Optimistic Explanatory Style

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Abstract and Keywords

Research has linked optimism to higher levels of subjective well-being, to positive mood and good morale, to perseverance and effective problem solving, to achievement and success in a variety of domains, to popularity, to good physical health, to reduced suicidal ideation, and even to long life and freedom from trauma. In this chapter, we review what is known about one cognate of optimism—"explanatory style," how people habitually explain the causes of events that occur to them. We trace the history of explanatory style research, focusing on the neglected question of the origins of explanatory style. Finally, we conclude by addressing issues that need to be considered by positive psychologists doing research on explanatory style. Research still focuses too much on negative outcomes, ignoring the premise of positive psychology: What makes life most worth living needs to be examined in its own right.

Keywords: attributional reformulation, explanatory style, learned helplessness, optimism, pessimism

Optimism has a checkered reputation. Consider Voltaire's Dr. Pangloss, who blathered that this is "*le meilleur des mondes possibles*" ("the best of all possible worlds"), even after facing ceaseless hardships, calamities, and evil. Through his fictional character's buoyant assertion, Voltaire was lampooning the optimistic philosophy of Gottfried Wilhelm Leibniz who said, "God assuredly always chooses the best." Or consider the eponymous heroine of the 1913 novel *Pollyanna* who played the "The Glad Game" when bad things happened. No matter what was occuring in her life, Pollyanna found a reason to be glad. The novel was a success in its era, but later—in the throes of the Great Depression—there was a backlash against it. We now know the word "Pollyanna" mainly as a pejorative used to describe an optimist who is unrealistic.

Optimism has long given thoughtful people pause because of connotations of naïveté and denial, but with the growth of the field of positive psychology, optimism's reputation has improved. Research has linked optimism to higher levels of subjective well-being, to positive mood and good morale, to perseverance and effective problem solving, to achievement and success in a variety of domains, to popularity, to good physical health, to reduced suicidal ideation, and even to long life and freedom from trauma (Forgeard & Seligman, 2012; Hirsch, et al., 2009; Peterson, 2000; Peterson & Bossio, 1991; Peterson & Park, 2007; Peterson & Steen, 2002; Seligman, 1990).

Our purpose in this chapter is to review what is known about one cognate of optimism —"explanatory style"—how people habitually explain the causes of events that occur to them. We discuss studies on explanatory style, focusing on the neglected question "What are the origins of explanatory style?" Finally, we conclude by addressing issues that warrant consideration by positive psychologists doing research on explanatory style (Peterson, 2000).

History: From Learned Helplessness to Explanatory Style

Psychologists studying animal learning were the first to describe learned helplessness (Peterson, Maier, & Seligman, 1993). Researchers immobilized a dog and exposed it to electric shocks that could be neither avoided nor escaped. Twenty-four hours later, the dog was placed in a situation in which shock could be terminated by a simple response. The dog did not make this response, however, and just sat, passively enduring the shock. This behavior was in marked contrast to dogs in a control group who reacted vigorously to the shock and learned how to make it stop.

The passive dog had learned to be helpless: When originally exposed to uncontrollable shock, it learned that nothing it did mattered. The shocks came and went independently of the dog's behaviors. The learning of response–outcome independence progressed to an

expectation of future helplessness that was then generalized to new situations to produce motivational, cognitive, and emotional deficits. The deficits that follow in the wake of uncontrollability have come to be known as the “learned helplessness phenomenon,” and the associated cognitive explanation as the “learned helplessness model.”

Human Helplessness

Psychologists interested in human problems were quick to see the parallels between learned helplessness as produced by uncontrollable events in the laboratory and maladaptive passivity as it exists in the real world. Thus, researchers began several lines of research on learned helplessness in people (Peterson et al., 1993).

In one study, helplessness in people was produced in the laboratory much as it was in animals, by exposing them to uncontrollable events and observing the effects. Unsolvable problems usually were substituted for uncontrollable electric shocks, but the critical aspects of the phenomenon remained: Following uncontrollability, people show a variety of deficits.

