

RUNNING HEAD: Concepts of Happiness

Concepts of Happiness Across Time and Cultures

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Abstract

We explored cultural and historical variation in concepts of happiness. First, we analyzed the definitions of happiness in dictionaries from 30 nations to understand cultural similarities and differences in happiness concepts. Second, we analyzed the definition of happiness in Webster's dictionaries from 1850 to present day in order to understand historical changes in American English. Third, we coded the State of the Union addresses given by U.S. presidents from 1790 to 2010. Finally, we investigated the appearance of the phrases "happy nation" vs. "happy person" in Google Ngram Viewer from 1800 to 2008. Across cultures and time, happiness was most frequently defined as good luck and favorable external conditions. However, in American English, this definition was replaced by definitions focused on favorable internal feeling states. Our findings highlight the value of a historical perspective in the study of psychological concepts.

Key words: Happiness, Subjective well-being, Culture, Historical

## Concepts of Happiness Across Time and Cultures

What is happiness? Although the scientific study of happiness and subjective well-being (SWB) has thrived over the last 30 years, the *concept* of happiness has been elusive. In fact, Ed Diener (1984) advocated the use of the scientific term SWB as opposed to happiness precisely because of the ambiguities associated with the term “happiness.” SWB has been frequently operationalized as the subjective evaluation of life as a whole, the presence of pleasant emotions, and the relative absence of unpleasant emotions (Diener, 1984). As SWB research became popular in psychological science, some researchers started using the term *happiness* (e.g., Lyubomirsky & Ross, 1997). However, the fundamental question regarding the meaning of happiness has been examined only rarely (see Wierzbicka, 2004 for this critique).

The main goal of this article is to explore various concepts of happiness using current and historical dictionaries and speeches (cf. Morling & Lamoreaux, 2008; Simonton, 2003). Just as our understandings of action (Noguchi, Handley, & Albarracín, 2011), emotion (Pennebaker, 2011), cognition (Semin, 2000; Maass, Karasawa, Politi, & Suga, 2006) and culture (Kashima & Kashima, 1998) have been deepened by detailed linguistic analyses, we believe that the linguistic analysis of the term happiness is critical to advance psychological theory and the scientific understanding of well-being.

The second goal is to demonstrate the utility of a historical perspective on psychological science. Psychological scientists today are concerned almost exclusively with the latest developments and cutting-edge research (see Nisbett, 1990; Oishi, Kesebir, & Snyder, 2009). It is, however, important to document the history of our science and the role that history might play in shaping our science in order to avoid repeating mistakes (cf. Allport, 1954; Hilgard, 1987). In addition to the epistemological advantage, there are also advantages to investigating historical

changes in psychological phenomena and concepts. The cross-temporal meta-analysis of survey results from different historical periods, for example, can address important questions such as whether Americans are increasingly more agentic over time (Roberts & Helson, 1997), more narcissistic (Twenge & Campbell, 2008) or not (Trzesniewski, Donnellan, & Robins, 2008), and whether or not Japanese people are becoming more individualistic over time (Hamamura, 2012). Similarly, the linguistic analysis of popular songs over time can reveal historical changes in idealized emotions and personality (DeWall, Pond, Campbell, & Twenge, 2011). Cultural differences and historical changes in concepts can be particularly important for research literatures examining reports of subjective states. Building on the previous research on culture, the self, and emotion from a historical perspective (e.g., Baumeister, 1987; Cohen, 2003), the present research shows other concrete empirical strategies by which a historical perspective can deepen psychological science, using subjective well-being research as an example.

### Historical and Philosophical Perspectives

#### *Ancient Happiness*

The concept of happiness has been most extensively analyzed by philosophers and historians. Most philosophers and historians agree that the concept of happiness in antiquity centered around good luck and fortune, whereas contemporary Americans view happiness as something over which they have control and something that they can actively pursue (Kesebir & Diener, 2008; McMahon, 2006; Oishi, 2012). For example, Lu (2001) analyzed the influential classic *Liji* (禮記), or the *Classic of Rites*, compiled some time between 5<sup>th</sup> and 1<sup>st</sup> century BC, and observed that “fu” (福) was used to mean “fortunate, lucky, smooth and free of obstacles” (p. 409). Similarly, historian McMahon (2006) observed that the Greek term *eudaimonia* (the term often translated as *happiness* in English; Thomson, 1953) was first used by the poet Hesiod in

the *Work and Days* as follows: “Happy and lucky the man” (*eudaimon te kai olbios*). Because the related term *eudaimon* (the adjective of *eudaimonia*) is the combination of *eu* (good) and *daimon* (god, spirit, demon), McMahon concludes “*eudaimonia* thus contains within it a notion of fortune—for to have a good daimon on your side, a guiding spirit, is to be lucky—and a notion of divinity, for a daimon is an emissary of the gods who watches over each of us” (pp. 3-4). Thus, in ancient Greece happiness was deemed as something beyond human agency, controlled mainly by luck and the gods. McMahon goes on to declare: “happiness is what happens to us, and over that we have no control” (p. 19).

It is interesting to note then that whereas poets and tragic writers accepted the fatalistic view of happiness, Socrates thought of happiness as something at least partially within one’s control (McMahon, 2006). In *The Symposium*, Socrates argues that the education of desire is a key to happiness. That is, Socrates insisted that children should learn to appreciate the beauty of individuals and nature, so that they can acquire the appreciation for knowledge and wisdom as adults and approach happiness properly. Likewise, in the *Republic*, Plato has Socrates state the following: “While [children are] young, they should be educated and should study philosophy in a way which suits their age... (W)hen their physical strength starts to wane and they are too old to play a public part in the community or to serve in the militia, they should be allowed to roam free and graze at will, and to concentrate on philosophy, with everything else being incidental. This is the correct programme for people who are going to live a happy life” (Waterfield, 1993, p. 221).

The Socratic view of happiness can also be seen in Aristotle’s *Nichomachean Ethics* (Thomson, 1953), in that Aristotle emphasizes the distinction between happiness and amusement, and argues that happiness consists in a contemplative (philosophical) life. While Aristotle shares

the Socratic view of happiness, which is more agentic than other Greek poets and philosophers conceived at that time, it is important to note that Aristotle is quick to point out the importance of external factors such as good friends, health, and resources. Indeed, the prominent moral philosopher Martha Nussbaum (1986/2001) maintains that Aristotle was very aware of the fact that virtue and contemplation alone do not guarantee a *eudaimonic* life. In *Nicomachean Ethics* Aristotle stated, “Nevertheless, it is evident that *eudaimonia* stands in need of good things from outside, as we have said; for it is impossible or difficult to do fine things without resources” (EN 1099a31-3; Nussbaum, 1986/2001 p. 318). Aristotle discussed the story of Priam who, for his entire life was virtuous, yet lost his status, resources, family, and friends due to war. According to Plato, Priam led a *eudaimonic* life, but according to Aristotle he did not, due to his lack of luck. Immanuel Kant (who took the Platonic view of *eudaimonia*) made it clear that moral philosophy should focus on factors that can be controlled. Nussbaum (1986/2001) argues that the dominant view today of *eudaimonia* as controllable stems from Kant and his influential followers. More importantly, Nussbaum emphasizes that Aristotle used the Greek term *makariotés* (fortune, blessing) interchangeably with *eudaimonia*, which indicates that living well to Aristotle also meant being blessed. Thus, the original meaning of happiness and a good life is being fortunate, lucky, and blessed, which were highly contingent upon external conditions. This fragile, external view of happiness was dominant for centuries.

When and how did the view of happiness turn from non-agentic to agentic, external to internal? According to McMahon (2006), it was a gradual process, but it accelerated in the Enlightenment era. McMahon summarized the antagonistic sentiment toward pursuit of happiness in earlier eras. For instance, St. Augustine’s *City of God* (believed to be written in the early 5<sup>th</sup> century) stated that “the earthly quest for happiness is doomed” (McMahon, 2006, p.

102) and that true happiness is “unattainable in our present life” (p. 104). In the 13<sup>th</sup> century, however, St. Thomas Aquinas clarified the role of human effort in the process of *eudemonia*, which he conceived as becoming closer to God. Aquinas claimed that partial happiness can be achieved in this life via “the ‘theological virtues’ of charity, hope, and faith” (p. 131). This signaled an important departure from ancient Greece in that Aristotle and Plato viewed happiness as something that can be achieved only by a small number of extremely fortunate and talented individuals, whereas Aquinas viewed partial happiness as obtainable by everyone via a divine gift. In the 16<sup>th</sup> century, Martin Luther went one step further, claiming that it was not a sin to be happy, and that “Christians *should* be merry... To live life as a justified man was apparently to experience the world as a ‘pleasure garden for the soul’” (McMahon, 2006, p. 172).

