

POSITIVE PSYCHOLOGY

THE SCIENCE OF WELL-BEING

JOHN M. ZELENSKI

SECOND EDITION

 **Sage**



1 Oliver's Yard
55 City Road
London EC1Y 1SP

2455 Teller Road
Thousand Oaks
California 91320

Unit No 323-333, Third Floor, F-Block
International Trade Tower
Nehru Place, New Delhi – 110 019

8 Marina View Suite 43-053
Asia Square Tower 1
Singapore 018960

Editor: Janka Romero
Assistant editor: Hanine Kadi
Production editor: Imogen Roome
Marketing manager: Camille Richmond
Cover design: Francis Kenney
Typeset by: C&M Digital (P) Ltd, Chennai, India
Printed in the UK

© John M. Zelenski 2025

Apart from any fair dealing for the purposes of research, private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may not be reproduced, stored or transmitted in any form, or by any means, without the prior permission in writing of the publisher, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publisher.

Library of Congress Control Number: 2024937221

British Library Cataloguing in Publication data

A catalogue record for this book is available from the British Library

ISBN 978-1-5296-2042-9
ISBN 978-1-5296-2041-2 (pbk)

To Michael and Phyllis Zelenski, my first teachers

CONTENTS

<i>About the Author</i>	xi
<i>Acknowledgements</i>	xiii
<i>How to Use This Book</i>	xv
Part I Introduction	1
1 Describing the Science of Positive Psychology	3
Introduction	3
Defining positive psychology	5
Ways of understanding 'positive'	6
Assessing positivity	11
Positive psychology in context	17
Methodological approaches	21
Summing up	32
Part II Happiness and Positive States	35
2 Positive Emotions	37
Introduction	37
Defining emotions and other affective states	40
Broaden and build model of positive emotions	62
Summing up	68
3 Happiness	71
Introduction	71
What is happiness?	72
Who is happy, and where does happiness come from?	78
Happiness around the world	90
A few lingering questions	98
Summing up	104
Part III Personality Processes	107
4 Personality	109
Introduction	109
Personality: The big picture	111

Contents

Personality at the middle level: Describing the differences	114
Positive psychology's personality unit: Character strengths	128
Summing up	137
5 The Self	141
Introduction	141
Defining the self	142
The true self and authenticity	144
Meaning in life	150
Self-views: -efficacy, -esteem, and -compassion	158
Cultural cautions about the self-concept	168
Summing up	170
6 Thinking	173
Introduction	173
Creativity	175
Wisdom	180
Intelligence, ability, and achievement	184
Predicting the future: Affective forecasting	192
Summing up	195
Part IV Social, Psychological, and Physical Environments	199
7 Social and Physical Environments	201
Introduction	201
Social environments: Human nature and cooperation	202
Physical environments: Natural and built	221
Summing up	232
8 Close Relationships	235
Introduction	235
What is love?	237
How do people create satisfying relationships?	246
Distinguishing positive processes in relationships	249
Summing up	259
Part V Towards Increasing Positivity	263
9 Stability and Change	265
Introduction	265
Resilience	266

Contents

Post-traumatic growth	273
Intentional positive change and interventions	278
Summing up	295
10 Looking Forward	299
Introduction	299
Goals: Looking ahead to your positive future	300
Positive psychology: Taking stock of the science	308
The ongoing contributions of positive psychology and looking forward	317
Summing up	321
<i>Glossary</i>	323
<i>References</i>	339
<i>Index</i>	409

ABOUT THE AUTHOR

John M. Zelenski is a Professor of Psychology at Carleton University in Ottawa, Canada. As a researcher and director of the Carleton University Happiness Laboratory, he studies individual differences in happiness, and how personality manifests itself ‘in the moment’ as emotional, behavioural, and cognitive processes. His recent work has focused on two areas: the causes and consequences of social behaviour (e.g. in relation to the personality trait of introversion–extraversion), and the links among nature, people’s sense of connection to nature (nature relatedness), happiness, and environmentally sustainable behaviour. He has also taught a range of personality, methods, and positive psychology courses at Carleton and around the world with Semester at Sea.

ACKNOWLEDGEMENTS

I am grateful to many: to my teachers, mentors, colleagues, and students, to the team at Sage, and to my family, friends, and communities who have provided encouragement for this book and shaped my thinking about positive psychology. In particular, I thank Cheryl Harasymchuk, Katie Gunnell, Chris Davis, Zack van Allen, Eve-Marie Blouin-Hudon, and Stephanie Woodall who have generously and skilfully provided assistance and feedback on this project.

HOW TO USE THIS BOOK

LEARNING OBJECTIVES

Each chapter begins with a list of learning objectives to signpost what you will be learning in the chapter.

CHAPTER INTRODUCTIONS AND CONCLUSIONS

Each chapter contains an introduction to introduce you to the area under discussion and a 'Summing up' conclusion that summarizes the key information to take away.

IN FOCUS

The 'In focus' sections highlight cutting-edge and interesting research developments to provide you with emerging insights and controversies that arise from constantly evolving areas of research.

RESEARCH CASE

The 'Research case' sections look at a specific piece of research, key studies, or theory in closer detail to help you understand the links between study methods and conclusions.

TRY IT

The 'Try it' sections have various questionnaires or exercises for you to try out theories and practices for yourself!

APPLICATION

New to this edition, the 'Application' sections describe a particular way that positive psychology is being used in the real world.

TEST YOURSELF

The 'Test yourself' sections contain questions that are designed to test your understanding as you progress through each chapter.

WEB LINKS

There are ‘Web links’ at the end of each chapter to point you in the right direction when you would like to know more about a given topic.

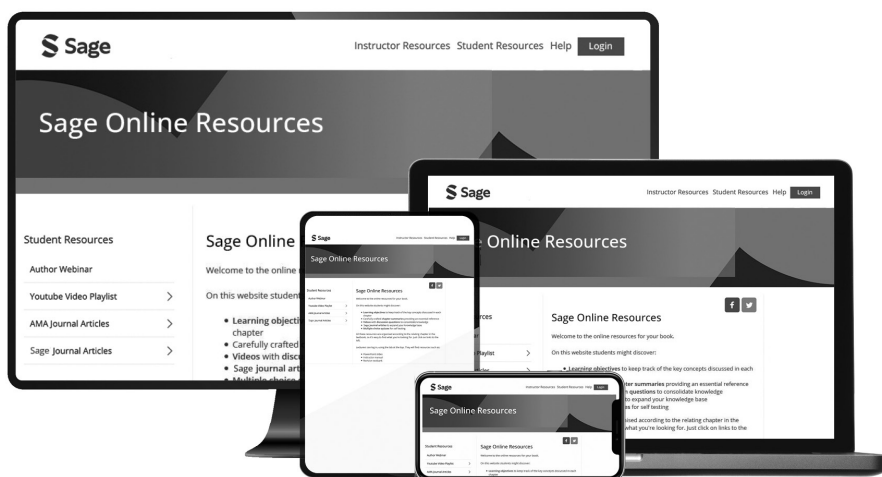
FURTHER READING

Each chapter has collated a range of articles and books for you to read if you wish to explore this area further.

GLOSSARY

A newly introduced key phrase or piece of terminology is emboldened throughout the text, with a detailed definition provided in the Glossary at the back of the book.

ONLINE RESOURCES



Visit <https://study.sagepub.com/zelenski2e> to find a range of additional teaching resources for lecturers:

- **PowerPoint lectures slides**, which can be downloaded and customized for use in class.
- A **test bank** of short-answer and multiple-choice questions related to the key concepts in each chapter.
- A **resource pack**, which allows instructors to upload the test bank directly to their university’s learning management system.

3

HAPPINESS

LEARNING OBJECTIVES

By the end of this chapter, you will be able to ...

- Describe happiness, including distinctions among eudaimonic indicators of well-being and the components of subjective well-being.
- Distinguish among some stronger and weaker predictors of happiness within societies.
- Explain a few factors that distinguish among the happiest and least happy nations on Earth.
- Justify the use of self-report happiness measures.
- Present a case for the value of happiness that goes beyond the pleasant experience itself.

INTRODUCTION

It was Luke Pittard's lucky day; he had just won £1.3 million in the UK National Lottery. He soon bought a house, spent big on a beautiful wedding, and took a nice holiday with his wife. Then, just two years after his big win, Luke went to work at McDonald's – the fast-food restaurant. This was not because he had squandered his windfall. He did it to be happy. Luke had worked at McDonald's before he won the lottery. It is where he met his wife, and he missed his other work friends after quitting. According to Luke, "there is only so much relaxing you can do" (BBC, 2008).

Someone should tell that to Matthieu Richard, a man whose impressive ability to meditate earned him the moniker 'happiest person in the world'. Matthieu's intriguing biography begins in France, where he earned a PhD in biology. Not long after, he made a big change, becoming a Buddhist monk in Nepal, and has spent decades practising meditation. The popular press dubbed him the 'happiest person' after a collaboration with neuroscientists. By practising loving kindness meditation, Matthieu produced the largest left-hemisphere activation the lab had ever seen (this activation is associated with positive and approach emotions; see Chapter 2). He earned the title based on brain waves, has continued to work with scientists, and has written popular books on happiness.

Taking a very different approach, the *New York Times* labelled Alvin Wong the happiest man in America (Rampell, 2011). When he earned the designation in 2011, Alvin was 69 years old, tall, Jewish, Chinese-American, living in Hawaii, owned a small business, and made more than \$120,000 a year. This unlikely collection of characteristics was all it took to win the happiness title. The *Times* used polling data to assemble a list of the demographics most associated with happiness. They had not talked to Alvin beforehand, but he confirmed that he was indeed quite happy when they phoned to check. He has since read a lot about happiness and began doing public speaking on the topic.

My hope is that this book will help you learn about happiness, and thus facilitate your well-being. Yet Matthieu and Alvin's experiences suggest that knowing you are happy might also facilitate learning more about it! Perhaps you want to skip ahead to 'Try it 2.1' to assess your own happiness now?

Luke, Matthieu, and Alvin have intriguing stories that all sound plausible. Yet they also imply quite different things about the causes of happiness, and even what it means to be happy. This chapter describes how psychological scientists have tackled questions about happiness and what they have learned.

WHAT IS HAPPINESS?

Whereas Chapter 2 considered happiness as a brief emotional state, Chapter 3 treats happiness as a more long-term characteristic of people. This is not to say that happiness never changes, but we do want to distinguish a general sense of happiness from more transitory emotions and moods. Very happy people have bad days, and miserable people have pleasant moments. One way to think of this more long-term happiness is as a mental running average of momentary feelings over one's life. Yet, as discussed in Chapter 2, subjective ratings of averaged moments differ somewhat from mathematical averages. Judgements of past emotions are influenced by memory biases.

In addition, the notion that long-term happiness is the accumulation of emotions over time is only part of the story. Philosophers, theologians, and many others have debated happiness for thousands of years. What does it mean to be truly happy? For some, happiness is mainly about feeling good; for others, it is more about living a morally good life; Charles M. Schulz wrote a book titled *Happiness Is a Sad Song*; The Beatles sang that 'Happiness is a warm gun'. Because the term happiness can be viewed in different ways, psychologists often replace happiness with the jargon term 'subjective well-being', which is defined more precisely. Subjective well-being is first subjective. It is how individuals view their own well-being, not how a philosopher, psychologist, or other expert would evaluate it. It is personal and in the mind of its subject.

