



The Benefits of Writing

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Abstract

Careful writing about traumatic or uncertain events, past, present or future, appears to produce a variety of benefits, physiological and psychological. Written accounts of trauma positively influence health. Recent investigations have shown that the explicit written description of an ideal future produces similar results. A large body of research conducted in the industrial and business domains also demonstrates that future authoring or goal-setting results in improved productivity and performance.

Narration and Health

A fascinating body of research, pioneered by James W. Pennebaker in 1986,¹ has linked written narrative to enhanced mental and physical health. Studies of this effect typically employ written output, although variations such as verbal expression do exist. Participants are asked to describe a traumatic personal event in writing (or, in the control condition, to write about a trivial topic), during 15 to 30 minute sessions. These sessions range in frequency, from a single instance to multiple sittings, spread out over a number of weeks. During each session, individuals are instructed to write continually for the allotted time, without regard for grammar or spelling.

In conjunction with this manipulation, a number of health-related variables are assessed, beginning during the writing period, and continuing for several weeks afterwards.

Individuals assigned to write about a stressful occurrence in their own life typically experience improvements in general physical health, compared to those who write about trivial events. These improvements include fewer consultations with physicians,² greater long-term psychological health³ and improved immune function.⁴

Other benefits include faster re-employment for recently dismissed professionals,⁵ and higher grade-point averages for students.⁶ Kitty Klein and Adriel Boals recently demonstrated, as well, significant increases in working memory among participants in two well-controlled studies, attributable to a decrease in anxiety and depression-related intrusive thoughts.⁷ These results appear robust, and have been demonstrated in over two-dozen studies, using a number of populations around the world.⁸

The health benefits of trauma narration have been replicated using a very different sort of content. Laura King⁹ explored the potential ramifications of writing about life goals and ideals, as opposed to past traumatic experiences. After reading a set of general instructions,¹ a group of participants engaged in a writing task, using methods similar to those described previously. Individuals in the control condition were asked to write about their plans for the day.

Three weeks later, those who wrote about their best possible selves scored significantly higher on measures of psychological well-being (which included such concepts as personal happiness and life satisfaction). Health records were also obtained and analysed for all participants. Although the two groups did not differ in average healthcare use prior to the experiment, people who wrote about their ideal future visited medical professionals less often than those in the control condition in the five months following the study.

Pennebaker demonstrated that such positive consequences appears related to the development of a coherent narrative (rather than as a consequence of reduction of

¹ Think about your life in the future. Imagine that everything has gone as well as it possibly could. You have worked hard and succeeded at accomplishing all of your life goals. Think of this as the realization of all of your life dreams. Now, write about what you have imagined.

repression or inhibition or emotional catharsis).^{10 11} Harber and Pennebaker¹² suggested, as well, that careful writing may help in the production of organized, structured memories, and in the analysis of cause/effect relationships in the past and their application to the present and future.

Narrated Future Goals and Health

The formation and pursuit of goals can be a valuable tool in coping with loss or trauma. The ability to “get on with life” following a traumatic incident appears closely allied with recovery. Failure to do so appears associated with depression, motivated by the apparent hopelessness of all activity. A number of researchers have found support for the psychological benefits of forming plans following a traumatic loss.

Stein, Folkman, Trabasso and Richards,¹³ who studied a population of caregivers who had lost their partners to AIDS, found that well-explicated goals were related to better well-being at the time of bereavement, and better recovery in the following year.¹⁴

Elovainio and Kivimäki,¹⁵ who examined a population of Finnish nurses, found that the degree to which goals were clearly stated and well-comprehended by staff moderated the amount of strain experienced individually. This applied to goals associated with each job or work unit, and to the more general goals of the entire organization.

Outcome-oriented thinking and behaviour is clearly useful in times of emotional upset. It also appears to aid day-to-day well-being. Researchers interested in human emotion have found that the pursuit of goals, as well as their attainment, are associated with happiness, by adults and children.¹⁶ As psychologists have become increasingly well-informed about the biochemical nature of emotional responses, it has become obvious that much of the positive emotion that human beings feel is a consequence of the release of the neurotransmitter dopamine, in response to evidence that satisfactory progress is being made towards desired goals.¹⁷ This means that it is difficult for people to experience hope and interest and engagement in the absence of well-specified goals.

