

# Optimism: Enduring resource or miscalibrated perception?

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## Abstract

There is a general, widely-held belief that optimism is always a good thing. While there is much previous research suggesting that optimists enjoy several health and wellness benefits, there is also a large body of research suggesting that optimism is not always advantageous. Perhaps examining how optimism develops and changes across the lifespan may give us insight into how people use optimism and allow us to determine if and when optimism is helpful or maladaptive for them. In the current review, we review evidence debating the benefits and costs of optimism, as well as examine how optimism develops across the lifespan. We discuss how life events may or may not impact the developmental trajectory of optimism. Lastly, we address currently unanswered questions and emphasize the contextual nature of optimism's advantages.

## KEYWORDS

life events, lifespan development, optimism, socioemotional selectivity theory, terminal decline, unrealistic optimism, well-being

## 1 | INTRODUCTION

Optimism is not a particularly new construct, whether it be in science, literature, or life. References to optimism are seen as early as the 18th century, in Leibniz's 1710 assertion that we are living in "the best of all possible worlds" (Leibniz, 2000). Popular literature and art have been quick to explore themes related to optimism—sometimes heralding it as an asset, and sometimes declaring it to be a delusion or naiveté.

The academic literature on optimism also reports contrasting perspectives about whether optimism is good or bad. This debate arises from many different intellectual traditions. As outlined in Table 1, optimism is defined in

TABLE 1 Common conceptualizations of optimism and their modes of measurement

Type of optimism	Conceptualization	Associated outcomes	Method of measurement	Representative citations
Dispositional/ Expectational	The belief that, in general, good things will happen in the future	Higher well-being; fewer symptoms of stress/depression; higher levels of perceived social support	Life Orientation Test (LOT), Attitude to the Future Scale	Brissette, I., Scheier, M., & Carver, C. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition. <i>Journal of personality and social psychology</i> 82, 102–111; Daukantaite, D., & Bergman, L. R. (2005). Childhood roots of women's subjective well-being: The role of optimism. <i>European psychologist</i> , 10(4), 287-297
Unrealistic	The belief that, in general, one's outcomes will be different (better) than similar others	Avoidance of important risk information	Direct comparison between self-reported, predicted level of risk and actual, calculated level of risk	Radcliffe, N. M., & Klein, W. M. (2002). Dispositional, unrealistic, and comparative optimism: Differential relations with the knowledge and processing of risk information and beliefs about personal risk. <i>Personality and Social Psychology Bulletin</i> , 28(6), 836-846; Weinstein, N. D., Marcus, S. E., & Moser, R. P. (2005). Smokers' unrealistic optimism about their risk. <i>Tobacco control</i> , 14(1), 55-59
Specific	Optimism directed towards a specific outcome (e.g., "I am going to ace this test," "this treatment is going to cure me")	Decrease in depressive symptomology; subjective improvements in outcome; increased negative affect if outcome is not achieved	Outcome-specific self-report scales (e.g., Likert scales asking how confident the participant is in a specific positive outcome)	Sweeny, K., & Shepperd, J. A. (2010). The costs of optimism and the benefits of pessimism. <i>Emotion</i> , 10(5), 750-753; Cohen, L., De Moor, C., & Amato, R. J. (2001). The association between treatment-specific optimism and depressive symptomatology in patients enrolled in a Phase I cancer clinical trial. <i>Cancer: Interdisciplinary International Journal of the American Cancer Society</i> , 91(10), 1949-1955

many ways. For example, some traditions examine optimism as a trait-like characteristic (e.g., “I am an optimistic person”), while others examine optimism as a cognitive estimation about whether one will experience a positive outcome in a specific situation (e.g., “I did not study, but I will pass this test” or “I regularly smoke, but I am not at risk for lung cancer”). Each definition has its own methodology and implications for how people think about their futures and the decisions they make (Chang et al., 2009).

In the sections ahead, we provide an overview of these traditions, examining the case for and against optimism. We also discuss how and why optimism might change across the lifespan—and as people experience tragedies and triumphs. We close by presenting some unanswered questions that will help inform the debate about whether optimists are onto something or, simply, way off-base.

## 2 | OPTIMISM CAN BE A GOOD THING

*Dispositional* optimism is understood to be a relatively good thing—an internal protective resource for people. Much of the literature suggests that an optimistic outlook is one of the key ingredients to a happy, healthy life (Scheier & Carver, 1992). Optimists engage in ostensibly positive behavior and make selective attributions that make success more likely—and they do, in fact, experience quite a bit of success.<sup>1</sup>

With respect to health, for example, high levels of optimism are associated with low levels of physical pain (Scheier & Carver, 1992), better physical functioning (Kim et al., 2014), lower risk of cardiovascular disease (Boehm et al., 2018; Rozanski et al., 2019), and quicker recovery times after illness or surgery (Forgeard & Seligman, 2012; Scheier & Carver, 1992). Those who are very high in optimism may even lead longer lives than those who are very low in optimism (Giltay, Kamphuis, et al., 2006). In general, those high in optimism also have better mental health and consistently report fewer depressive symptoms than those low in optimism (Achat et al., 2000; Giltay, Zitman, et al., 2006). Optimists also consistently report being generally happier than those without much optimism—enjoying better moods and higher subjective well-being across the lifespan (Andersson, 1996; Daukantaite & Bergman, 2005; Daukantaite & Zukauskienė, 2012; Scheier et al., 2001).

Optimists also have more success in the workplace and professional settings (Forgeard & Seligman, 2012). They tend to endure hardships on the job that make others quit (Schulman, 1993; Seligman & Schulman, 1986). Optimism, together with factors like hope and positive affect, combine to enhance work engagement (Mäkikangas & Kinnunen, 2003), and those who achieve remarkable career goals, like Olympic athletes, tend to be higher in optimism (Gould et al., 2002). Even being married to an optimistic person is associated with benefits. Having an optimistic spouse is associated with better self-rated health, better physical functioning, and fewer chronic illnesses over time (Chopik et al., 2018).