In other studies, researchers documented further similarities between the animal phenomenon and what was produced in the human laboratory. Uncontrollable bad events made anxiety and depression more likely, but previous exposure to controllable events immunized people against learned helplessness. Similarly, forcible exposure to contingencies (that is, demonstrating to the subjects that certain responses could now produce different outcomes) reversed helplessness deficits.

Several aspects of human helplessness differ from animal helplessness. First, uncontrollable bad events are more likely than uncontrollable good events to produce helplessness among human beings, probably because people are more readily able to devise coherent (if not veridical) accounts for why good things happen to them. Thus, the intriguing phenomenon among animals of “appetitive helplessness” (helplessness that develops when rewards occur no matter what the animal does) may have no reliable counterpart among people. People may be protected to some degree from appetitive helplessness because of their tendency to believe that they are responsible for the good things that happen to them.

More generally, humans have an unsurpassed inclination and ability to make meaning out of life as it unfolds. As captured by the learned helplessness model, animals can learn that they do or do not have control over events. But people are chronic storytellers and meaning makers, construing events in ways far beyond their literal controllability. One such story that people may tell in the wake of positive events is that these are evidence of their “good luck.” Day and Maltby (2003) found that a belief in good luck is associated with optimistic traits and a tendency to reject maladaptive irrational beliefs, which in turn lead to greater psychological well-being.

While observing human behaviors, it is important to avoid labeling them as signs of helplessness when they are not. Rothbaum, Weisz, and Snyder (1982) suggested that there are circumstances in which passivity, withdrawal, and submissiveness among people are not prima facie evidence of diminished personal control. Rather, these reactions may represent alternative forms of control achieved by aligning oneself with powerful external forces. For example, religious faith can protect people from feeling helpless in the wake of natural disasters, war, and other traumatic events. Relying on religious faith and believing that prayer produces real-world results may be better categorized as active rather than passive strategies.

A second asymmetry between human and animal vulnerability to learned helplessness concerns the phenomenon of "vicarious helplessness." Problem-solving difficulties can be produced in people if they simply see someone else confront uncontrollability (Brown & Inouye, 1978). In contrast, animals do not appear to be vulnerable to vicarious helplessness. Among humans, vicarious helplessness extends the potential for helpless behavior in the natural world. The parameters of this phenomenon have not been investigated, and questions arise regarding whether we can immunize people against vicarious helplessness or undo its effects via therapy.

A third difference between human and animal aspects of helplessness is that small groups of people can be made helpless by exposure to uncontrollable events. Groups working at an unsolvable problem later showed problem-solving deficits relative to another group with no previous exposure to uncontrollability (Simkin, Lederer, & Seligman, 1983). There is no known counterpart to group-level helplessness among animals. Group-level helplessness is not simply a function of individual helplessness produced among group members—when working alone, individual members of helpless groups show no deficits. Perhaps these results can be generalized to larger groups, including complex organizations, or even entire cultures. Again, the real-life implications of this phenomenon are intriguing, and future research seems indicated.

In another study, researchers proposed that various failures of human adaptation such as depression were analogous to learned helplessness. They then investigated the similarity between these failures and learned helplessness (Peterson et al., 1993). There are three criteria with which to assess the presence of learned helplessness:

1. *Objective noncontingency.* The applied researcher must take into account the contingencies between a person's actions and the outcomes that he or she experiences. Learned helplessness is present only when there is no contingency between actions and outcomes. In other words, learned helplessness must be distinguished from extinction (where active responses once leading to reinforcement no longer do so) and from learned passivity (where active responses are contingently punished and/or passive responses are contingently reinforced).

2. *Cognitive mediation.* Learned helplessness also involves a characteristic way of perceiving, explaining, and extrapolating contingencies. The helplessness model specifies cognitive processes that make helplessness more rather than less likely following uncontrollable events (Peterson & Park, 2007). If measures of these processes are not sensibly related to ensuing passivity, then learned helplessness is not present.

3. *Cross-situational generality of passive behavior.* Finally, learned helplessness is shown by passivity in a situation different from the one in which uncontrollability was first encountered. Does the individual give up and fail to initiate actions that might allow him or her to control this situation? It is impossible to argue that learned helplessness is present without the demonstration of passivity in new situations. Other consequences may also accompany the behavioral deficits that define the learned helplessness phenomenon: cognitive retardation, low self-esteem, sadness, reduced aggression, immunosuppression, and physical illness.

