

The Internet, Happiness, and Social Interaction: A Review of Literature

Richard H. Hall¹ and Ashley Banaszek²

¹ Department of Business and Information Technology,
Missouri University of Science and Technology, Rolla, Missouri
rhall@mst.edu

² Union Pacific Railroad, Information Technology, Omaha, Nebraska
abanasz@up.com

Abstract. This paper is a review of literature relevant to the Internet, happiness, and social interaction. The definition of happiness is discussed, emphasizing its subjective quality, followed by a review of studies that have examined the correlates of happiness. This is followed by a review of studies on internet use, happiness, and social interaction, which yields the conclusion that the internet can facilitate social communication and interpersonal connections, which is, in turn, associated with higher levels of happiness and well being.

Keywords: Happiness, Internet.

1 Why Study Happiness and the Internet?

Following the dawn of the new millennium, research on happiness increased dramatically, largely spurred on by the fact that people increasingly rate happiness as a major life goal. For example, recent surveys have indicated that the strong majority of people across many countries rate happiness as more important than income [1]. Lyubomirsky [2] sums this research up, "...in almost every culture examined by researchers, people rank the pursuit of happiness as one of their most cherished goals in life" (p. 239).

In addition, there is a large body of evidence that suggests situational factors, in particular wealth, play a surprisingly small role in determining happiness. Some suggest that this may be the result of society moving into a post-materialistic phase, where basic needs have been largely met for many in industrialized countries, so pursuit of self fulfillment becomes more important [3].

Finally, there are number of studies that indicate that happy people, in general, have a positive effect on society. For example, there is evidence that happier people are more successful and socially engaged [4].

2 What Is Happiness?

For the most part, researchers agree that happiness is inherently subjective. In fact, the term is often used interchangeably with "subjective well-being" (SWB) [5]. David

Myers [6], one of the leading researchers in the area, stated that happiness is "...whatever people mean when describing their lives as happy." (p. 57). Despite the potential for ambiguity with such a definition, there is considerable agreement, at least across Western culture as to what happiness means [7]. Most people equate happiness with experiences of joy, contentment, and positive well being; as well as a feeling that life is good, meaningful, and worthwhile [8].

As a consequence, self-report measures have served as the primary measure of happiness in most of the research we review. Examples include the Satisfaction with Life Scale (SLS), the Subjective Happiness Scale (SHS), and the Steen Happiness Index (SHI). Psychometric studies of these self-report measures indicate that they are, by and large, reliable over time, despite changing circumstances; they correlate strongly with friends and family ratings of happiness; and they are statistically reliable. Sonja Lyubomirsky [8] sums this up, "A great deal of research has shown that the majority of these measures have adequate to excellent psychometric properties and that the association between happiness and other variables usually cannot be accounted for by transient mood" (p. 239). These psychometric studies further illustrate the general agreement among people as to what constitutes happiness.

One other interesting point regarding the definition of happiness and its measurement is that mean happiness is consistently above a mid-line point in most populations sampled [5]. For example, three in ten Americans say they are "very happy", only 1 in ten report that they are "not too happy", and 6 in 10 say they are "pretty happy" [6]. Therefore, there appears to be a positive set-point, where most people appear to be moderately happy, and this is independent of age and gender [6].

3 What Predicts Happiness?

Over the years, particularly during the last two decades, there have been a number of studies that set out to determine the correlates of happiness in an effort to determine what makes some people happier than others. We will review the variables that have been examined most frequently, and discuss their relationship to happiness.

3.1 Individual Differences and Happiness

Happiness is surprisingly stable over time [9] even with major changes in life circumstances [10], and there appears to be no time in life that is most satisfying [11]. These findings are consistent with research that indicates some individual difference traits are predictive of happiness. Further, happiness may also be strongly tied to genetic predisposition. We now turn to a discussion of this research.

Twin studies indicate that there is a strong genetic component in happiness [12, 13]. For example, Lykken and Tellegen [12] assessed the well being of twins at ages 20 and 30. They correlated the happiness scores between monozygotic twins at stage 1 with the score for their twin at stage 2 (cross time/cross twin) and found a correlation of .4, while the test-retest correlation where each twin's score was correlated with himself/herself was only .5. Further the cross twin/cross time correlation

for dizygotic twins was only .07. Therefore, heritability appears to account for a large part of the stability in happiness.

As mentioned, some other individual difference measures have been found to consistently correlate with happiness, in particular extroversion. For example, in a cross-cultural study Lucas and colleagues found that extraversion correlated with positive affect in virtually all 40 nations they examined [14]. Extroversion, as a predictor of happiness, is strongly related to the literature to be discussed, which relates social interaction with happiness, in that there is a clear relationship between the number and quality of social relationships and happiness. One would expect that an extrovert would be more likely to seek out and form these types of relationships.