### *American Happiness*

The Reformation in the 16<sup>th</sup> century brought justification for pursuing earthly happiness. However, Luther, Calvin, and their followers advocated primarily a deeply religious life. To this end, it is interesting to note that the Enlightenment movement of the 18<sup>th</sup> century shifted the main question from the religious “How can I be saved?” to the secular “How can I be happy?” (McMahon, 2006).

Thomas Jefferson’s 1776 *Declaration of Independence* included the pursuit of happiness along with life and liberty as an unalienable right. The emphasis on an active pursuit of happiness stands in stark contrast to the more passive luck/fortune/fate concept of happiness. Therefore, historians have debated the meaning of happiness in the Declaration of Independence. Because Jefferson was very familiar with the writings of John Locke, who had discussed the rights to life, liberty, and property a century earlier, many speculated that what Jefferson meant was the pursuit of private property and wealth. However, other scholars including McMahon

(2006), speculated that what Jefferson meant was the pursuit of private happiness. Jefferson firmly believed that private happiness comes from being a good citizen, rather than the pursuit of ever-evolving desires for material wealth; he also believed that maximizing private happiness does not contradict maximizing public (collective) happiness.

Regardless of what Jefferson meant originally, the famous phrase in the Declaration of Independence did give license to Americans to pursue private happiness (often via the accumulation of material wealth) and pushed the concept of happiness from the religious into the secular arena. The view of happiness as attainable via accumulation of wealth was particularly seductive to new immigrants, many of whom had been deprived of the opportunity to pursue wealth in their home countries and viewed the U.S. as the land of opportunity. The number of immigrants exploded from the 1880s into the 1900s. The rapid industrialization and economic growth in the 1880s and 1890s all might have accelerated the gradual shift in the meaning of happiness from something external (e.g., luck and fortune) to something personal and attainable in the U.S. The economic growth reached the new height in the 1920s. The “roaring twenties” saw great urbanization, a surge in stock market (until the great crash of 1929), the beginning of the mass production of automobiles, the new “human-interest” trend in advertisements (appeal to emotion rather than the presentation of the facts about the product), and the emergence of consumer culture (O’Sullivan & Keuchel, 1989). Many historians call the 1920s the beginning of modernity in the U.S. (Slater, 1997) due to the emergence of mass culture. By the 1920s in the U.S the negative religious and moral connotations of happiness seem to have disappeared. In addition, the pairing of the active noun of “pursuit” and happiness brought happiness within one’s reach and control, which was a sharp contrast to the ancient Greek’s fragile, external view of happiness.



Alongside these temporal shifts in concepts of happiness, it is useful to consider how “happiness” is used differentially across nations, cultures, and world areas (Lu, 2001; Uchida & Kitayama, 2009). Because collectivism is typically associated with the external sense of control (Triandis, 1995), collectivistic nations might be more likely to develop the luck-based concepts of happiness than individualistic ones. In addition to culture, socio-ecological factors such as climate and pathogen prevalence may also play a role in how happiness is conceived and used (Oishi & Graham, 2010). For instance, luck-based happiness might have been developed in harsh than in mild climates, as people had less control in life in harsh than mild climate (Malthus, 1809). Pathogen prevalence indicates the degree of infectious diseases in the environment, and has been shown to be associated with cultural factors such as individualism/collectivism (Fincher, Thornhill, Murray, & Schaller, 2008). Thus, to the extent that pathogen prevalence signals that one’s life is contingent upon external factors, it might be associated with the emergence of luck-based happiness. Finally, poor economic conditions might indicate the precarious nature of life, which might in turn be associated with the luck-based concepts of happiness.

*The Present Research: Quantitative Analysis of Happiness*

The historical and philosophical analyses summarized above reveal a striking shift in the concepts of happiness from Ancient China and Greece to the contemporary U.S. Although rich in detail, the historical and philosophical analyses also have some limitations. First, the difference between Ancient China/Greece and contemporary U.S. could be due to linguistic differences and translation problems. The Greek term *eudaimonia*, for instance, might simply be inherently different from the English term happiness. To this end, linguist Anna Wierzbicka’s (2004) essay on this issue is highly informative. Citing Polish poems and memoirs of Polish immigrants to the U.S among others, Wierzbicka highlights that the English term “happy” is used much more

liberally than its equivalents in Polish, Russian, or other European languages. She notes that “progress in cross-cultural investigations of happiness and subjective well-being requires a greater linguistic and cross-cultural sophistication than that evident in much of the existing literature on the subject” (p. 43). Second, the historical analysis above focuses on American concepts of happiness. The American concept of happiness as something within one’s reach might be an exception; the rest of the world today might still hold a concept of happiness similar to that of ancient China and Greece.

We conducted the current research to address these limitations in the existing literature. First, we collected contemporary dictionary definitions of happiness from 30 nations to examine concepts of happiness in diverse languages and nations. This provides valuable information regarding whether the definition of happiness as luck and good fortune is specific to ancient China and Greece. Second, we analyzed English dictionary definitions of “happiness” over time, to see whether the definition changed. Third, we analyzed State of the Union addresses by all American presidents (from George Washington to Barack Obama) to test whether the use of the terms “happiness” and “happy” changed over time. Finally, we used the Google Ngram Viewer to test whether the use of “happy” to refer to an inner feeling of individuals (i.e., “happy person”) increased over time, whereas the use of “happy” to refer to the favorable condition of the collective (i.e., “happy nation”) decreased in books published between 1800 and 2008. Taken together the four types of analyses below help to locate roughly when changes in the meaning of happiness took place, and identify the factors that might be important in the changing conceptualization of happiness over time.

### **Study 1: Dictionary Definitions of Happiness from 30 Nations**

We obtained 30 dictionary definitions of happiness to examine how happiness is conceptualized in various cultures (see Method for details). Based on Lu's (2001) analysis, we predicted that East Asian definitions of happiness would center on luck and good fortune. Considering the historical influence of Chinese on Korean and Japanese culture, it is likely that Korean and Japanese happiness concepts center on the notion of luck and good fortune as well.

Whereas East Asian concepts of happiness have been extensively explored (e.g., Kitayama & Markus, 2000; Oishi, 2006; Tsai, 2007; Uchida & Kitayama, 2009), the concepts of happiness in other societies have not received as much research attention. One exception is Pflug's (2009) research. In spontaneous responses to "What is happiness to you?" several German participants mentioned "surprising events," whereas few South Africans did. This suggests that the German concept of happiness contains an element of luck and fortune. Wierzbicka (2004) also observed that German, French, Polish, and Russian equivalents of "happiness" and "happy" evoke a rare state, compared to English terms. This also suggests that many rare conditions need to be met (thus one must be lucky) for someone to be happy in German, French, Polish, and Russian cultural contexts.

Previous cultural and cross-cultural research has found that various cross-societal differences are associated with individualism-collectivism (Triandis, 1995), the wealth of nations (Oishi, 2012), the historical prevalence of pathogens (Fincher et al., 2008), and the distance from the equator (Pennebaker, Rime, & Blankenship, 1996). In addition, the number of foreign-born immigrants might be associated with the notion of happiness, as immigrants tend to bring a strong motivation to actively pursue happiness. Finally, the notion of happiness might be associated with the mean levels of happiness. Therefore, we tested whether the national mean levels of happiness would be associated with the degree to which happiness is conceived as luck

or fortune. It is predicted that in nations where happiness is conceived as luck or fortune (i.e., a rare condition), people might not report being happy as much as in other nations.

### Method

We sent an inquiry to our collaborators in various nations, requesting the definition of happiness in their own language. We explicitly asked our collaborators to pick the term(s) that best corresponds to the English term happiness in their local languages. We also asked them to obtain the most authoritative dictionary in their nation and provide the original definitions as well as English translations (we asked them to translate the original definitions to English, so that our English-speaking RAs could code them). Using this method, we were able to obtain the definitions of happiness from 30 nations: Argentina (Spanish), Australia (English), Brazil (Portuguese), China (Chinese), Ecuador (Spanish), Estonia (Estonian), France (French), Germany (German), Guatemala (Spanish), India (Hindi), Indonesia (Indonesian), Israel (Hebrew), Italy (Italian), Japan (Japanese), Kenya (Swahili), Korea (Korean), Malaysia (Malay), Mozambique (Portuguese), Norway (Norwegian), Pakistan (Punjabi), Portugal (Portuguese), Romania (Romanian), Russia (Russian), Senegal (French), Singapore (Chinese), South Africa (Afrikaans), Spain (Spanish), Turkey (Turkish), and the U.S (English).