In terms of these criteria, the best-fitting applications of learned helplessness include depression; academic, athletic, and vocational failure; worker burnout; deleterious effects of crowding, unemployment, noise pollution, chronic pain, aging, mental retardation, and epilepsy; and passivity among ethnic minorities (Peterson et al., 1993, Table 7-1). Other popular applications are unproven or simply wrong, usually because the particular examples of passivity are better viewed as instrumental—that is, the passive responses have been contingently reinforced.

For example, victims of child abuse or domestic violence have been characterized as having “learned” to be helpless. A better argument is that they have learned to hold still. Such passivity is problematic when generalized, but the underlying process is not the one described by the learned helplessness model. The practical importance of distinguishing passivity due to learned helplessness from other types of passivity is that interventions to prevent or undo passive behavior need to be informed by the mechanisms at work.

As research ensued, it became clear that the original learned helplessness explanation was too simple, failing to account for the range of reactions that people display to uncontrollable events. Some people show the hypothesized deficits across time and situations, whereas others do not. Furthermore, failures of adaptation that the learned helplessness model presumably explains, such as depression, are often characterized by loss of self-esteem, about which the model is silent.

Attributional Reformulation and Explanatory Style

In an attempt to resolve these discrepancies, Abramson, Seligman, and Teasdale (1978) reformulated the helplessness model as applied to people by melding it with attribution theory. They explained the contrary findings by proposing that people ask themselves why uncontrollable (bad) events happen. The person’s answer then sets parameters for subsequent helplessness. If the causal attribution is stable (“It’s going to last forever”),

then induced helplessness is long-lasting; if unstable (“Soon it will get better”), then it is transient. If the causal attribution is global (“It’s going to undermine everything”), then subsequent helplessness is manifested across a variety of situations; if specific (“It’s not all bad”), helplessness is circumscribed. If the causal attribution is internal (“It’s all my fault”), the person’s self-esteem drops following uncontrollability; if external (“It’s not my fault”), self-esteem is left intact.

These hypotheses comprise the “attributional reformulation” of helplessness theory. This new theory left the original model in place because uncontrollable events were still hypothesized to produce deficits when they gave rise to an expectation of response–outcome independence (i.e., “Nothing I do makes a difference”). However, the attributional reformulation theory postulated that the nature of these deficits was influenced by the causal attribution offered by the individual.

In some cases, the situation itself shapes the explanation made by the person, and the extensive social psychology literature on causal attributions documents many influences on the process. For example, the causal attributions that a student makes after failing a test would be influenced by knowing how other students performed on the test. In other cases, the person relies on his or her habitual way of making sense of events that occur, what is called one’s “explanatory style” (Peterson & Seligman, 1984). People tend to offer similar explanations for disparate bad (or good) events. Explanatory style is therefore a distal, although important, influence on helplessness and the failures of adaptation that involve helplessness. An explanatory style characterized by stable, global, and internal explanations for bad events has been described as “pessimistic,” and the opposite style—unstable, specific, and external explanations for bad events—has been described as “optimistic” (Buchanan & Seligman, 1995).

According to the attributional reformulation, explanatory style does not cause problems but rather is a dispositional risk factor. Explanatory style influences how a person responds to some uncontrollable situations more than others. Sometimes the situation itself shapes the attributions that a person makes about why the event is happening and what it means. When a person encounters an uncontrollable event and the situation itself does not shape the way the person makes sense of the uncontrollability, explanatory style influences how the person responds.

In both the original and reformulated versions of the helplessness model, generalized expectations of response–outcome independence are the proximal cause of helplessness. Research in this tradition, however, has rarely looked at this mediating variable. Researchers instead measure explanatory style and correlate it with helplessness-related outcomes such as depression, illness, and failure. Invariably, those with an optimistic explanatory style fare better than those with a pessimistic explanatory style.