Defining well-being might raise the same thorny issues involved in defining happiness, but with the term subjective well-being, psychologists decided on a specific meaning when they coined it. **Subjective well-being** includes high life satisfaction, experiencing many pleasant emotions, and experiencing few unpleasant emotions

(Diener et al., 1999). We discussed pleasant and unpleasant emotions in Chapter 2. Recall that they can be relatively independent – prompted by different things – and thus it is useful to consider both independently. **Life satisfaction** is an individual's judgement that things have gone well and that conditions are good. It can be sub-divided into various domains, such as work satisfaction, relationship satisfaction, leisure-time satisfaction, body satisfaction, and so on. That said, overall life satisfaction judgements are often preferable (Diener et al., 1985). When researchers are interested in a particular domain, such as work satisfaction, they will want to assess it separately. On the other hand, when we are interested in someone's overall happiness, it is hard to know which domains will be important to different individuals. One person might value family relationships above all else; for another, wealth is at the top of the priority list. Is there one thing that is essential to your happiness? Do you know people who have a different essential ingredient?

Asking about overall life satisfaction allows people to arrive at a judgement using their own criteria. A proud father might rate his life satisfaction high due to his healthy and loving family; the fact that his family is poor may not matter much for him. A successful athlete might rate her life satisfaction high because she is accomplishing all her professional goals. The subjective nature of subjective well-being suggests that we listen to how people determine their own satisfaction, rather than researchers assuming which domains are most important for them. For example, the Cantril measure of life satisfaction asks people to imagine a ten-step ladder. At the top is the best possible life for you. At the bottom is the worst possible life for you. On which rung would you say you personally feel you stand? Another popular measure of life satisfaction appears in 'Try it 3.1'.

Collectively, high life satisfaction, many positive emotions, and few negative emotions comprise the construct of subjective well-being. We can think of 'happiness' in the same way. Although the term happiness is often used to describe a pleasant emotional state, happiness can also be understood broadly, something that includes various narrower components (like emotions and satisfaction). These different components generally go together in people – they are correlated (Busseri, 2014). On average, people who experience few unpleasant emotions also tend to be satisfied with their lives. However, the components can also diverge. Imagine a person who spends all his time partying and enjoying the pleasures of life, but feels dissatisfied because he has not accomplished much. Another person might experience the joy of family and the satisfaction of a successful career, yet also be prone to intense anxiety.

These divergences have two important implications. First, the very happiest people have all three components; if we focus on only one indicator, we may be missing part of the complete picture. Second, it can be useful to study the components of subjective well-being as separate entities. They can change differently over time, and events or circumstances can influence one more than others (Diener et al., 2006; Lawes et al., 2023). For example, around the world wealth is more strongly associated with life satisfaction than it is with positive emotions (Diener et al., 2010), whereas prosocial behaviour is predicted by positive emotions and satisfaction, but not negative emotions (Kushlev et al., 2022).

TRY IT 3.1

Assessing Happiness

For both questionnaires, rate each statement on a scale where:

- 7 = Strongly agree
- 6 = Agree
- 5 = Slightly agree
- 4 = Neither agree nor disagree
- 3 = Slightly disagree
- 2 = Disagree
- 1 = Strongly disagree

The Satisfaction with Life Scale (Diener et al., 1985)

- _____ In most ways my life is close to my ideal.
- _____ The conditions of my life are excellent.
- _____ I am satisfied with my life.
- _____ So far I have gotten the important things I want in life.
- _____ If I could live my life over, I would change almost nothing.

To score, add all your responses together. Scores can range from 5 (least satisfied) to 35 (highest satisfaction possible), with the score 20 as a neutral midpoint. Higher scores indicate more life satisfaction.

The Flourishing Scale (Diener et al., 2009)

- _____ I lead a purposeful and meaningful life.
- _____ My social relationships are supportive and rewarding.
- _____ I am engaged and interested in my daily activities.
- _____ I actively contribute to the happiness and well-being of others.
- _____ I am competent and capable in the activities that are important to me.
- _____ I am a good person and live a good life.
- _____ I am optimistic about my future.
- _____ People respect me.

To score, add all your responses together. Scores can range from 8 (lowest possible) to 56 (highest possible) with 28 as a neutral midpoint. A high score represents a person with many psychological resources and strengths, consistent with contemporary views of eudaimonia.

Eudaimonia and Broader Views of Well-Being

Subjective well-being, with its facets of emotions and satisfaction, is a useful way to think about and measure happiness. The approach is widely used by researchers, and we have learned much about subjective well-being. However, another popular sentiment among positive psychologists is that subjective well-being is not enough to fully describe the good life. We should also consider things like people's sense of purpose, meaning, authenticity, growth, and so on. These additional features of well-being are often described by positive psychologists with the term **eudaimonia**, though this term means different things to different people.

The ancient Greek philosopher Aristotle first described eudaimonia in his great work *The Nicomachean Ethics*. Eudaimonia is often translated as 'happiness', but Aristotle was describing something a bit different from subjective well-being. Increasingly, eudaimonia is instead translated as 'flourishing'. The term **flourishing** emphasizes living well; happiness seems more about feeling good. Aristotle explicitly contrasted eudaimonia with feeling good, or **hedonia**. He viewed simple pleasures as base, far from the pinnacle of eudaimonic well-being. The good life, or eudaimonia, was about living a virtuous life. People who behave in morally valued ways and who fulfil their highest potentials live eudaimonic lives. According to Aristotle, there was nothing subjective about eudaimonia. Virtue and accomplishment should be objectively apparent, for example easily seen by other people, or even as an assessment made at the end of a person's life (Kashdan et al., 2008). Modern psychologists, however, think of and measure eudaimonia more subjectively, typically using self-report questionnaires. They assume that virtuous living will produce subjective feelings that people can self-report (Huta & Waterman, 2014). The goal of eudaimonia is still virtuous behaviour, but its consequences are assessed as psychological experience.

In psychology, eudaimonia can mean many different things; it lacks the consensus we see with the components of subjective well-being (Huta & Waterman, 2014). A common theme is that indicators of eudaimonia go beyond hedonia, or merely feeling good; they identify other characteristics and experiences of positive mental health and flourishing (e.g. authenticity, meaning). The connection to Aristotle is sometimes loose, but a clear theme is that well-being is distinct from simple pleasure. Said another way, many approaches see Aristotle's notion of eudaimonia as influential, but are not fixed on assessing his eudaimonia precisely. For example, Ryff's (1989) early and popular approach to **psychological well-being** includes six things:

- 1 Self-acceptance: a positive view of the past and present self that acknowledges good and bad aspects.
- 2 Positive relations with other people: trusting, intimate, caring relationships with others.

- 3 Autonomy: independence, authenticity, use of personal standards to guide behaviour, and resistance of social pressures.
- 4 Environmental mastery: competence, seizing opportunities, finding contexts conducive to needs and values.
- 5 Purpose in life: clear goals, sense of meaning, important projects, sense that things are worthwhile.
- 6 Personal growth: openness and sense of continuing development, positive changes over one's lifetime.

More recently, positive psychology founder Seligman (2012) proposed five key aspects of well-being – positive emotions (feeling good), engagement (flow, being absorbed), relationships (strong, healthy ones), meaning (a sense of larger purpose, important reasons for actions), and accomplishment (achieving valued goals) – summarized by the acronym **PERMA**. Positive emotions are hedonic and a component of subjective well-being. The other four aspects stem from Seligman's view that pleasantness is not sufficient; flourishing lives have additional features or paths to a good life. As one more example, you can take the Flourishing Scale (Diener et al., 2009) in 'Try it 3.1', which asks about meaning, relationships, and mastery.

Psychologists use the idea of eudaimonia to contrast broad ideas of well-being with hedonia. The hedonist pursues pleasure above all else – you might be thinking of the prototypical 'sex, drugs, and rock & roll' ethos. However, hedonia is really the goal of maximizing pleasure, rather than the particular means one uses (Huta & Ryan, 2010). If you believe that petting kittens all day will maximize your pleasure, petting kittens is then hedonistic for you. If other people pet kittens because they believe it is kind and virtuous, it is more eudaimonic – even if they get some pleasure from their kindness too.

Favouring eudaimonia over hedonia is a moral judgement that some things are more important than pleasure. This can be taken to a puritanical extreme that explicitly devalues pleasure, but positive psychologists do not go this far. Even if eating chocolate is the greatest pleasure, it may be better – perhaps more fulfilling – to write a poem. To paraphrase the philosopher John Stuart Mill, it is better to be a dissatisfied human than a satisfied pig, or a dissatisfied Socrates than a satisfied fool. You can agree or disagree with Mill; the point is that he is making the value judgement that knowledge is better than satisfaction.

People clearly value things besides simple pleasures. They even sacrifice pleasure in favour of things like authenticity, achievement, or the welfare of other people. For example, climbing mountains leads to intense cold, pain, and exhaustion – not to mention significant risk of death – things that are in no way pleasurable (see Loewenstein, 1999). Yet people voluntarily climb mountains, even after having experienced terrific hardships doing so. It is difficult to argue that the joy of summiting outweighs the pain of climbing if we only consider pleasure. Said another way, if we asked mountaineers why they do it, would 'fun' be the answer?

As other examples, consider people who take religious vows of poverty or medical professionals who trade the comforts of home to volunteer in disaster areas. It seems

unlikely that they are driven by pleasure. Finally, take a moment to conduct philosopher Robert Nozick's (1974) famous thought experiment: the experience machine. Imagine that a new machine has been invented. You can have your brain plugged into the machine, and it will simulate any experience you desire. Those experiences can be completely indistinguishable from reality. If you are thinking of the film *The Matrix*, you are on the right track. Your body would live safely in a tank while the machine creates a simulated reality for your mind. That simulation would be full of desirable experiences. If such a machine existed, would you plug in?

When I ask students this question, a few say 'yes' but many more say 'no'. The implication is that we value other things – like authenticity – over pleasure. We want to earn our good feelings. Even when I emphasize that the simulated pleasure feels just as good as genuine pleasure, it is hard to find takers. Many people say they would prefer genuine experiences, even if they were less pleasant than the machine's.

Nozick's experience machine is not very popular. However, even fewer people choose my recently invented 'authentic pain machine'. It hurts you in 100 per cent genuine ways. Would you like to try it? I admit my new pain machine is only a joke; my point here is that pleasure is obviously something we value too (except, perhaps, for those puritans). Authentic pleasure is better than authentic pain, and being a satisfied pig is better than being a dissatisfied pig (Diener et al., 1998). Philosophy has a long tradition of debating the merits of hedonism versus eudaimonia, but do we really need to choose? Why not both? The abstract philosophical debate suggests more incompatibility than we observe in day-to-day life (Kashdan et al., 2008). Most positive psychologists would agree that hedonic and eudaimonic pursuits are both important to the good life.