Self-defined, intrinsically important goals also seem more effective than externally defined

goals, which are often motivated by sources of negative emotion, such as pressure from relatives or guilt. Kennon M. Sheldon and Linda Houser-Marko¹⁸ asked first-year students to describe eight future goals, and to rate their reasons for pursuing them, demonstrating that attainment of internally-motivated goals was much more likely than attainment of those fuelled by external sources,¹⁹ and that the advantages to intrinsic motivation tended to become self-reinforcing and to last. The most stunning outcome of this extended study, however, was related to academic performance. Scores for the American College Test were compared with each student's final grade-point average. Individuals in the process of pursuing goals for intrinsic, personal reasons had grade point averages higher than those predicted by their American College Test scores. Remarkably, however, the majority of their goals were not at all course- or grade-related. In the words of the authors: "This finding suggests that those people who can identify sets of goals that well represent their implicit interests and values are indeed able to function more efficiently, flexibly, and integratively across all areas of their lives."²⁰ Similar results obtained by Morisano, Hirsh, Peterson, Shore and Pihl were obtained at McGill University, and provide part of the scientific groundwork for the programs available at www.selfauthoring.com.

Written Goals and Productivity

Decades of empirical research has supported the proposition that setting goals and pursuing them can lead to significant improvements in task performance.²¹ The majority of this work has been explored in a business context. Locke and Latham laid the base for the initial theoretical work on the benefits of goal-setting.²² The model they constructed collaboratively has four major tenets:

- Goals that are specific and difficult lead to better performance than vague exhortations to "do your best" (and, of course, than no specified goals whatsoever).
- The relationship between goal difficulty and performance is linear and positive.
- Other factors such as competition, provision of feedback, and participation in decision-making do not affect performance beyond their function in establishing and adjusting the commitment to specific and difficult goals.
- Direction, effort and persistence are three primary motivational mediators of the

goal-setting/performance relationship. Task strategy constitutes a fourth, cognitive mediator. Ability, commitment, feedback, task complexity, and situational constraints are all possible moderators of the goal-setting/performance relationship.

Locke and Latham erected their theory on a foundation of important empirical work, conducted in real-world workplaces and the laboratory.²³ Latham and Kinne²⁴ found, for example, that logging crews assigned a specific and difficult goal were significantly more productive (and had better job attendance) than a similar crew who were merely urged to do their best. Such improvement remained even when workers were paid by the hour, and not on a piecework basis.²⁵ These findings also held true in the case of more abstract occupations, such as research and development²⁶ and managerial planning.²⁷

Laboratory research has replicated these findings in such basic domains as memory,²⁸ mathematical ability,²⁹ and reaction time.³⁰ Further investigation revealed that participation in goal-setting clearly bolsters understanding of strategy.³¹ Pham and Taylor have begun to decompose the process of goal-attainment (through proximal goals), and to study its causal structure.³² University students were asked to imagine either the goal of doing well on an upcoming midterm, or to focus on imagining the details of the process required to attain a good mark. Following this mental simulation, participants wrote down the contents of their imaginings. Students who engaged in process-simulation performed significantly better on the test than those who merely imagined the positive outcome. This improvement appeared to be a consequence of study-plan formation and execution on the part of the successful group, as well as a decrease in exam-related anxiety.

Additional basic research has helped establish that fantasizing about a desired future (compared to a less valuable present) helps tag desired future states with positive affect, mediated as they are by expectations of success.³³ The importance of nearer or proximal goals has also been investigated. Such goals appear particularly important in uncertain circumstances, where many variables must be considered, and where longer-term goals have to be constantly evaluated, because of rapidly changing circumstances. Success at near or proximal goals also seems capable of enhancing distant or long-term goal commitment.³⁴

Conclusions

Writing about uncertainty, past, present, and future, has multiple benefits. Such benefits do not appear bound by conventional categorical domains, as they encompass psychological well-being, physical health, cognitive ability and task performance. Furthermore, the process by which such goal-setting exerts its effects appears broadly generalized. Establishing difficult, specific goals can facilitate performance in an unrelated domain (such as academic achievement). Likewise, comprehension of larger organizational goals (relatively removed from individual task aims) reduces the personal strain suffered by workers.

It appears possible that writing, which is a formalized form of thinking, helps people derive information from their experiences that helps them guide their perceptions, actions, thoughts and emotions in the present. Drawing specific, causal conclusions about life's important events may also help reduce the burden of uncertainty and threat that may remain active, emotionally, even years after a traumatic event occurred. Clarifying purpose and meaning into the future helps improve positive emotion, which is associated with movement towards important goals, and reduces threat, which is associated with uncertainty and doubt, and which may be experienced as hopelessness, despair, and lack of meaning.