In dictionaries, definitions for each term are typically specified in order from the primary definition (i.e., the first definition provided for this term), the secondary definition, and so forth. Two research assistants were trained to code the English translation of happiness from 30 nations in terms of the presence or absence or the theme associated with luck and fortune on the 4-point scale (0 = not at all present; 1 = present, but peripheral definition; 2 = present, secondary definition; 3 = present, primary definition). That is, 3 was given if the primary definition of happiness was luck and/or good fortune (including the theme of luck and good fortunate such as

favorable life circumstances), whereas 2 was given if the secondary definition of happiness was luck and/or good fortune. If luck and/or good fortune was the tertiary or lower definition, then 1 was given. If luck or good fortune did not appear in the definition, 0 was given. For instance, Norwegian term for happiness is “lykke”; the definitions for this word were “1. Destiny, coincident. 2. a) Fortunate destiny, luck. b) Luckily, it turned out well, being successful. c) Wish you luck. d) Congratulatory. 3. Good living conditions. 4. Deep and lasting feeling of enjoyment and well-being.” Two coders, independently, read and rated these definitions on the 4-point scale specified above. When there are multiple words (e.g., China), we took the mean of the ratings for each word before further taking the mean of the two raters. In the following analyses, we used the mean of the two coders’ ratings, as the two raters were very similar in terms of correlation ( $r = .80, p < .01$ ) as well as the mean ratings,  $M = 1.53, SD = 1.13$  vs.  $M = 1.58, SD = 1.19, t(29) = -.37, p = .71$ ).

In order to make sure that the choice of happiness terms chosen by our collaborators was not arbitrary, we sought to get the independent opinion from another set of collaborators. We were able to obtain the second opinion from 17 nations. We asked these secondary collaborators the same question that we asked to the original collaborators: “What is (are) the term(s) for happiness in your language?” (the original collaborators and the secondary collaborators are listed in the acknowledgement). Out of the 28 non-English nations, we were able to get the nomination from 17 nations: Brazil, China, France, Germany, India, Israel, Japan, Korea, Malaysia, Mozambique, Norway, Portugal, Russia, Senegal, Singapore, Spain, and Turkey. The terms nominated by the original collaborators were the same as the terms nominated by the independent collaborators, with the exception of Brazil (“alegria” and “alegre” were nominated by the original collaborator, whereas “felicidade” was nominated by the secondary collaborators;

two coders rated all three terms; we took the average of their ratings for Brazil). Although we were unable to obtain the independent nomination from Argentina, Ecuador, and Guatemala, we were able to obtain it from Spain. In addition, we asked the secondary collaborators to translate the definitions provided by the original collaborators. The English translations were again very similar to the ones provided by the original collaborators. Thus, we were able to be fairly confident in the representativeness of the terms and English translations that we analyzed below.

In terms of socio-economic variables, we used the following sources: individualism-collectivism (Hofstede, 2001), GDP per capita (International Monetary Fund, 2007), historical pathogen prevalence (Murray & Schaller, 2010), and the proportion of foreign-born immigrants (United Nation Population Report, 2005). The national mean levels of happiness were calculated based on the 2008 Gallup Global Polls, which surveyed 29 out of the 30 nations we included in this study.

### Results and Discussion

Because the historical analyses presented in the introduction (e.g., McMahon, 2006) revealed that luck and fortune were the central aspects of the definition of happiness, we expected that most definitions of happiness would include luck or fortune. As predicted, out of the 30 nations, luck or fortune was at least partially present in 24 nations' definition of happiness (80%). Luck or fortune was completely absent from definitions only in the U.S., Spain, Argentina, Ecuador, India, and Kenya (see Table 1). The one-sample binominal sign test indicates that the chance of observing 24 or more definitions with luck or fortune in 30 nations was .0014 (i.e., far less than 1% chance of obtaining this result by chance). Thus, happiness as luck or fortune is still present in many parts of the world today. It is also interesting to note the divergence even within the same language. For instance, Australian English possesses a luck and

fortune definition, whereas American English does not. Likewise, the Guatemalan definition of happiness includes luck and fortune, whereas Spanish, Argentine, and Ecuadorian definitions of happiness do not. The dictionary definition of happiness thus seems to reflect not only linguistic heritage but local history and culture.

We next explored whether the degree of luck or fortune in the definition of happiness would be associated with various economic, cultural, climatic, and demographic dimensions. The degree to which luck or fortune was evident in the definitions of happiness was not associated with GDP per capita (IMF, 2007),  $r(28) = .126, p = .509$ . It was also not associated with individualism (Hofstede, 2000),  $r(23) = .124, p = .555$ , historical pathogen prevalence (Murray & Schaller, 2010),  $r(28) = -.287, p = .125$ , or the number of foreign-born immigrants,  $r(28) = -.073, p = .702$ . It was, however, associated with the distance from the equator,  $r(28) = .362, p = .049$ . That is, the nations farther away from the equator were more likely to have luck- or fortune-based definitions of happiness than the nations closer to the equator. This could be due to the fact that the distance from the equator is associated with harshness of the climate. Where obtaining foods and shelter had been challenging, luck and fortune might have become a central part of what happiness is continued to be conceptualized as in those areas.

As predicted, the people living in the nations where happiness is *not* based on luck or fortune reported having experienced happiness more than those living in the nations where happiness is defined as luck or fortune,  $r(27) = -.405, p = .029$ . In the nations where happiness is defined by luck or fortune, happiness might refer to an exceptional condition (Wierzbicka, 2004), and that might be a reason why these nations reported happiness less frequently than others.

**Study 2: Historical Changes in American Definitions of Happiness & the State of the Union Addresses**

Study 1 reveals that happiness as luck or fortune is fairly wide-spread even today. We also found variations in the definition of happiness within the same language (e.g., Australia vs. the U.S; Guatemala vs. Spain). This suggests the influence of local culture and history in conceptualizations of happiness. While the current definitions of American happiness do not include luck or fortune, the older definitions may have included them. If that is the case, it is important to identify when such a change occurred. As a first step, we examined historical changes in the definition of happiness in American English, analyzing various editions of Webster's Unabridged English dictionary (see Cohen, 2003; Wolff, Medin, & Pankratz, 1999 for similar dictionary analyses).

We obtained all the editions of Webster's Unabridged English Dictionary available at the University of Virginia's library. The earliest edition available was the 1850 edition (see Table 2). As can be seen in Table 2, the early definitions of happiness all included the concepts of luck, fortune, or fate. However, there was an interesting shift in the 1961 edition of Webster's dictionary, in which the definition of happiness as "good fortune" was deemed archaic. The prominence of the good fortune definition indicates that the original concept of happiness in American English was very similar to the German, French, Russian, and Japanese ones. Over time, however, the Jeffersonian concept of happiness as something one can pursue took over. This change was first reflected in the 1961 edition of Webster's dictionary.

Considering that changes in dictionary definitions typically occur slowly, it is likely that the use of happiness to convey luck fell out of common usage well before 1961. To this end, we analyzed the State of the Union address provided by American presidents since George Washington's first State of the Union address in 1790. The State of the Union provides an ideal material for this purpose because it is one of the very few standardized forms of speech across



time. Although the precise purpose of the speech changed over time (e.g., earlier reports included some budgetary reporting), the State of the Union is the speech in which presidents summarize what they have accomplished in the previous year(s) and what they would like to accomplish in the upcoming year(s).

### Method

We downloaded all the State of the Union addresses (1790 to 2010) from <http://www.presidency.ucsb.edu/sou.php>. First we identified sentences in which the term “happy” or “happiness” were used. Then, two independent coders blind to hypotheses analyzed each entry in terms of the degree to which the use of happy/happiness was referring to good luck and fortune on a 5-point scale (-2 = not at all to +2 = very much). Because one rater gave a significantly higher ratings on average than the other,  $t(500) = 3.06, p = .001$ , we decided to count the number of times each rater rated the use of happy or happiness as clearly lucky or fortunate, namely +1 or +2 in the original 5-point scale. This reduced the discrepancy between the two raters’ mean ratings substantially,  $t(500) = .55, p = .58$ . We then computed the mean number of times each President used the term happy or happiness as “lucky” or “fortunate” ( $r = .92, p < .01$ ). For the analyses below, we took the mean of these two ratings. The basic findings hold when we used the mean of the original 5-point scale as well.