There are several proposed mechanisms that attempt to explain why optimism is connected to such favorable outcomes. Perhaps one of the most prevalent explanations is optimists' coping strategies. Optimists tend to use active coping techniques (Nes & Segerstrom, 2006). Specifically, optimists are more likely to address problems directly, using problem-focused methods. Interestingly, and perhaps contrary to the blissful ignorance sometimes ascribed to them, optimists are *less* likely to adopt coping strategies that involve denial, ignoring stressors, or emotional withdrawal (Nes & Segerstrom, 2006). Instead, it is often pessimists who tend to turn to avoidance strategies that can prolong or even exacerbate problems (Carver et al., 1989). In many common challenges and stressful situations, an active, approach-oriented coping style is more effective (Roth & Cohen, 1986) and indicative of cooperative problem-solving (Assad et al., 2007). The ability to cope effectively when faced with stressors or threats may explain why optimists are, on the whole, happier and healthier—and can explain why optimism might be a good thing.

### 3 | OPTIMISM CAN BE A BAD THING

Of course, there are situations where optimism can do more harm than good. Take, for example, what researchers have coined as *unrealistic optimism*. Unrealistic optimism is the belief that one is more likely to experience positive outcomes compared to others who are objectively similar to them (Weinstein, 1980). In an often-cited example of unrealistic optimism, smokers believe that they are at less risk for developing lung cancer compared to the general population of smokers (Weinstein et al., 2005).

This mindset comes with some clearly negative implications for health behaviors. For smokers, it leads to a discounting of a very real health risk and might interfere with efforts to quit smoking. While some research has suggested that optimists may be *more* attentive to information about potential risks (Aspinwall & Brunhart, 1996), those who are high in unrealistic optimism may *avoid* this same information (Wiebe & Black, 1997), which may ultimately stop them from fully understanding their risk or acting preventatively.

Importantly and, perhaps, counterintuitively, unrealistic optimism is often assessed independently of accuracy (Weinstein & Klein, 1996). Thus, it is difficult to determine if one is *truly* unrealistic when they say that they have a lower risk of developing any given health condition than the average person; maybe people who make these kinds of claims do indeed have more positive outcomes and are different from others in a similar boat. However, in studies that evaluate the chances of a specific outcome (e.g., evaluate the risk of heart attack using blood pressure and cholesterol data), researchers have operationalized when optimism is considered “unrealistic” (e.g., those who misjudged their risk by greater than 10%; Radcliffe & Klein, 2002). This research has found that, while dispositional optimists have a *lower* risk of negative outcomes, unrealistic optimists have a *higher* risk of negative outcomes.

Unrealistic optimists are less worried about their risk levels for negative events (Weinstein, 1982), have less prior knowledge about risks, and remember less when provided with information about risk (Radcliffe & Klein, 2002). Some researchers have suggested that this may be because of the invulnerability sometimes felt by unrealistic optimists (Perloff & Fetzer, 1986; Schwarzer, 1994); they may feel that risk information is irrelevant to them. Weinstein and Lachendro (1982) suggest that egocentrism plays a role in our use of unrealistic optimism—we tend to think that we will be far better off than others when we are not forced to think carefully about others' circumstances. Neuroscience research on the topic has suggested that those high in unrealistic optimism fail to code for errors that should reduce optimism, making it difficult for them to accurately update their beliefs (Sharot et al., 2011). Altogether, an unrealistic sense of optimism leads people to be at higher risk for negative outcomes, seek out less information about risk, and take fewer preventative steps to mitigate risk. Of course, unrealistic optimism is not a dichotomy, and those who are very high in unrealistic optimism may be most at risk for these aversive outcomes.

In the past decade, many researchers have found that optimism, even when not unrealistic, can occasionally be associated with negative outcomes. In another often-cited example, being optimistic about exam scores does not make students feel any less distressed or nervous *before* they get feedback, and being optimistic does not protect students from feeling bad when they learn they did poorly (Sweeny & Shepperd, 2010). In fact, optimism leads to *greater* disappointment when students receive a bad grade. Interestingly, students know that getting their hopes up, only to receive a bad grade, will be disappointing—and, yet, they continue to be optimistic (Sweeny & Shepperd, 2010). This suggests that, despite knowing the costs of optimism and experiencing no positive change in affect because of it, students continue to be optimistic. Worth noting, true pessimists—those who believe that they performed worse on the exam than they really did—report lower negative affect after the feedback (Sweeny & Shepperd, 2010).

Further, people tend to naturally drop their efforts to be optimistic when they expect things to go badly, especially when being evaluated. This suggests that people likely know that optimism is not the most beneficial mindset to adopt at all times. This tendency to shift towards pessimism in the moments before feedback is referred to as “sobering up” (Sweeny & Krizan, 2013). In general, the closer we get to an evaluation of our performance, the more pessimistic we become. There are many reasons why this may occur. For example, the closer we get to an event, the less control we have over the outcome, and the more “real” (i.e., concrete) it becomes (Sweeny & Krizan, 2013). There is an increased pressure to be accurate in our prediction of how we will fare after an event,

and we are more likely to think critically about our expectations in order to counteract any unrealistic optimism (Lerner & Tetlock, 1999; Tetlock & Kim, 1987). As in the case of the student receiving their exam score, a shift toward pessimism may also be an outcome of affect management, in which we temper our expectations in order to avoid negative feelings (Sweeny & Krizan, 2013). Being pessimistic in these moments can spare us from painful emotions, like disappointment, and allow us to prepare for unfavorable outcomes (Sweeny et al., 2006). The protective functions of bracing for bad news may explain why, in some cases, pessimism might be called for—and that optimism might be a bad thing.

