

Happiness in the Workplace: Employees who focus on Maximizing Happiness Become Happier

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Abstract

The pursuit of happiness has preoccupied philosophers, psychologists, and economists, amongst others. Recently, it has been investigated empirically, with results appearing to support the perspective that explicitly focusing on happiness is counterproductive. However, these investigations have been correlational or involved participants being asked to maximize or monitor their momentary happiness in laboratory settings involving fixed tasks. The current research uses a sample of working adults drawn from a national participant pool and a sample of management-level employees from large U.S. based firms in order to examine whether focusing on one's happiness can increase happiness levels over a longer time horizon, and in a work environment. We find consistent support for the proposition that employees' happiness improves when they focus on maximizing their happiness, as compared to other conditions. The effect appears to arise because focusing on maximizing one's happiness leads to happiness-consistent behavioral changes. We conclude with a discussion of the managerial implications for these findings.

Keywords: happiness, happiness intervention, well-being

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“Ask yourself whether you are happy” stated the philosopher John Stuart Mill “and you cease to be so” (Mill, 1909). A common idea regarding happiness is that it cannot be pursued directly, but rather, is a fortuitous byproduct of engagement in other activities (see Kesebir and Diener, 2008 for review). Indeed, findings show that people who are explicitly asked to maximize happiness are less happy than those not asked to do so (Cupchic and Leventhal, 1974; Kashdan, Breen and Julian 2010; Mauss, Tamir, Anderson, and Savino 2011; Schooler, Ariely, and Loewenstein 2003; for review see Gruber, Mauss, and Tamir 2011). One study (Schooler et al. 2003, study 1), for instance, found that individuals who simply listened to music enjoyed the experience more than either those who were asked to make themselves as happy as possible while listening to it or those who were asked to monitor their happiness while listening to it.

Such findings are, at one level, intuitively appealing. Many of us recognize that certain goals cannot be pursued too explicitly or directly. Trying too explicitly to impress a potential date or to fall asleep, just as trying hard to not think of a white bear (cf. Wegner 1994), is likely to be counterproductive. However, most of us also recognize that the likelihood of achieving a goal is greater when we accord it higher (vs. lower) priority. Most decisions involve tradeoffs and therefore, our chances of achieving a goal are greater when we give it more importance. Thus, for example, a person who consciously (re)arranges various aspects of his life (e.g., diet, work habits) so as to get a good night’s sleep will sleep better than one who does not. By the same token, it stands to reason that individuals who accord higher (vs. lower) priority to the goal of being happy might make more happiness-enhancing choices, thereby becoming happier.

The theoretical contribution of this research lies in testing whether, results from past research notwithstanding, it is possible to increase happiness by explicitly pursuing the goal of

happiness. Specifically, we examined whether regularly making a happiness goal salient through introspection on one's happiness could increase employees' happiness levels. Although our manipulation was similar to those employed by past research, in that it made a happiness-related goal salient, our experimental design differed from those used previously in an important way: whereas past experiments used a controlled laboratory set-up in which participants were explicitly instructed to maximize their happiness levels during an assigned activity, we used field experiments in which employees were prompted to focus on happiness during normal work activities. Thus, whereas past experiments were conducted in an artificial setting under the supervision of an experimenter, our experiment was performed in a workplace context, with participants going about their jobs and moderating their behavior as they saw fit.

We predicted that, in these more natural settings, individuals who introspected on their happiness with an aim to enhance it would engage in more behaviors congruent with enhancing their happiness, and would thus be happier, than participants who did not regularly introspect on their happiness. We tested this prediction in three field experiments involving samples of working adults drawn from a national online pool and a sample of management-level employees drawn from large U.S. based firms. These populations were chosen because inquiry into the factors that increase employee happiness has both theoretical and practical value.

As mentioned previously, the theoretical value of this work is to provide a more nuanced understanding of the heretofore one sided perspective on happiness goals, which to date has suggested that such goals are generally counterproductive. Beyond that, the practical value of this line of inquiry lies in the development and empirical validation of a cost effective and time-efficient intervention with the potential to improve employees' happiness in the workplace.

Employee happiness is a major concern for firms (Conger 2009). Research from academics and practitioners alike supports the perspective that firms accrue a variety of important benefits from employee happiness. For example, research on the “happy-productive worker hypothesis” (Fisher 2003) confirms that across a variety of cultures and organizations, people believe that happy employees work harder. This belief is supported by data demonstrating that employee happiness is positively correlated with productivity (for review see Judge, Thoresen, Bono and Patton 2001). Further, happy employees have been shown to be more creative in solving problems (Amabile, Barsade, Mueller and Staw 2005), to provide superior levels of customer service (Gold 2012), to engender a more helpful, collegial work environment (Seppala 2013), and perhaps as a consequence, to improve the firm’s financial performance (Harter et al. 2010; Kansas State University 2009). In addition to promoting positive benefits to the firm, happy employees also decrease the likelihood of negative workplace events. For example, research shows that when employees are happy they are more committed to the firm, which results in lower rates of employee turnover (Cooper 2012; Gregory 2009; Seppala 2013; Smith, 2011). Further, when workers are happier, the likelihood of strikes and/or class-action law suits against the firm decreases (Waggoner 2013).

Due to the numerous, consequential implications that employee happiness has for firms, it is perhaps no wonder that every year many firms invest substantial resources into initiatives designed to promote employee happiness, either directly or indirectly (Intuit 2013). Importantly, however, many of these initiatives present significant costs to the firm as well (Cooper 2012). For example, flexible work hours (Conger 2009; Gold 2012), employer-sponsored childcare (Bright Horizons, 2013), open communication with upper-level managers (Conger 2009), and access to benefits and raises (Smith, 2011; Yusko 2013) are factors that are commonly

implemented with the purpose of promoting or maintaining a happy workforce. Yet all of these elements require some level of risk, time and/or financial commitment on the part of the firm. Interestingly, although a myriad of variables that have been explored in the study of employee happiness, to our knowledge almost no work to date has investigated what firms can do in order to facilitate a workplace environment that encourages employees to pursue happiness on their own. This line of inquiry is important because research suggests that when individuals are intrinsically motivated to generate and maintain their own happiness, their likelihood of becoming happier may be higher than when happiness is the byproduct of extrinsic rewards (Deci and Ryan 2000).