There are times when eudaimonic pursuits will be at odds with maximizing momentary pleasure, but pleasure often follows with time. Delay of gratification can be useful, but eventually that gratification comes – and often in larger amounts because we waited. How do you feel when you accomplish goals, express your true self, or help friends? I bet you feel good. These things are pleasurable. Even though pleasure is not the goal, eudaimonic pursuits often produce it. Some people have a deep sense of meaning, yet experience only few positive emotions; however, such people are uncommon. Eudaimonic constructs, such as Ryff's six aspects listed above, correlate positively and strongly with subjective well-being (Disabato et al., 2015). There are many more people who experience both meaning and pleasant emotions, or a lack of both, together.

Thinking of 'happiness' as subjective well-being (i.e. a pleasant balance of average emotions and high satisfaction) does not imply that it results from a stereotypical 'hedonistic lifestyle'. Pleasant emotions are an important part of subjective well-being, yet they can result from chocolate sprinkles, pony rides, or giving these things to someone else. The rest of this chapter focuses on happiness research with happiness mainly understood as subjective well-being. In other words, I will typically use 'happiness' to refer to subjective well-being. This does not diminish the importance of eudaimonia or other indicators of flourishing. Indeed, studying eudaimonia has highlighted important aspects of the good life beyond feeling good. As you will see, strong social relationships,

a sense of meaning, and so on, are very important to subjective well-being. These things are potentially distinct from – yet contribute to – happiness. Other chapters in this book consider aspects of eudaimonia like virtues, authenticity, meaning, and positive relationships in more detail. (You will need to consult other sources to learn about sad songs and warm guns.) We now turn to the substantial body of research on subjective well-being.

TRY IT 3.2

Eudaimonic and Hedonic Activities

People can pursue activities for reasons that are eudaimonic, such as to develop a skill, to pursue excellence, or express the best of one's self. Other activities might be pursued for mostly hedonic reasons; that is, to find pleasure, enjoyment, relaxation, or fun (Huta & Ryan, 2010). For this exercise, choose one small activity that seems eudaimonic (mostly about being your best self), and another that seems more hedonic (mostly about pleasure). Do them both.

Afterwards, take some time to reflect on the activities. For example, how did you know that they would be eudaimonic or hedonic? How did each make you feel? What were the consequences of each activity? How did other people respond? Any other observations? There are no right or wrong answers here, but psychologists are interested in learning more about how the experience and consequences of hedonic and eudaimonic activities can be similar or different.

WHO IS HAPPY, AND WHERE DOES HAPPINESS COME FROM?

Would you say that you are generally satisfied with your life? Do you experience more pleasant than unpleasant emotions? Most people in the world answer these questions in the affirmative. As we saw in Chapter 2, people tend to experience more positive than negative emotions. This positive balance is also true of life satisfaction, adding up to a generally positive view of overall subjective well-being. As Diener and Diener (1996) titled their review on the subject, 'Most people are happy'. Even people in difficult circumstances often report being reasonably happy. One study assessed 65 French patients with locked-in syndrome – people with near complete paralysis who communicated via eye blinks. Astonishingly, 72 per cent reported being happy! Also, happiness was higher among the people who had been locked-in longer (Bruno et al., 2011).

Despite the general trend towards high happiness, there is also considerable variation. For example, on a 1–7 scale of life satisfaction, a sample of rich Americans averaged 5.8, whereas homeless people in California averaged 2.9 – the same as homeless pavement dwellers in the slums of Calcutta (Diener & Seligman, 2004). Research on subjective well-being tries to explain this variation, ultimately trying to determine what causes happiness.

Features of the Person

After many studies, we now know that the best predictors of happiness are personality traits (Diener et al., 1999; Diener et al., 2018). Personality can include many things (see Chapter 4), yet key differences among people are commonly summarized with just five dimensions. These traits are known as the **big five**. ‘Big’ refers to the breadth of each trait – they include many narrower facets. This is how a mere five dimensions can describe so many of the ways that people differ from one another. With lots of variation in each trait, the particular combination of trait scores is another way that a few primary sources of difference can produce many different people; as an analogy, just three primary colours can combine in different amounts to produce infinite variations.

One of the big five traits is introversion–extraversion. This trait is made up of components like activity level, sociability, cheerfulness, assertiveness, and excitement seeking. The other big five traits are: emotional stability (vs ‘neuroticism’ or proneness to negative emotions), agreeableness (trusting, cooperative, sympathetic), conscientiousness (dutiful, tidy, organized, controlled), and openness (to ideas, feelings, aesthetics, sensations) (Digman, 1990). Given that extraversion and emotional stability explicitly include aspects of positive and negative emotionality, it is easy to see why these traits predict subjective well-being. Indeed, these two traits are among the single best predictors of happiness. Beyond their dispositional cheerfulness, extraverts’ habit of socializing also boosts their happiness (Srivastava et al., 2008). Trait agreeableness and conscientiousness have reliable, yet smaller, positive correlations with subjective well-being; openness is less consistently related, but likely positive too (Anglim et al., 2020; Busseri & Erb, 2023).

Other personality characteristics, such as optimism, hope, and self-esteem, are also strongly correlated with happiness (Lyubomirsky & Lepper, 1999; Pleeing et al., 2021). That is, from a more cognitive perspective, having a positive outlook, seeing paths to success, and evaluating oneself positively seems to boost happiness. Of course, being happy can contribute to positive thoughts, but dispositional tendencies towards positive views also seem to facilitate happiness. For example, optimism predicts well-being many years in the future (Carver et al., 2010).

Like personality traits, subjective well-being is fairly stable over time. Still, sometimes change does occur, and personality traits seem to change along with happiness (Fetvadjiev & He, 2019). For example, as people become more extraverted, they report more happiness. Nonetheless, the average amount of change is modest. Imagine a group of people: the happiest, most extraverted, and most emotionally stable people in that group are likely to remain the same over time – even across many years (Lucas, 2007). Our dispositions are important to happiness.

In addition to being relatively stable over time, traits and subjective well-being are also heritable. On average, about 30 per cent to 50 per cent of the variation in a group’s happiness can be explained by differences in genes. When focusing on the part of happiness that is stable over many years, genetic variation may explain as much as 80 per cent of the differences among people (Lykken & Tellegen, 1996; Røysamb et al., 2023).

These estimates come from research that uses the twin study method. Monozygotic (identical) and dizygotic (fraternal) twins are compared on characteristics like happiness and traits. Identical twins share the exact same genes – they are essentially clones – and fraternal twins share only half of their genes, like any other siblings. In this way, the different kinds of twins are like a natural experiment where the degree of genetic similarity differs randomly. Thus, when identical twins are more similar in happiness, compared to fraternal twins, we can infer that genetic similarity accounts for some of the similarity in happiness. This is what studies find. It implies that some lucky people – twins or not – possess genes that are more conducive to happiness than others.

Twin studies tell us that genes – collectively – are important to happiness, but they do not tell us which particular genes are important. Without revealing specific genes, twin studies do not suggest specific (physiological) causes of happiness. However, recent advances in genetic research do allow for some general statements. First, it is likely that the same genes that produce differences in the big five traits also contribute to happiness (Pelt et al., 2024). Said another way, much of the heritable part of happiness comes from our personality dispositions. Second, there are likely hundreds, or even thousands, of individual genes that contribute to complex traits like happiness (Chabris et al., 2015).

Some studies have linked individual genes to subjective well-being using methods other than twin studies. For example, a gene variant that acts on the neurotransmitter serotonin was correlated with life satisfaction in one study (De Neve, 2011). However, this preliminary finding, like most others, does not appear robust in other studies (van de Weijer et al., 2022a). Because individual genes have very tiny effects on complex traits, it is difficult to detect them reliably. Moreover, even when we do identify a particular gene reliably (e.g. in very large, genome-wide studies), it explains far less than 1 per cent of the variation in happiness. Said another way, we are confident that there is no single happiness gene, or even a modestly sized collection of important players. It is only collectively that genes have a large influence on happiness.

Twin studies provide numeric estimates of how much variation in a group is due to differences in genes. This estimate is called **heritability**. The remaining, unexplained variation is due to differences in life events, parenting, circumstances, choices, and so on. These non-genetic influences are collectively termed ‘the environment’. Twin studies estimate both heritability and environmental influences. Also, it is important to keep in mind that heritability refers only to variation in a group. In an individual person, both genes and a developmental environment are essential, so it is impossible to attribute more causation to one or the other. Just as one hand cannot clap, individuals require both genes and environments.

In a group, we can explain how much of the variation across people might be due to genes or environmental influences. These estimates are about the differences between people; again, heritability is defined as the proportion of observed variability in a group that is due to genetic variability. Substantial heritability means that genes are important to variation in happiness. However, whether it is 20 per cent or 50 per cent will vary across studies. The specific number is not particularly important; we expect it to vary.

In other words, genetic effects are not fixed or unchanging, nor are they complete explanations for differences across people.

For example, we expect heritability estimates to vary across different populations. The size of a heritability estimate depends on both genes and environments ('nature' and 'nurture') – this is because they must sum to 100 per cent. When there is much environmental variation (e.g. some people growing up in comfort and others in harsh conditions), these differences in environments will create more of the variation. It follows that there is then less variation for genes to explain; the heritability estimate is lower. The COVID-19 pandemic provided an excellent demonstration of this idea by dramatically changing people's environment during the early lockdowns. In the Netherlands, twins' happiness scores that were collected in April and May 2020 showed only 16 per cent heritability, compared to 31 per cent in data collected from the same people in previous years (van de Weijer et al., 2022b). Here, the environment explains more variation because it prompted much change in happiness (both increases and decreases, though an overall average decrease). Similarly, when considering heritability across many nations of the world, individual nations' circumstances (e.g. government, health policies, wealth, etc.) explain variation that goes unnoticed when studying a single country (Røysamb et al., 2023). When environmental variation is less (e.g. high similarity in developmental conditions), differences in genes explain more of the variations that we observe across people. Thus, heritability estimates can change somewhat, depending on the group or time period under study.

A common misconception is that highly heritable traits cannot be changed. This notion may be leading you to a pessimistic conclusion about happiness, but there is reason for hope. The heritability findings on happiness leave plenty of room for people's efforts to increase subjective well-being (Diener et al., 2018; Sheldon & Lyubomirsky, 2021).

First, even highly heritable traits can be changed when the environment changes, and this applies to longer timelines than the recent pandemic. The best example comes from studies of height, which is about 80 per cent heritable (W. Johnson, 2010). Over the last 150 years, the average height of adults in developed countries has increased by a few centimetres. This is due to the widely available improvements in health and nutrition over time. Height has remained very heritable – even as people have got taller – because better nutrition has been available to most people. Thus, the differences in height are still mostly due to differences in genes – everyone experiences similar growth. Positive psychology hopes to do something like this with well-being. If we can help provide better 'psychological nutrients', perhaps we can increase the average mental health and happiness of societies.

Second, although the heritability of subjective well-being is substantial, it is far less than 100 per cent. Even if 50 per cent of the variation in happiness is due to genes, it leaves 50 per cent of the variation to be explained by other things. It may be possible to systematically change some of them to boost happiness.

Despite this potential, it has been difficult to identify things that explain large portions of the environmental effect (i.e. the influences beyond genes). For example, the historical framing of 'nature vs nurture' has not been very helpful. From it, we might

infer that parenting (nurturing) is the other important piece. However, research finds only small effects for the home environment (i.e. parental values and other things that siblings usually share; Turkheimer, 2000). Interestingly, twin and adoption studies have been essential to parenting research. This is because they can separate the influences of parenting practices from the genes that parents also contribute to their children. When genetic similarity is accounted for, parental practices explain little remaining variation. Parenting is an important and complex task, yet most parents end up doing a reasonably good job. The differences do not have a large average influence on adult happiness.