## 4 | EVALUATING THE EVIDENCE

When determining the efficacy of optimism, it is important to examine the quality of evidence. How convincing is current research?

There are reasons to be skeptical—many studies on the benefits of optimism rely on correlational data, including many of those discussed above (i.e., Andersson; 1996; Carver et al., 1989; Gould et al., 2002; Nes & Segerstrom, 2006; Scheier & Carver, 1992). Anderson (1996) goes as far as to note that “practically all studies of the benefits of optimism as assessed by the LOT [the Life Orientation Test, a popular optimism measure] have been in the form of correlational designs.” However, more recent work has applied more rigorous methods of analysis.

Interventions, for example, offer an opportunity to examine if optimism can be manipulated and test its connection to specific outcomes. In a meta-analysis of interventions, Malouff and Schutte (2017) determined that, while these programs are, overall, successful in increasing optimism, this success may be highly dependent on methodology. Timing of measurement, instrument used, intervention length, and other methodological artifacts were moderators of effect sizes yielded from the interventions (Malouff & Schutte, 2017). Of course, all interventions are not created equal. Some interventions, like the “best possible selves” exercise—in which participants imagine themselves in the best possible future and what they have done to get there—have been successful in both boosting optimism itself and in using optimism to increase positive affect (Carrillo et al., 2019; Malouff & Schutte, 2017). Other interventions, such as cognitive-behavioral techniques, have also found success in cultivating long-term gains in optimism (Brunwasser et al., 2009).

In a recent meta-analysis of optimism's associations with positive health behaviors, Boehm et al. (2018) identified other common pitfalls of optimism research, including its reliance on cross-sectional research. Indeed, much of the work discussed above, arguing both for and against optimism, is cross sectional. However, the longitudinal work that does exist, much of which examines the entire adult lifespan (Chopik et al., 2015, 2018; Daukantaite & Bergman, 2005; Daukantaitė & Zukauskienė, 2012; Kim et al., 2014), suggests these findings are likely not just an artifact of cross-sectional analyses. In general, less longitudinal work has examined the costs of optimism; the few existing exceptions have suggested that, without intervention, unrealistically optimistic individuals may be at risk for poorer cognitive, performance, and health outcomes than their more realistic counterparts (Haynes et al., 2006; Popova & Halpern-Felsher, 2016).

With this in mind, there are other pieces of evidence that offer insight into the efficacy of optimism. Longitudinal work on how optimism changes throughout the lifespan offers one such insight.

## 5 | DOES OPTIMISM CHANGE?

It is possible that how optimism changes over time can inform us if it is adaptive or maladaptive. Being optimistic could be associated with the onset of positive life events and increase after they happen. On the other hand, if optimism is stable after negative life events happen, it suggests that people may not be accurately calibrating to their environments (or perhaps even reflect resilience). In this way, knowing how optimism descriptively changes

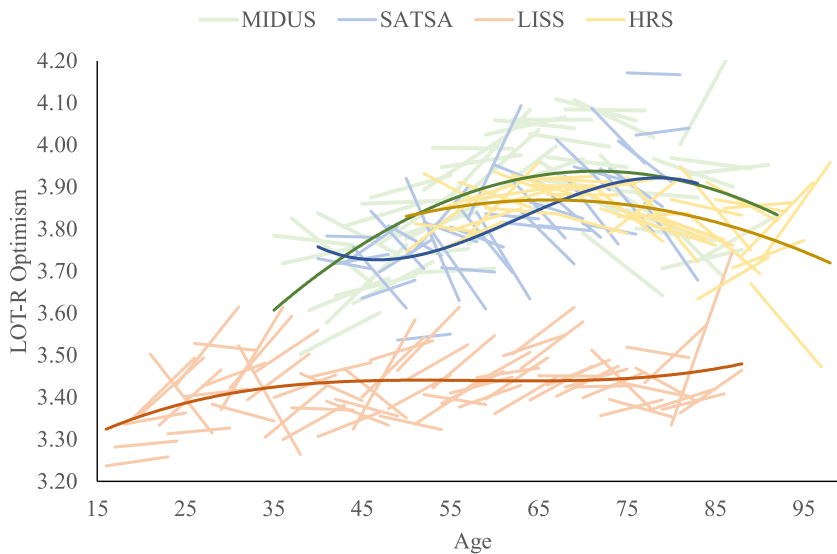
across the lifespan and in response to life events is informative for determining whether one might want to be optimistic or not.

As occasionally reflected in well-known literature (Porter, 1913; Voltaire, 2013), there is an assumption that optimism reflects a type a naivete about the world (Peterson, 2000). Specifically, people might start out as optimists but, through hardship and disappointment, they come to realize that expecting positive outcomes in the future is not warranted. But is this an accurate portrayal of how people change in optimism? In line with this characterization, there have been a number of theoretical perspectives that have attempted to make predictions about how optimism changes across the lifespan. For example, socio-emotional selectivity theory suggests that as people age, they become acutely aware of their shortening lifespan (Carstensen et al., 1999). In response to this time pressure, people increasingly choose to prioritize goals aimed at maximizing emotional balance, satisfaction, and meaning. Over time, as they focus on goals and relationships that enhance quality of life, people may become more optimistic merely by attending to positive aspects of their environment (Chopik et al., 2015). According to another theoretical perspective, self-determination theory, later life boosts in well-being can be attributed to a sense of competence and belonging achieved in this stage of life—a sense of satisfaction from a job well done (Deci & Ryan, 2012). These growing senses of competence and belonging may lead to an expectation that the future holds positive things—after all, mastering life tasks in the past would likely portend being able to do that in the future (Vansteenkiste & Sheldon, 2006). Taken together, these two examples suggest that optimism might grow over time. As people age, they accumulate accomplishments, gain competencies, and attend to positive aspects of their lives—all ingredients for an optimistic lifestyle.