### Results and Discussion

First, earlier presidents were more likely to use the term happy or happiness than recent presidents; the year of the State of the Union speech was negatively associated with the number of times happy/happiness was used,  $r(222) = -.47, p < .001$ . This was the case when we controlled for the total words in the State of the Union addresses, *partial*  $r(216) = -.49, p < .001$ . George Washington, for instance, used happy/happiness 2.25 times per speech. The ninth

president, John Tyler, used it 8.75 times per speech. In contrast, Presidents George H. Bush and Bill Clinton used it .5 times per speech, and Present George W. Bush used it only .38 times per speech. It is possible that the terms happiness and happy were used more formally when referring to fortunate conditions of the nation in the 18<sup>th</sup> century, and thus were more suitable for a formal speech such as the State of the Union. For instance, in the first State of the Union address in 1790, President George Washington stated “Knowledge is in every country the surest basis of public happiness” while promoting the importance of science and literature. The Historian Eric Peterson (2005) also noted that Thomas Jefferson used the term *happy* and *happiness* in conjunction with prosperity of the collective, be that family or nation (“happiness of the man and that of his family”). In contrast, the terms *happiness* and *happy* are used much more frequently and informally referring to one’s positive feeling state in contemporary usage. For example, President George W. Bush stated in 2003: “Seniors happy with the current Medicare system should be able to keep their coverage just the way it is.” Ironically, the historical shift in the concepts of happiness from the prosperity of the collective to an individual’s feeling state might have made these terms less suitable for a formal speech, such as the State of the Union. We also examined whether the frequency in which the terms happy and happiness were used was different depending on the president’s political ideology (coded by conservative vs. liberal). There were no differences by ideology,  $M_{conservative} = 2.22$  ( $SD = 2.45$ ) vs.  $M_{liberal} = 1.85$  ( $SD = 2.20$ ),  $t(222) = 1.20$ ,  $p = .232$ .

Most important, we found that earlier presidents were more likely to use “happy” and “happiness” to mean good luck, fortune, and prosperity than were more recent presidents,  $r(223) = -.37$ ,  $p < .001$ <sup>1</sup> (see Figure 1). This association was virtually unchanged when we controlled for the number of words in the State of the Union addresses,  $partial\ r(216) = -.38$ ,  $p < .001$ . For

instance, President James Madison stated in 1812, “Such is the happy condition of our country, arising from the facility of subsistence and the high wages for every species of occupation.” Similarly, in 1824, President James Monroe declared, “From the view above presented it is manifest that the situation of the United States is in the highest degree prosperous and happy.” In 1833, President Jackson began his State of the Union address by stating that, “On your assembling to perform the high trusts which the people of the United States have confided to you, of legislating for their common welfare, it gives me pleasure to congratulate you upon the happy condition of our beloved country.” President Ronald Reagan is the only president over the last 30 years to use the term *happy* in a clearly old-fashioned way when he used happy along with prosperous to mean a favorable, fortunate condition of the collective: “I would like to talk with you this evening about what we can do together---not as Republicans and Democrats, but as Americans---to make tomorrow’s America happy and prosperous at home, strong and respected abroad, and at peace in the world.”

Considering that conservatives favor more collectivistic values than do liberals (Haidt & Graham, 2007), one might expect conservative Presidents to have used the luck-fortune definition of happiness more often than liberal Presidents. However, political ideology did not affect the degree to which presidents used happy and happiness as fortune,  $M_{conservative} = 1.63$  ( $SD = 1.91$ ) vs.  $M_{liberal} = 1.24$  ( $SD = 1.81$ ),  $t(222) = 1.51$ ,  $p = .13$ . A multiple regression analysis also revealed that earlier presidents were more likely to use happy/happiness as fortune than were more recent ones, controlling for the political ideology of the presidents,  $B = -.011$ ,  $SE = .002$ ,  $\beta = -.38$ ,  $t(221) = -6.11$ ,  $p < .01$ . Thus, we conceptually replicated the findings from the analyses of Webster’s unabridged dictionaries. In addition, Figure 1 shows the analysis of these speeches that allow us to more precisely estimate when this use of happiness fell out of use. The steep

drop-off between Wilson and Harding suggests that after World War I (from 1920 on), happiness was only rarely used to convey fortune or good luck. As shown in the analyses of Webster's unabridged dictionaries, this usage was deemed archaic 40 years later.

As discussed above, the view of happiness as attainable via accumulation of wealth was particularly seductive to new immigrants, many of whom were deprived of the opportunity to pursue their wealth and viewed the U.S. as the land of opportunity. It is possible, then, that as the number of immigrants increased in the U.S., the view of happiness as controllable also might have increased, and the view of happiness as lucky or fortune might have decreased. Indeed, the number of legal immigrants (obtained from <http://www.dhs.gov/files/statistics/immigration.shtm>) was negatively associated with the frequency in which Presidents used happiness as lucky or fortune,  $r(189) = -.26, p < .001^2$ . The number of legal immigrants is also correlated with the U.S. population (obtained from <http://www.census.gov/population/www/censusdata/hiscendata.html>),  $r(117) = .44, p < .001$ . When we predicted the frequency in which Presidents used luck-based happiness from the number of legal immigrants and the U.S. population simultaneously, however, an increase in the number of immigrants was *positively* associated with the frequency of luck-based happiness,  $B = .0000007, SE = .000, \beta = .18, t(116) = 2.03, p = .045$ , whereas the U.S. population was negatively associated with the frequency of luck-based happiness,  $B = -.00000001, SE = .000, \beta = -.60, t(116) = -6.88, p < .001$ . Likewise, as the number of legal immigrants was positively associated with loglinear-transformed real GDP per capita (obtained from [www.measuringworth.com](http://www.measuringworth.com)),  $r(189) = .56, p < .001$ , we conducted a multiple regression predicting the frequency of luck-based happiness from the number of legal immigrants and the loglinear-transformed GDP per capita. This analysis also showed that Presidents used luck-based

happiness less when log-transformed GDP per capita was larger,  $B = -1.05$ ,  $SE = .14$ ,  $\beta = -.55$ ,  $t(188) = -7.35$ ,  $p < .001$ . Controlling for GDP per capita, the number of immigrants did not predict the frequency of luck-based happiness uttered in the State of the Union addresses,  $B = .0000003$ ,  $SE = .000$ ,  $\beta = .05$ ,  $t(188) = .74$ ,  $p = .46$ . Thus, the increase in immigrants did not uniquely explain why the use of happiness as lucky-fortune decreased over time in the U.S.

Next, year (1790-2010) is highly correlated with the total U.S. population,  $r(117) = .98$ ,  $p < .001$ , and loglinear-transformed real GDP per capita,  $r(219) = .99$ ,  $p < .001$ . Thus, we also examined the correlation between U.S. population, loglinear-transformed real GDP per capita, and the frequency of fortune-based happiness uttered in the State of the Union addresses. The State of the Union addresses included more fortune-based happiness use in years of lower GDP per capita than in the year of higher GDP per capita,  $r(221) = -.40$ ,  $p < .001$ . Similarly, the U.S. population was negatively associated with the frequency in which fortune-based happiness appeared in the State of the Union,  $r(117) = -.52$ ,  $p < .001$ . A multiple regression analysis, predicting the number of fortune-based happiness used from loglinear-transformed GDP per capita and the total U.S. population showed that GDP per capita was marginally negatively associated with the number of luck-based happiness uses,  $B = -1.18$ ,  $SE = .68$ ,  $\beta = -.68$ ,  $t(116) = -1.75$ ,  $p = .08$ , whereas the U.S. population was unrelated,  $B = .000000003$ ,  $SE = .000$ ,  $\beta = .14$ ,  $t(116) = .37$ ,  $p = .71$ . Because GDP per capita and the U.S. population are also highly correlated ( $r = .98$ ,  $p < .001$ ), this multiple regression analysis is likely to suffer from multicollinearity. Thus the interpretation of the above multiple regression analysis requires some caution. However, our findings might be best interpreted as follows: as the U.S. has become richer over time, fortune-based happiness has become less frequently used in State of the Union addresses. As indicated in the historical dictionary analyses, this might reflect that the definition of happiness as good

fortune has become archaic. The reason why this definition became archaic might be that as the U.S. has become richer, people's perception of personal control in life has also increased, and made the fortune-based definition of happiness look obsolete.