The goal of the current research is make both theoretical and applied contributions by exploring the conditions under which asking employees to focus on their own happiness makes them happier. Specifically, we ask employees to focus on a goal of happiness maximization by introspecting on if they did their best to be happy. We then compare how this intervention affects their happiness to conditions where individuals are asked to monitor their happiness by considering how happy they were, or a control condition. We test the effectiveness of these interventions in three experiments, which involved shorter (15 minutes) and longer (2+ weeks) durations of time. Across our experiments, we find consistent evidence showing that happiness increases when the employees focus on a goal of happiness maximization, as compared to other conditions. We conclude the paper with a discussion on the potential applications that such interventions have for firms seeking to improve employee happiness.

Experiment 1: The Effect of Maximizing vs. Monitoring Happiness on Happiness over a Shorter Time Horizon

The goal of experiment 1 was to examine whether focusing on the goal of happiness maximization could increase short-term happiness, and whether such a boost in happiness is due to the behavioral changes the individuals make. A secondary objective was to assess whether in the same context monitoring happiness can be counterproductive to maximizing it, as observed in prior research (e.g., Mauss et al. 2011).

Method

Two hundred and twenty two workers from Amazon's Mechanical Turk online pool (45% male; $M_{age} = 29.3$, $SD = 11.88$) were recruited to participate in the experiment in exchange for a small monetary compensation. All participants were first given a measure designed to assess baseline happiness prior to participating in the experiment ("How happy are you at this moment?" scale: 1—Not at all happy to 7—Very happy). Participants were then randomly assigned to one of six conditions in a 3 (happiness-focus: maximizing vs. monitoring vs. control) X 2 (task wording: do what "you would *normally* do" vs. do what "you would *like* to do") between-subjects design. The purpose of including different task wording instructions was to examine whether the effect of focusing on happiness was sensitive to minor differences in task wording (i.e., to test robustness).

Participants were instructed that they would be participating in a study on "Free Time." They were told that they would have 15 minutes to engage in any activities of their choosing, as long as they stayed within sight of their computer. Those in the normal task-wording condition were instructed to do "Whatever you would normally do." The remaining half of participants was instructed to do "Whatever you would like to do." Participants in the control condition were given no further instructions.

Participants in the maximizing and monitoring conditions were exposed to an additional instruction. Those in the maximizing condition were given an instruction that was designed to promote a focus on a happiness maximizing goal, “During this time we would like you to do your best to be happy. By this we mean, just ask yourself, ‘Am I doing my best to be happy?’ periodically during this free time.” In contrast, those in the monitoring condition read an instruction designed to promote happiness monitoring. They were instructed as follows: “During this time we would like you to monitor your happiness. By this, we mean, just ask yourself, ‘How happy am I?’ periodically during this free time.”

After fifteen minutes had passed, during which time participants were free to engage in the activities of their choosing, participants were given the same happiness measurement question administered initially. The change in happiness between the first and second assessment was our main dependent variable. Given our proposition that focusing on happiness can improve happiness through changes in behavior, we asked participants in all conditions to indicate the extent to which they agreed with the statement “Being asked to focus on happiness changed the way I behaved during the study” (scale: 1—Definitely disagree to 7—Definitely agree). Additional measures were included to rule out alternate accounts (participating in the study was “fun;” the study was “tedious”) by testing for them as possible mediators.

We expected those in the maximizing condition to engage in those activities that they felt would be best suited to enhance their happiness-levels. Thus, we expected participants in this condition to report a higher level of happiness than those in the control condition and further, we expected this boost in happiness to be mediated by the behavioral changes these participants made. In contrast, we expected those in the monitoring condition to engage in monitoring their happiness levels, which has been shown to erode happiness (Mauss et al. 2011). However, we

did not necessarily expect participants in this condition to report a lower level of happiness relative to the control since, unlike participants in past experiments, those in our experiment were not constrained to participate in a task of the experimenter's choosing; rather, they had the freedom to engage in a task of their own choosing. Thus, depending on the relative strength of the two forces (monitoring happiness vs. freedom to engage in an activity of their own choosing), we expected participants in the monitoring condition of our experiment to report higher, lower, or comparable levels of happiness as those in the control condition.

Results

The purpose of this experiment was to test whether focusing on happiness could improve happiness, and further, if the framing through which individuals focused on happiness (maximizing vs. monitoring) influenced the effect. To test this, we first employed a 3 (happiness-related query: maximizing vs. monitoring vs. control) by 2 (task: normal behavior vs. "do what you like") analysis of variance with repeated measures (pre- vs. post-experimental participation). Results revealed a significant main effect of measure ($F(1, 216) = 56.49, p < .001$), showing that self-reported happiness increased with experimental participation. However, in support of our account, this main effect was qualified by an interaction between the measure (pre- vs. post-experimental participation) and the happiness-focus manipulation, $F(2, 216) = 9.070; p < .001$.

To explore this, paired t-tests were used to test for differences in self-reported happiness as a function of when the measure was taken (pre- vs. post-experimental participation). The results revealed that, in the maximizing condition, happiness increased significantly as a function of experimental participation ($M_{pre} = 4.73, SD = 1.17; M_{post} = 5.51, SD = 1.17$), $t(70) = 6.91, p < .001, d = .67$. Those in the control condition ($M_{pre} = 4.63, SD = 1.27; M_{post} = 5.08, SD = 1.16$) also showed significant improvement, $t(74) = 4.95, p < .001, d = .37$. In contrast, those in the

monitoring condition showed no signs of change from baseline ($M_{pre} = 4.84, SD = 1.07, M_{post} = 4.99, SD = 1.30$), $t(75) = 1.33, p = .187$. There was no significant difference in the pre-experimental, baseline measure of happiness across conditions (p 's $> .26$).