As explanatory style research has progressed and theory has been modified, the internality dimension (i.e., “It’s me” versus “It’s external to me”) has become of less interest (Abramson, Metalsky, & Alloy, 1989). Internality has more inconsistent correlates than stability or globality, it is less reliably assessed, and there are theoretical grounds

for doubting its direct impact on expectations per se (Peterson, 1991). Moreover, internality may well conflate self-blame and self-efficacy, which explains why it fares poorly in empirical research.

Measures of Explanatory Style

Explanatory style typically is measured with a self-report questionnaire called the Attributional Style Questionnaire (ASQ; Peterson et al., 1982). In the ASQ, respondents are presented with hypothetical events involving themselves and then asked to provide "the one major cause" of each event if it were to happen. Respondents then rate these provided causes along the following dimensions: (1) Externality (how much respondents see themselves as responsible for the event versus the situation or other people); (2) Stability (how temporary versus long-lasting the cause is) and (3) Globality (the extent to which the cause has a limited versus broad impact on life domains). Ratings are combined, keeping separate those for bad events and those for good events. Explanatory style based on bad events usually has more robust correlates than explanatory style based on good events, although correlations are typically in the opposite directions. For example, when people make internal, stable, and global attributions about bad events, there is a correlation with increased symptoms of depression. Yet when people make internal, stable, and global attributions about good events, there is a weaker correlation with the absence of depressive symptoms (Peterson, 1991).

A second way of measuring explanatory style is with a content analysis procedure—the CAVE (an acronym for "content analysis of verbatim explanations")—that allows written or spoken material to be scored for naturally occurring causal explanations (Peterson, Schulman, Castellon, & Seligman, 1992). Researchers identify explanations for bad or good events, extract them, and have judges rate them along the scales of the ASQ. The CAVE makes it possible to conduct longitudinal studies after the fact, as long as appropriate material can be located from early in the lives of individuals for whom long-term outcomes of interest are known.

Changing Explanatory Style

We know that cognitive therapy can change an individual's explanatory style from pessimistic to optimistic, reducing the extent of depressive symptoms (Seligman et al., 1988). We also know that cognitive-behavioral interventions that impart problem-solving skills can lead individuals to explain events more optimistically, preventing depression in the future (Gillham, Reivich, Jaycox, & Seligman, 1995).

For example, the Penn Resiliency Program (PRP) is a 12-session curriculum administered by school teachers and guidance counselors (Reivich, Gillham, Chaplin, & Seligman,

2005). The program contains two main components, one cognitive and the other based on social problem-solving techniques.

In the cognitive component, core cognitive techniques are translated, through the use of cartoons and skits, into a language that adolescents can understand and apply to their own lives. Group facilitators begin by teaching students about the link between thoughts and feelings. Then students learn how to evaluate the beliefs they have learned to recognize. Skits are used to help find differences between the beliefs of fictitious characters who are thriving and those who are not. By the end of these lessons, students have learned that pessimistic explanations of bad events are likely to result in undesirable outcomes.

In the social problem-solving component, students learn seven skills to help them be more effective in the world: assertiveness, negotiation, relaxation, avoidance of procrastination, social skills, decision-making, and problem solving.

A meta-analysis of PRP's effect on depression found that adolescents who participated in the program showed significantly reduced depressive symptoms for at least one year following completion (Brunwasser, Gillham, & Kim, 2009). Gillham et al. (2012) found that the PRP improved adolescents' symptoms of anxiety and active coping skills as well as depression and hopelessness. Among middle-school students with conduct problems, participating in the PRP helped to reduce parent-reported conduct and internalizing behaviors (Cutuli et al., 2013; Cutuli, Chaplin, Gillham, Reivich, & Seligman, 2006).

The PRP has also been extended for use in colleges, corporations, government agencies, and public safety organizations such as fire, police, security, and emergency medical services (IOM, 2012; Reivich & Shatté, 1999; Seligman, Schulman, & Tryon, 2007). In the largest application of the PRP, the United States Army includes the curriculum as part of the Comprehensive Soldier Fitness program (Reivich, Seligman, & McBride, 2011). Over 1 million soldiers have already completed the intervention, and an evaluation of the program suggests that it has been successful in increasing optimism as well as other positive outcomes such as reducing the likelihood of being diagnosed with a mental health or substance abuse problem (Harms, Herian, Krasikova, Vanhove, & Lester, 2011, 2013).

