

# Optimism

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## Definition and History

The concepts of **optimism and pessimism** concern people's **expectations for the future**. These concepts have ties to centuries of folk wisdom and also to a class of psychological theories of motivation, called expectancy-value theories. Such theories suggest a logical basis for some of the ways in which optimism and pessimism influence people's behavior and emotions.

**Expectancy-value models** begin with the idea that behavior is aimed at attaining desired goals (Carver & Scheier, 1998). **Goals** are actions, end-states, or values that people see as being either desirable or undesirable. People try to fit their behavior to what they see as desirable. They try to stay away from what they see as undesirable. According to this theoretical orientation, unless there is a valued goal, no action occurs. The other core concept is **expectancies**: a sense of confidence or doubt about attaining the goal. If a person lacks confidence, again there is no action. Only if they have enough confidence do people engage (and remain engaged) in goal-directed effort. These ideas apply to specific values and focused confidence; they also apply to optimism and pessimism (Scheier, Carver, & Bridges, 2001). In the latter case, the sense of "confidence" versus doubt is simply broader in its focus.

From these principles come many predictions about optimists and pessimists. When confronting a challenge, optimists should be confident and persistent, even if

progress is difficult and slow. Pessimists should be more doubtful and hesitant. Adversity should even exaggerate this difference. Optimists believe adversity can be handled successfully, pessimists expect disaster. This can lead to differences in such domains as actions relating to health risks, taking precautions in risky circumstances, and persistence in trying to overcome health threats. It can also lead to differences in what coping responses people deploy when confronting a threat such as a cancer diagnosis (Carver et al., 1993; Stanton & Snider, 1993).

Behavioral responses are important, but behavior is not the only response when people confront adversity. People also experience emotions in such situations. Difficulties elicit many feelings, feelings reflecting both distress and challenge. The balance among such feelings differs between optimists and pessimists. Because **optimists expect good outcomes**, they are likely to experience a more positive mix of feelings. Because **pessimists expect bad outcomes**, they should experience more negative feelings—*anxiety, sadness, and despair*. A good deal of research has found evidence of such emotional differences (see Scheier et al., 2001).

There is even evidence linking pessimism to cancer survival (Schulz et al., 1996), though the reason for the association is far from clear. Patients diagnosed with recurrent cancer were followed for 8 months, by which time approximately one-third had died. Earlier all had completed a measure of pessimism. Controlling for site of cancer and symptoms at baseline, persons with a pessimistic orientation were less likely to be alive at the 8-month follow-up.

### Methodological Issues

#### Related Constructs

One methodological issue concerning optimism is that several other constructs exist that relate to optimism but are not quite the same as optimism. Two that are closely related to each other are the sense of control (e.g., Thompson, 2002) and the sense of personal efficacy (e.g., Bandura, 1997). These concepts have strong overtones of expecting desired outcomes, as does optimism. However, there is a difference in the assumptions made (or not made) about how the desired outcomes are expected to occur. **Self-efficacy** is a concept in which the self as a causal agent is paramount. If people have high self-efficacy expectancies, they presumably believe that their personal efforts (or personal skills) are what will determine the outcome. If, for example, you believe you have the personal fortitude to overcome the side-effects of chemotherapy, you are more likely to struggle harder to do so. The same is true of the concept of control. When people see themselves as being in control, they believe that the desired outcome will occur through their own personal efforts.

In contrast to this emphasis, optimism takes a broader view of the potential causal forces assumed to be at work. People can be optimistic because they are immensely talented, because they are hard-working, because they are blessed, because they are lucky, because they have friends in the right places, or any combination of these or other factors that produce good outcomes (cf. Murphy et al., 2000). For example, a person could be optimistic about being able to overcome side effects of chemotherapy either because of her personal fortitude or because her oncologist has a useful bag of tricks for dealing with side-effects. The latter would be optimistic but not because of the role of self as the agent of the outcome.

Without question there are some circumstances in which personal efficacy is the

key determinant of a desired outcome. There are also cases in which the goal is explicitly to do something yourself. In the latter case, only a personally determined success is the desired end-point, so personal control is critical. However, there are also many cases in which the causal determinant of the outcome is far less important than the occurrence of the outcome (for broader discussion see Carver, Harris, et al., 2000). Those cases are also included within the optimism construct.