### **Study 3: Happy Nation vs. Happy Person: Google Books 1800-2008**

The State of the Union Addresses revealed a steep drop-off in the use of happiness as good luck and fortune around 1920. The content analyses of the State of the Union Addresses showed that earlier presidents were far more likely to use the terms happy and happiness to describe fortunate conditions of the nation as a whole (e.g., “the happy condition of our beloved country” by Andrew Jackson, 1833), whereas more recent Presidents use the term happy to refer to an inner feeling of individuals (“Seniors happy with the Medicare” by George W. Bush 2003). Although the conceptual distinction between internal feelings and external conditions made in Studies 1 and 2 is different from the conceptual distinction between private and collective happiness, Study 2 showed that the use of happiness as fortune/luck took place often in reference to the collective and the use of happiness as internal feelings took place in reference to individuals. Thus, in Study 3 we examined the historical changes in the frequency in which the terms “happy nation” and “happy person” were used in books published in English.

One main limitation of Study 2 was that the State of the Union addresses are political in nature, and therefore their generalizability beyond politics and politicians might be of question. The main goal of Study 3, then, was to investigate the historical changes in the use of the terms “happy nation” and “happy person” in all the books published in the U.S. since 1800. We chose to analyze the period between 1800 and 2008 for two reasons: (1) to be comparable to the State of the Union analyses, which covered from 1790 to 2010; and (2) the number of books published before 1800 is small, which makes it hard to obtain reliable information before 1800.

## Method

We used Google Ngram Viewer, which provides the frequencies of words in books digitized by Google (Michel, Shen, Aiden, et al., 2011). This allowed us to examine whether the frequency of the phrases “happy nation” and “happy person” changed between 1800 and 2008 in the books covered by the American English corpus in Google’s Ngram database (see Twenge, Campbell, & Gentile, 2012 for an exemplary use of Google Ngram Viewer). GDP per capita and the number of immigrants used in this study are exactly the same as those used in Study 2.

## Results and Discussion

As can be seen in Figure 2, the frequency in which the term “happy nation” is used in books published in each year has declined over time, whereas the frequency of the term “happy person” increased gradually over time. The correlation between year and phrase frequency was positive and significant for the phrase “happy person”,  $r(207) = .68, p < .001$ . In a regression equation predicting phrase frequency from year, “happy person” had an unstandardized coefficient of  $3.70E-8$  ( $SE_b = 2.74E-9$ ),  $t(207) = 13.50, p < .001$ . In contrast, the correlation between year and phrase frequency was negative and significant for “happy nation”,  $r(207) = -.74, p < .001$ . In a regression equation predicting phrase frequency from year, “happy nation” had an unstandardized coefficient of  $-6.74E-8$  ( $SE_b = 4.26E-9$ ),  $t(207) = -15.81, p < .001$ . It is interesting to note that the Google Book search showed the convergent evidence that 1920 was a turning point, where the use of “happy person” (happy referring to a person’s chronic feeling) dominated the use of “happy nation” (happy referring to a nation’s fortunate condition). Pre-1920, “happy nation” appeared in American books on average 2.82 times as frequently as “happy person.” In contrast, after 1920, the ratio falls to 0.18, with “happy person” appearing more than 5 times often than “happy nation.”

We next tested whether the frequency in which “happy nation” and “happy person” appeared in books was associated with GDP per capita and # of immigration. “Happy nation” appeared in books more in years when GDP per capita was low ( $r [207] = -.503, p < .001$ ), and when the number of legal immigrants was smaller ( $r [187] = -.462, p < .001$ ). In contrast, “happy person” appeared in books more when GDP per capita was high ( $r [207] = .822, p < .001$ ) and the number of legal immigrants was high ( $r [187] = .493, p < .001$ ). A multiple regression analysis that predicted “happy nation” from loglinear GDP per capita and the number of legal immigrants showed that “happy nation” appeared in books less in years with high GDP per capita, controlling for the number of immigrants,  $B = -2.577\text{E-}006, SE = .000, \beta = -.677, t(186) = -11.36, p < .001$ , whereas the number of immigrants no longer predicted “happy nations,”  $B = -1.052\text{E-}012, SE = .000, \beta = -.093, t(186) = -1.56, p = .121$ . Likewise, a multiple regression analysis that predicted “happy person” from loglinear GDP per capita and the number of legal immigrants showed that “happy person” appeared more in books in years with high GDP per capita, controlling for the number of legal immigrants,  $B = 2.47\text{E-}006, SE = .000, \beta = .793, t(186) = 16.16, p < .001$ , whereas the number of legal immigrants no longer predicted the frequency in which “happy person” appeared in books, above and beyond GDP per capita,  $B = 5.61\text{E-}013, SE = .00, \beta = .06, t(186) = 1.23, p = .219$ .

Replicating the State of the Union analyses in Study 2, then, our Google Ngram analyses showed that as the U.S. has become richer over time, happiness in reference to nation has become less frequently used in books, whereas happiness in reference to person has become more frequent. Also, replicating Study 2, we found that 1920 was the turning point in the dominance of happiness as inner feelings over happiness as collective conditions.

### **General Discussion**



Historians, philosophers, and linguists have documented historical and linguistic variations in the concepts of happiness across time and cultures (e.g., McMahon, 2006; Nussbaum, 1986/2001; Wierzbicka, 2004). The concepts of happiness centered on favorable, external circumstances in Ancient China and Greece, whereas they center on positive inner feeling states in the U.S. today (McMahon, 2006; Oishi, 2012). Happiness in American English today covers a wide range of positive feeling states, whereas happiness in Polish, Russian, German, and French is used to refer to a rare event or condition (Wierzbicka, 2004). For instance, in American English, it is perfectly fine to say “I’ll be quite happy to do it.” When this sentence is translated into French, French term for happy, *heureux*, is not used, but instead other weaker terms such as “glad” or “doesn’t bother me to” are used: “Je le ferai volontiers./Ça ne me derange pas de le faire” (Wierzbicka, 2004, p. 34). These qualitative analyses suggest that the concepts of happiness vary across cultures and historical times. To our knowledge, however, there have not been any systematic quantitative analyses of the concepts of happiness across diverse languages or in-depth analyses of the historical changes in the concepts of happiness in the U.S. We initiated the current project to provide the first systematic test of cultural and historical variations in the concepts of happiness.

The analyses presented above detail variations in the concepts of happiness across time and across cultures. The cross-cultural dictionary analysis revealed that the use of happiness to convey fortune, fate or luck was present in 80% of a sample of current international dictionary definitions, so this use is not relegated to ancient China and Greece. The analyses of the State of Union addresses and Google Books Ngram Viewer locate when in American English this usage fell into disuse, in the early 20<sup>th</sup> century around the 1920s.

*What Happened in the 1920s in the U.S?*

So, what happened in the 1920s in the U.S? A lot. Before the crash of the stock market in 1929, the stock market was surging. The highest Dow-Jones Industrial Average was 120.5 in 1924 and soared to 300 in 1928 (O'Sullivan & Keuchel, 1989). Ford's Highland Park plant was producing 1,000 cars a day, and the mass production of automobile started in the late 1910s, which helped reduce the price of cars, which in turn resulted in higher rates of car-ownership. Indeed, in 1927 more than half of American families owned cars (Berger, 2001).

Many historians consider the 1920s the beginning of modernity in the U.S, the first decade of affluence, urbanization, and consumer culture (Ewen, 1976). Historians John O'Sullivan and Edward Keuchel state, "The year 1920 marked a significant moment in that process. The census of that year indicated that, for the first time, the majority of Americans now lived in urban areas...farm production constituted only one-sixth of the gross domestic product" (p. 157). Likewise, Sociologist Don Slater (1997) states "From the 1920s, the world was to be modernized partly *through* consumption; consumer culture itself was dominated by the idea that everyday life could and should be modern...This is the age of real estate, consumer credit and cars; modern appliances, bought by modern methods, placed in a modern household" (p. 12-13). Magazine circulations also soared in the 1920s. The number of monthly periodicals grew from 3,415 in 1920 to 4,110 in 1930 (Kotchemidova, 2005), again corroborating the rise of mass media and advertisement in the 1920s. Historian Roland Marchand (1985) also documents the rise of new "human-interest" approach to advertisement between the 1910s and the 1920s, which tried to appeal to customers' emotions (e.g., "The skin you love to touch" for a soap) rather than the announcement of descriptive product data. Equally important, smile and cheerfulness, which are overt signs of the inner feeling of happiness, have become increasingly prevalent in advertisement. According to the media study scholar Christina Kotchemidova (2005), "in the

1920s, advertisers began to entice consumers by portraying the pleasure of using a product” (p. 18). These changes in everyday life appear to indicate that Americans’ concern shifted toward the satisfaction of one’s desires and self-expression in the 1920s. It is no doubt an overstatement. The historical change is often slow and gradual. Thus, these changes must have been taking place slowly since the late 19<sup>th</sup> century, the era of progressivism. Yet, the sudden emergence in mass production, the transformation in transportation (automobile), and advertisement in the 1910s-1920s fit the story depicted by our current analyses that the use of the collective, old-fashioned definition of happiness was replaced by the modern use of individualistic, feeling-centric definition of happiness.

