing (writing when the writer "felt like it"). Boice's data also appears to show, however, that the use of extreme reinforcers, in this case a punishment, was even more effective.

In this note, I present a re-analysis of Boice's data, and conclude that Boice's conclusions on the effectiveness of regularly scheduled sessions are correct. I also conclude, however, that the use of a punishment to reinforce writing quantity did not result in increased efficiency in the production of creative ideas.

Subjects were volunteers, college faculty with doctorates. None reported having a writer's block, but all "complained of difficulties in completing written projects" (p. 538). All had authored or co-authored at least one academic publication in the last three years. Subjects met with the experimenter one time per week and kept track of the number of pages written and the number of creative or novel ideas that emerged that week. Subjects were told that "creative ideas" were those that were "useful and relevant to professional writing projects (and were) novel and original to the writer" (p. 538). Subjects were asked only to list the first four ideas they had each writing day.

Subjects were randomly assigned to one of three groups.

Those in the first group were asked to schedule five writing sessions per week. During the baseline phase of the study, they were asked to write "only when they

felt like it" for ten days or until they had produced no writing for three consecutive writing days.

After this, they entered a new phase in which they agreed to produce three pages per session, and a strong motivator was instituted: If subjects did not meet the goal on any day, they would have to donate \$15 to a "despised organization." They stayed in this phase for 30 days.

A second group did the same baseline condition as the first, scheduling five sessions per week but actually writing only when they felt like it for 15 scheduled days. After this time, for an additional 20 days, they were asked to write daily, whether they felt like writing or not, but no quota and no reinforcers were used.

A third group agreed to do no writing for 50 days or ten weeks and also kept track of any new, creative ideas they had.

For ease of exposition, I present Boice's results in terms of four writing conditions. Conditions 2, 3 and 4 represent increasing amounts of management in writing.

1. No writing: the control group.
2. Spontaneous writing, writing when one "feels like it.": the baseline conditions for groups 1 and 2.
3. Regular writing: the second phase activity of group 2, asked to do regular writing without incentives.
4. Forced writing, those who had to send a donation to a despised organization if they did not meet their writing goals. This was the second phase activity of group 1.

Quantity written

Table 1	
Amount of writing reported	
no writing	.1 (control, baseline), .2 (control, post-baseline)
spontaneous	.4 (group 1, baseline), .3 (group 2, baseline)
regular	.9 (group 2, post-baseline)
forced writing	3.2 (group 1, post-baseline)

As seen in table 1, there is no question that tightening the writing management conditions resulted in more writing. Encouraging writers to write regularly tripled output (.3 to .9 pages per day) and imposing a punishment increased output eightfold (.4 to 3.2 pages per day).

Production of creative ideas

Boice presented his results on the quantity of novel ideas in the form of graphs. I converted the information contained in Boice's summary graph (Boice's figure 2) into actual numbers, measuring the output of creative ideas at each five day interval. Table 2 shows that writing itself resulted in more creative ideas (compare the "no writing" and "spontaneous" writing conditions), and that the number of creative ideas increases sharply with increased management, with punishment producing the largest increase.

Table 2	
Output of creative ideas	
no writing	.09 (control, baseline), .06 (control, post-baseline)
spontaneous	.21 (group 2, baseline), .32 (group 1, baseline)
regular	.63 (group 2, post-baseline)
forced writing	1.39 (group 1, post-baseline)

Table 3	
Creative ideas per page	
spontaneous	.8 (group 2, baseline), .8 (group 1, baseline)
regular	.7 (group 2, post-baseline)
forced writing	.43 (group 1, post-baseline)

Table 3 presents an analysis not included in Boice's paper: The results in terms of creative ideas produced per page of writing. The results for the spontaneous and regular groups are remarkably similar. Under both conditions, writers produced about three-fourths of a creative idea per page. The efficiency of writing in generating new ideas was nearly cut in half in the punishment condition, however. Thus, the forced writing group produced more writing and more ideas, but they were less efficient.

Conclusions

Boice's data and my re-analysis confirm that writing is highly effective in stimulating creative thought: Those in the spontaneous writing condition produced more creative ideas than those who did not write at all, and those who were asked to write regularly produced even more ideas. This result is a clear, empirical confirmation that "writing makes you smarter," that writing is a profound means of stimulating creativity, as those who have studied the composing process have maintained (e.g. Elbow, 1975).

A remarkable result of this re-analysis is that writers in the spontaneous condition (two groups) and in the regular writing condition were nearly identically efficient: All three groups averaged about three-fourths of a creative idea per page written.

It can be argued that the clear winner was the regular writing condition. Regularly scheduled writing resulted in more writing and more new ideas than writing "when one feels like it." This result is consistent with reports from professional writers who maintained writing schedules, regardless of mood (e.g. Wallace and Pear, 1977). It is also consistent with the results of other studies by Boice (1987, 1989) showing that regular, planned writing sessions result in more writing than waiting for longer blocks of time ("binge writing"). A frequent theme in Boice's work is that inspiration does not typically precede writing in experienced writers; it is the

result of writing.

My re-analysis, however, casts some doubt on the desirability of forcing writing using punishment. The group that wrote under the threat of punishment wrote the most; their average output, in fact, indicated that they met their goal of three pages per day. But they barely met the goal, apparently writing just enough to avoid punishment, and their writing was only half as efficient as those in other groups, and only half as efficient as their own writing in the baseline condition.

It is possible that writing under the punishment condition became aversive; it would be interesting to see how much writers in such a condition continue to write after the negative consequences are removed¹. It would also be interesting to see whether the quality of their ideas was similar to those produced by the other groups.

These results suggest that there is an optimal level of management that encourages writing and the creative process. Encouraging writers to write regularly, with the modest reinforcer of their recording their output and reporting it to someone else, was the most effective level of management among all the conditions used in this study.

Boice (1994) reached similar conclusions after working with 52 writers over many years, recommending that writers should always employ the "least pressure sufficient" when using external means to maintain (or reinstall) a regular schedule of writing (p. 108). In fact, Boice concludes that extreme punishments of the kind used in group 1 are to be used only "as a last resort, temporarily; with longer use, their aversiveness can generalize to the act of writing itself" (p. 108).

Footnote

- 1 In general, writers who write under reinforced conditions, whether rewards or punishments, typically write much less when these reinforcers are removed, and return to higher levels of productivity when the reinforcers are restored (Boice, 1982). This predicts that those in the punishment condition would show a drop in productivity and creativity after the treatment. But it is not clear that the regular writers (group 2) would maintain their productivity without some support. In Boice (1989), writers who wrote under conditions similar to the regular condition (regular sessions with regular meetings with a writing therapist and keeping track of the quantity written) maintained steady output for one year. Those who wrote regularly but without keeping track of the quantity written and without meetings wrote more than a comparison group, but their quantity of writing declined over a year.

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