Another construct that resembles optimism, and which has its own substantial literature, is **hope** (Snyder, 1994, 2002). Hope is said to have two parts. One part is the person's perception of the existence of pathways that are needed for the person to reach his or her goals. The second is the person's level of confidence of being able to use those pathways to reach the goals. Thus, hope has been characterized (e.g., Snyder et al., 1991) as reflecting both the will (confidence) and the ways (pathways). The confidence dimension is similar to optimism, though with more overtones of personal agency. The pathway component is a quality that the optimism concept doesn't address. You can see, though, that a person who sees many pathways to a particular desired outcome may be especially likely to remain persistent if one particular pathway is blocked.

Finally, it has also been noted that pessimism has a considerable resemblance to the construct of **neuroticism** (Smith, Pope, Rhodewalt, & Poulton, 1989). Neuroticism (or emotional instability) is defined by a tendency to worry, to experience unpleasant emotions, and to be pessimistic. Smith et al. (1989) found that a commonly used measure of optimism related strongly to a measure of neuroticism, a finding also reported by Marshall and Lang (1990). Smith et al. also found that correlations between optimism and several outcome variables were sharply reduced when neuroticism was controlled.

Scheier, Carver, and Bridges (1994) later found that the overlap between constructs was more limited, but noted that the existence of a relationship was unsurprising, inasmuch as part of neuroticism is a sense of pessimism.

### Bipolar or Dual Unipolar?

A second methodological issue concerns the fact that measures of optimism versus pessimism sometimes separate into two factors, one defined by **positively framed items** (e.g., “I’m always optimistic about my future”), the other defined by **negatively framed items** (e.g., “I hardly ever expect things to go my way”). It has been shown that the two subscales have somewhat different personality correlates (Marshall, Wortman, Kusulas, Hervig, & Vickers, 1992). Some studies (though not others) have found that one subscale is more important than the other in the prediction of relevant outcomes (Robinson-Whelen, Kim, MacCallum, & Kiecolt-Glaser, 1997), though which subscale is more important varies from study to study.

The question is what to make of this difference between the two subsets of items. Is this purely a methodological artifact, caused by the reverse phrasing of half the items, together with the general tendency toward agreeing in responding? Or does one item set provide a more valid measure of the underlying construct? When the item subsets have differed in their prediction, it generally (though not always) has been the negative items that predicted better. A summary recommendation is often that the subsets be examined separately, with results reported separately only if the two subsets of items behave differently.

### Measures

Individual differences in optimism versus pessimism can be measured by several

devices. The measures have somewhat different focuses, but in large part they share the same underlying conception, deriving from the expectancy-value model of behavior.

### Life Orientation Test

One early measure of optimism and pessimism was the **Life Orientation Test**, or LOT (Scheier & Carver, 1985). The LOT consists of 8 coded items, plus fillers. Half the items are framed in an optimistic manner, half in a pessimistic manner, and respondents indicate their extent of agreement or disagreement with each item on a multi-point scale. The LOT has good psychometric properties, in most respects. However, it was criticized because the optimistic and pessimistic item sets form two factors that are not always strongly inter-related (e.g., Chang, D’Zurilla, & Maydeu-Olivares, 1994; Marshall & Lang, 1990). Further, it gradually became apparent that some of the items asked about things slightly different from expectations per se.

Accordingly, the LOT was superseded by the **Life Orientation Test-Revised**, or LOT-R (Scheier et al., 1994). The LOT-R is briefer than the original (6 coded items, 3 framed in each direction). The revision omitted or rewrote items that did not focus explicitly on expectancies. The LOT-R has good internal consistency (Cronbach’s alpha runs in the high .70s to low .80s) and is quite stable over time. Because of the extensive item overlap between the LOT and the LOT-R, correlations between the two scales are very high (Scheier et al., 1994). However, the positive and negative item subsets of the LOT-R are more strongly related to each other than were those of the LOT. Given these various considerations, the LOT-R is preferred over the original LOT.

Both the LOT and the LOT-R provide continuous distributions of scores. Distributions tend to be skewed toward the optimistic, but not greatly so. Researchers

often refer to optimists and pessimists as though they were distinct groups, but talking that way is usually just a matter of convenience. There is no specific criterion for saying a person is an optimist or a pessimist. Rather, people range from very optimistic to very pessimistic, with most falling somewhere in the middle. Most research using these instruments uses them to create continuous distributions, with optimists and pessimists being defined relative to each other.