#### *Future Directions*

Far from just a historical (or cross-cultural) side note, the use of *happiness* as fortune or luck carries important implications for the scientific study of happiness. First, the cross-cultural differences show that the meanings of the term may differ, and so asking about “happiness” (and its equivalents) in different cultures may be asking about different concepts. That is, Germans, Russians, Japanese, Norwegians, and many others might be thinking about how lucky they have been lately when they answer the question regarding how happy they have been lately, whereas Americans, Spanish, Argentine, Ecuadorians, Indians, and Kenyans are not. These different connotations of the “happiness” question could bias the results (Wierzbicka, 2004). This concern can be alleviated if the same patterns of cross-cultural differences emerged when life satisfaction or other related questions were examined. However, the patterns of cross-cultural differences are often different, depending on specific well-being items used in the surveys. For instance, Diener, Kahneman, Tov, and Arora (2010) recently found that GDP per capita was far more strongly associated with life satisfaction than the happiness of nations. The divergent patterns of cross-

cultural results found in previous research could be in part due to different connotations of the term *happiness*. It is important to examine the degree to which different connotations of the term happiness contribute to differential patterns of results. For example, researchers might want to include how lucky and fortunate respondents feel currently, in addition to the happiness and life satisfaction items. By partialling out the role of luck and fortune, researchers can see if the wealth of nations is indeed less strongly associated with happiness (or once the linguistic connotations are statistically controlled, the wealth of nations is as strongly associated with happiness as with life satisfaction).

Further, the cross-cultural dictionary analysis showed a relation between luck usage and subjective reports of happiness, suggesting that how participants are conceiving of happiness may affect other aspects of how it functions in their lives. For instance, in cultures where happiness is conceived to be attainable, happiness might be the conscious goal. Consequently, various important decisions might be made based on anticipated happiness. For instance, many Americans make various important decisions such as where to retire or where to live based on the heuristics of “Would I be happy if I did X?” (Schkade & Kahneman, 1998). In contrast, in cultures where happiness is conceived as luck and fortune, happiness might not be the conscious goal. Thus, various decisions might *not* be made to maximize happiness. Indeed, East Asians do not seem to make decisions to maximize happiness, as they tend to work on tasks they do not enjoy or do not do well (Falk, Dunn, & Norenzayan, 2010; Oishi & Diener, 2003). The current results suggest Germans, French, Norwegians, Russians (where happiness means luck or good fortune) might not use the “happiness heuristics” to make important life decisions as frequently as Americans do. It is important to examine whether cultural differences in the “happiness heuristics” could be explained by the connotative differences of the term happiness.

Recently, researchers have revealed some negative consequences of pursuing happiness (e.g., Gruber, Mauss, & Tamir, 2011). So far, most research on the negative consequences of happiness came from the U.S. It would be interesting to examine whether the dark side of happiness is more prevalent in the nations with the agentic concept of happiness than the fortune concept of happiness.

Third, all three studies point to the fluidity of happiness concepts, suggesting possible future drifts in uses of the term happiness. To this end, it is noteworthy that Mogilner, Kamvar, and Aaker (2011) found that young Americans tend to use the term “happiness” along with “excitement”, whereas older Americans do not. Older Americans’ use of happiness co-occurred more frequently with peaceful feelings. Previous developmental research found that older adults tend to be happier than younger adults (Siedlecki, Tucker-Drob, Oishi, & Salhouse, 2008). This could be in part due to the connotational differences in the concepts of happiness between the young and old. It is critical to examine how developmental shifts in the meaning of happiness affect the levels and correlates of happiness.

Fourth, the cross-cultural analyses above also point to the possibility of religious differences in the meaning of happiness. As pointed out by Cohen (2009) and Graham and Haidt (2010), religious differences have received relatively little research attention in psychological science. Subjective well-being is no exception in this regard. Recently, however, researchers have started actively investigating the role of religion in subjective well-being. Kim-Prieto and Diener (2009), for instance, found that Jewish Americans reporting more happiness than Buddhist Americans. It is important to explore whether the meaning of happiness differs across different religious traditions, and if so, how that might affect the levels and correlates of happiness (see Tsai, 2007 for the initial evidence).

*Conclusion*

While ancient uses of happiness terms centered around good luck, fortune, or external conditions in general, this use has fallen into disuse in modern-day American usage. The present studies provide evidence that (1) much cultural variation exists in the concepts of happiness, with many linguistic traditions still centering on fortune or luck; (2) this use was deemed “archaic” in American English in 1961, and (3) use of happy/happiness to connote good luck or fortune dropped off about 40 years prior to the “archaic” designation, around 1920. Variations in conceptualizations of happiness across languages, cultures, and time have important implications for research on happiness and subjective well-being. As happiness becomes a major policy goal in nations ranging from the United Kingdom and France, to Japan and China, to Bhutan (Diener, Lucas, Schimmack, & Helliwell, 2009), it is critical to document precisely what people mean by “happiness” and how different conceptualizations could affect survey responses across nations and time. Future research should further delineate the causes – and consequences – of such changes in conceptualizations of happiness. Finally, it is our hope that a historical analysis of dictionary definitions, formal speeches, and written materials (e.g., letters, blogs, tweets) will be used more often and its benefit be recognized in psychological science in the near future.

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## Footnote

1. We checked whether # of fortune-based happiness used in the State of Union address had the autocorrelation issue (i.e., whether errors were independent). The Durbin-Watson (DW) statistics, which range from 0 to 4, is often used to detect autocorrelation. The DW statistics of 2 indicates essentially no autocorrelation with time lag of 1 (here year  $t$  and year  $t-1$ , Wooldridge, 2009). Conventionally, DW less than .80 and DW greater than 3.2 are considered significant deviations from the null hypothesis of complete independence of error terms. The DW statistics for our analysis (linear trend) was 2.18. Normal P-P plot of residuals was also nearly perfectly in line with the expected values. In addition, we checked the Durbin-Watson statistics for the regression analysis in which we predicted the luck/fortune ratings from Log Linear GDP per capita. Again, the DW was very close to 2 (2.13), thus there was no evidence for the violation of the assumption that error terms are independent. Likewise, the DW was 2.08 when we predicted the luck/fortune ratings from # of immigrants. Thus, the significance tests from the ordinary least square trend regressions are interpretable in our analyses.
2. We also tested whether there were one year, two years, three years, four years, or five years time lag in the effect of the number of immigrants on the luck/fortune ratings of happiness. None of the time-lag analyses for the number of immigrants showed significant effect on the luck/fortune ratings of happiness ( $|t|s < 0.92$ ,  $ps > .35$ ).

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Table 1. Dictionary Definitions of Happiness from 24 Countries

Country	Source	Original Term	English Translation
Argentina	Diccionario Practico, Crijalbo 1996	Felicidad	State of complete and ordered satisfaction that proceeds from the enjoyment of a desirable good.
Australia	Macquarie Dictionary 4 <sup>th</sup> edition, The Macquarie Library Pty Ltd 2005	Happiness	1. The quality or state of being happy. 2. Good fortune; pleasure, content, or gladness. 3. Aptness or felicity, as of expression.
		Happy	1. Characterised by or indicative of pleasure, content, or gladness. 2. Delighted, pleased, or glad, as over a particular thing. 3. Favoured by fortune; fortunate or lucky. 4. Apt or felicitous, as actions, utterances, ideas, etc. 5. <i>Colloquial</i> Showing an excessive liking for, or quick to use an item indicated (used in combination).
	The Australian Oxford Dictionary, Oxford University Press 1999	Happy	1. Feeling or showing pleasure or contentment. 2. a) Fortunate: characterized by happiness. b) (of words, behavior, etc.) apt, pleasing. 3. <i>Colloq.</i> Slightly drunk. 4. (in

			comb.) <i>colloq.</i> Inclined to use excessively or at random
Brazil	Novo Dicionário Aurélio da Língua Portuguesa, Positivo 2004	Alegria	1. The quality of happy. 2. State or condition of happy. 3. Feeling of felicity, contentment, satisfaction, jubilation. 4. Everything that makes one happy, content, jubilant, exultant. 5. Entertainment, distraction (as in pastime), pleasure.
		Alegre	1. That which/who feels and/or expresses contentment, satisfaction, pleasure in life; content, satisfied. 2. Intimately (privately) felicitous, content. 3. That which inspires jubilation, pleasure, contentment. 4. That which has jubilation; jovial, pleasurable. 5. It is said of a color that is vibrant and showy (as in bold). 6. Slightly drunk. 7. Quite licentious or libertine.
		Felicidade	1. Concurrence of circumstances that cause venture 2. State of the happy person 3. Luck. 4. Venture, good fortune. 5. Good success. 6. the eternal happiness: blessedness.