RESEARCH CASE 3.1

Finding the Very Happy People

Good happiness research pre-dates positive psychology, but with the movement came new ways of doing it. In a classic example, Diener and Seligman (2002) collaborated on a study designed to characterize the happiest people. Seligman's background with clinical psychology probably played a role because they borrowed an approach more common with pathology: to identify extreme cases and to compare them to average people. To begin, they recruited a relatively unremarkable sample of 222 students. More impressive, however, was the extensive battery of happiness assessments used to find the very happiest people in this group. This included the facets of subjective well-being: the satisfaction with life scale and measures of positive and negative emotions. Emotions were assessed in a few ways: as participants' ratings of their average affect across 24 adjectives in the last month – twice, as daily ratings of those same adjectives over 51 days, and the same adjectives were rated by five other people who knew each participant as overall averages for the target. In addition, some less direct assessments were used. First was a memory balance measure where participants were given two minutes to write down as many positive events as they could think of, and a similar count of negative events generated in two minutes was subtracted. A trait self-description task forced participants to choose which in a pair of terms described them better – pairs included things like a happiness adjective and an equally desirable personality characteristic. Finally, a measure of suicidal thoughts indicated low happiness.

All these measures were averaged, and the top 10 per cent happiest people were identified. This 'very happy' group was then compared to the bottom 10 per cent and the middle 27 per cent of the sample on many characteristics (personality, social life, habits, demographics, etc.). Consistent with other research, the traits of extraversion and emotional stability were considerably higher in the very happy group; they also scored lower on some Minnesota Multiphasic Personality Inventory (MMPI) pathology scales (e.g. schizophrenia, family conflict, depression, psychopathic). Although the very happy people experienced more positive emotions in day-to-day life (by definition), they were not immune from unpleasant emotions – they experienced the full range. The most striking differences were found in social

behaviour. The very happy people seem to have more and better social relationships when assessed by global self-reports (close friends, family, romantic partners), with peer ratings, and in daily time use (time alone vs time with close others; see Table 3.1). Other seemingly positive features did not uniquely distinguish the very happy people, such as religiosity, physical attractiveness, exercise, grades, sleep – though other studies have found some links with happiness.

Table 3.1 Social relationships of the three groups

Measure (range)	Very unhappy	Middle	Very happy
Self-rating of relationships (1–7)			
Close friends	4.1a	5.2b	6.3c
Strong family relationships	3.7a	5.8b	6.4b
Romantic relationship	2.3a	4.8b	6.0c
Peer rating of target's relationships (1–7)	4.2a	5.3b	6.1c
Daily activities (1–10)			
Mean time spent alone	5.8a	5.0ab	4.4b
Mean time spent with family, friends, and romantic partner	3.6a	4.5b	5.1c

Note: Within each measure, groups with different letters differ significantly from one another ($p < .05$). For daily activities, 1 represented 'no time' and 10 represented '8 hours/day'.

Source: Adapted from Diener and Seligman (2002)

Across the many results, researchers concluded that strong social relationships may be a necessary feature of extreme happiness – all of the very happy people had this. Still, strong social relationships were not a sufficient feature either – many average and even some low happiness participants also had good relationships. Thus, extreme happiness seems to require something more – perhaps luck – as no measured feature was sufficient alone. Can you think of a characteristic missed by this study that might be sufficient for extreme happiness?

Happiness Beyond Personality and Genes

If it is not parenting, what explains the remaining variation in happiness? It turns out that there is not a single or even a small handful of good answers to this question. Rather, it seems that many things account for differences in happiness. In a way, this is similar to how individual genes explain only a very small part of the overall large genetic effect. For example, Diener et al. (1999) conducted a now classic review of research on subjective well-being over the previous 30 years. They concluded that

people's circumstances – things such as education, employment, marriage, etc. – explain some variation in happiness, but their collective contribution is probably smaller than most people would assume. As a rough estimate, these demographic features, altogether, explained about 10–15 per cent of the variation in most societies. Those conclusions have held up pretty well over time, though as more and better data accumulate, the certainty of particular conclusions has both increased and decreased (see updated review by Diener et al., 2018). As we turn towards the list of possible contributors, keep in mind that the research was often conducted within a single society. This can obscure some larger cross-national differences which we consider in more detail later. Additionally, as research has focused more on Western, industrialized nations, results may differ elsewhere (Diener et al., 2018). With these caveats, the general trends are:

Gender is not consistently linked to more or less subjective well-being, even as small differences sometimes emerge in studies. Differences can differ according to the component of subjective well-being (e.g. satisfaction vs negative affect) and the particular nation under study. A clever study recently suggested that women may be less happy, even without reporting it on surveys, due to differences in how they interpret questions (Montgomery, 2022). This is an area where additional research has so far complicated conclusions, rather than boosting confidence, but it remains fair to conclude that average gender differences are small.

Age is also weakly associated with subjective well-being. Emotional intensity may decrease with age, but this applies to both positive and negative emotions (Buecker et al., 2023). For a while, a consensus was developing to suggest that an 'inverted-U' pattern might explain small changes across the lifespan, where middle age was a less happy time, on average (Blanchflower, 2021). However, this conclusion has generated debate and counter examples (e.g. Bartram, 2022). It seems clear that overall differences are not dramatic, and this argues against the stereotype of older adults being miserable. Especially while in good health, the elderly appear just as happy as the young, on average.

Health is positively associated with happiness, but the link is stronger for subjective ratings of health, compared to objective health – for example, as rated by physicians or as presence of diseases. Still, subjective health remains a useful indicator, and people may adjust their expectations to their physical state. Happiness may also promote good health, rather than simply being a consequence of it (Diener et al., 2017). Major disability or chronic illness can also significantly hinder happiness for the few people who experience it.

Education may have a small positive association with happiness. This link appears stronger among people who are less wealthy. Education tends to co-vary with status and income, and this is part of the reason educated people are slightly happier. High levels of education might also raise expectations for success, helping explain why it does not have more impact on average levels of happiness. Additionally, the positive role of education may emerge more clearly when comparing regions, rather than individuals.

Intelligence also seems helpful for achieving status and income, yet it has no consistent link with subjective well-being.

Married people tend to be somewhat happier than those who have never married or who have become divorced. Some of this difference is due to happiness before marriage – happier people are more likely to marry and stay married. When looking at changes over time, marriage is associated with a modest increase in happiness, but one that may not last long, on average. However, there are wide differences in the experience of marriage. Some people respond with a lasting increase in happiness, whereas others have a nearly immediate – and lasting – decrease in happiness (Diener et al., 2006). In addition, becoming widowed can lead to lasting decreases in happiness. Thus, although marriage contributes to the happiness of many (see Grover & Helliwell, 2019), it is also not a universal key to well-being. All things considered, lifelong singlehood does not preclude a happy life (DePaulo & Morris, 2005).

Parenting has a mixed relationship with happiness. Having children can produce a sense of purpose and some of the best moments in life. Yet extra stress, financial strain, and sleep disturbance are also borne with kids. On balance, children do not seem to have a major, overall influence on happiness. However, this general conclusion overshadows considerable complexity and debate. A comprehensive review made the – perhaps obvious and timid – conclusion that parents are less happy when things go poorly, and happier when they experience more of the joys of children (S. K. Nelson et al., 2014). In general, men who are somewhat older and married tend to be happier with children, compared to younger, single mothers. Strong social support is helpful, as is having children free of problems or a difficult temperament.

Religion is linked with subjective well-being, but not in a straightforward way. There are no differences among denominations in predicting happiness. For example, Hindus are no more or less happy than Christians, on average; other happiness comparisons also reveal similarity across religions. People who view religion as an important part of their life or who actively participate in a religious community do report higher levels of subjective well-being. This seems especially true in difficult circumstances (e.g. poverty, illness) where religion seems to act as a buffer. Among people who would otherwise be unhappy due to their circumstances, religion seems to help (Diener et al., 2011; Yaden et al., 2022).

Money and its link with happiness have been studied a lot. Psychologists have tended to downplay the importance of money for happiness, while economists have argued for a strong link. We can find evidence for both views because the link between happiness and money can vary depending on how you ask the question. Fortunately, we now have a pretty clear picture of this complexity. First, the link between income and happiness is stronger when we define happiness as life satisfaction; the relationship is weaker if we consider emotional experience. Money

In summary, demographic characteristics like age and gender have weak links with happiness. Also, some of the things that we might assume to be very important – like marriage or income – explain only a small part of happiness within nations. Although these factors' influence is small, at least compared to personality traits, we should not dismiss them altogether.

There are a few reasons to be cautious. First, even when we do not observe an overall difference, a demographic characteristic might combine with other circumstances or traits in important ways. As one example, even though age and gender differences in happiness are small overall, young single mothers tend to be significantly less happy than average. Conflicting patterns in different places can obscure more meaningful differences too. For example, the 2024 *World Happiness Report* highlights emerging age differences in happiness that favour the old in North America and the young in much of Europe (Helliwell et al., 2024).

Second, statistically small effects can sometimes have large practical importance. As an analogy, an increase of a few degrees in the average global temperature would be small compared to the wide variation across climates, yet still catastrophic in its effects. Within countries, the correlation between income and happiness is small; however, when comparing the richest people to the poorest people in a country, the difference in happiness is still noteworthy (a full standard deviation in many countries; Lucas & Schimmack, 2009). Are the rich happier than the poor? Yes – but money is not the most important factor in happiness.

Third, things that are relatively infrequent – such as unemployment – can have a substantial influence on a few individuals' happiness, yet explain only a little of the overall variation in average happiness. The impact on a few individuals is only a small part of the much larger whole; however, it looms very large for those few. Our statistics typically focus on the overall trends, and may gloss over important effects for these smaller sub-groups. In addition, major life events can sometimes produce large changes in happiness, but these changes often fade over time. This idea is captured by the term **hedonic treadmill**.

Life Events and the Hedonic Treadmill

Because happiness is strongly related to heritable dispositions, and less so to life circumstances, some have claimed that happiness is fixed, that it cannot really be changed. This view goes too far; yet happiness is more stable than many people assume. The relative stability can be for the best. When bad things happen, people typically find a way to cope, and they return to a reasonable level of happiness. People are resilient. However, the flip side of this trend is that good events only boost our happiness temporarily.

People's tendency to return to a 'baseline' level of happiness is known as **adaptation**. With most sensations, we become accustomed to novelty over time. Adaptation is why the first bite of dessert is the sweetest, why we continue to add salt as we make our way

through a pile of chips, or why your roommate is shocked at the noise when coming home to the personal dance party that broke out as you turned up the volume through each new song on your favourite playlist. Said another way, people are sensitive to changes. Once the change has occurred, we adapt to it; it takes more change for us to notice again. It seems people's happiness responds to life events in the same way. We know that our emotions fluctuate with pleasant and unpleasant experiences; these are the kinds of changes we considered in Chapter 2. When it comes to bigger events and longer-term changes in subjective well-being (i.e. beyond daily moods), people also react. Yet people often return to their 'personal normal' after a period of adaptation (Headey & Wearing, 1989; Luhmann et al., 2012). This idea has been called the hedonic treadmill. Hedonic refers to the pleasantness of experience, and the treadmill implies that we are not really going anywhere.

