

My Child Is Better Than Average: The Extension and Restriction of Unrealistic Optimism¹

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The purpose of the current study was to determine whether parents make unrealistic evaluations of children and what factors predict these evaluations. Parents of 5- and 6-year-olds rated their child's risk for various positive and negative outcomes, temperament, and health and behavior problems. Parents also completed an adult attachment measure. Parents appeared to give relatively little consideration to realistic constraints when predicting their child's future. Parents scoring higher on attachment avoidance were less optimistic that their child would attain positive outcomes and avoid negative outcomes, consistent with the view that optimism is a motivated phenomenon. Greater child internalizing behaviors also were associated with less parental optimism for positive outcomes. Findings have implications for the delivery of health messages to parents.

It is well established that people's desires influence their predictions about their own futures (Babad, 1987, 1997; Price, 2000; Weinstein, 1980). One instance of desire influencing judgment, *unrealistic optimism*, is the universal tendency for people to say that they are more likely than their peers to avoid negative events and to attain positive events (Weinstein, 1980). Such perceptions are considered unrealistic because, statistically, it is impossible for everyone to be at low risk for all events. Furthermore, even people who are at high risk for a particular outcome as a result of unhealthy behaviors (e.g., smokers) report that they are at lower risk for related diseases (e.g., emphysema) compared to others who engage in the same behaviors (McKenna, Warburton, & Winwood, 1993).

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This optimistic bias has been related to higher rates of risky health behaviors (e.g., promiscuity) and failure to take precautionary health measures (e.g., regular medical checkups). To date, unrealistic optimism has been examined primarily by having adult participants rate their own chances of experiencing future outcomes. Although the findings have provided consistent support for the phenomenon, they have not allowed for an identification of the mechanisms underlying its occurrence. The purpose of the present study is to examine the source of optimistic judgments. Specifically, by having parents rate their child's chances of experiencing positive and negative events, it is possible to begin to delineate some of the mechanisms that may underlie optimistic judgments.

There are two mechanisms that have been proposed to explain individuals' optimistic tendencies. The first is that desires influence predictions. In other words, people's desires to achieve positive outcomes and to avoid negative outcomes affect their ratings of how likely those outcomes are to occur. Two theoretical accounts are relevant to this proposed mechanism. First, a motivated reasoning account (Dunning, 1999; for a review, see Kunda, 1990) posits that people feel threatened when they consider negative outcomes happening to themselves. The discomfort associated with threat leads people to believe and state that negative outcomes are unlikely. People further ignore or degrade countering information, seek reaffirming information, and engage in biased recall, all of which helps them to defend their optimistic beliefs. Second, people may rely on immediate affective responses when making decisions about the likelihood of an event (e.g., Loewenstein, Weber, Hsee, & Welch, 2001; Schwarz & Clore, 1983). How people feel about an outcome may be used as a basis for predictions about the likelihood of the outcome, rather than the objective likelihood of the outcome. Because negative events evoke a negative affective response, people judge that negative outcomes will not occur. In summary, according to both accounts, desires influence outcomes in that people base their predictions on their desires. However, according to a motivated reasoning account, people are motivated to cognitively reduce the negative emotions caused by threat. According to an affective reaction account, people's initial emotional responses guide their predictions.

A second proposed mechanism is that unrealistic optimism is not unrealistic at all. Several researchers have suggested that unrealistic optimism may be a result of realistic appraisals of situations in uncertain circumstances (e.g., Klionowicz, 2002; Schneider, 2001; Todesco & Hillman, 1999). Such an interpretation has been acknowledged as a possibility since the first discussions of unrealistic optimism (e.g., Weinstein, 1980). Positive events occur more frequently than do negative events (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Thus, predictions that positive events will occur

more often than negative events in fact may be accurate. Further, researchers cannot perfectly predict the future, but only create probabilities, making it difficult to definitively determine one person's actual risk.