However, there are a number of reasons to expect that optimism might decline across the lifespan. Drawing on the phenomenon of *terminal decline*, Gerstorf et al. (2008) note that, in general, the factors that contribute to quality of life (like well-being, perceived control, subjective health, social activities) remain relatively stable throughout adulthood, declining slowly as individuals enter late adulthood. However, in the years immediately preceding death (usually around 4 years before death, Gerstorf et al., 2008), these factors—and a person's quality of life—decline very dramatically (Gerstorf & Ram, 2013). Much of this framework ties people's quality of life to their physical health, such that rapid declines in health immediately preceding death naturally suppress and override a person's desire to think optimistically. Trait-versions of optimism are associated with better health and a more positive psychological profile as age-related declines begin (Chopik et al., 2015; Zaslavsky et al., 2015). However, as death approaches, optimism becomes less and less powerful in maintaining well-being, until, ultimately, it becomes nonsignificant at death (Zaslavsky et al., 2015). Such an interpretation of declines in well-being is consistent with the aforementioned idea that people “sober up” as they approach important evaluative situations or endings (Sweeny & Krizan, 2013).

So how does optimism *actually* change over time? Fortunately, there have now been a handful of studies that have explicitly tracked optimism throughout life in order to answer this exact question (Chopik et al., 2020; Renaud et al., 2019; Schwaba et al., 2019). These data often come from large panel studies from different parts of the world, such as the Netherlands (Longitudinal Internet Studies for the Social Sciences), the United States (Health and Retirement Study; Midlife in the United States), and Sweden (Swedish Adoption/Twin Study on Aging). Some of the strengths of these studies include following a developmentally diverse and often nationally representative sample of people for several years, often decades. We highlight these studies in particular because they have the same measure of optimism.

As seen in Figure 1, many of these studies capture a similar pattern—that optimism largely increases through early life and middle age. Then, in most samples, optimism begins to decline after middle age and into late adulthood. While certainly not universal across countries and measures (see Germany: Chopik et al., 2020) and the increases and decreases are not as dramatic (e.g., the Netherlands), this finding is generally robust despite people occasionally reaching this plateau (followed by a decline in optimism) at different ages in different samples (Schwaba et al., 2019).



**FIGURE 1** Longitudinal optimism changes in four large panel studies (LISS, HRS, MIDUS, SATSA). The solid lines in the foreground represent the overall, model-implied trend lines in each study, while the faded lines in the background represent the mean-level changes of individual cohorts followed over the study period. The faded lines are presented for descriptive purposes. Age-related slopes were generated from multi-level models in which continuous age (linear, quadratic, cubic effects) was entered as a predictor of variation in optimism. Effect sizes were relatively small ( $r_s > 0.05$ ). More formal and extensive analyses of these data can be found in other publications dedicated to LISS/HRS (Chopik et al., 2020), MIDUS (Chopik & Kim, 2021), and SATSA (Chopik et al., 2021). HRS, Health and Retirement Study; LISS, Longitudinal Internet Studies for the Social Sciences; LOT-R, Life Orientation Test-Revised; MIDUS, Midlife in the United States; SATSA, Swedish Adoption/Twin Study on Aging

There are lots of reasons why this kind of pattern may exist, including many of the theoretical examples we presented earlier. Indeed, each of these theoretical perspectives can contribute to understanding why optimism follows the pattern it does—increasing throughout early adulthood and midlife (e.g., socio-emotional selectivity theory, self-determination theory) before declining in late life (e.g., terminal decline, sobering up). Ultimately, each of these theories make predictions for how people change based on life events (e.g., events that help us become competent, change our goals, and avoid negative outcomes). Something happens to us or our world, and, in response, we become more or less optimistic about the future. We assume that we learn, and that our optimism is reactive. But that's an assumption that isn't always tested.

Worth noting, some research suggests that this common-sense idea holds water. As people move through adulthood, the presence of positive life events (like an increase in health) and the absence of negative life events (like the onset of a chronic illness), correspond with increases in optimism (Chopik et al., 2015). But other research suggests that the changes in optimism in response to life events is not this straightforward, and suggest very few consistent life events that change optimism (Chopik et al., 2020). For example, optimists might have a blind spot where they only respond to the *positive* things that happen to them and not take into account the negative things that happen to them. Schwaba et al. (2019) found that people were more optimistic when they experienced more positive life events (e.g., developed a new friendship, became a parent when they wanted to). But negative life events (e.g., getting laid off, losing a loved one) did not have the same effect. In fact, negative life experiences were not associated with any changes in optimism across the lifespan. This suggests that people may become more optimistic when good things happen but do not temper their optimism when bad things happen. Of course, this study is not the final word on how life events affect optimism. There are likely scenarios under which negative events can decrease optimism. However, identifying a consistent set of life experiences that affect optimism—and knowing what additional information to collect about these

experiences (Luhmann et al., 2021)—has proved elusive thus far. What is known so far is very preliminary: knowing merely whether an event occurred or not in a person's life is likely not diagnostic for their optimism (Chopik et al., 2020). But knowing people's appraisals of those events is likely very informative (Schwaba et al., 2019). But even then, people may be persistently optimistic about life—becoming more optimistic about life when good things happen but not updating their expectations when bad things happen to them. From one perspective, these findings could be interpreted as championing the human spirit as a resilient entity—one that will persist and expect positive outcomes even in the face of adversity. Another perspective is more sinister—that people are in denial about how negative events affect them and their future. Blind optimism in the face of overwhelming adversity and loss is likely a maladaptive way of coping in many circumstances (e.g., similar to John Henryism; Peterson, 2000). In this way, even knowing how people change in optimism does not necessarily help render a judgment about whether optimism is a good or a bad thing.