Religiosity is another variable that has been found to consistently predict happiness [6]. In addition, those who report higher levels of religiosity tend to recover greater happiness after suffering from negative life events [15]. This finding has been found for peoples' self reports of their degree of religiosity, and for behavioral measures such as Church attendance [6]. As with extroversion, the impact of religiosity may be, at least partly, explained by the importance of social interaction in determining happiness, in that those who attend Church regularly, and interact with others in a positive social environment, are more likely to be happy [16]. Further, people often derive meaning and purpose from religious practices, which is another important correlate of happiness [6].

In addition to behavioral tendencies, with respect to individual differences, the research of Lyubomirsky and colleagues provides substantial evidence that there are consistent differences between happy and unhappy people in the ways they process ("construe") information. For example, studies from Lyubomirsky's laboratory have found that happy people are less sensitive to social comparisons [17], tended to feel more positive about decisions after they were made [18], construed events more positively [19], and are less inclined to self-reflect and dwell on themselves [18]. This difference in information processing dispositions in happy vs. unhappy people is presumably one reason why the effects of circumstantial factors are relatively minimal.

Another individual difference factor, which has been identified as important in predicting happiness, is the autoletic personality, which refers to people who tend to regularly experience "flow" [20]. Flow refers to a kind of experience that is engrossing and enjoyable to such a degree that it becomes "autoletic" – worth doing for its own sake [20]. The autoletic personality and the flow concept are consistent with the views of happiness researchers who have suggested that engagement is a fundamental component of a happy life [21].

3.2 Wealth and Happiness

Common sense tells us that environmental variables, such as wealth, should have a strong influence on happiness. In fact, wealth has been examined in a number of studies as a potential correlate with happiness, both in comparisons of the wealthy with the non-wealthy, and in examination of the effect of changes in wealth on happiness. As we will see, wealth, in general, plays a surprisingly small role.

Many of these studies have found a small, but significant, relationship between wealth and happiness. However, the relationship appears to disappear once there is enough income to provide for basic needs.

For example, Suh and colleagues found that those living in wealthier countries (where basic needs were met) were significantly happier than those in non-wealthy countries. However, within the wealthy and non-wealthy clusters there was virtually no relationship between the wealth of average individuals in a country and their reported happiness [1]. In the United States, the wealthiest are barely above those with average income in reported happiness [22]. Further, changes in wealth appear to have virtually no impact on long-term happiness. One study, which compared Lottery winners with those struck with traumatic events, found no differences in reported happiness a short period of time after the event [23]. Finally, though the average income in the United States more than doubled between 1960 and 1990, the percentage of people describing themselves as “very happy” remained the same [24].

3.3 Social Interaction and Happiness

The number and quality of social interactions and acquaintances has been found consistently to have a strong and positive impact on happiness. For example, people report feeling happier when they are with others [25]. Further, a study conducted by the National Opinion Research Center found that 26% of those who reported having five or less friends reported being very happy, but the number jumped to 38% for those who reported having more than 5 friends [6]. Those who enjoy close relationships also cope more effectively with various stressors [26].

Myers reports on a “mountain of data” (p. 62) that indicates that those who are married are, on average, happier and more satisfied with life. It appears this is particularly true in comparison to those who are separated or divorced [6]. Studies on the relationship between marriage and happiness provide yet more support for the importance of social interactions on happiness.

3.4 Volitional and Non-volitional Activities

Before we consider the relationship between Internet activities and happiness we will consider one other interesting issue involving activities that are associated with happiness, by considering the role of volition.

Lyubomirsky and colleagues propose a model of happiness, which poses that happiness is the result of three primary sources: a) personal set point (genetic predisposition); b) circumstances; and c) intentional activities [4].

We have discussed the importance of genetic pre-disposition but have made no distinction between circumstances (e.g., life events) and intentional activities (e.g. exercising). According to Lyubomirsky and colleagues [4] “...circumstances happen to people, and activities are ways that people act on their circumstances.” p. 118.

Although it is very difficult to operationalize given activities as volitional or not [4], we mention this distinction because it has important practical implications. Specifically, if volitional activities can impact long term happiness then presumably,

happiness can be changed. That is, people can have some control in affecting their own happiness.

In fact, Lyubomirsky and colleagues have some initial support for their model, in that they have found that relatively short-term happiness “interventions” can have a positive effect on well being. In one case they asked students to carry out acts of kindness and, in the other case they asked students to consider what they were grateful for [4].

Interestingly, this leads to our discussion of the Internet and happiness, in that there was a similar study, which examined the effect of relatively simple happiness interventions. This study was conducted completely over the Internet. Participants were recruited, given the materials describing the activity, and asked to complete a survey that used ratings to measure happiness, completely online. Despite the relatively simple and short-term nature of the intervention, participants who were asked to identify their “signature strengths” and then carry out activities associated with these strengths, and those who were encouraged to daily recall things for which they were thankful, had increased levels of happiness and decreased levels of depression, compared to a control group six months later [21].