The two potential mechanisms of optimistic judgments have been difficult to disentangle for several reasons. First, actual risk is difficult to verify. For instance, when participants estimate their future health, they state that they are less likely than others to experience negative outcomes (e.g., Weinstein, 1980, 1987). These participants actually may be at lower risk than others. Indeed, there is seldom any attempt to evaluate individual participants' objective level of risk. A few researchers have examined the reasons that people generate for their low risk estimates (Price, Lench, & Lee, 2004; Santioso, Kunda, & Fong, 1990). It is difficult to determine if these subjective responses are factually true or if the reasons are part of biased cognitions. Second, when optimism for others is examined, participants frequently self-select into groups. For instance, political activists are optimistic that their candidate will fare better in an election (e.g., Fischer & Budescu, 1995; Uhlener & Grofman, 1986). However, activists may have additional information that led them to choose the candidate in the first place.

A way to disentangle the potential mechanisms is to study people's risk evaluations for those to whom people are close, but who they have not self-selected, rather than study people's evaluations of themselves. It may be easier to identify realistic constraints that affect risk assessments about others than about themselves. The current study examines parents' reports of their child's risk, including whether relevant risk factors influence parents' risk evaluations. If optimistic judgments are a motivated phenomenon, parents should evaluate their child optimistically in a manner similar to that which adults typically do for themselves. If, however, optimistic judgments are the product of realistic evaluations, realistic considerations should be related to parents' evaluations of their child's risk, and optimism should vary as a function of objective risk criteria. We predict that parents, who are naturally invested in their children, will extend optimistic judgments, to their children and thus will rate their children as more likely to attain positive outcomes and to avoid negative outcomes, compared to other children.

In addition to investigating parents' judgments of their child's risk for various outcomes, we also examine several factors that could influence parental judgments. First, we consider parental attachment style, which serves as one indicator of how involved parents are in relationships. Recent research has suggested that individual differences in adult attachment are best conceptualized as falling along two relatively independent dimensions: anxiety and avoidance (Brennan, Clark, & Shaver, 1998; Fraley & Waller, 1998). The *anxiety* dimension reflects the extent to which an individual fears

abandonment and rejection by relationship partners. People scoring high on this dimension report fears of being alone. The *avoidance* dimension reflects the extent to which attachment behavior is regulated in threatening situations. People scoring high on this dimension report discomfort with close relationships. People who score low on both dimensions are considered secure.

Although self-report measures of adult attachment originally were designed to capture orientations toward romantic relationships, individual differences in anxiety and avoidance also are related to the manner in which parents interact with their children (e.g., Edelstein et al., 2004; Goodman, Quas, Batterman-Faunce, Riddlesberger, & Kuhn, 1997; Rholes, Simpson, & Blakely, 1995). For instance, insecure parents (i.e., those with high scores on avoidance, anxiety, or both) report feeling less close to their children and have more negative models of the parent-child relationship (Rholes et al., 1995; Rholes, Simpson, Blakely, Lanigan, & Allen, 1997). Parental avoidance, in particular, has been associated with lack of sensitivity during parent-child interactions (Rholes et al., 1995), especially during stressful situations (Edelstein et al., 2004). According to motivated explanations, less avoidant parents should be more optimistic in order to avoid negative affect associated with considering negative outcomes happening to someone about whom they care. Because avoidant parents are less involved with their child under threat, we predict that they will be less optimistic that their child will avoid negative outcomes and attain positive outcomes. Because anxiety reflects the level of potential threat in the relationship, and not involvement, the anxiety dimension is not expected to influence parental optimism.

Second, we examine whether parents' optimistic risk evaluations reflect realistic considerations. Even if parents rate their child's future positively, they actually may be making realistic evaluations of their child based on past experiences and realistic appraisals. Realistic considerations include factors related to particular life events that may affect rates of experiencing negative outcomes. There are three such factors that are of interest: the temperamental trait of effortful control, child health history, and child behavior problems. First, effortful control reflects tendencies to direct and monitor attention and emotion. Studies have indicated that high effortful control is related to positive health and behavioral outcomes (Flinn, 1999; Murray & Kochanska, 2002), leading to the possibility that effortful control will be related to more optimistic risk assessments by parents in the present study. Second, medical and health problems early in life are predictive of health problems later. It is unknown the extent to which parents take into account their child's actual health history when assessing their child's risk for health problems later. However, it is expected that parents will do so, if risk assessments are based on realistic considerations. Specifically, although past

and future risk are never exactly correlated, prior health problems reflect one realistic factor that parents can consider when making judgments. Third, studies have uncovered associations between behavior problems in childhood and a range of adverse outcomes later in life (e.g., Champion, Goodall, & Rutter, 1995). Insofar as parents take into consideration their child's actual behavioral tendencies when evaluating risk, fewer behavior problems should be associated with more optimistic risk assessments.