### Generalized Expectancy of Success Scale

Another measure of optimism is the **Generalized Expectancy of Success Scale**, or GESS (Fibell & Hale, 1978). This scale presents respondents with a series of situations, some specific, others more general, and asks them to evaluate their likelihood of experiencing a success in each. The stem for each item is “In the future I expect that I will ...” with response options ranging from “highly improbable” to “highly probable.” Most of the items refer to successful outcomes, with a few (reverse scored) relating to failures. The situations range fairly widely. Perhaps in part for this reason, its authors found the GESS to have 4 factors, each of which focused around one domain (Fibell & Hale, 1978).

The GESS underwent a minor revision in 1992 (Hale, Fiedler, & Cochran, 1992). In the revision, some items were rewritten, several new items were created, and the resulting item set was distilled to 25 items. Smith, Pope, Rhodewalt, and Poulton (1989) reported correlations of .51 and .55 between the original GESS and the LOT in two samples. Hale et al. (1992) reported a correlation of .40 between the GESS-R and the LOT. These data suggest that the two measures are assessing somewhat different qualities.

### Optimism-Pessimism Scale

Another measure that might be used is the **Optimism-Pessimism Scale**, or OPS (Dember, Martin, Hummer, Howe, & Melton, 1989). The OPS was developed from the assumption that separate tendencies regarding optimism and pessimism should be measured separately. The OPS is considerably longer than the measures just described, with 18 items reflecting optimism, 18 items reflecting pessimism, and 20 fillers. Dember et al. reported a separation among the subsets of items representing optimism and pessimism, but they did not conduct a factor analysis of the item set. Chang et al. (1994) did so, and found multiple factors. On statistical grounds they suggested that three factors be retained, but found the factors not readily interpretable. After further analysis, they concluded that the OPS is a complex, multidimensional instrument which is difficult to interpret theoretically.

### Attributional Style

Measures of optimism focus on expectancies, but expectancies are sometimes measured indirectly. This approach to optimism relies on the assumption that expectancies for the future derive from people's **view of the causes for events** in the past (Seligman, 1991). If a person's explanations for bad outcomes in the past emphasize causes that are stable, the person will expect more bad outcomes in that domain, because the cause is relatively permanent and thus likely to remain in force. If attributions for past bad outcomes emphasize causes that are unstable, the outlook for the future may be brighter, because the cause may no longer be in force. For example, if you attribute a failure to a lack of ability, you will expect to continue to fail in that area of endeavor; if you attribute it to not getting enough sleep the night before, you won't. If explanations



for bad outcomes are global (apply across aspects of life), expectancies for the future in many domains will be for bad outcomes, because the causal forces are at work everywhere. If the explanations are specific, the outlook for other areas of life may be brighter, because the causes don't apply. For example, if you perceive that you failed at something because you are generally inept, you will expect to fail in all domains; if you perceive that you simply lack talent in that one particular area, you won't.

It is often assumed that people have “**explanatory styles,**” which bear on the person's whole life space. The theory behind explanatory style (Seligman, 1991) holds that optimism and pessimism are defined by patterns of explanation for bad outcomes that are unstable and specific versus stable and global, respectively. Explanatory style is assessed by a questionnaire that asks people to imagine a series of hypothetical negative events happening to them (Peterson et al., 1982). Respondents write down what they would see as the likely cause for the event and they rate that cause on attributional dimensions.

Another method of assessing attributional style is called **Content Analysis of Verbal Explanations**, or CAVE technique (Peterson, Schulman, Castellon, & Seligman, 1992). This procedure involves assembling a sample of written or spoken material from a person—letters, diaries, interviews, speeches, and so on—that contain statements about explanations for negative outcomes, and analyzing the statements for their attributional qualities. The CAVE technique is quite flexible; it can be applied to archival data, even records pertaining to people who are no longer alive.

### Hope Scale

The **Hope scale** (Snyder et al., 1991) is a set of 4 items reflecting agency, 4 items

reflecting perceptions of pathways, and 4 filler items. As noted earlier, the pathways subscale is a little divergent away from optimism, but the agency subscale is fairly similar to optimism. Although the theory underlying the agency scale emphasizes personal causal influence, that role is less salient in the items themselves. One item expresses energetic goal pursuit; 2 items report a history of success; the fourth item is somewhat more ambiguous, but also seems to express a sense of prior success. To the extent that assessment of prior success can be taken as an index of confidence of future success, 3 of the 4 items seem to imply confidence for the future, a content that is consistent with the optimism construct.