4 Happiness and the Internet

Studies that have examined the relationship between the Internet and happiness have been conducted at least since the relatively early days of the World Wide Web. Most of these have focused on communication/collaborative activities and the internet. As we mentioned, these types of activities have been found in non-internet studies to be strongly related to happiness. Consequently, our discussion will focus on the internet as a tool for communication and collaboration as this relates to happiness.

4.1 The Internet Paradox

In 1998 Kraut and colleagues reported the results of a reasonably extensive study of early World Wide Web users where they followed the activity of mostly first time Internet users over a period of years. Researchers administered periodic questionnaires and server logs indicating participant activity on the web were analyzed. (Participants were provided with free computers and internet connections) [27].

Over all, the results showed that the Internet had a largely negative impact on social activity in that those who used the Internet more communicated with family and friends less. They also reported higher levels of loneliness. Interestingly, they also found that email, a communication activity, constituted the participants main use of the Internet. The researchers coined the term “internet paradox” to describe this situation in which a social technology reduced social involvement.

These researchers speculated that this negative social effect was due to a type of displacement, in which their time spent online displaced face-to-face social involvement. Although they note that users spent a great deal of time using email, they suggest that this constitutes a low quality social activity and this is why they did not see

positive effects on well being [27]. They find further support for this supposition in a study reported in 2002, where they found that business professionals who used email found it less effective than face-to-face communication or the telephone in sustaining close social relationships [28].

Since the time that this Internet paradox was identified, a number of studies over the next twelve years have found, fairly consistently, results that contradict the Kraut et al. results. More recent studies have indicated the potential positive social effects of the Internet and their relationship to well being. Further, the effect appears to be getting stronger as the internet and the users mature.

In fact, one of the first challenges to this Internet paradox was provided by Kraut himself when he published follow up results for participants in the original Internet-paradox study, including data for additional participants. In this paper, "Internet Paradox Revisited," researchers report that the negative social impact on the original sample had dissipated over time and, for those in their new sample, the Internet had positive effects on communication, social involvement, and well being [29]. Therefore, it appears that the results of the original Kraut et al. study were largely due to the participants' inexperience with the Internet. Within just a few years, American society's experience with the Internet had increased exponentially. Further, the Kraut studies concentrated on email, whereas there are many other social communication tools available on the modern web.

4.2 Displacement versus Stimulation Hypothesis

More recently, researchers have examined the relationship between on-line communication and users' over all social networks, explicitly addressing the question of whether or not on-line communication "displaces" higher quality communication, or "stimulates" it. Presumably, the former would negatively effect well being, while the latter would enhance it [30].

In this large scale study, over 1000 Dutch teenagers were surveyed regarding the nature of their on line communication activities, the number and quality of friendships, and their well being.

They found strong support for the stimulation hypothesis. More specifically, these researchers developed a causal model, which indicated that instant messaging lead to more contact with friends, which lead to more meaningful social relationships, which, in turn, predicted well being. Interestingly, they did not find this same effect for chat in a public chat room. They attributed this finding to the fact that participants reported that they interacted more with strangers in the chat room as compared to their interaction with friends in with instant messaging [30].

4.3 The Internet and Social Connectedness

Despite studies, such as the one just mentioned, which have found a relationship between internet use and positive outcomes, there is still a great deal of press suggesting that the internet can effect users negatively, causing social isolation, and shrinking of social networks. This is purported to be especially true for adolescents [31].

Researchers with the Pew Internet and Daily Life Project set out to examine this concern directly in one of the most comprehensive studies of the effect of the Internet on social interaction, reported in 2009 [31]. Contrary to fears, they found that:

- A variety of internet activities were associated with larger and more diverse core discussion networks.
- Those who participated most actively with social media were more likely to interact with those from diverse backgrounds, including race and political view.
- Internet users are just as likely as others to visit a neighbor in person, and they are more likely to belong to a local voluntary organization.
- Internet use is often associated with local activity in community spaces such as parks and restaurants, and Internet connections are more and more common in such venues.

Although these outcomes did not explicitly include happiness, they do support the contention that Internet activities can enhance the amount and quality of social relationships, which has been implicated in a number of studies as a strong and consistent predictor of happiness.

5 Conclusions

Though happiness is an inherently subjective construct, our review indicates that there is agreement among people as to what constitutes happiness and relatively simple and straightforward self-report measures of happiness are psychometrically sound. Research using these measures has identified important predictors of happiness; including predisposition and temperament measures that appear to be relatively fixed; and behavioral and processing variables that appear to be more amenable to change. Among these are social interaction variables, which have been found to be strongly and consistently predictive of happiness. A review of literature on the Internet, social communication, and happiness; indicates that the Internet can be a powerful tool for promoting numerous and high quality social interactions, which can positively impact well being. This effect appears to be growing stronger as Internet users and Internet culture matures.

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