Method

Participants

As part of a larger project, 106 parents (93 mothers, 12 fathers, 1 other) completed a set of questionnaires. Children's mean age was 73.04 months at the time of the session (range = 60 to 83 months), with 51.9% of the children being male. The child sample was mostly Caucasian and multiethnic: 60% Caucasian, 9% Hispanic American, 6% Asian American, 3% African American, and 22% multiethnic. Most parents were married or in a long-term relationship (91%), made over \$60,000 per year (70%), and were fairly well educated (50% had at least a 4-year college degree).

Families were recruited from a database of parents interested in research, advertisements at child facilities, and word of mouth. The database was developed over time through mailed letters to parents with young children in the surrounding areas, asking if they were interested in university research. A professional recruitment service also was utilized. Parents received an honorarium for their participation, and children received small prizes. One child per family participated.

Questionnaires and Procedure

Parents were contacted via telephone, and the study was explained. An initial session at a university laboratory was scheduled for parents who wished to take part. Upon parents' arrival, the study was explained in detail, and parental consent and child assent were secured. While their child participated in the study, parents completed a number of questionnaires. Of relevance to the present report, parents completed questionnaires on child risk, parent attachment, child temperament, and child health and behavior.

The risk questionnaire, developed for the present study, consists of a list of 12 negative and 12 positive events. The events were chosen to depict a range of possible life occurrences: 14 events were related to general health (e.g., getting emphysema, remaining cancer free) and 10 were related to other types of life events (e.g., getting a divorce, graduating from college).

Parents rated the likelihood of each event happening to their child compared to other children on a 7-point scale ranging from 1 (*far below average*) to 7 (*far above average*). A full list of events is included in Table 1. A sample statement is "Compared to other children, rate your child's chances of getting emphysema." The question format employed in the measure is used frequently in risk perception research (Price, Pentecost, & Voth, 2002; Weinstein, 1980). The validity of this question format in risk perception has been established in studies demonstrating that respondent perceptions are related to behavior changes, with greater perceived risk related to increased protective and decreased risk-taking behavior (e.g., Brewer, Weinstein, Cutite, & Herrington, 2004; Weinstein, 2003). The extent to which the measure reflects a risk construct is assessed by calculating alpha coefficients for the positive and negative scales (α s = .66 and .84, respectively).

Parents' romantic attachment style is assessed via the Relationship Questionnaire (Bartholomew & Horowitz, 1991). This questionnaire describes four attachment styles: secure, fearful avoidant, preoccupied, and dismissive avoidant. Respondents indicate their similarity to each style on a 7-point scale ranging from 1 (*not at all like me*) to 7 (*very much like me*). The measure has demonstrated reliability and correlates well with other measures of romantic attachment (Griffin & Bartholomew, 1994). Using a procedure recommended by Brennan et al. (1998), a factor analysis revealed two independent dimensions: avoidance and anxiety. The two factor scores, on which higher values indicate greater avoidance or anxiety, were used in subsequent analyses.

The Children's Behavior Questionnaire (CBQ; Rothbart, Ahadi, & Hershey, 1994) is included to assess child temperament. This widely used measure is designed for use with 3- to 7-year-olds and includes 120 statements describing different child behaviors. Parents rate how true each statement is for their child on a 7-point scale ranging from 1 (*extremely untrue*) to 7 (*extremely true*). Scores for three general temperamental characteristics are derived from the measure, one of which reflects effortful control. Internal consistency of the subscales ranged from .67 to .94, and the 2-year test-retest reliability ranged from .50 to .79 (Ahadi, Rothbart, & Ye, 1993). Higher scores are indicative of a tendency toward effortful control (e.g., "My child can wait before entering into new activities if s/he is asked to.").