Tests of the hedonic treadmill view often focus on major life events. In a classic study, people who had won large amounts of money in lotteries were compared to people who were injured in accidents and became paraplegic. A control group of people with similar backgrounds, but no extreme events, was also included (Brickman et al., 1978). The lottery wins and accidents had occurred between 1 and 18 months before the data were collected. Participants rated their current happiness, as well as how pleasant they found mundane events like eating breakfast, hearing a joke, or watching TV. Surprisingly, the lottery winners did not report significantly more happiness than the control group. Winners also reported gaining significantly less pleasure from mundane events. These results suggested that winning the lottery did not improve happiness a few months later (though other studies find lasting positive effects of lottery wins on satisfaction, e.g. Lindqvist et al., 2018).

The classic Brickman study is sometimes incorrectly cited with regard to the accident victims – they were not actually equivalent to lottery winners. The victims reported significantly less happiness than both the controls and winners. On the other hand, victims' happiness was still above the midpoint of the happiness scale – this group was not miserable (recall the locked-in patients described earlier). Moreover, accident victims reported levels of pleasure from mundane events that were similar to the control group and lottery winners. This study had a large impact because it conflicted with people's intuitions. It suggested that major events had only a modest influence on people's happiness.

Since this early and influential study, psychologists have collected much better data. More recent research has clarified the hints of remarkable adaptation – and the limits of adaptation – observed in the classic study. Large studies that track people over many years can tell us about people's happiness both before and after major life events (e.g. see Diener et al., 2006; Headey & Wearing, 1989). They can also tell us about the extent of stability and change in happiness that people typically experience over time. It turns out that people's life satisfaction and average levels of emotion are quite stable over time. In other words, there are moderate to large correlations between individuals' happiness ratings at different points in time, even when ratings

are separated by years (Lucas & Donnellan, 2012). However, it is also easy to overstate the degree of stability – the correlations are far from perfect. There are still some fluctuations to explain.

When looking at major life events, such as marriage, serious illness, unemployment, and so on, we see clear influences on happiness. Unsurprisingly, positive events increase happiness, and negative events decrease happiness. Over time, however, we also see evidence of adaptation. The impact of events tends to dissipate. People recover from the sharp decrease in happiness that accompanies things like unemployment and widowhood. Yet even with this clear recovery, the power of adaptation can also be overstated. Often people's recovery takes years; they remain less happy for a long time after major negative life events. Figure 3.2 summarizes findings from a large German survey that tracked people over many years (Diener et al., 2006). We can see people's yearly life satisfaction ratings from five years before to five years after widowhood, divorce, unemployment, and marriage. Findings like these suggest that the hedonic treadmill does not always keep pace with life. Thus, events and circumstances do have some bearing on our happiness, even as adaptation tends to mellow these effects with time (Bühler et al., 2023; Luhmann et al., 2012).

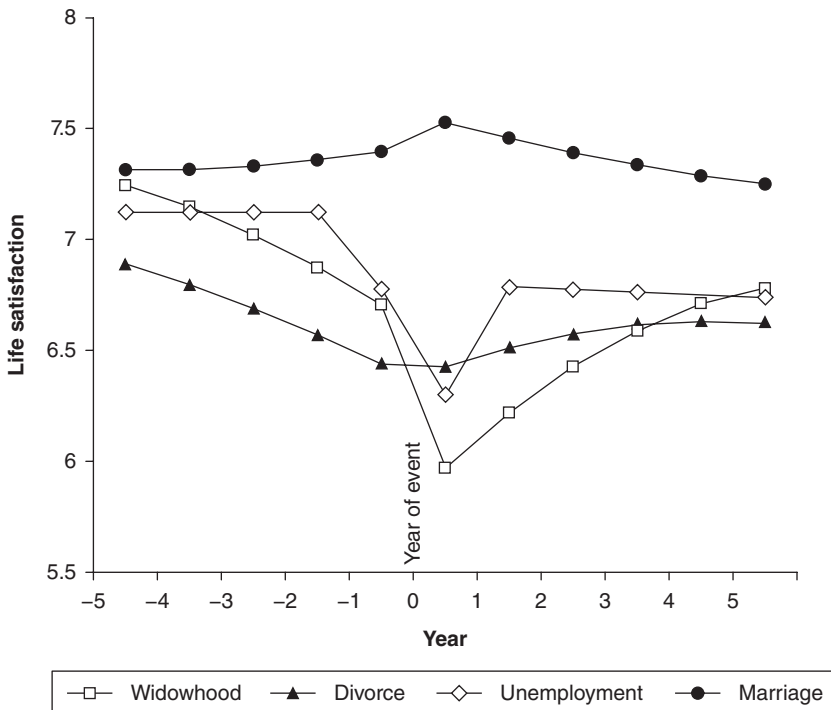


Figure 3.2 Life satisfaction before and after major life events

Source: From Diener et al. (2006)

Many psychologists seemed to cope with another big life event – the COVID-19 pandemic – by conducting studies. This explosion of data indicated that many people suffered and experienced decreases in subjective well-being; however, these changes appeared to be relatively brief, largely rebounding within the first year (Aknin, De Neve et al., 2022). Adaptation seemed rapid for most. In contrast, recent studies of migration suggest that lasting happiness improvements are possible. Such findings provide a good argument against an inevitable hedonic treadmill. For example, immigrants to Canada and the UK from 100 different nations reported increases in happiness after moving to these two happier nations (Helliwell et al., 2020). The migrants' happiness seemed to adjust to their new national circumstances. Interestingly, that boost was slightly larger for Canadian immigrants, which mirrors national averages where the UK is a bit less happy than Canada. As we explore in the next section, differences in national happiness averages suggest how local conditions and policies can influence happiness.

HAPPINESS AROUND THE WORLD

Another persuasive argument against a strong hedonic treadmill comes from international comparisons of happiness. If we compare the average happiness in countries such as Denmark, Australia, and the UK (quite high) to that in countries such as Togo, Haiti, and Iraq (quite low) the differences are vast. For example, average life satisfaction, rated on a 10-point scale, is 7.4 in the happiest 10 countries, compared to only 3.4 in the bottom 10 countries (Helliwell et al., 2016). Genetic differences do not account for the wide variation across nations. Instead, we see that living conditions, social cohesion, wealth, political stability, liberty, and so on matter a lot when we take a global perspective on subjective well-being. People's happiness does not adapt to everything.

This highlights a key benefit of studying happiness across nations: circumstances differ much more dramatically across nations than within the individual countries where most early research was conducted. For example, in a Swedish sample, much of the variation in happiness will be due to personality and genetic differences. Living conditions are quite good in Sweden, and even the least fortunate citizens are generally able to meet basic needs. As a contrast, imagine looking at a sample that includes half Swedish people and half Tanzanian people. The living conditions in Tanzania are much more difficult. Because the circumstances of these two countries vary dramatically, those circumstances account for a lot of the variation in happiness when we include both in a comparison. People are, on average, much happier in Sweden than in Tanzania, and these differences are largely due to circumstances. Genetic and personality differences are still present, but now explain less of the variation in happiness, compared to when we considered a group of Swedish people only. With wider variation in circumstances, their role in happiness becomes more pronounced. International comparisons show us that the country people live in can contribute to, or detract from, their subjective well-being.

In recent years, our understanding of international differences in subjective well-being has improved dramatically. One important reason for this is the **Gallup World**

Poll (GWP). In 2005, the Gallup organization began an annual survey that sought to sample the entire world, and to do so each year for the next 100 years. The scope and scale of this survey were unprecedented. Fortunately, positive psychologists helped design the poll to assess subjective well-being along with other important psychological characteristics and environmental circumstances. The GWP surveys people in 160 nations – it represents views from about 98 per cent of the world's population (see Diener & Tay, 2015). The key questions have been painstakingly translated into many languages and asked the same way in each country. In nations where many people do not have phones, interviewers walk from home to home to survey carefully selected people, revisiting if necessary. That is, about 1,000 people are chosen so that they accurately represent the diversity of the population (e.g. on gender, age, location) in each nation. These survey data are also combined with country-level statistics like gross domestic product (GDP, or wealth), inequality indexes, and so on.

A key advantage of the GWP is the wide range of people it surveys. In addition, it includes questions about each component of subjective well-being. People report their life satisfaction using the ladder measure described earlier; they also indicate whether they experience much enjoyment and laughter (positive emotion), as well as anger, sadness, or stress (negative emotions). Table 3.2 shows some examples of how the components of subjective well-being are correlated with people's circumstances (Diener & Tay, 2015). These correlations are based on national averages from the 2005–2013 polls – they include over 1.2 million surveys!

Table 3.2 Nation-level correlations between subjective well-being and societal conditions (2005–2013)

	Life satisfaction	Enjoyment	Stress
Economic & material needs			
Annual income	.75	.35	.24
Have electricity	.62	.29	.22
Hungry	–.58	–.22	.11
Health			
Life expectancy	.71	.28	.36
Environment quality			
Preservation	.26	.37	.08
Good water	.66	.53	.11
Social quality			
Count on others	.68	.46	.09
Freedom	.53	.53	.07
Honest elections	.39	.27	.10
Equality			
Income inequality	–.44	–.07	–.11

Source: Adapted from Diener and Tay (2015)

Chapter 1 described how we interpret correlation coefficients. To recap, correlations can range from -1 to 1 . The sign tells us whether the two things increase together (positive), or whether one increases as the other decreases (negative). Values near 0 suggest that two things are not associated, or that there is no direct link between them. Values closer to -1 or 1 suggest very strong associations. Even correlations of around $(-).5$ are considered fairly strong, representing a clear, if imperfect, link.

In Table 3.2 – where nations around the world are compared – we see a strong link between annual income and life satisfaction (.75), and a smaller correlation with enjoyment (.35). People report more happiness in richer countries. Interestingly, the correlation between income and stress is also positive (.24). In countries with high income, stress also tends to be higher. Other negative emotions not included in Table 3.2 (e.g. sadness, anger) tend to be lower in places where quality of life is good and income is high. Thus, it seems there is something different about stress; societies that are generally functioning well economically may not reduce stress as efficiently as they provide other psychological benefits.

The correlations in Table 3.2 are consistent with a few ideas already mentioned in this chapter. First, wealth is more strongly associated with life satisfaction than with emotions (.75 is larger than .35 and .24). Second, it is useful to consider different components of subjective well-being because they sometimes suggest different things. Both satisfaction and stress are higher with more income – a mixed bag for overall well-being. As another example, positive emotions – unlike life satisfaction – are more strongly associated with good social relationships and environmental quality, compared to meeting material needs. Third, the link between income and satisfaction is quite strong when we look at national averages. This contrasts with the relatively small correlations between wealth and subjective well-being found when we look at individuals within a single country.

Other aspects of the GWP data extend this idea. Living in a wealthy country seems to contribute to subjective well-being over and above one's individual income (Diener et al., 2010). Wealthier countries tend to have better infrastructure, environmental quality, and less corruption – things that contribute to the well-being of everyone regardless of personal income. Said another way, it is less important to be richer than your neighbours when it comes to subjective well-being, and more important to live in a place with a generally high quality of life. Again, the conditions in which we live matter for subjective well-being.