China	现代汉语大词典 (Xiandai Hanyu Da Cidian)	愉快	Pleasant, relaxing; (used commonly to describe life, mood, or facial expression).
		幸福	1. Circumstances or a life that makes people have ease of mind. 2. Referring to life or circumstances, etc., turning out the way one wishes
		高兴	Excited (used commonly to describe life, mood, or facial expression).
		快乐	Excited (used commonly to describe life, mood, or facial expression); relaxing.
Ecuador	Diccionario Esencial de la Lengua Española, Real Academia Española 2006	Felicidad	1. State of great spiritual and physical satisfaction. 2. Person, situation, object or group of these that contribute to happiness. 3. Lack of inconvenience or trouble/mess.
Estonia	Eesti kirjakeele seletussõnaraamat/The Dictionary of Written Estonian, Eesti Keele Instituut/Institute of the Estonian Language 2007	Õnn	1. Happy feeling and deep satisfaction with one's own circumstances, a happy state. 2. The good will of fate; by chance or success depending on some outside force, windfall. 3. Õneks. Luckily. (as a postposition) good or favourable for someone. 4. (in well wishing).

		Önnelik	<p>1. Feeling happiness, glad and satisfied; expressing this. A person who is doing well in some way, who is lucky, and therefore has a reason to be glad and satisfied (also as a noun). 2. A place or time of happiness, that is full of happiness, joy. 3. Favourable, good; (relatively) positive (about something which could also have gone badly or ended unhappily).</p>
France	Dictionary of the French Academy 9 <sup>th</sup> edition, 2000	Heureux	<p>1. Someone who enjoys happiness, who possesses that which can satisfy completely 2. Someone who is favored by luck or destiny. 3. Something that promises or announces good luck or fortune, that provides happiness or satisfaction; favorable; advantageous; beneficial. 4. Something that seems distinguished by the favor of luck or nature; that is remarkable, excellent in its category.</p>
		Bonheur	<p>1. Happy event, favorable luck. 2. Perfect success in style or</p>

			manner (literature and fine arts). 3. Inner state of perfect satisfaction.
Germany	Duden ( <a href="http://www.duden.de/rechtschreibung/Glueck">http://www.duden.de/rechtschreibung/Glueck</a> )	Glück	<p>1. something which is the result of a concurrence of especially opportune or fortunate circumstances; especially fortunate or opportune coincidence, fortunate or opportune destiny of fate</p> <p>2. the personified imaginary “Glück”; fortune</p> <p>3.</p> <p style="padding-left: 40px;">a. pleasant and joyful state of mind, in which one finds oneself when they come into possession or pleasure of something they had wished for; state of inner satisfaction and high spirits</p> <p style="padding-left: 40px;">b. single happy/fortunate situation, happy/fortunate result, experience</p>
Guatemala	Diccionario de la Lengua Espanola, Larousse 2000	Felicidad	A mood state acquired through the possession of a good.

			Satisfaction, pleasure, content. Good luck, a favorable circumstance.
		Feliz	He who enjoys happiness, lucky. Opportune, favored by good luck.
India (Hindi)	<a href="http://www.definition-of.net">www.definition-of.net</a>	Khusi	1. bliss, relish, delight, delectation, boot, welfare, quiet, joy, hilarity, gusto, fun 2. glee
Indonesia	Kamus Besar Bahasa Indonesia, Balai Pustaka 1995	Bahagia	1. (noun) state or feeling of happiness peace (free from everything, which is upsetting): -- worldly heavenly; life full of --; 2 adjective, lucky, being happy, hopefully we -- and always in the protection of God almighty, I am really feeling -- to be among family again.
		Kebahagiaan	feeling happy, gladness and peace of life (physical mental); luckiness; fortune which is physical & psychological: the presence of the baby brings -- in his family; mutual understanding between husband and wife will bring -- in the family.

		Gembira	cheerful/like; happy; proud; glad; -- ria glad heart; cheerful; very glad; the trip downward is continued with --
		Kegembiraan	gladness of heart; feeling glad (proud), which causes activity: all work with --
		Senang	1 content and relieved, no hard feelings, disappointment, etc: he finishes the work with --; -- is my heart now after having finished all the task; 2 comfortable: I always -- living in a cold area; 3 being happy (nothing is upsetting, nothing is lacking in his life): he is quite -- with his life now; 4 cheerful/like, glad: his parents -- towards their to be son-in-law; with -- he welcomes the birth of his baby; 5 in good condition (on health, comfort, etc): already a couple of days I feel not --; we are always in the condition of --; 6 easy, all easy, practical: this stove -- to use; his job --, the salary is big; -- over --;

		Kesenangan	n 1 on being glad; content; comfort; happiness; relieved, etc; 2 things being liked; hobby
Iran (Farsi)	<a href="http://farsilookup.com/p2p/seek.jsp?lang=fa&amp;word=خوشحالی">http://farsilookup.com/p2p/seek.jsp?lang=fa&amp;word=خوشحالی</a>	khoshali	1. Good fortune 2. to becomes successful 3. feeling of joy
Israel	Even Shoshan's Dictionary – Renewed and Updated for the 2000s, Am Oved, Kineret, Zmora-Bitan, Dvir and Yediot Aharonot 2003	Samehach	1. Full with cheerfulness. 2. That causes happiness.
		Simcha	Joy, gladness, the feeling of satisfaction and much desire, cheerful mood.
		Osher	Pleasure, good fortune, a general feeling of pleasantness that is caused by success and great satisfaction.
Italy	Dizionario della Lingua Italiana, 1988	Felice	1. To feel or show the fulfillment of every wish and desire in perfect serenity. Sometimes specifies an expression of pleasant courtesy. Also, 'blessed, lucky' (often with a bit of contempt or pity). Historically, official name for the subjects of a monarch. 2. To realize one's desires or in perfectly normal way, without any accidents: a happy crossing; to give a pleasant or pious memory. 3. Fully appropriate



			and opportune to the moment when the truth comes out; Appropriate, well-chosen; Conceived and executed in a satisfactory way; euf. Not very happy, inappropriate, inconvenient; Also, full of good will and understanding in relationships with other people; ready, efficient (regarding mental faculties). 4. Ferile; in an active sense, a fertilizing person [From the Latin, felix].
		Felicità	1. Experiencing fully every fulfilled desire; a serene, pure, calm happiness; to enjoy and taste days of happiness; eternal happiness, heavenly bliss; happiness!, wish (although today much less common than saying salute!, or bless you (after sneezing), often in a joking manner); Sometimes, joy; Concr. Event that happens according to one's wishes. 2. Opportunity that went/ended extremely well [From the Latin, felicitas].
Japan	Ko-ji-en (広辞苑) 6th edition, 2008	幸福	1. Luck. Chance. Stroke of good luck. 2. Natural course of events. Result. 3. Happiness.

			Good fortune. Luck. Smile of a fortune.
		幸せ	The state or the fact that the mind is satisfied. Happy.
Kenya (Swahili)	Kamusi ya Karne y 21: Kamusi ya Kiswahili yenye uketo zaidi katika karne hii. Nairobi: Longhorn Publishers (K) Limited.	Furaha	1. being jovial 2. the situation of being satisfied 3. the state of being between joy and enjoyment.
Korea	Standard Korean Language Dictionary (Vols. 1-2), Doosan Dong-A 1999	행복	1. Good luck. 2. A state of being satisfied and feeling joy in daily life. Contentment.
Malaysia	Kamus Dewan, Dewan Bahasa dan Pustaka 2005	Bahagia/Berbahagia	A relaxing and peaceful atmosphere, peaceful/Prosperous
		Kebahagiaan	The feeling of happiness, enjoyment in life, luck, prosperity
Mozambique (Portuguese)	<i>Dicionário da Língua Portuguesa</i> (6th Edition). Porto: Porto Editora.	Felicidade	The state of someone who is happy; prolonged prosperity; good fortune; fortune; good luck; good success; contentment
Norway	Bokmålsordboka. Definisjons- og rettskrivingsordbok ("Written Language. Definition- and orthographic dictionary"), Universitetsforlaget 1993	Lykke	1. Destiny, coincident. 2. a) Fortunate destiny, luck. b) Luckily, it turned out well, being successful. c) Wish you luck. d) Congratulatory. 3. Good living conditions. 4.