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- ¹ Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, Vol. 95 (3), 274-281.
- ² Cameron, L. D. & Nicholls, G. (1998). Expression of stressful experiences through writing: Effects of a self-regulation manipulation for pessimists and optimists. *Health Psychology*, Vol. 17 (1), 84-92; Greenberg, M. A., Wortman, C. B., & Stone, A. A. (1996). Emotional expression and physical health: Revisiting traumatic memories or fostering self-regulation? *Journal of Personality and Social Psychology*, Vol. 71 (3), 588-602; Pennebaker, J. W., Colder, M. & Sharp, L. K. (1990). Accelerating the healing process. *Journal of Personality and Social Psychology*, Vol. 58 (3), 528-537; Richards, J. M., Beal, W. E., Seagal, J. D., & Pennebaker, J. W. (2000). Effects of disclosure of traumatic events on illness behavior among psychiatric prison inmates. *Journal of Abnormal Psychology*, Vol. 109 (1), 156-160; Pennebaker, J. W. & Francis, M. E. (1996). Cognitive, emotional and language processes in disclosure. *Cognition and Emotion*, Vol. 10 (6), 601-626; Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, Vol. 95 (3), 274-281; Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of trauma and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, Vol. 56 (2), 239-245.
- ³ See Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, Vol. 66 (1), 174-184 for a review of this effect.
- ⁴ Esterling, B. A., Antoni, M. H., Fletcher, M. A., Margulies, S., & Schneiderman, N. (1994). Emotional disclosure through writing or speaking modulates latent Epstein-Barr virus antibody titers. *Journal of Consulting and Clinical Psychology*, Vol. 62 (1), 130-140; Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of trauma and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, Vol. 56 (2), 239-245; Petrie, K. J., Booth, R. J., & Pennebaker, J. W. (1998). The immunological effects of thought suppression. *Journal of Personality and Social Psychology*, Vol. 75 (5), 1264-1272; Petrie, K. J., Booth, R. J., Pennebaker, J. W., Davison, K. P., & Thomas, M. G. (1995). Disclosure of trauma and immune response to a Hepatitis B vaccination program. *Journal of Consulting and Clinical Psychology*, Vol. 63 (5), 787-792.
- ⁵ See Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, Vol. 66 (1), 174-184 for a review of these effects.
- ⁶ Morisano, D., Hirsh, J. B., Peterson, J. B., Shore, B., & Pihl, R. O. (2010). Personal goal setting, reflection, and elaboration improves academic performance in university students. *Journal of Applied Psychology*, 95, 255-264.
- ⁷ Klein, K. & Boals, A. (2001). Expressive writing can increase working memory capacity. *Journal of Experimental Psychology: General*, 130, 520-533.
- ⁸ Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology*, Vol. 55 (10), 1243-1254. See Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, Vol. 66 (1), 174-184 for a review and research synthesis examining effect size and moderating factors. Also, Pennebaker, J. W. & Graybeal, A. (2001). Patterns of natural language use: Disclosure, personality, and social integration. *Current Directions in Psychological Science*, Vol. 10 (3), 90-93 for a current review of theoretical explanations and directions for further research.
- ⁹ King, L. A. (2001). The health benefits of writing about life goals. *Personality and Social Psychology Bulletin*, Vol. 27 (7), 798-807.
- ¹⁰ Baikie, K. A. & Wilhelm, K. Emotional and physical health benefits of expressive writing. *Advances in Psychiatric Treatment*, 11, 338-346.
- ¹¹ Pennebaker, J. W. (1997) Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8, 162-166.
- ¹² Harber, K. D., & Pennebaker, J. W. (1992) Overcoming traumatic memories. In *The Handbook of Emotion and Memory: Research and Theory* (ed. S.-Å. Christianson), pp. 359-387. Hillsdale, NJ: Lawrence Erlbaum Associates.
- ¹³ Stein, N., Folkman, S., Trabasso, T., & Richards, T. A. (1997). Appraisal and goal processes as predictors of psychological well-being in bereaved caregivers. *Journal of Personality and Social Psychology*, Vol. 72 (4), 872-884.
- ¹⁴ See also Stein, N. L., Sheldrick, R. A., & Broaders, S. C. (1999). Predicting psychological well-being from beliefs and goal-appraisal processes during the experience of emotional events. In Goldman, S., Van den Broek, P. L., & Graesser, A. (Eds.), *Essays in Honor of Tom Trabasso*. Mahwah, NJ: LEA for more on the relationship between depression and goal-formation.
- ¹⁵ Elovainio, M., & Kivimäki, M. (1996). Occupational stresses, goal clarity, control, and strain among nurses in the Finnish health care system. *Research in Nursing and Health*, Vol. 19, 517-524.