Parents also completed the MacArthur Health and Behavior Questionnaire (HBQ), a standardized measure of physical health and emotional and behavioral problems in 4- to 8-year-olds (Ablow et al., 1999; Boyce et al., 2002; Essex et al., 2002; Luby et al., 2002). Parents rate their child's general health and check the number of health problems that their child has experienced. These problems include arthritis, chronic lung disease, asthma, birth defects, blood diseases, bowel diseases, heart disease, cystic fibrosis,

Table 1

Ratings of Specific Events

Event	<i>M</i>	<i>SD</i>	<i>t</i>
Positive events			
Avoiding being sued	3.78	1.98	-0.92
Remaining healthy	5.40	1.12	10.30***
Completing college	5.90	1.06	14.63***
Having a healthy child	5.44	1.30	8.98***
Remaining cancer free	3.83	1.51	-0.89
Being able to breathe easily throughout life	4.91	1.49	4.92***
Staying happy	5.75	1.11	12.93***
Staying cardiovascularly fit	5.00	1.29	6.27***
Choosing a career they love	5.40	1.17	9.83***
Remaining happily married	5.38	1.56	9.67***
If they smoke, suffering no serious effect	3.27	1.45	-4.00***
If they drink, suffering no serious effect	3.77	1.44	-1.30
Negative events			
Getting a divorce	3.00	1.72	-4.75***
Dropping out of college	2.29	1.09	-12.68***
Becoming ill	3.34	1.27	-4.32***
Getting lung cancer	2.24	1.30	-10.79***
Becoming depressed	2.82	1.40	-6.85***
Being unhappy in their career	2.92	1.32	-6.64***
Becoming alcoholic	2.48	1.61	-7.75***
Getting heart disease	2.98	1.44	-5.68***
Having a child with a physical disability	2.74	1.36	-7.47***
Being sued	2.69	1.51	-6.98***
Getting emphysema	2.27	2.00	-7.07***
If they smoke, becoming ill from smoking	3.41	1.48	-3.22**

Note. Items were rated on a 7-point scale ranging from 1 (*far below average*) to 7 (*far above average*), with a score of 4 indicating average risk. Scores above 4 for positive events and below 4 for negative events indicate an optimistic bias. These scores were recoded for some analyses, as noted in the text.

** $p < .01$. *** $p < .001$, on single-sample t tests examining whether the mean differed from *average* on the scale.

diabetes, HIV/AIDS, kidney disease, leukemia, nerve or muscle problems, recurrent ear infections, recurrent urinary infections, severe allergies, persistent colds/bronchitis, and an open-ended question regarding other health problems. Parents also rate whether potentially problematic behaviors are *not true*, *sometimes true*, or *very true* of their child. Composite behavioral problem scales are derived from the behavioral ratings. Scales indexing externalizing problems, internalizing problems, and impulsivity are relevant to this study. The validity and reliability of the HBQ scales have been established in several recent studies.

Results

The results are presented in two sections. First, we analyzed parents' overall optimism ratings for their child avoiding negative outcomes and attaining positive outcomes. Second, we examined predictors of parents' positive and negative risk evaluations. Child gender, family income, and parental education were unrelated statistically to any of the independent or dependent variables. Thus, they are not considered further. Child age was negatively correlated with effortful control ($r = -.30, p < .01$) and positively with internalizing and externalizing problems ($r_s > .26, p_s < .05$).

Optimism for Children

Parents' risk judgments were recoded so that a score of 0 indicates average risk, and higher scores indicate more optimism; in other words, greater likelihood of attaining positive outcomes and avoiding negative outcomes. Thus, positive outcomes were scored on a 7-point scale ranging from -3 (*far below average*) to 3 (*far above average*), and negative outcomes were scored on a 7-point scale ranging from 3 (*far below average*) to -3 (*far above average*).

Overall, parents rated their child as more likely to attain positive outcomes and to avoid negative outcomes, relative to other children. Single-sample t tests indicate that risk judgments for positive outcomes ($M = 0.74, SD = 0.61$) differed significantly from 0 (average risk), $t(105) = 12.56, p < .001$. Risk judgments for negative outcomes ($M = 1.17, SD = 0.88$) also differed significantly from 0 or average, $t(105) = 13.70, p < .001$. Thus, as expected, parents were optimistic about their child. In addition, consistent with findings for self-optimism (e.g., Weinstein, 1980), a paired-sample t test reveals that parents were more optimistic that their child would avoid negative outcomes than attain positive outcomes, $t(105) = 4.39, p < .001$.