Because participants' happiness improved significantly above baseline in both the control and the maximizing conditions, further analysis was conducted in order to test if the size of the change in happiness was greatest in the maximization condition, in line with our predictions. In order to test this, a happiness change index was constructed by subtracting participants' pre-experimental happiness score from their post-experimental happiness score, with a positive score indicating a positive change in happiness. Planned contrasts revealed that participants in the maximizing condition reported a significantly greater positive change in happiness than those in the control condition ($M_{maximizing} = .77, SD = .94; M_{control} = 0.45, SD = .79, t(219) = 2.16; p = .032, d = .37$) and those in the monitoring condition ($M_{monitoring} = .14, SD = .95, t(219) = -4.25; p < .001, d = .66$). Additionally, those in the control condition improved more than those in the monitoring condition, $t(219) = 2.11; p = .036, d = .37$. No other significant results emerged in the analysis, F 's < 1 . The lack of an effect of the task wording manipulation (i.e., the effect of happiness-focus was not affected by task wording) suggests that the effect of happiness-focus is robust. See figure 1 for all means by condition.

Examining the number of people whose happiness increased (vs. stayed the same vs. decreased) by condition confirms that the greatest number of participants (57.7%) experienced an increase in happiness in the maximizing condition (see table 1). Further, the greatest number of participants experienced a decrease in happiness in the monitoring condition (19.7%). In line with prior work (Mauss et al. 2011; Schooler et al. 2003), these findings suggest that happiness monitoring can have a deleterious effect on happiness in short-term contexts.

To test the prediction that focusing on happiness improves happiness by changing one's behavior, and not due to other factors (e.g., the “fun” of participating in a “free time” study), we employed a mediation analysis using the bootstrapping technique suggested by Preacher and Hayes (2008). The results based on 5,000 bootstrapped samples indicated that maximizing had a significant positive effect on the behavioral change measure as compared to the control condition, $\beta = .39$; $SE = .14$; $p < .01$ (see figure 2 for all means by condition). Further, a higher score on this measure had a significant positive effect on happiness change, $\beta = .14$; $SE = .04$; $p < .01$. Moreover, while the main effect of the maximizing manipulation on happiness change ($\beta = .19$; $SE = .07$; $p < .001$) and the direct effect of the maximizing manipulation on happiness change ($\beta = .16$; $SE = .07$; $p < .01$) were significant, because the 95% Bias Corrected confidence interval for the indirect effect did not include 0 (lower 95% CI = .012, upper 95% CI = .119), the mediation was significant (Preacher and Hayes 2008). A shift in behavior therefore mediated the relationship between the condition (i.e., control vs. maximizing) and happiness change. Neither of the additional measures mediated the observed effect (“fun”: lower 95% CI = -.036, upper 95% CI = .016; “tedious”: lower 95% CI = -.081, upper 95% CI = .015).

Discussion

The results of experiment 1 reveal that, in short-term contexts where people are free to choose the activities that they engage in, happiness-levels increase when people are charged with the goal of maximizing happiness. These results appear to contradict those obtained in prior research. As mentioned earlier, prior findings suggest that happiness levels decrease among people asked to pursue happiness. We posit that the difference between our findings and those obtained in past research is due to a difference in the flexibility that the participants had in choosing how to maximize happiness: whereas participants in our experiment were free to

choose their activities, participants in prior experiments were forced to engage in a specific, pre-selected, task assigned by an experimenter (e.g., listening to a pre-selected piece of music). This difference meant that participants in our experiment had the freedom to make the behavioral changes that they felt would enhance their happiness, whereas participants in past experiments were left with no option but to attempt to directly control their emotional state. As prior findings have shown, an improvement in mood is more likely through changes in behavior rather than through direct regulation of one's emotions (Gross and Thompson 2007).

Two sets of supplementary results from our experiment support this explanation for the difference between our findings and past findings. First, we found that behavioral changes mediated the boost in happiness in the maximizing condition. Second, we found that individuals' happiness levels in the monitoring condition—the condition in which participants were instructed to monitor their happiness levels—decreased relative to control. As mentioned earlier, we did not necessarily expect that the happiness level in this condition would be lower than that of the control condition, but the results we obtained are consistent with the idea that monitoring happiness can be counterproductive to maximizing it.

Although the results from experiment 1 provide evidence that pursuing happiness need not necessarily be counterproductive and can, in fact, boost happiness levels, the experiment had two critical limitations. First, we measured individuals' momentary happiness using a single item measure, as opposed to using a more global assessment of happiness. Research has shown that global happiness tends to be relatively stable in comparison to momentary happiness (Lyubomirsky and Lepper 1999) and therefore may be less susceptible to intervention. We address the limitation in experiment 2. Second, experiment 2 tests if the positive effect of pursuing happiness observed in experiment 1 can extend to longer time horizons. This question

has implications for how useful or practical happiness-maximization goals are for organizations. For example, people may find themselves capable and/or willing to “do their best to be happy” over a 15 minute period; however, the efficacy of such goals may attenuate over a longer period of time. Contrary to this, we argue that consistent, periodic reminders of the goal of happiness maximization may be the nudge people need in order to accord greater priority to happiness over other goals, and make congruent behavioral choices.

Experiment 2: The Effect of Maximizing vs. Monitoring Happiness on Happiness over a Longer Time Horizon

The goal of experiment 2 was to examine whether the positive effects of pursuing happiness-maximization could extend to a global assessment of whether one is a happy or unhappy person and have implications for longer-term happiness. To this end, experiment 2 employed a longitudinal design in which participants were prompted to focus on their happiness daily for a period of one week. Further, this experiment allowed participants to report the behaviors they engaged in in an effort to maximize their happiness, to gain preliminary understanding into if there were systematic patterns in the types of behavioral-change individuals adopted.

Method

Two hundred and seventeen workers from Amazon’s Mechanical Turk online pool (62% male; $M_{age} = 29.9$, $SD = 9.51$) were recruited to participate in exchange for a small monetary compensation. The experiment utilized a three-group between-participants design, where happiness-focus (maximizing vs. monitoring vs. control) was the manipulated factor. Participants in two experimental conditions (maximizing and monitoring) were exposed to a manipulation that focused them on happiness every day, by presenting them with a question about their

happiness. We chose to use daily questions to focus participants on happiness based on extensive prior research validating that goals can become activated when individuals are asked to provide self-relevant information related to the goal (e.g., Fischhoff et al. 2003). The question in the maximizing condition was aimed at focusing participants on happiness maximization (“Did you do your best to be happy today?”). The question in the monitoring condition, in contrast, was designed to focus participants on monitoring their happiness (“How happy were you today?”). Those in the control condition were asked to report what day of the week it was each day.