			Deep and lasting feeling of enjoyment and well-being.
		Lykkelig	1. Lucky, joyful, advantageous. 2. a) Feeling happy or joyful, marked by being happy. b) Being joyful and grateful.
Pakistan (Punjabi)	The Pãnjábí dictionary (Munshi Gulab Singh & sons, 1895)	Khus, Khush	Glad, joyful, delighted, pleased, happy; merry, cheerful, gay; well off; willing, ready; lucky, fortunate:
Portugal	Dicionário da Língua Portuguesa Contemporânea da Academia das Ciências de Lisboa, 2001	Felicitas, Felicitates	1. State of full/absolute inner satisfaction, well-being, in which all human beings' aspirations are met/satisfied; state of being happy. ≠ UNHAPINESS. The secret of happiness; a great happiness, an enormous happiness; to bring happiness, to wish the happiness of; to give happiness to; to make the happiness of, to contribute to the happiness of. 2. Favourable luck; happy or fortunate event; ~ VENTURE. ≠ BAD LUCK, UNHAPINESS. 3. Success or good outcome of an action, achievement... ~ TRIUMPH, PROSPERITY. 4. <i>Plural of Happiness – term that</i>

			expresses a wish for someone to be happy, to have success.
		Felix, Felicis	1. That feels inner satisfaction for accomplishing his dreams, his aspirations; that is enjoying happiness. ≠ UNHAPPY. 2. That reveals joy, contentment, happiness. ~ RADIANT. ≠ UNHAPPY. 3. That causes happiness. ≠ UNHAPPY, SAD. 4. That is marked by happiness, by the absence of suffering, of sadness. 5. That is praised, blessed. 6. That benefits from favourable luck; what is successful, triumphant. ≠ UNHAPPY. 7. That resulted well; what was successful. ~ EXCELLENT. 8. To wish someone happiness, in certain situations or festivities.
Romania	Explanatory Dictionary of Romanian Language, Univers Enciclopedic Printing House 1998	Fericít, -ă	1. A person who is in a state of complete mental satisfaction/contentment, full of joy. 2. That brings happiness, causes joy, that is good, favorable. 3. The first rank of holiness given to

			someone by the synod or the pope.
		Fericíre	1. A state of intense and complete mental contentment. 2. A state of total satisfaction 3. Beatitude.
Russia	Novyj tolkovo-slovoobrazovatel'nyj slovar' russkogo yazyka [New explanatory and word-formative dictionary of the Russian language], Drof 2000	счастье	1. Success, luck. 2. Happy occasion, happy turn of events. 3. Said about state when one feels very good ("one feels" is implied, literally "when it is very good"). 4. Said about luck, good fortune that accompany someone.
		счастливы́й /ая	1. a) One that experiences happiness. b) One that is filled with happiness, i) successful, lucky, ii) that which provides pleasure, brings happiness, joy. 2. That which is accompanied by happiness, success and good luck. a) That which brings happiness, success and good luck. b) Lucky, successful.
Senegal (French)		Bonheur	1. a) Luck. b) Achievement, success. 2. a) State of being fully satisfied. Well-being, felicity, pleasure, contentment, enchantment, euphoria, ecstasy, joy, satisfaction. b) Which makes happy.

		Heureux, Heureuse	1. a) (people). Whom benefits from favorable luck, whom luck favors. Lucky, favored, fortunate. b) (things). Which is favorable. Advantageous, good, favorable. c) Which has a tendency to obtain favorable outcomes; which is remarkable and rare. d) (esthetic). Which is original, appropriate, skillful in way that seems lucky. 2. a) (people). Whom enjoys a state of happiness. b) Whom expresses happiness. c) (things). Marked with happiness, where happiness reigns.
Singapore (Chinese)	现代汉语大词典 2002 (Xiandai Hanyu Da Cidian)	高兴	1. Joyful and excited 2. Doing something with a joyful mood; to enjoy.
		快乐	Feeling fortunate or satisfied.
		幸福	1. Life or circumstances rendering a person comfortable. 2. (of life, circumstances) Gratifying.
		愉快	Happy, comfortable.
South Africa (Afrikaans)	Handwoordeboek van die Afrikaanse Taal (Pearson South Africa, 2005)	Geluk	1. State/condition of contentment; satisfaction of your wishes and desires; joy 2. Fortune; fate;

			opportunity/chance 3. Favorable coincidence; advantageous circumstances; prosperity gained without own effort
Spain	Diccionario de la Real Academia de la Lengua Espan~ola 22 <sup>nd</sup> edition, Royal Spanish Academy 2001	Feliz	1. That has or possesses happiness. 2. That causes or gives happiness. 3. Right, ideal, efficacious. 4. That happens or occurs with happiness.
		Felicidad	1. Affective state involving satisfaction with the possession of something. 2. Satisfaction, pleasure, contentment.
Turkey	Büyük Türkçe Sözlük, 2007	Mutluluk	The state of pleasure that comes from having attained all one's longings completely and lastingly, prosperity, good fortune, felicity.
		Mutlu	1. Someone who has reached happiness, flourishing, prosperous. 2. Something that gives happiness.

Table 2. Webster Unabridged Dictionary Definition of Happiness

Year	First Definition	Second Definition	Third Definition
1850	The agreeable sensations which spring from the enjoyment of good; that state of a being in which his desires are gratified by the enjoyment of pleasure without pain; felicity; but happiness usually expresses less than felicity, and felicity less than bliss. Happiness is comparative. To a person distressed with pain, relief from that pain affords happiness; in other cases, we give the name happiness to positive pleasure or an excitement of agreeable sensations. Happiness therefore admits of indefinite degrees of increase in enjoyment or gratification of desires. Perfect happiness, or pleasure unalloyed with pain, is not attainable in this life.	Good luck; good fortune	Fortuitous elegance; unstudied grace
1853	Same as 1850	Same as 1850	Same as 1850
1854	Same as 1850	Same as 1850	Same as 1850
1859	Same as 1850	Same as 1850	Same as 1850
1861	Same as 1850	Same as 1850	Same as 1850
1883	an agreeable feeling or condition of the soul arising from good of any kind; the possession of those circumstances or that state of being which is attended with enjoyment; the state of being happy; felicity; blessedness; bliss; joyful satisfaction.	Same as 1850	Same as 1850
1888	Same as 1883	Same as 1850	Same as 1850
1894	good luck; good fortune; prosperity	an agreeable feeling or condition of the soul arising from good of any kind; the possession of those circumstances or that state of being which is attended with	fortuitous elegance, unstudied grace; --used especially of language



		enjoyment; the state of being happy; contentment; joyful satisfaction; felicity; blessedness	
1895	Same as 1894	Same as 1894	Same as 1894
1910	Same as 1894	A state of well-being characterized by relative permanence, by dominantly agreeable emotion ranging in value from mere content to positive felicity, and by a natural desire for its continuation. Mental and moral health and freedom from irksome cares are its normal conditions	Felicitous elegance; graceful aptitude; felicity;--used especially of language; as his happiness in debate.
1936 Version1	the agreeable sensation which springs from the enjoyment of good; the state of a being in which his desires are gratified by the enjoyment of pleasure without pain; felicity; blessedness; satisfaction.	Good luck; good fortune	Fortuitous elegance; unstudied grace, particularly in writing or speaking
1936 Version 2	good luck; good fortune; prosperity	A state of well-being characterized by relative permanence, by dominantly agreeable emotion ranging in value from mere content to positive felicity, and by a natural desire for its continuation. Mental and moral health and freedom from irksome cares are its normal conditions.	Felicitous elegance; graceful aptitude; felicity;--used especially of language; as his happiness in debate.

1961	archaic: good fortune: good luck: PROSPERITY	<p>(a) a state of well-being characterized by relative permanence, by dominantly agreeable emotion ranging in value from mere contentment to deep and intense joy in living, and by a natural desire for its continuation</p> <p>(b) A pleasurable or enjoyable experience</p>	APTNESS, FELICITY
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Figure Caption

*Figure 1.* Use of the terms happy and happiness in the lucky/fortunate sense in American presidents' State of the Union addresses (1790-2010)

*Figure 2.* Appearance frequency of the phrases "happy nation" and "happy person" in a corpus of American books (1800-2008). Yearly frequencies are presented with a smoothing factor of 3.