#### Usefulness of Constructs and Measures

The constructs of optimism (assessed both directly as expectancies and indirectly as attributional tendencies) and hope have been examined in a great many studies. They have proven to be quite useful as predictors of behavior and emotional experiences in a wide variety of settings (Bandura, 1997; Scheier et al., 2001; Peterson & Bossio, 2001; Snyder, 2002). There is little question that they are useful, in terms of accounting for substantial variance in well-being (Carver et al., 2005). There remains some disagreement, however, about whether they are more useful as constructs than are competitors, such as control, self-efficacy, extraversion, and neuroticism.

It might be argued that the disagreement should be easy to resolve. Whichever construct does a better job of predicting relevant outcomes should be the construct of preference. However, that answer turns out to be too simplistic. There are several problems. One problem is that there may be diverse relevant outcomes, some of which are predicted better by one construct, others by another construct. Another problem is that

even if prediction was better for one measure than for another, it might mean that the one measure is better than the other, not that one construct is better than the other.

Which construct a researcher prefers depends in part on which theoretical background the researcher finds most congenial. Given that there is a great diversity among theoretical analyses of individual differences (Carver & Scheier, 2004), different people are likely to gravitate to different constructs. Those who are most comfortable with the 5-factor model of personality will tend to prefer extraversion and neuroticism; those who are most fond of views that emphasize human agency will tend to prefer control, self-efficacy, or hope. What is clearest is not which specific construct is best, but rather that this family of constructs is very useful. It will take more work to sort out whether one of them is more useful than another in a given context.

### Conclusions

Optimism and related constructs have been studied a great deal over the past two decades, in a large number of behavioral contexts. They have proven to be very useful in predicting behavior, emotional responses, coping tendencies, and adequacy of adjustment to difficult life circumstances. They are often referred to as resource or resilience variables, because they represent the presence of motivational properties that permit people to sustain and even thrive under adversity.

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## Appendices

### LOT-R

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

- A = I agree a lot
- B = I agree a little
- C = I neither agree nor disagree
- D = I DISagree a little
- E = I DISagree a lot

1. In uncertain times, I usually expect the best.
- [2. It's easy for me to relax.]
3. If something can go wrong for me, it will.
4. I'm always optimistic about my future.
- [5. I enjoy my friends a lot.]
- [6. It's important for me to keep busy.]
7. I hardly ever expect things to go my way.
- [8. I don't get upset too easily.]
9. I rarely count on good things happening to me.
10. Overall, I expect more good things to happen to me than bad.

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Note: Items 2, 5, 6, and 8 are fillers. Responses to "scored" items are to be coded so that high values imply optimism. Researchers interested in testing the potential difference between affirmation of optimism and disaffirmation of pessimism should compute separate subtotals of the relevant items.



## **HOPE SCALE (The Goals Scale)**

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.

1=Definitely False

2=Mostly False

3=Mostly True

4=Definitely True

1. I can think of many ways to get out of a jam.
2. I energetically pursue my goals.
3. I feel tired most of the time.
4. There are lots of ways around any problem.
5. I am easily downed in an argument.
6. I can think of many ways to get the things in life that are most important to me.
7. I worry about my health.
8. Even when others get discouraged, I know I can find a way to solve the problem.
9. My past experiences have prepared me well for my future.
10. I've been pretty successful in life.
11. I usually find myself worrying about something.
12. I meet the goals that I set for myself.

Notes: When administered, the authors have called this the "Goals Scale" rather than the "Hope Scale." Items 3, 5, 7, & 11 are not used for scoring. The Pathways subscale score is the sum of items 1, 4, 6, & 8: the agency subscale is the sum of items 2, 9, 10, & 12. Hope is the sum of the 4 Pathways and 4 Agency items. The original studies used a 4-point response continuum, but to encourage more diversity in scores in more recent studies, the authors have used the following 8-point scale:

1 = Definitely False

2 = Mostly False

3 = Somewhat False

4 = Slightly False

5 = Slightly True

6 = Somewhat True

7 = Mostly True

8 = Definitely True