All participants were informed that the experiment would involve three stages. In Stage 1, which was conducted on a Tuesday, participants completed standard demographic questions along with the 4-item Subjective Happiness Scale (Lyubomirsky and Lepper, 1999), which measures individuals’ subjective assessment of their global happiness. Stage 2 began on the following day. During Stage 2, which lasted 6 days, participants received an email around the same time each day (in the late afternoon) containing the question that corresponded to their assigned condition. Once Stage 2 was completed, Stage 3 began on the following day, also a Tuesday. Stage 3, which was completed by participants in all conditions, required participants to complete the same Subjective Happiness Scale administered in Stage 1. We collected before and after measures on the same day of the week (Tuesday) to eliminate any “day of the week” effects. After completing the subjective happiness scale, participants also were asked to describe—in an open-ended format—how participation in the experiment changed their behavior (if at all) over the course of the experiment. The main dependent measure was participants’ change in global happiness, relative to the baseline measure.

Results

Approximately 75% of participants ($n = 132$) completed the experiment and the final dependent measure. Participants' likelihood of completion was not affected by condition ($P_{behavior} = 75\%$, $P_{state} = 86\%$, $P_{control} = 71\%$; $\chi^2(1) = 3.957$; $p = .138$).

To test if focusing on happiness could improve global happiness, we first conducted an analysis of variance with repeated measures (pre- vs. post-experimental participation). Results revealed a marginally significant main effect of measure ($F(1, 129) = 3.58$, $p = .060$), showing global assessments of happiness increased with experimental participation. Importantly, however, this effect was qualified by an interaction between the measure (pre- vs. post-experimental participation) and the happiness-focus manipulation, $F(2, 129) = 2.38$; $p = .097$.

Paired t-tests were used to examine if the change in global happiness between pre-experimental participation ($\alpha = .943$) and post-experimental participation ($\alpha = .950$) varied as a function of condition. Replicating the results of experiment 1, in the maximizing condition, global happiness increased significantly as a function of experimental participation ($M_{pre} = 4.50$, $SD = 1.56$; $M_{post} = 4.75$, $SD = 1.45$), $t(44) = 2.96$, $p = .005$, $d = .17$. However, those in the monitoring condition ($M_{pre} = 4.51$, $SD = 1.40$; $M_{post} = 4.62$, $SD = 1.59$; $t(47) = 1.11$, $p = .271$) and the control condition ($M_{pre} = 4.24$, $SD = 1.51$; $M_{post} = 4.38$, $SD = 1.63$; $t(38) = .539$, $p > .59$) showed no significant signs of change relative to baseline. There was no significant difference in the pre-experimental, baseline measure across conditions (p 's $> .4$).

Additional analyses were conducted in order to confirm that the size of the change in happiness was greatest in the maximization condition, in line with our predictions. In order to test this, a global happiness change index was constructed by subtracting participants' pre-experimental global happiness score from their post-experimental global happiness score, with a positive score indicating a positive change in global happiness. Planned contrasts revealed that

those in the maximizing condition improved significantly more than those in the control condition ($M_{maximizing} = .25, SD = .57; M_{control} = -.05, SD = .59$), $t(129) = 2.182; p = .031, d = .52$. There was no difference between the maximizing condition and the monitoring condition ($M_{monitoring} = .12, SD = .95, t(129) = 1.03; p = .30$) or the monitoring condition and the control condition, $t(129) = 1.22; p > .22$ (see figure 3). In contrast to prior work, this suggests that happiness monitoring does not necessarily have negative effects on happiness in all contexts, a fact we will discuss this subsequently.

Finally, we tested if one's likelihood of experiencing an increase (vs. decrease) in global happiness varied by condition. We observed that those in the maximizing condition were the most likely to experience an increase in global happiness (and the least likely to experience a decrease in global happiness) as compared to the other conditions. The relationship between condition and happiness-change was significant, $\chi^2(4) = 4.2; p = .04$ (see table 2).

Discussion

The finding that focusing on maximizing one's happiness leads to an increase in happiness is consistent with our findings from experiment 1, and with the idea that focusing on happiness-maximization leads people to engage in more happiness-consistent behaviors, thereby increasing their happiness. In order to gain additional insight into this result, we examined responses of participants in the maximizing condition to the open-ended question of how participation in the experiment changed their behavior. The most common behavioral changes explicitly reported by participants (as coded by a research assistant) were: (1) focusing more on the positive events in their life (38% of participants); (2) making an effort to have more positive interactions with others (16%); (3, tie) engaging in productive activities (9%); and (3, tie), worrying less/relaxing more (9%). Some representative self-reports corresponding to each of

these types of responses were: (1) focus on the positive: “[The daily question] made me think about the ‘good’ and positive things that happened. I reflected on them more than I usually do, even if it was just for a moment;” (2) focus on positive interactions: “Being asked every day if I had been trying my best to be happy definitely made me strive toward being happier from day to day. I have been far more ambitious about interacting with coworkers and friends in a friendly manner. It's been an interesting thing. I'm going to miss the reminders;” (3) focus on productivity: “Yes, my behavior did seem to change, or at least my approach to each day did. I did my best to do things that not only made me feel accomplished and fulfilled, but also happy. I took on several projects around my house that I had been putting off and got a lot of satisfaction out of finally finishing them...;” (4) focus on worrying less/relaxing more: “I made somewhat of an effort to relax more. I'm not sure if I believe that attitude can really have that great an effect on happiness, but I think it can have some effect. For example, I usually get stressed out when I'm cooking dinner for my family, but today I tried not to worry so much.” Interestingly, the four behaviors most commonly reported by participants correspond to behaviors that happiness researchers have identified as leading to increased happiness, namely focusing on the positive things in one's life (Boehm et al. 2011; Emmons and McCulloch; Lyubomirsky et al. 2011; Seligman et al. 2005), having positive interactions with others (Liu and Aaker 2008; Lyubomirsky et al. 2005; Mogilner 2010), engaging in purposeful, goal-directed activity (Csikszentmihalyi 1997) and relaxing (Kahneman et al. 2004).

The results from experiment 2 revealed that, over the course of one week, individuals who focused daily on maximizing their happiness experienced a greater change in their global happiness level as compared to individuals in a control condition. However, an interesting question is why, in the case of experiment 1, individuals who focused on monitoring their

happiness experienced diminished happiness relative to those in the control condition, whereas in experiment 2, individuals who focused on monitoring their happiness did not experience a reduction in happiness relative to individuals in the control condition. One reason may be that in experiment 1, the happiness-monitoring manipulation required a more immediate focus on one's state of happiness, akin to manipulations used in prior work (e.g., Schooler et al. 2003).