Table 2

Correlations Among Predictor Variables

Variable	1	2	3	4	5	6	7
1. Attachment anxiety	—						
2. Attachment avoidance	-.05	—					
3. Effortful control	-.05	.07	—				
4. Physical health	-.01	.02	-.09	—			
5. Number of health problems	.18	.11	-.04	.20	—		
6. Internalizing	.10	.03	-.28*	.16	.15	—	
7. Externalizing	.05	.11	-.36**	.17	.31**	.39**	—
8. Impulsivity	-.07	-.14	.02	.18	.29*	.13	.47**

* $p < .05$. ** $p < .01$.

Factors That Influence Optimism

It was of interest to determine the extent to which unrealistic or realistic factors predicted parents' optimism for their child attaining positive outcomes and avoiding negative outcomes. Unrealistic factors include parents' attachment style (avoidance and anxiety). Realistic factors include parental reports of child temperament (effortful control), child health problems (general health rating and number of health problems), and child behavior problems (internalizing, externalizing, and impulsivity). Table 2 presents the correlations among the predictor variables. The variables were related in theoretically consistent ways. For instance, higher levels of reported health problems were associated with poorer overall health ratings.

Next, two linear regressions were conducted with positive-outcome and negative-outcome likelihood ratings entered as separate dependent measures. Predictors include the two attachment dimensions, child effortful control, the two physical health scores, and child behavior problems. As shown in Table 3, the model predicting positive outcomes was significant, $F(8, 48) = 2.22$, $p < .05$, and explained 30% of the variance. Avoidance of relationships was related significantly to parents' risk evaluations for positive events, such that parents who were less avoidant tended to be more optimistic that their child would attain positive outcomes.

The only realistic consideration that emerged as a significant predictor was internalizing behavior problems, with more internalizing symptoms

Table 3

Regression Analyses Predicting Risk Evaluations for Positive and Negative Events

Variable	Positive events (β)	Negative events (β)
Attachment anxiety	-.07	-.15
Attachment avoidance	-.37*	-.47**
Temperament (effort)	.22	.18
Rated physical health ^a	-.17	-.14
Number of health problems	.02	.11
Internalizing	-.28 [†]	.21
Externalizing	.05	.10
Impulsivity	-.13	-.28

Note. $N = 106$. Positive outcomes, $F(8, 48) = 2.22$, $p < .05$ ($r^2 = .30$). Negative outcomes, $F(8, 48) = 1.66$, $p = .14$ ($r^2 = .25$).

^aHigher scores indicate poorer health.

[†] $p = .05$. * $p < .05$. ** $p < .01$.

associated with less optimism. Surprisingly, optimism was not predicted by either of the physical health rating scores. Because this result was unexpected, two additional regressions, one each with the realistic and unrealistic predictors entered into separate equations, were conducted. Among the realistic constraints, neither the child's number of health problems nor the parents' rating of general health was significantly related to parents' evaluations of their child attaining positive outcomes. The results remained nearly identical when only health-related outcomes were examined: Parents' ratings of their child's general health or the number of specific health problems did not predict parental optimism for positive outcomes.

As shown in Table 3, the overall model predicting optimism for negative outcomes did not reach significance, $F(8, 48) = 1.66$, $p = .14$. However, it is worth noting that the trend was in the same direction as that reported for optimism with regard to positive outcomes. Specifically, avoidance of relationships was associated with less optimism for negative events. Again, none of the realistic considerations were predictive of the degree of optimism. Additional regressions, entering each predictor set into separate equations, did not alter the results. As with positive outcomes, the results remained consistent when only health-related outcomes were examined: The child's number of health problems or parents' ratings of their child's general health did not predict parental optimism.

To summarize, parents' level of attachment-related avoidance was the primary predictor of optimism, consistent with a motivated account. Parents did consider internalizing behavior in predicting whether their child would attain positive outcomes, reflecting a realistic appraisal. However, parents appeared not to consider any other realistic factors when making risk judgments. It is especially surprising that parents did not take their child's general health or history of health and behavior problems into account when predicting how well their child would fare in the future, either in terms of positive or negative outcomes, or with health-related outcomes specifically.