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16. Stein, N. L., Sheldrick, R. A., & Broaders, S. C. (1999). Predicting psychological well-being from beliefs and goal-appraisal processes during the experience of emotional events. In Goldman, S., Van den Broek, P. L., & Graesser, A. (Eds.), *Essays in Honor of Tom Trabasso*. Mahwah, NJ: LEA.
17. Gray, J. (1982). *The neuropsychology of anxiety*. New York: Cambridge University Press.; Panksepp, J. (1998). *Affective neuroscience*. New York: Oxford University Press.
18. Sheldon, K. M., & Houser-Marko, L. (2001). Self-concordance, goal attainment, and the pursuit of happiness: Can there be an upward spiral? *Journal of Personality and Social Psychology*, Vol. 80 (1), 152-165.
19. Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need-satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, Vol. 76, 482-497.
20. Ibid., pg. 163. Deci, E., & Fujita, F. (1995). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation: Vol. 38. Perspectives on motivation* (pp. 237-288). Lincoln: University of Nebraska Press.
21. For example, Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969–1980. *Psychological Bulletin*, Vol. 90 (1), 125-152, Latham, G. P., & Locke, E. A. (1991). Self-regulation through goal setting. *Organizational Behavior and Human Decision Processes*, Vol. 50, 212-247, and Latham, G. P. (2001). The reciprocal effects of science and practice, insights from the practice and science of goal setting. *Canadian Psychology*, Vol. 42 (1), 1-11.
22. Locke, E. A. (1964). *The relationship of intentions to motivation and affect*. Unpublished doctoral dissertation, Cornell University, Ithaca, NY; Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
23. Latham, G. P., & Locke, E. A. (1991). Self-regulation through goal setting. *Organizational Behavior and Human Decision Processes*, Vol. 50, 212-247.
24. Latham, G. P., & Kinne, S. B. (1974). Improving job performance through training in goal setting. *Journal of Applied Psychology*, Vol. 59, 187-191.
25. Latham, G. P., & Balders, J. J. (1975). The "practical significance" of Locke's theory of goal setting. *Journal of Applied Psychology*, Vol. 60, 122-124.
26. Latham, G. P., Mitchell, T. R., & Dossett, D. L. (1978). The importance of participative goal setting and anticipated rewards on goal difficulty and job performance. *Journal of Applied Psychology*, Vol. 63, 163-171.
27. Latham, G. P., & Saari, L. M. (1979). The effects of holding goal difficulty constant on assigned and participatively set goals. *Academy of Management Journal*, Vol. 22, 163-168; Latham, G. P., & Marshall, H. A. (1982). The effects of self set, participatively set, and assigned goals on the performance of government employees. *Personnel Psychology*, Vol. 35, 399-404.
28. West, R. L., Welch, D. C., & Thorn, R. M. (2001). Effects of goal-setting and feedback on memory performance and beliefs among older and younger adults. *Psychology and Aging*, Vol. 16 (2), 240-250.
29. Locke, E. A., & Bryan, J. F. (1969). Knowledge of score and goal level as determinants of work rate. *Journal of Applied Psychology*, Vol. 53, 59-65; Locke, E. A., Cartledge, N., & Knerr, C. S. (1970). Studies of the relationship between satisfaction, goal setting, and performance. *Organizational Behavior and Human Performance*, Vol. 5, 135-158.
30. Locke, E. A., Cartledge, N., & Knerr, C. S. (1970). Studies of the relationship between satisfaction, goal setting, and performance. *Organizational Behavior and Human Performance*, Vol. 5, 135-158.
31. Latham, G. P., & Saari, L. M. (1979). The importance of supportive relationships in goal setting. *Journal of Applied Psychology*, Vol. 64, 151-156.
32. Pham, L. B., & Taylor, S. E. (1999).
33. Oettingen, G., Pak, H., & Schnetter, K. (2001). Self-regulation of goal setting: Turning free fantasies about the future into binding goals. *Journal of Personality and Social Psychology*, Vol. 80 (5), 736-753.
34. Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice Hall; Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology*, Vol. 41, 586-598.