Conversely, in experiment 2, the monitoring manipulation was more akin to a retrospective evaluation of one's happiness for that day (the question they answered daily was "how happy were you today"). However, another explanation could be that the negative consequences of happiness monitoring observed in prior work may attenuate over longer time horizons. Said otherwise, it is possible that being repeatedly asked to monitor one's happiness over longer periods of time could promote happiness consistent behavioral change, and through this process increase happiness. We will explore this further in experiment 3.

Experiment 3: The Effect of Maximizing vs. Monitoring Happiness within Large U.S. Based Organizations

Experiments 1 and 2 demonstrated support for our prediction that happiness-maximizing goals can effectively increase happiness by promoting behavioral change. We have argued that these results are relevant for firms, many of whom regularly endeavor to promote happiness in the workplace. However, in many workplaces, employees may have comparatively few degrees of freedom with which to modify their behavior. As a consequence, it is possible that if employees were tasked with the goal of maximizing their happiness while at the workplace, happiness may not improve. Experiment 3 will address this in order to test the practical implications of our results for firms. Further, experiment 3 will employ a longer time horizon in order to test if happiness-monitoring goals can increase happiness over longer time horizons.

Method

Three hundred and forty nine management-level employees (63% male) from seven Fortune 500 U.S. firms were invited to participate. These employees were given the opportunity to participate following an unrelated management seminar and they were not compensated for their participation. All employees received information telling them that their participation would be entirely voluntary and anonymous and that neither their firm nor the experimenters would be aware of the identity of those who chose to participate. All employees who were invited to participate agreed to begin the experiment.

The experiment utilized a three group between-participants design, where a happiness-related query (maximizing vs. monitoring vs. control) was the manipulated factor. Following the design of experiment 2, participants in two experimental conditions (maximizing and monitoring) were exposed to a manipulation that made the goal of happiness salient every day, by presenting them with a question about their happiness. Those in the control condition were not given a daily question.

All participants were informed that the experiment would involve three stages. In Stage 1, participants completed standard demographic questions. For participants in the treatment conditions, Stage 2 began on the following day. Participants in the control condition did not participate in Stage 2.

During Stage 2 participants received an email between 4 and 5 P.M. each business day containing a happiness-related query. The focus of the happiness question varied by experimental condition (monitoring: “How happy were you today?”; maximizing: “Did you do your best to be happy today?”). Due to organizational constraints, then length of the experiment was varied (2, 3 or 4 business weeks); however, neither the length of participation nor firm

membership had a significant effect on the observed pattern of results ($p > .3$ and $p > .15$ respectively).

Once Stage 2 was completed, Stage 3 began on the following day. Stage 3 was completed by all participants and required completing a dependent measure designed to assess how their happiness had changed throughout their experimental participation (“How does your happiness now compare to your happiness before you participated in the study?”; scale: -3 – much less happy to +3 – much more happy, the midpoint (0) indicated no change). Given our proposition that making a happiness goal salient will improve happiness by changing individuals’ behavior in accordance with the activated construct, we asked participants in the experimental conditions if they changed their behavior (over the course of the experiment) as a result of their experimental participation (scale: 1—not at all to 7—very much). As in experiment 2, additional measures were included to rule out alternate accounts (the daily questions were “fun;” the daily questions were “tedious”) by testing for them as possible mediators.

Results and Discussion

Approximately 78% of participants ($n = 273$) completed the experiment and the dependent measure. Participants’ likelihood of completion was not affected by condition ($P_{maximizing} = 71.6\%$, $P_{monitoring} = 70.6\%$, $P_{control} = 77.6\%$), $\chi^2(1) = .436$; $p > .5$.

The purpose of this experiment was to test if encouraging employees to focus on happiness could improve happiness in the workplace. To test this, we examined participants’ self-reported happiness-change scores. An analysis of variance revealed that condition had a significant effect on reported change in happiness, $F(1, 273) = 7.939$; $p < .001$. Planned contrasts showed that those in the maximizing condition improved significantly more than those in the monitoring condition ($M_{maximizing} = .62$, $SD = .76$; $M_{monitoring} = .37$, $SD = .76$), $t(273) =$

2.264; $p = .024$, $d = .33$. Further, those in the maximizing condition improved significantly more than those in the control condition ($M_{control} = .09$, $SD = 1.01$), $t(273) = 3.895$; $p < .001$, $d = .59$. Additionally, those in the monitoring condition improved significantly more than those in the control condition, $t(273) = 2.02$; $p = .044$, $d = .31$. Thus, in contrast to prior work, this suggests that happiness monitoring can have positive effects on happiness in certain contexts. See figure 4 for results.

Next, we tested if, within the two experimental conditions, the focus of the query affected the extent to which the manipulation changed the respondent's behavior. An analysis of variance test revealed that condition had a significant effect on the behavior-change measure, $F(1, 273) = 20.174$; $p < .001$, $d = .61$. Those in the maximizing condition indicated that they modified their behavior significantly more than those in the monitoring condition ($M_{maximizing} = 4.09$, $SD = 1.68$; $M_{monitoring} = 3.08$, $SD = 1.62$).

To test the prediction that making a happiness-maximization goal salient leads to improvement by changing one's behavior, and not due to other factors (e.g., the "fun" of participating), a mediation analysis was performed using a bootstrap test for multiple mediators (Preacher & Hayes, 2008) and analytical steps advocated in Zhao, Lynch and Chen (2010). Happiness-focus (monitoring vs. maximizing) was regressed against the happiness-change measure. To test for alternate accounts, the three possible mediators (behavioral-change, "tedious," "fun") were entered into the analysis. This analysis revealed only a significant and positive indirect effect of happiness-focus on improvement through the behavioral-change measure ($\beta = .989$ $SE = .2267$, $95\% CI .066$ to $.225$). These results support the hypothesis that it is a change in one's behavior, and not other factors, which causes an improvement in happiness after completing the experiment. Note, because participants in the control condition did not

complete the behavioral change measure, those in the control condition could not be included in the mediation analysis.