Origins of Explanatory Style

Research suggests that explanatory style is malleable, but what initially sets it in place? This question has not been adequately explored. We find isolated studies by various investigators documenting diverse influences on explanatory style. In few of these studies has more than one influence been investigated at a time. Hence, we cannot say with

confidence what are the more important versus less important influences on explanatory style. Nor can we say how different influences interact.

Tools for assessing explanatory style in children such as the CASQ-R (CASQ-R; Kaslow & Nolen-Hoeksema, 1991) had been limited to children ages 9–12 years old. The CASI (Conley, Haines, Hilt, & Metalsky, 2001), which can be used for children as young as age five, is proving to be a helpful tool for investigating the origins of explanatory style. What follows is an overview of what is currently known about the natural history of explanatory styles.

Genetics

Explanatory style is influenced by genetics. Schulman, Keith, and Seligman (1993) found that the explanatory styles of adult monozygotic twins were more highly correlated than the explanatory styles of dizygotic twins. Subsequent large-scale, population based studies of the explanatory styles of adolescent monozygotic twins, dizygotic twins, and siblings confirmed that explanatory style is moderately heritable in the population (Lau and Eley, 2008; Lau, Rijsdijk, and Eley, 2006; Waszczuk, Coulson, Gregory, and Eley, 2016).

It is important to clarify that these findings do *not* mean that there is an “optimism gene.” Genes may be indirectly responsible for the concordance of explanatory style among monozygotic twins, however. For example, genes influence attributes like intelligence and physical attractiveness, which in turn lead to more positive (and fewer negative) outcomes, which in turn may encourage an optimistic explanatory style.

Genetic influences aside, we presume that explanatory style is either acquired as a whole (e.g., when a child hears an explicit causal message from a parent or teacher) or abstracted from ongoing experience (e.g., when an individual ruminates on the meaning of failure or trauma and draws a causal conclusion). We can identify the former mode of acquisition as direct, and the latter as indirect, although the line between these may be blurred in actual instances.

Parents

Researchers have explored the relationship between the explanatory styles of parents and their offspring. Attributions by mothers and their children are usually the focus. The relevant data prove inconclusive, with some researchers finding convergence between the causal attributions of mothers and their children, but others not (Peterson & Steen, 2002). Although few studies have looked at the explanatory styles of fathers and their children, Seligman and colleagues (1984) found that fathers’ explanatory styles were *not* related to those of their children.

Perhaps the best way to make sense of these conflicting findings about explanatory styles of parents and their children is to take them at face value and conclude that explanatory style is transmitted to children by some parents but not by others. Researchers therefore must do something more than calculate simple correlations across generations. Attention to the moderators of these occasional links is essential. How much time do parents and children spend together? What do they talk about when they are together? Do causal explanations figure in this discourse?

Attention to mechanisms is especially important when we look at optimistic explanatory style. Why are some children able to endorse an optimistic outlook despite external influences that would seem to undercut optimism? Why do some children transcend whatever genetic influences there might be on their explanatory style?

We assume that parents can affect the explanatory style of their children through simple modeling. Children are most likely to imitate those whom they perceive as powerful and competent, and most parents—although not all—fit this description and are thus perceived in this way. Children are attuned to the ways in which their parents interpret the world, and they therefore may be inclined to interpret their environments in a similar manner. If, for example, children repeatedly hear their parents give internal, stable, and global explanations for negative events, they are likely to adopt these pessimistic interpretations for themselves.

Another type of parental influence involves the interpretations parents make about their children's behaviors. Criticism implying pessimistic causes has a cumulative effect on how children view themselves (Seligman, 1990). If a child says that she cannot find her house key, the parent may admonish the child as being careless, thus providing an internal, stable, and global explanation of the child's behavior. Alternatively, a parent may say that the child needs to work on becoming more organized, thus providing an internal, unstable, and specific attribution. One response enforces a pessimistic view of a relatively minor event, whereas the other response allows a more optimistic view.