How and why optimism changes throughout the lifespan is still up for debate. We know that there are general trends in optimism (i.e., the inverse-U that many individuals describe throughout life), even though there are a few examples that depart from this general pattern. We also know that life events have the potential to spur changes in optimism—although the strength and direction of these changes can often be difficult to estimate.

## 6 | UNANSWERED QUESTIONS

Certainly, there are times when optimism can be an asset. As we have discussed, optimism may help people make good decisions, achieve important goals, and be good romantic partners. However, as we have also discussed, optimism is not entirely a good thing—being unrealistically optimistic can lead to inaccurate perception of risk and feelings of disappointment. And while knowing about how optimism changes across the lifespan may help us understand more about the purposes and development of optimism, it doesn't situate optimism on either the “good” or the “bad” side of the debate. While there is no definitive answer to this question—yet—there are some other unanswered questions that may help us understand more about the nature of optimism.

To date, there is a consensus that optimism is at least partially heritable (23%–26%) with little variance explained originating from the shared environment (0%–13%) (Mosing et al., 2009; Plomin et al., 1992; Schulman et al., 1993; Yuh et al., 2010; Zuckerman, 2001). Although variation and changes in optimism are likely attributable to complex interaction between heritable and environmental forces (like many other psychological characteristics; Briley & Tucker-Drob, 2014), there has been a natural inclination for identifying environmental contributions to variation in optimism. For example, there is often a small to moderate correlation between (both childhood and concurrent) socioeconomic status and optimism in adulthood ( $r_s \sim 0.10$ – $0.24$ ; Heinonen et al., 2006; Robb et al., 2009; Schutte et al., 1996). Aside from this study of childhood socioeconomic status, however (Heinonen et al., 2006), there have been relatively few studies examining prospective predictors of changes and variation in optimism over the life course. In the sections ahead, we focus on two specific environmental factors that could affect how optimism is manifested across the life course—culture and life events.

### 6.1 | Cross-cultural variation

A handful of studies have found that some optimism-related phenomena, like unrealistic optimism, are fairly universal (across Western and Eastern cultures). However, there are also differences in how optimism is manifested in different cultures (Chang et al., 2001). For example, when asked to predict future life events, European American and Japanese participants both showed bias toward unrealistic optimism. Interestingly, however, the Americans showed more of this bias, believing that many more good things would happen to them in the future than Japanese participants did (Chang et al., 2001). Later work comparing Japanese and American students found that American students are also more likely to show this bias when estimating risk about themselves and people they know well (Chang & Asakawa, 2003). Inversely, Japanese students in the study demonstrated a pessimistic bias, but only for



negative events—believing that bad things were more likely to happen to them than to a sibling (Chang & Asakawa, 2003). Why might Westerners, particularly Americans, hold such a positive bias? Chang and Asakawa (2003) suggest that this is a reflection of the value that each culture places on self-enhancement and self-criticism. They suggest that Westerners are more motivated to self-enhance and may feel more pressure to expect positive things for themselves in the future (i.e., are optimistic). Easterners, according to the authors, may be more motivated to self-criticize given that individualism is not a salient value in Eastern cultures.

Of course, this is not a hard-and-fast rule for optimism, and other research comparing Western and Eastern cultures has come to different conclusions. For example, when assessing the risk of the SARS epidemic, both Canadian and Chinese participants believed that they were less at risk than the average person (Ji et al., 2004). However, while the groups did not differ in levels of dispositional optimism, they did differ in unrealistic optimism. Chinese participants showed *more* unrealistic optimism and reported more positive changes brought about by the SARS outbreak (Ji et al., 2004). In this case, it was the Easterners who were more optimistic. Of course, even relatively similar countries/cultures may show important differences (Goa, 2015; Henrich et al., 2010).

In the future, it is important to examine how optimism changes and develops differently across cultures. Past research has found that some personality traits, such as agreeableness, tend to develop similarly across cultures, while other traits, such as extraversion, can develop differently (Bleidorn et al., 2013; Chopik & Kitayama, 2018). Understanding how optimism develops in different contexts may be helpful in determining the ways in which it is adaptive or maladaptive for individual well-being.

## 6.2 | Life events

The literature on the impact of life events on optimism can be frustratingly mixed (Bleidorn et al., 2018). This may be due, in part, to individual differences in how people interpret life events. Most people, for example, would see becoming unemployed as a negative event—a loss of financial stability that may bring an onslaught of other problems. However, for a few individuals, unemployment may represent freedom—a golden opportunity to switch careers or start anew. Now, while very few people are likely to celebrate the loss of a job, many life events are more ambiguous, such as the death of a parent who had suffered with a prolonged illness or the birth of an unexpected child. For different people, these life events could mean very different things and impact their optimism accordingly. One way that future research can account for these sorts of differences is by evaluating the particular characteristics surrounding a major life event, as proposed by Luhmann et al. (2021) (e.g., predictability). These factors help provide important context for a major life event, and may further our understanding on how these events impact outcomes like optimism.

However, it is also possible that life events may have little to no effect on true optimists' levels of optimism. Perhaps true optimists would maintain their optimism in the face of many hardships or any major negative life event. Indeed, optimists tend to have an optimistic explanatory style, in which they attribute bad events to external, unstable circumstances (Peterson et al., 1988), which may preserve their positive outlook. Optimism has also been associated with “benefit finding”—finding a silver-lining in an otherwise stressful or threatening life event, like a receiving a cancer diagnosis (Harrington et al., 2008). A more thorough examination of optimists' reactions to major life events (especially negative ones) with the taxonomy developed by Luhmann et al. (2021) may help determine if an optimists' positivity is impervious to hardship.