General Discussion

This research was designed with the goal of providing a more nuanced theoretical understanding how happiness can be pursued, with relevant implications for how firms can improve employee happiness. To address this, the research examined whether explicitly pursuing happiness could improve one's happiness in the workplace, or whether—as argued by past research—explicitly pursuing happiness can be not only pointless, but counterproductive. We argued that happiness-maximization goals may be effective to the extent they promote happiness-enhancing behavioral change. In support of our predictions, three experiments demonstrate that participants focused on maximizing their happiness improved their subjective happiness to a greater extent than participants in control conditions. We show that these effects replicate both over relatively short (15 minutes; experiment 1) as well as longer (2+ weeks: experiment 3) time horizons. Further, we show robust support for our results in different behavioral contexts (e.g., “do what you like;” experiment 1 vs. at the workplace; experiment 3). In line with our theorizing, we find evidence suggesting that the beneficial effect of a focus on happiness-maximization appeared to result from greater engagement in happiness-enhancing behaviors. In doing so, our findings suggest an important, and heretofore undocumented, counterpoint for prior research suggesting that the pursuit of happiness is necessarily futile (Cupchic and Leventhal, 1974; Kashdan, Breen and Julian 2010; Mauss, Tamir, Anderson, and Savino 2011; Schooler, Ariely, and Loewenstein 2003; for review see Gruber, Mauss, and Tamir 2011).

Further, these results contribute to past research regarding the susceptibility of happiness to change. A confluence of past findings on the stability of personality (McCrae and Costa, 1990), the heritability of well-being (Lykken and Tellegen, 1996), and hedonic adaptation (Frederick and Loewenstein, 1999) might be interpreted to imply that individuals have a happiness “set-point” that is relatively immutable to changes in life circumstances or behavior. However, a recent model of happiness—while affirming the relative stability of well-being—argues that it is associated with a set-range rather than a set-point (Lyubomirsky, Sheldon, and Schkade 2005). Specifically, the model proposes that 50% of an individual’s happiness is determined by a happiness set-point and that 10% is determined by circumstances, but that up to 40% of happiness is attributable to intentional activity. In other words, individuals’ actions can shift their happiness within their set-range. A small number of longitudinal interventions aimed at improving subjective well-being have provided evidence consistent with this view, showing that consistently engaging in certain exercises (e.g., expressing gratitude; Lyubomirsky, Dickerhoof, Boehm, and Sheldon 2011) can increase subjective well-being. Our findings contribute to this work by demonstrating that even explicit happiness goals can be effectual at improving happiness in contexts that allow for behavioral modification.

Of note, the effect of focusing on happiness maximization on the change in participants’ subjective happiness was small (a change of approximately one-third to one-half point on a 7-point scale). However, this change should be considered in the context of prior research regarding interventions that have been shown to increase global happiness. In particular, such interventions tend not to result in large effects, and the effects tend to be particularly weak when participants are not self-selecting to participate in a study on happiness (Lyubomirsky et al. 2011). In light of the fact that when recruiting participants we did not inform them that the

experiment had anything to do with happiness, participants did not self-select into our experiment based on a motivation to increase their happiness. Nonetheless, the magnitude of our effects appears similar to those in past happiness interventions (e.g., expressing gratitude) in which participants self-selected into the experiment (e.g., Lyubomirsky et al. 2011).

Some might argue that one limitation of the current research is that happiness was measured using self-reports. However, this was done for three important reasons. First, happiness researchers have largely relied on self-reported measures of happiness as their dependent measures (for discussion see Lyubomirsky and Lepper 1999). In order to draw connections between their work and our own, it required that we incorporate parallel dependent measures in our experiments. Second, firms that measure and monitor employees' happiness at work typically do so through annual human resources surveys including measures of self-reported happiness and other correlates (e.g., well-being, engagement, satisfaction; Gallup 2013; HR Fuel 2013). Because understanding the factors that improve the firms' performance on such metrics is of critical interest to firms, using similar measures in our experiments allowed us to make a more direct, applied contribution. Finally, although debate exists surrounding whether any quantitative self-report measures are able to capture happiness in an entirely unbiased fashion (e.g., Sink 2000), to date researchers have yet to agree on any physiological or behavioral measures that are superior for the purpose. For these reasons, we believe using self-reported measures of happiness as our main dependent measures allowed us to best achieve our research goals.

Although some may question if our data may be subject to demand effects as a consequence, we believe that such an explanation is unlikely to account for our results. Notably, prior work showing that happiness-maximizing and happiness-monitoring goals negatively affected happiness also relied on self-reported measures of happiness to demonstrate their

effects. It is unclear why such manipulations would have resulted in a demand effect (thereby increasing happiness) in our experiments, but not theirs. Further, although one might argue that participants asked if they did their best to be happy (maximizing condition) might have felt more obligated to report an increase in happiness, it is less clear how a demand effect could explain the observed shift in behavioral change that mediates the effect of the happiness-focus manipulation on happiness-change (experiments 1 and 3). At present, we believe the current findings provide a meaningful advancement to the understanding of when happiness-maximizing goals may be successful for improving happiness. Future research may wish to build on our results using similar experimental designs and testing for consequences on personality attributes (e.g., extroversion) and/or behaviors (e.g., exercise) found to be linked to happiness (Diener and Seligman, 2002).

The limitations of the current experiments suggest interesting opportunities for future research. For example, although we consistently observed that prompting participants to focus on happiness-maximization increased happiness as compared to a control condition, the results for the happiness-monitoring condition were decidedly more mixed. In experiment 1, those in the happiness-monitoring condition showed significantly less improvement in happiness as compared to a control condition, in line with prior work. However, in experiment 2 results in the happiness-monitoring condition paralleled those in the control condition and in experiment 3, participants in the happiness-monitoring condition showed significantly greater improvement than those in the control condition. One notable factor that varied across our experiments was the experimental duration. This suggests that although our work (experiment 1) and others' (e.g., Schooler et al. 2003) has demonstrated that happiness-monitoring goals can erode happiness in short-term contexts, given a sufficient length such effects may reverse. Future research might

investigate this by manipulating happiness-focus and experimental duration within the same experiment and testing for the consequences on happiness.