Related to this point, Vanden Belt and Peterson (1991) found that how parents explain events involving their children has implications for their children's achievement and adjustment in the classroom. In their study, when parents had a pessimistic explanatory style vis-à-vis events involving their children, the children tended to work below their potential in the classroom—perhaps because they had internalized their parents' outlook.

Another type of parental influence is indirect but probably quite important: whether a safe and coherent world is provided for the young child. In one study of adolescents, Ciarrochi and Heaven (2008) found that poor family support predicted future pessimism, which in turn predicted decreases in social support. A cycle of poor family and social support and increased pessimism may result in some adolescents developing a belief that they are powerless to affect their social world. Similarly, Filippello, Sorrenti, Buzzai, and Costa (2015) concluded that when parents engage in higher levels of psychologically

harsh, intrusive, and guilt-inducing behavioral control, their children are more likely to demonstrate lower self-efficacy at school and, in turn, learned helplessness.

In contrast, children from happy and supportive homes are more likely as adults to have an optimistic explanatory style (Franz, McClelland, Weinberger, & Peterson, 1994). A prospective study of adolescents age 11 to 14 found that maternal (but not paternal) acceptance predicted a less pessimistic explanatory style among adolescents six months later (Vélez, Krause, Brunwasser, Freres, Abenavoli, & Gillham, 2014). The researchers suggested that interventions aimed at teaching parents to show more warmth and acceptance may be helpful in preventing depression.

The connection between a supportive home life and optimistic explanatory style follows from the fact that parental encouragement and support diminish fear of failure and enable children to take the risks necessary to find and pursue their interests and talents. Success and confidence are generated, which in turn generate expectations of further success. Thus, optimism is fostered and nurtured through a series of confidence-building experiences. Along these lines, Marks (1998) cautioned that children who are congenitally deaf and blind are at particular risk for developing a pessimistic explanatory style if their condition elicits too much coddling or results in too many experiences of failure. Parents and caregivers face the challenging task of providing appropriate challenges that allow these children to exercise control over their environment.

What happens to children whose parents do not consistently encourage safe exploration of the world? Perez-Bouchard, Johnson, and Ahrens (1993) found that children (ages 8–14) of parents with substance abuse problems were more likely to have a pessimistic explanatory style than children of parents without a history of substance abuse. One possible explanation of the link between parents' substance abuse and children's pessimism is that substance-abusing parents are less likely to be available to provide their children with the support and encouragement that facilitate successes. Furthermore, children of substance abusers may be forced to take on adult responsibilities beyond their developmental abilities, thus setting themselves up for failure rather than the success that fosters optimism. If children experience repeated failures, they learn that nothing they do makes a difference.

Teachers

As teachers administer feedback about children's performance, their comments may affect children's attributions about their successes and failures in the classroom. Heyman, Dweck, and Cain (1992) had kindergarteners role-play scenarios in which a teacher criticized one of their projects. Thirty-nine percent of the students displayed a helpless response to the teacher's criticism—exhibiting negative affect, changing their original positive opinions of the project to more negative ones, and expressing disinclinations toward future involvement in that type of project. In addition, those

children were more likely to make negative judgments about themselves that were stable, global, and internal.

Mueller and Dweck (1998) demonstrated that even praise can be detrimental to children if focused on a trait perceived as fixed. In their study, children who were praised for intelligence displayed more characteristics of helplessness in response to difficulty or failure than did children praised for effort. Whether providing positive or negative feedback, a teacher's habitual explanations for children's performances can have a critical impact on the children's developing explanatory style.

Media

Do the media—including television, digital streaming media, and social media—influence explanatory style? Levine (1977) reported that CBS and NBC newscasts modeled helplessness 71% of the time, thereby offering ample opportunity for the vicarious acquisition of helplessness. Gerbner and Gross (1976) also examined television shows and found that televised violence—whether fictional or actual—resulted in intensified feelings of risk and insecurity, promoting compliance with established authority. Explanatory style was not an explicit focus, but it seems plausible that a causal message was tucked into these phenomena (Wise & Rosqvist, 2006). Even when viewing television produces positive feelings, helplessness may result when viewers learn that the entertaining reward of television is independent of any behavior on their part (Hearn, 1991).