Returning to Table 3.2, we see that good circumstances, beyond income, are generally positively correlated with subjective well-being. For example, good environmental quality, being able to count on others, having a sense of personal freedom, and equality are positively correlated with satisfaction and enjoyment. All of these things tend to be higher in wealthier countries; yet statistically controlling for wealth does not eliminate the links. Good social bonds, environments, health, and so on matter beyond their association with money. Countries differ in how they spend their wealth and how they structure their societies. More nuanced statistical analyses show that cultural differences are important to the subjective well-being of nations. When we look at individual countries, we can see these differences. Wealth alone does not ensure the highest quality of life or subjective well-being.

Comparing Individual Countries

A selection of individual nations' well-being is provided in Table 3.3. Each nation has a score, adjusted to a 100-point scale, for subjective well-being, economic and material well-being, health, environmental quality, social quality, and equality. These scores include the example items in Table 3.2, along with others in each category. The subjective well-being column (SWB) combines satisfaction and emotion questions into one score, and the nations are sorted by that score. (Similar scores for all nations and in each year since 2012 are available at <https://worldhappiness.report.>)

Table 3.3 Well-being scores for selected nations

Nation	SWB	Economic/ material	Health	Environment	Social	Equality
Denmark	84.0	92.9	84.5	84.2	91.3	77.0
The Netherlands	82.6	90.9	86.5	81.1	89.7	78.0
UK	78.0	87.8	88.8	82.9	85.5	70.4
Costa Rica	77.7	61.2	86.8	79.8	81.7	70.4
Canada	77.3	90.5	88.8	76.6	91.5	74.2
Germany	76.9	86.6	85.8	83.2	79.7	73.5
Mexico	76.7	56.7	85.9	65.6	69.1	70.0
Russia	75.7	62.6	74.4	39.4	61.2	71.3
Brazil	75.7	62.9	83.2	65.7	32.5	68.3
China	75.3	63.2	86.2	75.7	86.3	61.8
Japan	75.2	85.5	91.1	67.8	79.3	74.3
Bhutan	74.7	54.2	83.5	89.3	89.3	75.4
USA	74.3	89.8	86.3	76.0	83.5	72.5
South Africa	73.7	47.6	70.3	65.1	75.8	58.8
Singapore	73.4	89.9	93.9	90.6	88.9	74.2
Kenya	73.2	31.4	75.5	62.4	70.4	62.3
South Korea	72.5	84.4	87.4	64	66.7	71.1
Qatar	69.4	81.9	91.3	88.6	92.2	67.7
Israel	69.3	80.4	88.9	56.7	75.4	79.9
India	68.0	47.2	77.2	69.3	67.1	67.1
Greece	64.5	69.3	89.1	54.5	61.6	72.1
Sierra Leone	56.5	22.7	61.3	48.9	59.9	59.3
Iraq	50.0	55.7	77.5	35.3	49.7	72.8

Notes: All values transformed to a 0–100 scale. The top five of selected nations (in this group) on each index are in bold; the bottom five are in italics.

Source: Adapted from Diener and Tay (2015)

The profiles of individual countries are instructive. On average, indicators of quality tend to go together; they are positively correlated. Yet there are also intriguing divergences among the different areas. Positive psychologists argue that these differences make it important to consider subjective well-being itself when making policy decisions. Using only economic indexes, or an index of any one domain alone, would neglect other important aspects of the good life. For example, the USA is the wealthiest nation in the world (though not the best in meeting material needs broadly), yet people there report lower subjective well-being than in many other nations – particularly as it is calculated in Table 3.3. Similarly, Singapore and Japan score very high on meeting economic needs, health, and equality. However, they are not particularly happy, scoring considerably lower on subjective well-being. In contrast, Costa Rica is not a wealthy country, yet ranks among the happiest nations of the world and provides good quality of life in most areas (beyond what we might expect, given its modest wealth). This comparison fits with larger trends in cross-cultural studies.

People in Latin America often report more happiness than we would expect, based on their circumstances, whereas people in wealthy East Asian nations often report less. The GWP data are limited in explaining why we see these trends. Given the GWP's wide reach, it is not practical to ask some of the more nuanced questions that would help capture unique features of individual cultures or regions. Indeed, GWP questions are designed to be understood in the same way by everyone. The survey must also be kept brief, thus omitting other potentially interesting questions. Separate studies can help fill this gap. For example, one study suggested that people in Mexico value and express energetic positive emotions more, whereas people in China and Japan value emotional restraint as a route to harmonious social relationships (Ruby et al., 2012). Perhaps these cultural ideals help explain some national differences in subjective well-being. More studies are needed to fully understand such cultural differences, and they will need to go deeper than the GWP is able to do.

Changes Over Time

The GWP has now been conducted yearly for long enough to look at how things have changed over time. In Table 3.3, Greece stands out as a European country with lower subjective well-being than many nations on the continent. The scores in Table 3.3 are averages across 2005 to 2013; when we look at individual years, we see considerable change over time (Diener & Tay, 2015). Greek society fell into turmoil over a debt crisis during this period, to the point where its membership of the European Union came into doubt. Economic indicators in Greece were not good during this time; yet even more dramatic changes were seen in people's sense of freedom, satisfaction, sadness, and stress. A recent study using GWP data found that conflict in Syria produced the largest decrease in well-being during the 2006 to 2015 period, after which data was not collected there (Cheung et al., 2020). It is not surprising that war produces unhappiness, yet worth noting that in Syria the effects were widespread and did not appear limited

to people directly involved in the conflict. Thus, we see that changes in people's well-being mirror changes in national circumstances. Patterns like this remind us that some of the things that contribute to our happiness, like a stable and free society, can go unnoticed – until they go away.

Even without such extreme circumstances, the ebb and flow of nations' fortunes seem to impact people's happiness. Often, this change is positive. In the GWP, as well as other large international studies that go back 30 years, we see that people's life satisfaction tends to increase as nations become wealthier over time (Diener, Tay & Oishi, 2013; Inglehart et al., 2008; Oishi & Kesebir, 2015). With economic development, we often see increases in democracy, social tolerance, sense of freedom, optimism, and financial satisfaction too. These changes are important to realizing the happiness benefits of increased wealth. Said another way, national wealth does not translate directly into citizens' happiness. Growing economic prosperity improves satisfaction when it is distributed more equally and strengthens societies (Oishi & Kesebir, 2015). More generally, the consequences of wealth inequality remain debated with mixed results across studies (Ngamaba et al., 2018) and questions about the best way to assess inequality (Blesch et al., 2022).

Still, given wealth's widely observed diminishing returns for happiness at high levels, many have wondered whether a society's average happiness might be increased by redistributing some money from the rich to the poor. An extraordinary recent study was able to address this question with experimental methods due to a generous donation of wealth. The researchers distributed \$2,000,000 to 200 people (i.e. \$10,000 each) across seven nations (including Brazil, Kenya, Indonesia, USA) and compared them to a randomly assigned control group who were unaware of any cash transfers (Dwyer & Dunn, 2022). Participants were asked to spend the money within three months, and they reported on their well-being before and after. Results were clear in showing subjective well-being boosts (all indicators), both over time and compared to the control group. The boost was also larger for people with lower incomes, as we might expect from previous correlational data. A bit more speculatively, the researchers estimated that the plausible decrease in happiness that might come from taking \$2,000,000 away from wealthy people was vastly surpassed by 225 times more happiness gain among the recipients. There are certainly some unique features and limitations of this experiment, but it seems to argue for a net happiness benefit in societies that redistribute wealth more equitably (cf. Kaiser & Oswald, 2022).

Beyond Satisfaction: Meaning and Religion

We see a recurring theme when comparing nations: wealth is associated with high subjective well-being. However, if we take a broader view of happiness, we see some exceptions to this trend. Stress is one example; it is often high in places that are otherwise doing well. Even more dramatic, however, is the more eudaimonic indicator of meaning in life. In the GWP, poorer countries report having more meaning in life than

rich countries (Oishi & Diener, 2014). Said another way, the correlation between life satisfaction and meaning is negative when we look at national averages around the world. The rich countries tend to be more satisfied; the poor countries tend to experience more meaning. (This contrasts with a strong positive correlation between satisfaction and meaning when we look at people within a single country.) It seems there are major differences between societies when it comes to finding meaning.

There are a few possible explanations. For example, poor countries that report high meaning also have higher fertility rates and less education. It may be that having children contributes to meaning, while higher education prompts more questions than answers about the meaning of life. Another major difference across societies is religiosity. In many countries, such as Bangladesh, Malawi, Thailand, and Saudi Arabia, over 95 per cent of people report that religion is an important part of their daily life. In contrast, many developed countries, particularly in Northern Europe, have rates around 30 per cent, and as low as 16 per cent in Sweden (Diener et al., 2011).

Religious countries report more meaning in life, and poorer countries are more likely to be religious. Statistically, nations' religiosity seems to account for much of the higher meaning. To illustrate, both Haiti and Yemen are similarly poor countries. However, Yemen is more religious than Haiti, and meaning in life is higher in Yemen than Haiti (Oishi & Diener, 2014). We see this trend repeated across nations. Wealthy countries with higher religiosity (like the USA) also report more meaning than wealthy countries with less religiosity (like France). Religion is more closely tied to meaning than wealth is. It appears that poor countries report more meaning in life largely because they are more religious (though education, fertility, etc., probably play some role too).

People in poor, religious societies report a lot of meaning, but still less subjective well-being than people in wealthy countries. What does this imply about the link between religion and happiness? To answer this question, we need to consider people's circumstances. Religiosity is associated with higher subjective well-being at the individual level, especially in very religious societies. There is not one faith that is more conducive to happiness than the others, but religious people tend to be happier than non-religious people when all else is equal. Yet across the world, the more religious countries tend to be less economically prosperous, on average. We have seen that poorer countries tend to be less happy than wealthier countries. Thus, many religious people live in harsh conditions, and they tend to report low satisfaction (along with high meaning). Still, religion – and the sense of meaning it gives – seems to provide some benefit to subjective well-being. This is especially true in places with the most difficult circumstances. We can tease apart the influence of religion and wealth by comparing countries.

Among the poorest and least educated nations, the more religious nations report higher satisfaction than the less religious nations (Yemen vs Haiti). Religion and meaning seem to help with satisfaction. This trend, however, is not as strong in wealthier nations that otherwise have good quality of life (USA vs France). Thus, from the GWP we might conclude that religion facilitates happiness more in difficult circumstances

(Diener et al., 2011; Yaden et al., 2022). Said another way, religion helps buffer against the unhappiness of difficult circumstances. This may also explain why rates of religiosity are declining in many highly developed countries. In these places, it seems people can find high levels of satisfaction in other ways – even if meaning is more elusive.