Further, in the current set of experiments we consistently activated a happiness-maximizing (vs. monitoring) goal with interventions that required participants to introspect on if they were doing their best to be happy (vs. consider how happy they were). These interventions were chosen for two reasons. First, as mentioned previously, these interventions were chosen based on prior work suggesting that asking participants to provide self-relevant information related to a goal can be an effective way to activate a goal (e.g., Fischhoff et al. 2003). Second, these interventions were chosen because a “daily question” intervention could be one that was relatively easy for firms to implement, with the power to increase employee happiness. Importantly, however, our theoretical framework does not require that a focus on happiness-maximization need necessarily be activated through introspection. It is possible that if a happiness-maximization goal were activated otherwise (e.g., a reminder each morning to “do your best to be happy”), we would observe similar effects. Future research may wish to investigate if the way in which the goal is activated moderates the observed pattern of results in order to provide a more general understanding of the factors that can improve happiness through a shift behavior.

Managerial Implications

Happy employees benefit firms, both directly and indirectly (Gregory 2012). As a consequence, firms regularly implement initiatives designed to improve employee morale and/or to maintain a happy workforce (Conger 2009). However, such initiatives are often costly in terms of time and money, causing many smaller firms to question if such initiatives are actionable (Intuit 2013). Our research addresses this question and proposes that one way firms may be able

to promote employee happiness without a substantial investment of resources is to utilize interventions that encourage employees to focus on their own happiness-maximization. To that end, our findings demonstrate that a daily question asking employees if they are doing their best to be happy may be an effective strategy for promoting happiness in the workplace.

Recent technological advances may make such interventions particularly actionable for firms. With the increasing popularity of the “quantified self” movement, a variety of websites, cell phone applications and other tools have been developed that offer users the ability to track everything from their workouts, to their meals, to their moods and more (Ockerman 2013). For example, the website www.askmeevery.com offers to send users one or more questions of the users’ choosing each day via email or text. Users then respond to the question, and their data is collected and aggregated by the site, which provides users with weekly progress reports. A firm interested in implementing an intervention similar to those used in the current set of experiments could consider working with one of these vendors in order to develop a service that would allow employees to opt-in and anonymously track the extent to which they are doing their best to be happy during the work day.

It may be hypothesized that such an intervention might be more effective at increasing happiness than a happiness intervention involving a specific activity (e.g., hosting employees at an afternoon baseball game, Goldsmith and Goldsmith 2010). This is because the former approach allows people to focus on engaging in the specific activities that makes them happy, whereas the latter approach—which assigns the same activity to everyone—may not account for individual differences in what makes people happy. For example, some people may increase their happiness by being kinder to others, whereas other individuals might increase their happiness through engagement in productive activity. Of course, an assumption underlying this

premise is that individuals know what behaviors make them happy. Participants' descriptions of the behaviors they engaged in when directed to focus on whether their behavior was happiness-maximizing (experiment 2)—which corresponded to behaviors identified by researchers as being associated with happiness—suggest that to some extent individuals have accurate intuitions about what makes them happy.

However, if people know what makes them happy, a question arises as to why they would need reminders to behave in a manner congruent with enhancing their happiness in the workplace? One possible explanation is that although most people believe happiness is among their most important life goals (Diener 2000), people might lose sight of this high-level goal in the daily struggle to address more immediate or concrete objectives (Raghunathan, Chugani, and Mukherji 2011). This explanation is consistent with research showing that when pursuing a particular goal, rather than focusing on achieving the goal itself, people often get distracted by the goal of maximizing the means (or mediums) for attaining the goal (Amir and Ariely 2008; Fishbach, Dhar, and Zhang 2006; Hsee et al. 2003; Hsee et al., 2012; see also Wilson et al., 1993) or focus on making decisions in accordance with rules that are not necessarily congruent with happiness-maximization (Amir and Ariely 2007; Hsee et al. 2003; for review, see Hsee, Rottenstreich, and Stutzer 2012). Extrapolated to the context of the present research, these findings suggest that people's attention to more immediate, concrete objectives at work may come at a cost to their happiness. Our findings suggest that a program of consistent, periodic focus on whether one's behavior is congruent with promoting happiness may be one way to combat this.

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	Decreased	Stayed the same	Increased
Control	6.7%	53.3%	40%
State	19.7%	47.4%	32.9%
Behavior	2.8%	39.4%	57.7%

$$\chi^2(4) = 18.84; p = .001$$

Table 1. Experiment 1: The percentage of participants whose happiness decreased vs. stayed the same vs. increased as a function of study participation by happiness-focus.

	Decreased	Stayed the same	Increased
Control	33%	33%	33%
State	37.5%	18.8%	43.8%
Behavior	20%	22.2%	57.8%

$$\chi^2(4) = 4.2; p = .04$$

Table 2. Experiment 2: The percentage of participants whose global happiness decreased vs. stayed the same vs. increased as a function of study participation by condition.