Similarly, higher levels of passive consumption of social media—in contrast to active interaction—have been associated with increased loneliness (Burke, Marlow, & Lento, 2010). In a recent study of young adults in the United States, Lin et al. (2016) found that the use of social media was significantly associated with increased depression. When using social media, young people may find themselves making frequent comparisons with their peers and feeling discouraged about their social status. Peers may post depictions of only the best aspects of their lives or post misleadingly positive depictions. Constant social comparisons on social media based on only highly idealized peer depictions may leave participants with an inaccurate impression that their peers are happier and more successful than they are and, moreover, that their own lives are less valuable (Smith & Kim, 2007; Tandoc, Ferrucci, & Duffy, 2015).

Young people may be especially susceptible to the influence of media, whether televised, streaming, or social. Children eight years old and older still spend more than 2.5 hours per day watching live television and a significant amount of time viewing video online or on mobile devices (Rideout, 2013). Of particular concern is young people’s exposure to scenes of violence on television, the Internet, and social media.

Although to some extent television, streaming content, and social media mirror what is actually occurring in the world, the violence that is routinely depicted can be gratuitous. This is true not only of fictional portrayals, but of news reports as well. When violence occurs anywhere in the world, ubiquitous mobile-phone cameras immediately share videos of the violence on social media. The sharing can be so ubiquitous, in fact, that success is often measured by the extent to which a video “goes viral.” (See Goel, Anderson, Hoffman, & Watts, 2016, for a more precise measure of structural “virality” of online content diffusion.) When violence occurs, television cameras soon arrive to record every facet of misery with numbing repetitiveness. Pictures and videos of victims are displayed constantly; cable news programs review the sequence of events endlessly; and various professionals analyze the causes and effects.

Coverage can be live and produced to create maximum dramatic tension and the desire for frequent updates. With the proliferation of television channels and other means of targeting viewers (online, in elevators, in taxicabs, etc.), strategies such as “narrowcasting” are also used strategically to maximize return visits. By tailoring news stories and other messages to the demographics and preferences of specific groups of viewers, they are more likely to return for another dose of content (Legendre, Lenders, May, & Karlsson, 2008). When the content is chronically violent, it may reinforce a pessimistic explanatory style.

From an explanatory style perspective, the issue is not media violence per se, but how its causes are portrayed. The media’s proclivity for ruminating on violence compounds a tendency to magnify stories of violence in a way that slants factual presentation. It is not in the interest of media networks to place temporal or specific parameters on a story. Instead, they benefit from interpreting a story from a pessimistic vantage point, specifying the stability and globality of its impact and enlarging the story’s import. Consider the epidemic of mass shootings in the United States, the massacre at the Bataclan concert hall in Paris, and the terrorist dissemination through social media of videos of prisoner executions—content that was shared and shown not only repeatedly but also in ways that present the world as a bleak and dangerous place. Unfortunately, the distortions in permanence and pervasiveness that serve the interest of television networks and social media news outlets do not serve the best interests of young viewers who may adopt the implied style to which they are exposed. The positive psychology implication is that the media can be more of a force for the good, not by changing its content but by altering the causal messages conveyed in stories and shows.

Trauma

Trauma also influences the explanatory style of children. Bunce, Larsen, and Peterson (1995) found that college students who reported experiencing a significant trauma (e.g., death of a parent, rape, or incest) at some point in their childhood or adolescence currently had a more pessimistic explanatory style than students who had never experienced trauma. Even more specifically, Gold (1986) found that women who had been sexually victimized during their childhood and adolescence were more likely to have a pessimistic explanatory style than were women who had not been sexually victimized. Furthermore, even the divorce of parents puts children at greater risk for developing a pessimistic explanatory style (Seligman, 1990).

Because isolated traumas have been shown to influence the development of a pessimistic explanatory style, it is not surprising to find evidence that chronic abuse has a similar effect. Cerezo and Frias (1994) found that children (ages 8–13 years) whose parents had physically and emotionally abused them for at least two years had a more pessimistic explanatory style than did other children. Because of the often arbitrary nature and

seemingly random occurrence of the punishments, the abused children learned that there was no way to prevent them. They learned to be helpless.