## 7 | CONCLUSION

There are many unanswered questions that stymie a strong conclusion about whether optimism is good or bad for people. In general, when measured as a trait (e.g., dispositional optimism), optimism seems to largely act as a protective resource—encouraging people to participate in positive behaviors, engage in more productive problem solving, or simply feel happier (Forgeard & Seligman, 2012). However, optimism, when measured as a prediction of a

specific, positive outcome (e.g., hoping for a good grade on a specific test; Sweeny & Shepperd, 2010), may not always be helpful. When measured in this way, optimism can lead to disappointment, and people have learned to “sober up” in order to avoid negative consequences (Sweeny & Krizan, 2013). Optimism can also be maladaptive when it is unrealistic, leading us to believe that we are at less risk for negative consequences than others (Wiebe & Black, 1997), perpetuating negative behaviors. How individuals learn to adapt their optimism throughout life is still largely unclear. In general, optimism changes throughout the lifespan in an inverse-U shape, in which people are most optimistic in mid-life. Although research has found that life events evaluated positively may increase optimism, few studies have strong, qualitative information about these events. In order to more effectively answer this question, future research regarding optimism and major life events needs to account for the specific context in which major life events occur.

It is clear that the benefits of optimism are largely contextual. Future work on optimism should clarify its role within everyday life and make further distinctions about what sort of optimism is helpful—or hurtful—and when.

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## ENDNOTE

<sup>1</sup> It is important to briefly distinguish optimism from similar concepts, like hope, positive thinking, and self-efficacy. While hope and optimism share much conceptual ground (i.e., they both involve a positive outlook for the future), some work has found that optimism has a stronger connection to positive reappraisal and coping strategies (Bryant & Cvigros, 2004). In turn, hope has a stronger connection to one's belief in their own competency and abilities (Bryant & Cvigros, 2004). In the literature, positive thinking and optimism are occasionally used interchangeably; positive thinking has been theorized as a facet of optimism and vice versa: with optimism as a facet of positive thinking (Scheier & Carver, 1993). In general, the two concepts each center around holding positive expectancies about the future (Scheier & Carver, 1993). Worth noting, it is also often the case the optimism predicts positive outcomes over-and-above the contribution of demographic variables like intelligence and household income (e.g., Daukantaitė & Zukauskienė, 2012).

## REFERENCES

- Achat, H., Kawachi, I., Spiro, A., DeMolles, D. A., & Sparrow, D. (2000). Optimism and depression as predictors of physical and mental health functioning: The normative aging study. *Annals of Behavioral Medicine*, 22(2), 127–130.
- Andersson, G. (1996). The benefits of optimism: A meta-analytic review of the life orientation test. *Personality and Individual Differences*, 21(5), 719–725.
- Aspinwall, L. G., & Brunhart, S. M. (1996). Distinguishing optimism from denial: Optimistic beliefs predict attention to health threats. *Personality and Social Psychology Bulletin*, 22(10), 993–1003.
- Assad, K. K., Donnellan, M. B., & Conger, R. D. (2007). Optimism: An enduring resource for romantic relationships. *Journal of Personality and Social Psychology*, 93(2), 285–297.
- Bleidorn, W., Hopwood, C. J., & Lucas, R. E. (2018). Life events and personality trait change. *Journal of Personality*, 86(1), 83–96.
- Bleidorn, W., Klimstra, T. A., Denissen, J. J. A., Rentfrow, P. J., Potter, J., & Gosling, S. D. (2013). Personality maturation around the world. *Psychological Science*, 24(12), 2530–2540.
- Boehm, J. K., Chen, Y., Koga, H., Mathur, M. B., Vie, L. L., & Kubzansky, L. D. (2018). Is optimism associated with healthier cardiovascular-related behavior? *Circulation Research*, 122(8), 1119–1134.
- Briley, D. A., & Tucker-Drob, E. M. (2014). Genetic and environmental continuity in personality development: A meta-analysis. *Psychological Bulletin*, 140(5), 1303–1331.
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009). A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, 77(6), 1042–1054.