APPLICATION 3.1

Bhutan's Gross National Happiness

The small Himalayan nation of Bhutan is sometimes referred to as the happiest nation on Earth. This is probably not correct; in cross-national comparisons like the *World Happiness Report*, it does not even rank in the top half. Still, Bhutan is noteworthy as a clear leader and an early adopter of national happiness statistics. The inspiration goes back to the 1970s when King Jigme Singye Wangchuck explicitly prioritized 'gross national happiness' over gross national product (GNP), the economic indicator of national wealth. As other parts of this chapter make clear, wealth can do much to facilitate happiness, but some things that generate wealth can also produce unhappiness. By prioritizing happiness per se, some policy decisions might change. For example, the pollution and associated health and happiness costs might not be worth the economic benefit of some industrial projects. Bhutan's gross national happiness was more a guiding principle than a concrete statistic until 2008, two years after the King converted the nation to a democracy in another step towards national happiness. Since then, government employees have gone out to ask citizens about their well-being each year. They use face-to-face interviews with 148 questions to collect the information needed to compute a single numeric score for each person. Familiar questions about life satisfaction and positive and negative emotions are included. Yet these are only a small part of the interview. There are also questions about Zorig Chusum skills (13 national arts, crafts, and trades), Driglam Namzha (a code of dress and etiquette), wildlife, donations, literacy, sleep, language, assets, community relationships, political participation, and so on (see <https://www.grossnationalhappiness.com>). A 2024 documentary film titled *Agent of Happiness* directed by Arun Bhattacharai and Dorottya Zurbó shows these interviews as endearing and enlightening conversations. Beyond the data itself, director Bhattacharai noted, "... the act of happiness agents knocking on people's doors and coming into their homes, asking if they were happy or not – it made people feel cared for by the government" (quoted in J. Lambert, 2024). For example, a woman rates her happiness as 10 out of 10, explaining how her good karma had her cow recently birth a calf and produce milk to sell (see a clip here: <http://tinyurl.com/yc6yx3mh>). This particular rating is only one of many that generate her overall happiness score, which is 8, rather than the 10 that she explicitly reported; having only two cows (few assets) seems to be part of the reduction.

(Continued)

The gap between simple subjective ratings and complex computed scores highlights an ongoing debate about how to best deploy happiness measurement as national indices. To the extent that they differ, these have important implications for policies. Subjective ratings have the advantage of not presuming what is important to people, and then to evaluate national policies against the happiness that people themselves experience (or at least report). Still, many of the current national indices include other things. Bhutan mixes subjective states with more objective information (e.g. number of cows). In the UK, 44 measures are included with only some gathered by actually asking people. The Canadian Index of Well-Being does not include any questions about satisfaction or emotions, and relies on dozens of other statistics assumed to be good for happiness, such as gender equality in parliament, availability of childcare, ratio of students to teachers, air pollution, donations, life expectancy, etc. Positive psychologists tend to favour subjective experience (and with good reasons), yet other social scientists seem inclined to make longer lists of desirable circumstances to infer well-being. Accordingly, some of the most basic research on happiness measurement matters to daily life in the growing number of nations that apply it in a national happiness index. Bhutan's gross national happiness is just one early and influential example.

A FEW LINGERING QUESTIONS

We have discussed definitions of happiness and some of the important predictors of happiness. Psychologists have learned a lot about who reports higher or lower levels of subjective well-being. However, a few frequent – and important – questions about happiness remain. We tackle those questions in this section.

Again, Is That All There Is?

Positive psychology has largely integrated subjective well-being as a core description of happiness with broader eudaimonic (flourishing) indicators adding important breadth to understanding the good life. Still, with research and researchers disproportionately located in **WEIRD** nations (i.e. Western, educated, industrialized, rich, and democratic; see Henrich et al., 2010), similar calls to broaden or re-evaluate core ideas have emerged. The Gallup World Poll has clearly shown that people can report on their subjective well-being everywhere, but it does not confirm that it is important to people everywhere. Some research suggests there may be more. For example, when people in dozens of different nations were asked to rate the ideal person's life satisfaction, nations clearly differed (Krys et al., 2024). European nations tended to rate the ideal life as very happy (e.g. 86% chose 'very happy' in Germany), whereas 70 per cent chose a level below 'very happy' in nations like Ghana, Japan, and Pakistan. Perhaps similarly, a study asked

Christian participants in the USA and Korea to describe Jesus and rate his happiness (Oishi et al., 2011). Americans saw Jesus as very happy and with almost universally positive characteristics, whereas Koreans saw somewhat less happiness and mixed characteristics (e.g. more suffering and sorrow, less agreeable and extraverted). The idea is that cultural ideals are revealed in views of Jesus, and these seem to mirror how people see themselves. Idealizing or maximizing positivity may be a particularly WEIRD phenomenon (Krys et al., 2024). Some people even report being afraid of happiness, for example, because it is immoral or prompts future bad luck (Joshanloo & Weijers, 2014). However, this seems relatively rare as 97 per cent of people in the Krys et al. (2024) study saw the ideal as more happy than unhappy.

A wide range of alternative and additional ‘happiness’ indicators have been proposed, drawing on various methods and sources (e.g. Delle Fave et al., 2016; Krys et al., 2024; Lomas & VanderWeele, 2023). These lists are sometimes offered as merely adding breadth to traditional indicators, and sometimes as more pointed challenges to a perceived colonial hegemony of ideas that produces results favouring the same WEIRD nations that developed them. Either way, it seems clear that there is room for more culturally sensitive approaches to subjective well-being.

In an intriguing demonstration of possibilities, Tim Lomas (2021) is collecting untranslatable words that describe pleasant experiences, relationships, and personal characteristics (see <https://www.drtilomas.com/lexicography/>). With well over a thousand words, these are offered as an exploration, rather than a list of things that need to be assessed. They range from things that seem pretty recognizable by English speakers to others that seem more elusive, and perhaps unique to a single cultural group. They may point the way to indicators of the good life that positive psychology has not yet considered seriously. They might even expand your sense of possibilities for pleasant experiences; having a word can help you find or recognize it. Consider a few examples:

- Charis (χαρις). Greek / n. / kʰá.ris / khah-riss. Grace, kindness, beauty, nobility.
- Kaizen (改善). Japanese / n. / kai.zen / kai-zen. Gradual, incremental (and often continuous) improvement.
- Asabiyyah. Arabic / n. / a.saːˈbiː.ja / ah-sah-bee-yah. Solidarity; group feeling; group consciousness.
- Menefrehismo. Italian / n. / mi.ni fri:gi:z.mo: / mih-nih-frih-geez-mooh. A couldn’t-care-less attitude; the condition of not giving a hoot.
- Ayurnamat. Inuktitut / n. / i.jɜːnæ.mæt / ih-yur-nah-mat. Stoicism; the possibility or approach of not worrying about things that cannot be changed.
- Sanuk (สนุก). Thai / n. / sæ.nuk / sah-nook. To have a good time; to have fun, not in a frivolous way, but rather in a way imbued with satisfaction, pleasure, and value.
- Ubuntu. Zulu (& Xhosa) / n. / ʊˈbuːntu / uu-boon-tuu. Being kind to others on account of one’s common humanity.

- Siddhārtha/siddhattha (सिद्धार्थ). Sanskrit/Pāli / n. / sɪd.dɑːr.θə / sɪd-dar-thuh. Derived from siddha (achievement) and arth (meaning, purpose); one who has successfully achieved an aim or object.
- Beschaulich. German / adj., adv. / bəʃ'faʊlɪç / beh-shao-lish. Quiet, pensive; living a simple life; pleasantly contemplative, unhurried in a fashion that inspires mental well-being.
- Gringagog. Old English / n. / grɪn.ə.gɒɡ / grin-uh-gog. Someone who is always grinning.

Other studies have asked people how they define happiness more directly (with considerable attention to issues of translation!). For example, people in 12 nations on 6 continents provided answers that spanned both psychological notions (e.g. satisfaction, harmony, pleasant emotions) and more contextual circumstances (e.g. work life, family, relationships; Delle Fave et al., 2016). Combining answers across the 12 nations, the most frequent referred to things that do not fit neatly into the definition of subjective well-being. That is, harmony and balance came up more than satisfaction or positive emotions, and family and social relationships were commonly seen as defining features of happiness.

Some similar themes emerge in a questionnaire designed to assess 'interdependent happiness' by researchers in Japan (Hitokoto & Uchida, 2015). They argue that Japanese and other more interdependent cultures value ordinariness, relationships, and quiescence (quiet passivity), and that these things are not prominent in traditional measures of subjective well-being. Interestingly, the new interdependent happiness questionnaire correlated fairly strongly (about $r = .60$) with life satisfaction and emotions, and equally so among Japanese and American participants. There were some cultural differences when comparing self-esteem, but it was clear that interdependent happiness made sense to Western participants too. Similarly, the Gallup World Poll recently tested some questions about balance to represent indicators that seem more prominent in Asian thought. Surprisingly, the highest scores were often observed in Europe, with China at 13th and Japan at 73rd highest scores, and the lowest scores often in Africa (Lomas et al., 2022). Indeed, as new indicators are piloted in the GWP, cross-national comparisons often follow the trend of substantial correlation with the wealth of nations (Lomas, 2023). Of course some nuance and complexity appear as we explore new ideas too.

In sum, positive psychology remains curious about more culturally diverse indicators of well-being. Nonetheless, the traditional definition of subjective well-being has been very useful worldwide, and there are few examples where new constructs produce dramatically different results. The best example remains the negative correlation between wealth and meaning when comparing national averages (Oishi & Diener, 2014), but future research may find more. Finally, it seems important to know whether and what kind of happiness is valued in each society as global organizations like the United Nations are increasingly considering these measurements.

Can We Trust Self-Report Measures of Happiness?

Most happiness research uses self-reports as the primary measurement tool. This raises questions about **validity**: can we trust what people tell us? Similar to self-reports of emotions (considered in Chapter 2), accurate assessment depends on the participants' ability and willingness to report on their happiness. Normally this is not a problem – people easily rate their happiness – but there are sources of bias that can influence answers (Diener, Inglehart & Tay, 2013). When and how we ask questions about subjective well-being can influence the answers we get.

Subjective well-being is defined as a relatively stable characteristic of people; we explicitly contrast it with the daily fluctuations of moods and emotions. Theoretically then, reports of subjective well-being should not change much from day to day or be influenced by immediate context. Yet some studies suggest that momentary circumstances can influence ratings of overall subjective well-being. When moods, certain life domains, or events are made salient, they can be weighted too strongly in making an overall satisfaction judgement, thus biasing answers. For example, a large telephone survey of Americans asked questions about politics and about well-being. People reported lower well-being if the political questions came just before the well-being questions, compared to other orderings (Deaton, 2011). Presumably, being reminded of the typically dissatisfying domain of politics made people think about it too much when judging their overall well-being. People's ratings of their subjective well-being are not as fixed as theory suggests they should be. The order of questions and context of the assessment can influence answers. Does this mean that measures of subjective well-being are completely invalid? Fortunately, the answer here is a clear 'no'.

Although question order can sometimes make a difference, the influence is usually quite small. Detailed analyses show that subjective well-being scores mostly represent stable judgements (as they should), with momentary conditions accounting for about ten per cent of the score (Schimmack & Oishi, 2005). In addition, biases can also be corrected or controlled. In the example above, adding a single 'buffer' question after the politics questions removed the effect on well-being ratings. The buffer question simply asked people to consider their personal lives in general, thus prompting other important domains to be considered appropriately.