Conclusions

A great deal is known about the consequences of an optimistic versus pessimistic style of explaining the causes of events. Less is known, however, about the origins of explanatory style; therefore, we have summarized the pertinent research. Unaddressed by any study is a normative question: Is the typical person an optimist, a pessimist, or expectationally neutral (Peterson, 2006)? Said another way, does something unusual in the course of development need to occur in order to impart to someone an optimistic explanatory style? Is optimism simply the developmental default, hard-wired into human beings by evolution? Or is pessimism the default? Or perhaps the child is a blank slate, equally able to become an optimist or a pessimist, depending on the idiosyncratic influences to which he or she is exposed.

Certainly, many researchers have been drawn to the study of factors that make people pessimistic, although it is not clear if they are assuming that optimism needs no special explanation or instead that pessimism is a more pressing concern. Regardless, positive psychologists need to be concerned with how optimism *and* pessimism develop. To foreshadow a point we emphasize in the final section, we can assume neither that optimism is the simple opposite of pessimism nor that the determinants of optimism can be gleaned from the study of the determinants of pessimism.

Directions for Future Research: Explanatory Style as a Positive Psychology Concern

More needs to be done. In most explanatory style research, the focus has remained on outcomes of interest to the helplessness model: depression, illness, and failure. These are important, but the typical way of measuring these outcomes assigns zero points that correspond to *not* being depressed, *not* being ill, and *not* failing. This limitation can be glossed over by researchers describing what the data actually show. For example, if we find that pessimistic individuals are depressed and physically ill, we may glibly convey this result by saying that optimistic people are happy and healthy, even though our outcomes measures did not allow people to manifest happiness or health.

There is more to perseverance than the absence of helplessness, more to happiness than the absence of depression, and more to health than the absence of illness (Peterson, 2006). A sports cliché cautions that playing not to lose differs from playing to win. But somehow these obvious points can be ignored when optimism researchers interpret their findings. As long as outcome measures reflect only degrees of pathology, no conclusions can be drawn about well-being. This is an important lesson for positive psychologists of all stripes. It is not enough to study positive "predictors" like optimism; one must also study positive "outcomes" or—even better—outcomes that range from negative to positive. Only with this strategy will we have a complete positive psychology.

Some studies in the explanatory style tradition have included outcome measures that tap the full range of functioning. Usually, these have been studies of performance in academic, athletic, and vocational domains. Here, the expected positive correlation between optimistic explanatory style and good performance is found. Unreported in such studies, though, is whether the correlation is a literal straight line rather than one that merely meanders upward. The distinction is important because it allows researchers to distinguish between the costs of pessimism versus the benefits of optimism.

As explanatory style researchers heed this call to study positive as well as negative outcomes, explanatory style based on good events might become more relevant than it has seemed in previous research that focused on negative outcomes. Abramson et al. (1989) suggested that the way people explain the causes of good events is related to how they savor their effects. Perhaps good moods are created and sustained by savoring—a possibility compatible with the views of positive psychologists who direct our attention to the diverse benefits of positive emotions (Peterson & Park, 2007). Perhaps thriving is under the sway of a "good" explanatory style, just as helplessness is influenced by a "bad" explanatory style.

A valid criticism of explanatory style research to date is that it has looked much more at correlations between explanatory style and distant outcomes than at the mechanisms that lead from explanatory style to these outcomes. This imbalance is ironic given that

learned-helplessness research with animals has in recent years taken an ever-closer look at the mechanisms—psychological and biological—that produce the helplessness phenomenon. In contrast, explanatory style researchers have rapidly moved from one outcome measure to another, to still another. This restlessness has doubtlessly kept alive interest in explanatory style, but it has precluded a full understanding of learned helplessness.

Future Questions

1. What are the processes (mechanisms) by which explanatory style influences distant outcomes?
2. How can an optimistic explanatory style best be encouraged among children and adults?
3. Does “learned” optimism have the same consequences as naturally developed optimism?

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