- Bryant, F. B., & Cvengros, J. A. (2004). Distinguishing hope and optimism: Two sides of a coin, or two separate coins? *Journal of Social and Clinical Psychology, 23*(2), 273–302.
- Carrillo, A., Rubio-Aparicio, M., Molinari, G., Enrique, Á., Sánchez-Meca, J., & Baños, R. M. (2019). Effects of the best possible self intervention: A systematic review and meta-analysis. *PLoS One, 14*(9), e0222386.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist, 54*(3), 165–181.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267–283.
- Chang, E. C., & Asakawa, K. (2003). Cultural variations on optimistic and pessimistic bias for self versus a sibling: Is there evidence for self-enhancement in the West and for self-criticism in the East when the referent group is specified? *Journal of Personality and Social Psychology, 84*(3), 569–581.
- Chang, E. C., Asakawa, K., & Sanna, L. J. (2001). Cultural variations in optimistic and pessimistic bias: Do Easterners really expect the worst and Westerners really expect the best when predicting future life events? *Journal of Personality and Social Psychology, 81*(3), 476–491.
- Chang, E. C., Chang, R., & Sanna, L. J. (2009). Optimism, pessimism, and motivation: Relations to adjustment. *Social and Personality Psychology Compass, 3*(4), 494–506.
- Chopik, W. J., Kim, E. S., & Smith, J. (2015). Changes in optimism are associated with changes in health over time among older adults. *Social Psychological and Personality Science, 6*(7), 814–822.
- Chopik, W. J., Kim, E. S., & Smith, J. (2018). An examination of dyadic changes in optimism and physical health over time. *Health Psychology, 37*(1), 42–50.
- Chopik, W. J., Kashy, D. A., & Oh, J. (2021). Individual and coordinated changes in optimism and pessimism from mid- to late life: A study of twins.
- Chopik, W. J., & Kim, E. S. (2021). Cultural differences in age-related changes in optimism.
- Chopik, W. J., & Kitayama, S. (2018). Personality change across the life span: Insights from a cross-cultural, longitudinal study. *Journal of Personality, 86*(3), 508–521.
- Chopik, W. J., Oh, J., Kim, E. S., Schwaba, T., Krämer, M. D., Richter, D., & Smith, J. (2020). Changes in optimism and pessimism in response to life events: Evidence from three large panel studies. *Journal of Research in Personality, 88*, 103985.
- Daukantaitė, D., & Bergman, L. R. (2005). Childhood roots of women's subjective well-being. *European Psychologist, 10*(4), 287–297.
- Daukantaitė, D., & Zukauskienė, R. (2012). Optimism and subjective well-being: Affectivity plays a secondary role in the relationship between optimism and global life satisfaction in the middle-aged women. Longitudinal and cross-cultural findings. *Journal of Happiness Studies, 13*(1), 1–16.
- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange A. W. Kruglanski & E. T. Higgins. (Eds.), *Handbook of theories of social psychology* (pp. 416–436). Sage Publications Ltd. <https://psycnet.apa.org/doi/10.4135/9781446249215.n21>
- Forgeard, M., & Seligman, M. (2012). Seeing the glass half full: A review of the causes and consequences of optimism. *Pratiques Psychologiques, 18*(2), 107–120.
- Gerstorf, D., & Ram, N. (2013). Inquiry into terminal decline: Five objectives for future study. *The Gerontologist, 53*(5), 727–737.
- Gerstorf, D., Ram, N., Estabrook, R., Schupp, J., Wagner, G. G., & Lindenberger, U. (2008). Life satisfaction shows terminal decline in old age: Longitudinal evidence from the German Socio-Economic Panel Study (SOEP). *Developmental Psychology, 44*(4), 1148–1159.
- Giltay, E. J., Kamphuis, M. H., Kalmijn, S., Zitman, F. G., & Kromhout, D. (2006). Dispositional optimism and the risk of cardiovascular death. *Archives of Internal Medicine, 166*(4), 431–436.
- Giltay, E. J., Zitman, F., & Kromhout, D. (2006). Dispositional optimism and the risk of depressive symptoms during 15 years of follow-up: The Zutphen Elderly study. *Journal of Affective Disorders, 91*(1), 45–52.
- Goa, G. (2015). *How do Americans stand out from the rest of the world?*. Pew Research Center.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. *Journal of Applied Sport Psychology, 14*(3), 172–204.
- Harrington, S., McGurk, M., & Llewellyn, C. D. (2008). Positive consequences of head and neck cancer: Key correlates of finding benefit. *Journal of Psychosocial Oncology, 26*(3), 43–62.
- Haynes, T. L., Ruthig, J. C., Perry, R. P., Stupnisky, R. H., & Hall, N. C. (2006). Reducing the academic risks of over-optimism: The longitudinal effects of attributional retraining on cognition and achievement. *Research in Higher Education, 47*(7), 755–779.
- Heinonen, K., Räikkönen, K., Matthews, K. A., Scheier, M. F., Raitakari, O. T., Pulkki, L., & Keltikangas-Järvinen, L. (2006). Socioeconomic status in childhood and adulthood: Associations with dispositional optimism and pessimism over a 21-year follow-up. *Journal of Personality, 74*(4), 1111–1126.

- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2–3), 61–83.
- Ji, L.-J., Zhang, Z., Osborne, E., & Guan, Y. (2004). Optimism across cultures: In response to the severe acute respiratory syndrome outbreak. *Asian Journal of Social Psychology*, 7(1), 25–34.
- Kim, E. S., Chopik, W. J., & Smith, J. (2014). Are people healthier if their partners are more optimistic? The dyadic effect of optimism on health among older adults. *Journal of Psychosomatic Research*, 76(6), 447–453.
- Leibniz, G. W. (2000). *Theodicy: Essays on the goodness of God, the freedom of man and the origin of evil*. Wipf and Stock Publishers.
- Lerner, J. S., & Tetlock, P. E. (1999). Accounting for the effects of accountability. *Psychological Bulletin*, 125(2), 255–275.
- Luhmann, M., Fassbender, I., Alcock, M., & Haehner, P. (2021). A dimensional taxonomy of perceived characteristics of major life events. *Journal of Personality and Social Psychology*, <https://doi.org/10.1037/pspp0000291>.
- Malouf, J. M., & Schutte, N. S. (2017). Can psychological interventions increase optimism? A meta-analysis. *The Journal of Positive Psychology*, 12(6), 594–604.
- Mäkikangas, A., & Kinnunen, U. (2003). Psychosocial work stressors and well-being: Self-esteem and optimism as moderators in a one-year longitudinal sample. *Personality and Individual Differences*, 35(3), 537–557.
- Mosing, M. A., Zietsch, B. P., Shekar, S. N., Wright, M. J., & Martin, N. G. (2009). Genetic and environmental influences on optimism and its relationship to mental and self-rated health: A study of aging twins. *Behavior Genetics*, 39(6), 597–604.
- Nes, L. S., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and Social Psychology Review*, 10(3), 235–251.
- Perloff, L. S., & Fetzer, B. K. (1986). Self-other judgments and perceived vulnerability to victimization. *Journal of Personality and Social Psychology*, 50(3), 502–510.
- Peterson, C. (2000). The future of optimism. *American Psychologist*, 55(1), 44–55.
- Peterson, C., Seligman, M. E., & Vaillant, G. E. (1988). Pessimistic explanatory style is a risk factor for physical illness: A thirty-five-year longitudinal study. *Journal of Personality and Social Psychology*, 55(1), 23–27.
- Plomin, R., Scheier, M. F., Bergeman, C. S., Pedersen, N. L., Nesselroade, J. R., & McClearn, G. E. (1992). Optimism, pessimism and mental health: A twin/adoption analysis. *Personality and Individual Differences*, 13(8), 921–930.
- Popova, L., & Halpern-Felsher, B. L. (2016). A longitudinal study of adolescents' optimistic bias about risks and benefits of cigarette smoking. *American Journal of Health Behavior*, 40(3), 341–351.
- Porter, E. H. (1913). *Pollyanna*. Page Company.
- Radcliffe, N. M., & Klein, W. M. (2002). Dispositional, unrealistic, and comparative optimism: Differential relations with the knowledge and processing of risk information and beliefs about personal risk. *Personality and Social Psychology Bulletin*, 28(6), 836–846.
- Renaud, J., Barker, E. T., Hendricks, C., Putnick, D. L., & Bornstein, M. H. (2019). The developmental origins and future implications of dispositional optimism in the transition to adulthood. *International Journal of Behavioral Development*, 43(3), 221–230.
- Robb, K. A., Simon, A. E., & Wardle, J. (2009). Socioeconomic disparities in optimism and pessimism. *International Journal of Behavioral Medicine*, 16(4), 331–338.
- Roth, S., & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41(7), 813–819.
- Rozanski, A., Bavishi, C., Kubzansky, L. D., & Cohen, R. (2019). Association of optimism with cardiovascular events and all-cause mortality. *JAMA Netw Open*, 2(9), e1912200.
- Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16(2), 201–228.
- Scheier, M. F., & Carver, C. S. (1993). On the power of positive thinking: The benefits of being optimistic. *Current Directions in Psychological Science*, 2(1), 26–30.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (2001). Optimism, pessimism, and psychological well-being. In E. C. Chang (Ed.), *Pessimism: Implications for theory, research, and practice*. American Psychological Association.
- Schulman, P., Keith, D., & Seligman, M. E. P. (1993). Is optimism heritable? A study of twins. *Behaviour Research and Therapy*, 31(6), 569–574.
- Schulman, P. (1999). Applying learned optimism to increase sales productivity. *Journal of Personal Selling & Sales Management*, 19(1), 31–37.
- Schutte, J. W., Valerio, J. K., & Carrillo, V. (1996). Optimism and socioeconomic status: A cross-cultural study. *Social Behavior and Personality*, 24(1), 9–18.
- Schwaba, T., Robins, R. W., Sanghavi, P. H., & Bleidorn, W. (2019). Optimism development across adulthood and associations with positive and negative life events. *Social Psychological and Personality Science*, 10(8), 1092–1101.
- Schwarzer, R. (1994). Optimism, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology and Health*, 9(3), 161–180.

- Seligman, M. E., & Schulman, P. (1986). Explanatory style as a predictor of productivity and quitting among life insurance sales agents. *Journal of Personality and Social Psychology*, 50(4), 832–838.
- Sharot, T., Korn, C. W., & Dolan, R. J. (2011). How unrealistic optimism is maintained in the face of reality. *Nature Neuroscience*, 14(11), 1475–1479.
- Sweeny, K., Carroll, P. J., & Shepperd, J. A. (2006). Is optimism always best? *Current Directions in Psychological Science*, 15(6), 302–306.
- Sweeny, K., & Krizan, Z. (2013). Sobering up: A quantitative review of temporal declines in expectations. *Psychological Bulletin*, 139(3), 702–724.
- Sweeny, K., & Shepperd, J. A. (2010). The costs of optimism and the benefits of pessimism. *Emotion*, 10(5), 750–753.
- Tetlock, P. E., & Kim, J. I. (1987). Accountability and judgment processes in a personality prediction task. *Journal of Personality and Social Psychology*, 52(4), 700–709.
- Vansteenkiste, M., & Sheldon, K. M. (2006). There's nothing more practical than a good theory: Integrating motivational interviewing and self-determination theory. *British Journal of Clinical Psychology*, 45(1), 63–82.
- Voltaire, F. (2013). *Candide, or optimism*. Penguin UK.
- Weinstein, N. D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39(5), 806–820.
- Weinstein, N. D. (1982). Unrealistic optimism about susceptibility to health problems. *Journal of Behavioral Medicine*, 5(4), 441–460.
- Weinstein, N. D., & Klein, W. M. (1996). Unrealistic optimism: Present and future. *Journal of Social and Clinical Psychology*, 15(1), 1–8.
- Weinstein, N. D., & Lachendro, E. (1982). Egocentrism as a source of unrealistic optimism. *Personality and Social Psychology Bulletin*, 8(2), 195–200.
- Weinstein, N. D., Marcus, S. E., & Moser, R. P. (2005). Smokers' unrealistic optimism about their risk. *Tobacco Control*, 14(1), 55–59.
- Wiebe, D. J., & Black, D. (1997). Illusional beliefs in the context of risky sexual behaviors. *Journal of Applied Social Psychology*, 27(19), 1727–1749.
- Yuh, J., Neiderhiser, J. M., & Reiss, D. (2010). Genetic and environmental influences on dispositional optimism and depressive symptoms in adolescence. *International Journal of Human Ecology*, 11, 15–23.
- Zaslavsky, O., Palgi, Y., Rillamas-Sun, E., LaCroix, A. Z., Schnall, E., Woods, N. F., Cochrane, B. B., Garcia, L., Hingle, M., Post, S., Seguin, R., Tindle, H., & Shrira, A. (2015). Dispositional optimism and terminal decline in global quality of life. *Developmental Psychology*, 51(6), 856.
- Zuckerman, M. (2001). Optimism and pessimism: Biological foundations. In E. C. Chang (Ed.), *Optimism and pessimism: Implications for theory, research, and practice* (pp. 169–188). American Psychological Association.

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