Although it is not difficult to ask questions about happiness, there are better and worse ways to do it. As a general guideline, better approaches will ask about subjective well-being early in a study and will use procedures that keep testing conditions similar for everyone. Multiple measures and sophisticated statistical techniques can also improve precision (e.g. Kim et al., 2012).

Our confidence in the validity of happiness questionnaires also comes from decades of corroborating research findings. That is, the measures must be reasonably reliable and valid for happiness research to find many of the things already reviewed in this chapter. Happiness scores correlate highly when re-tested across many years, correlate strongly with personality traits, and are moderately heritable (e.g. in twin studies). Differences

in societal conditions across nations are associated with substantial differences in subjective well-being, and changes in societal conditions are mirrored by changes in reports of subjective well-being. Self-reports of happiness are also sensitive to major changes in life circumstances (e.g. marriage, divorce, unemployment). In addition, self-reports correlate with a wide range of alternative methods of assessing well-being, such as physiological functioning (Step toe & Wardle, 2005), family and friends' ratings of happiness (L. Schneider & Schimmack, 2009), coding of online posts (Sametoğlu et al., 2023), economic indicators of life quality (Oswald & Wu, 2010), and how quickly people recall positive life events (Diener & Seligman, 2002). This large collection of findings strongly supports the notion that self-reports of happiness are generally valid.

Despite the validity of self-report happiness measures, some are still hesitant to trust them. Would it not be better to use an objective measure? Should we yearn for a future with a happiness blood test? Such a tool might be useful, but it will never replace self-reports. Keep in mind that we define well-being as subjective. We care about individuals' judgements. What if the blood test told me you were very happy, yet you told me you were not? Should I trust the blood test more? Unless you are lying, the answer is no; we each know our own subjective well-being best. Philosophers can debate whether or not it is possible to be wrong about your happiness (defined more broadly), but the idea of subjective well-being requires self-reports. There will always be some error when using self-report measures, but this is true of every other measurement in science too. Research in positive psychology strives to further improve our self-report measurement techniques. It also pursues alternative approaches that rely on physiology, internet behaviour, and so on, but these cannot fully replace self-reports.

Is it Good to Be Happy?

Happiness is typically associated with good (valued) things. It is obviously pleasant, and it is something people desire (Krys et al., 2024). Happiness is also correlated with health and success across a variety of domains. Happier people tend to act more prosocially and are more productive. In this way, happiness may even be seen as morally good. The correlates of high happiness include cardiovascular, immune, and endocrine health, as well as better health behaviours, longevity, productivity at work, creativity, cooperation, higher income, delay of gratification, number and quality of social relationships, volunteering and donating, and many others (De Neve et al., 2013; Diener et al., 2018; Lyubomirsky et al., 2005; Walsh et al., 2018). US companies that have happy workers are more profitable and outperform others in the stock market (De Neve et al., 2023).

The many positive associations with happiness are clear; the bigger question is whether happiness is merely a consequence of these desirable things, or whether it might also be a cause of them. Major reviews of the scientific literature suggest that happiness is both a cause and a consequence (De Neve et al., 2013; Diener & Chan, 2011). For example, it is easy to imagine that getting married might make a person happier. On the other hand, people who are already happy are more likely to get and

stay married (Luhmann et al., 2013); it seems that happiness increases the chances of good marriages. When happiness comes – or is measured – well beforehand, it suggests that happiness can facilitate desirable outcomes. As another example, a large longitudinal study found that positive affect and life satisfaction measured at ages 16, 18, and 22 predicted income at age 29 (De Neve & Oswald, 2012). Happier adolescents became wealthier adults. It is possible that ‘third variables’ help explain this correlation. For example, the traits of extraversion, optimism, and low neuroticism accounted for part of the link between happiness and later income. Happier young people were also more likely to earn a university degree, become employed, and get promoted. Findings like these help us understand why happiness could be helpful to future success.

Causal links among happiness, health, and success are also inferred from experiments where happiness is manipulated. Typically, such studies manipulate positive emotions in the short term, as opposed to the long-term happiness of subjective well-being. Nonetheless, it seems positive emotion states facilitate many desirable things. As we saw in Chapter 2, positive emotions often broaden thought-action repertoires that help build resources (Fredrickson, 2013a). For example, they can promote social bonding, approach goals, creativity, and generosity. Experimental manipulations provide stronger evidence of causality, compared to correlational studies, but there is a gap with long-term subjective well-being. That gap is narrowed by the fact that people with high subjective well-being experience positive emotion states frequently. Happy people have more happy moments – where we have confidence about the causal direction. Thus, it seems that happiness not only feels good, it is often good for you and for those around you.

Is it Possible to be Too Happy?

Knowing that I am a happiness researcher, people sometimes send me an advertisement for a new drug. It reads, “Are you annoyingly happy? Despondex could be right for you”. Designed to treat people who are “insufferably cheery”, this pill is not the latest offering from Pfizer, but rather created by the *The Onion*, a satirical paper. At times happiness can seem uncool or be annoying to jealous frenemies, but is there more substance to the idea that too much happiness is a bad thing? It is easy to think that if happiness is good, more happiness is better. Yet this is an assumption that should be tested.

Overall, the research is convincing: happiness is associated – and very likely can help cause – success and health. This conclusion works well when stated as a general rule, but must not be taken to mean that happiness is a panacea or some magic characteristic that is always good for everything. Happiness will not make you taller, grow or remove hair, nor give you better breath. Broad reviews suggest that happiness is useful more often than not, but this does not mean happiness is the most important factor; it is rarely the single best predictor. Counter-examples – where happy people do more poorly – exist too (see Gruber et al., 2011). This is particularly true when we examine positive states. Some high-intensity positive emotions may tax, rather than mend, physiological systems.

Happy moments can make people careless and more prone to stereotyping – positive moods are associated with taking mental shortcuts. When competing or negotiating, unpleasant emotions can facilitate success. Genuine threats should rarely be met with passive smiles. Keep in mind that emotions – pleasant and unpleasant – are functional; they push us towards adaptive responses. The very happiest people still experience unpleasant emotions in their daily life, just a bit less frequently than unhappy people (Diener & Seligman, 2002). Long-term well-being and success are not the result of constant, inflexible, or delusional positive affect. In sum, there are clearly moments when happiness is not the best way to feel.

It is more difficult to find examples where high subjective well-being – as a long-term characteristic of people – hinders health or success. This does not mean that we should dismiss the idea entirely; it is hard to imagine that anything – even happiness – can be a universal and unmitigated good. Globally, many people do not see the very highest level of happiness as ideal (Krys et al., 2024). It seems plausible that high happiness could hinder some artistic or critical endeavours, or produce unwarranted optimism or complacency. There are some empirical hints that more happiness is not always better. Such findings seem to depend on whether we consider achievement or good relationships. Across a collection of large data sets, Oishi et al., (2007) found that very high happiness was associated with close relationships and volunteering without limit – the happiest people had the richest social and most prosocial lives. The trend was different for measures of achievement, however. Subjective well-being was positively associated with income and achievement in school, yet with an exception for the very highest levels of happiness. Over time, the happiest people tended to earn less money than the moderately happy people (but both earned more than unhappy people). Said another way, when it comes to achievement, the optimal level of happiness might be more like 8.5 – rather than 10 – on a 10-point scale. For good relationships, 10 may well be best.

SUMMING UP

Happiness can mean many things, so psychologists coined the term subjective well-being to describe the combination of positive life evaluations and a pleasant average emotional balance. Eudaimonia and flourishing refer to additional aspects of the good life, such as having a sense of meaning, authenticity, positive relationships, personal growth, autonomy, and so on. It can be useful to distinguish among these various facets of well-being, though they often correlate positively. Research suggests that we can measure happiness with reasonable accuracy. In addition, studies suggest that happiness not only feels good, it likely contributes positively to personal and societal health.

Both internal and external factors influence happiness. Genes, personality, and outlook are among the best predictors of happiness. Still, they leave plenty of room

for people's circumstances to play an important role. Basic demographic features (e.g. gender, age, education), parenting practices, and life events have a surprisingly small impact on long-term happiness, on average. Nonetheless, international comparisons show us that societal circumstances – such as meeting basic material needs, strong social connections, and personal liberty – play a major role in humanity's well-being.

Taken together, you might wonder whether there is much individuals can do to increase their happiness. After all, it is impossible to change your genes (though their expression can be altered), and unusual to drastically change personality or outlook. You probably already live in a nation where things are pretty good, and if not, emigrating is extreme and likely difficult. Gaining education, a spouse, or money might improve happiness a little, but the hedonic treadmill can take those gains back. There is no single, simple method that will transform everyone's happiness.

Still, there are very good reasons to be optimistic about the potential for improvement. For example, this chapter has not said much about potentially important factors in happiness: people's efforts and choices. The way people spend leisure time, enjoy or suffer through their job, and pursue personal goals are not automatic consequences of genes or circumstances. As Brian Little (2014) noted, people's well-being often depends on 'well-doing'. How we pursue life's projects – large and small – are important to happiness. Our personal goals and our pursuit of them leave plenty of room for choices and change. They are also idiosyncratic and thus difficult to capture in a broad survey of happiness. Future chapters of this book dive deeper into the psychology of how thoughts, feelings, circumstances, and behaviours come together, often speaking to the potential for increased happiness.

TEST YOURSELF

- 1 What is subjective well-being? How does it differ from eudaimonia?
- 2 What does it mean to say that happiness is heritable?
- 3 How is money associated with subjective well-being?
- 4 Why does happiness resist easy change?
- 5 What are some of the desirable outcomes associated with happiness?

WEB LINKS

- Listen to Tim Lomas describe the untranslatable words project: <http://tinyurl.com/bdf9pym6>
- Veenhoven's World Database of Happiness: <http://worlddatabaseofhappiness.eur.nl>

FURTHER READING

To learn more about measuring happiness, see:

Diener, E., Inglehart, R., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research*, 112(3), 497–527. <http://doi.org/10.1007/s11205-012-0076-y>

This article addresses the suggestion that happy people might not engage with social issues, though results suggest the opposite:

Kushlev, K., Drummond, D. M., Heintzelman, S. J., & Diener, E. (2020). Do happy people care about society's problems? *The Journal of Positive Psychology*, 15(4), 467–477. <https://doi.org/10.1080/17439760.2019.1639797>

For a closer look at well-being changes during the COVID-19 pandemic, see:

Aknin, L. B., De Neve, J.-E., Dunn, E. W., Fancourt, D. E., Goldberg, E., Helliwell, J. F., Jones, S. P., Karam, E., Layard, R., Lyubomirsky, S., Rzepa, A., Saxena, S., Thornton, E. M., VanderWeele, T. J., Whillans, A. V., Zaki, J., Karadag, O., & Ben Amor, Y. (2022). Mental health during the first year of the COVID-19 pandemic: A review and recommendations for moving forward. *Perspectives on Psychological Science*, 17(4), 915–936. <https://doi.org/10.1177/17456916211029964>

This overview of happiness research includes some learning activities in the supplement (free download):

Tov, W., Wirtz, D., Kushlev, K., Biswas-Diener, R., & Diener, E. (2022). Well-being science for teaching and the general public. *Perspectives on Psychological Science*, 17(5), 1452–1471. <https://doi.org/10.1177/17456916211046946>