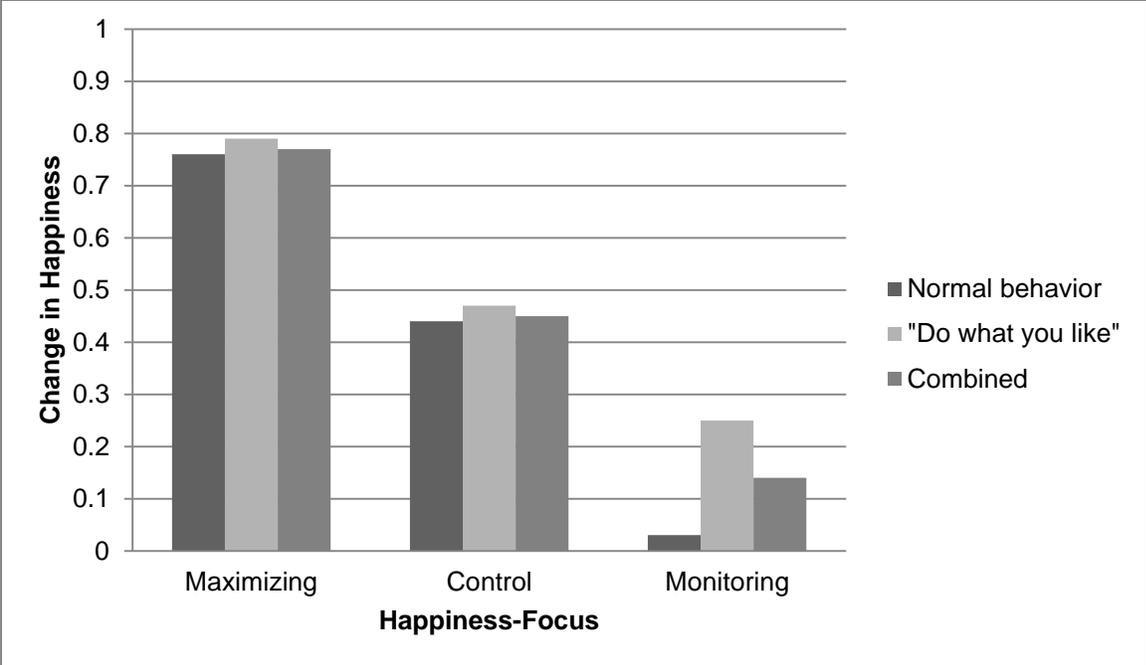


Figure 1. Experiment 1: The mean change in self-reported happiness as a function of experimental participation by condition.

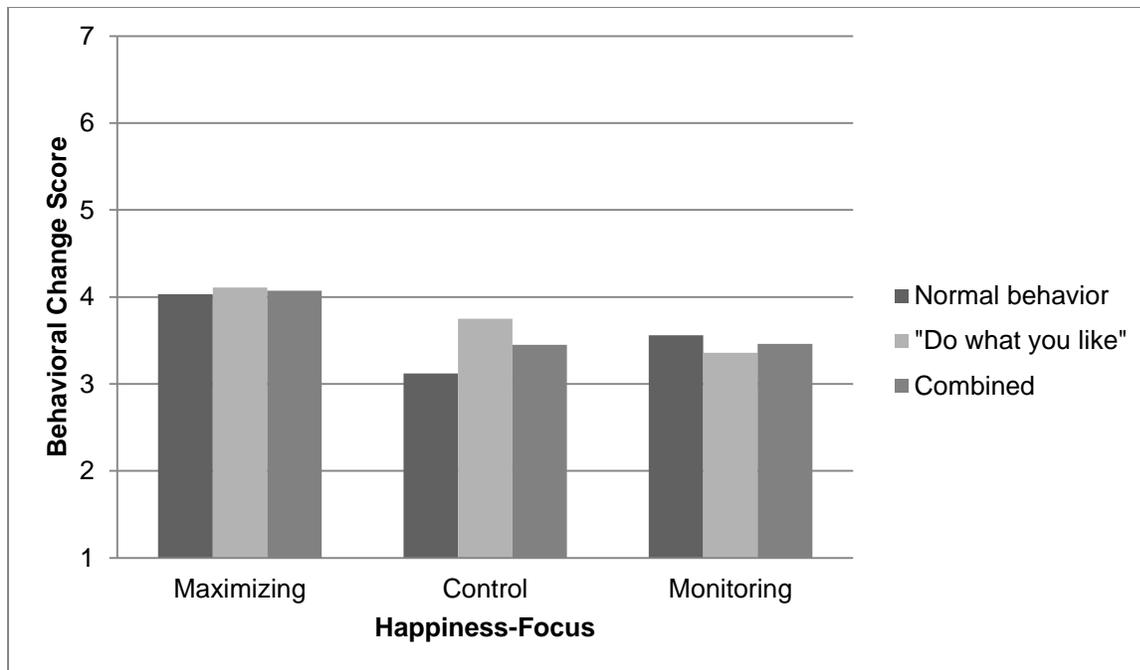


Figure 2. Experiment 1: Mean responses on the behavioral change measure by condition.



Figure 3. Experiment 2: The mean change in self-reported happiness as a function of experimental participation by condition.

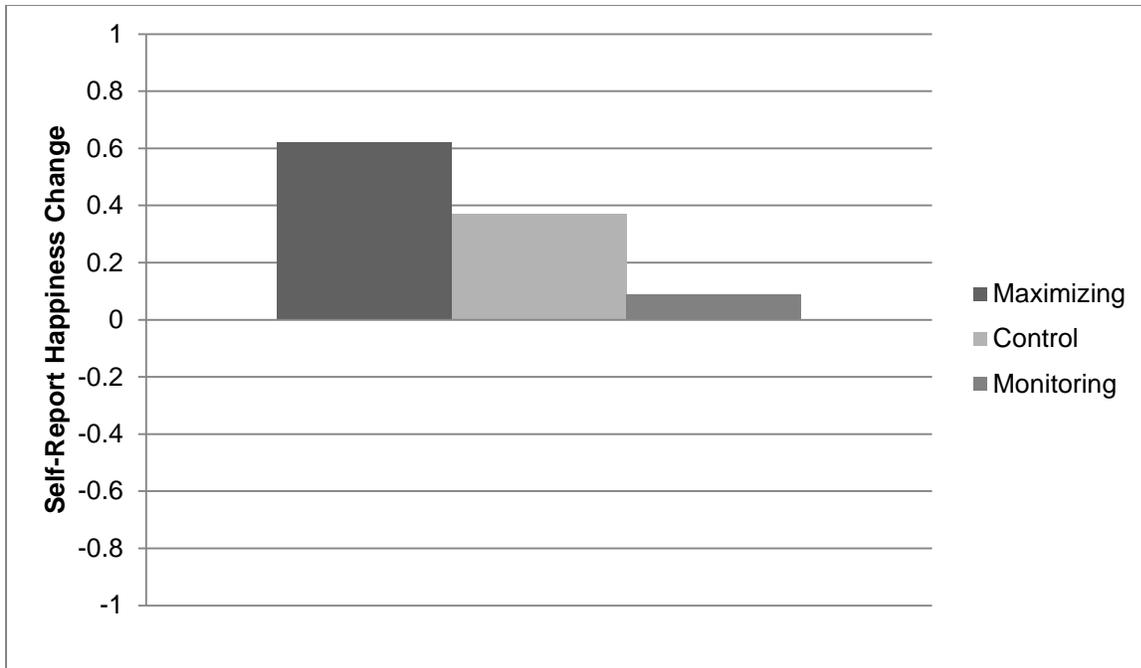


Figure 4. Experiment 3: The mean self-reported happiness change as a function of experimental participation by condition.