Discussion

There are two mechanisms that have been proposed to account for people's general tendency to be optimistic about their future. According to a motivated account, people base their predictions on their desire to attain positive outcomes and to avoid negative outcomes (Kunda, 1990). According to a realistic account, people base their predictions on realistic considerations and risk factors (e.g., Klonowicz, 2002; Schneider, 2001; Todesco & Hillman, 1999). Optimism often is examined by asking people to make risk judgments for themselves, and there is seldom any attempt to examine actual level of risk. Thus, it is difficult to determine which potential mechanism underlies the tendency for virtually all people to be optimistic. A way to disentangle these two potential mechanisms is to determine whether people extend optimism to others about whom they care and to identify whether motivated or realistic factors predict their optimism.

In the present report, we investigated whether parents extend optimism to their children. We asked parents to rate their child's likelihood of experiencing positive and negative events compared to the average child. Parents rated their child as more likely to attain positive events and avoid negative events. Thus, it appears that parents do extend optimistic evaluations to their child. In addition, parents were more optimistic that their child would avoid negative events than attain positive events. Negative events often are regarded as more threatening and important (Baumeister et al., 2001). Because parents were more optimistic about threatening events, specifically avoiding negative outcomes, these findings are suggestive of a motivated account of optimism.

Yet, this initial finding does not eliminate the possibility that parents based their judgments on realistic evaluations. To assess whether parents' risk evaluations were a result of motivated or realistic considerations, parents also completed questionnaires regarding their attachment style, as well as their child's temperament, health, and behavior.

Parents who were high in attachment avoidance were less optimistic about their child experiencing positive outcomes and, to some extent, avoiding negative outcomes. Thus, less involvement in relationships was related to lower optimism, consistent with a motivated account of optimism. It is possible that avoidant parents were less optimistic about their child's future because of beliefs about their ineffective parenting (e.g., Rholes et al., 1995), particularly in threatening situations (Edelstein et al., 2004). Because of different parenting practices, children of avoidant parents, in fact, may be at a greater risk for negative health outcomes.

Such an explanation, however, is unlikely because parents did not take any other realistic factors into account. Rather, the evident relations between avoidance and optimism more likely indicate lower levels of investment on the part of avoidant parents relative to nonavoidant parents. Avoidant parents were not more likely to rate their child's current state negatively, but rated their future outcomes more negatively. Unrealistic optimism often is extended to others in whom one is invested. Perhaps avoidant parents are less invested in their children, and hence less likely to extend unrealistic optimism to them. Because parents in the current sample were volunteers, they are potentially likely to be unusually invested in their children, restricting the range of attachment and investment in the current study and potentially attenuating the findings. Further research with other samples would be useful to confirm the current findings. Also of interest in future research is determining whether avoidant people are as pessimistic about their own future outcomes as they are about those of their children.

The temperamental factor of effortful control, child health, and child behavior problems are all related, in actuality, to outcomes in later childhood and adulthood. Unexpectedly, in this study, parents' judgments were largely unrelated to these realistic considerations. Parents were less optimistic for children high in internalizing behavior, but did not take any other relevant realistic factors into account to make their judgments. The fact that health problems and optimism were statistically unrelated is especially surprising, and this result remained consistent when only health outcomes were examined. Although the two measures did not tap the exact same health problems, past health is still indicative of future health and functioning. Parents may not be aware that temperament and behaviors influence future outcomes. But they would almost certainly be aware that a child who is unhealthy now is likely to be unhealthy in the future.

Although the results of this study provide insight into parental risk assessments for their children and the mechanisms underlying optimistic judgments, limitations also must be mentioned. Information was provided by parental report. Some parents simply may have a tendency to represent their children negatively or positively. Because parents reported on their child's

behavior, health, and risk probabilities, it is difficult to separate out a general negative or positive response bias. Also, parents for the most part were judging their child's risk for outcomes that would happen far in the future. It would be interesting to determine if parents remain optimistic when asked their child's risk for more immediate childhood outcomes.

In addition, it was not possible to differentiate between the two motivated explanations. It is possible that parents were optimistic in order to alleviate their negative emotion when considering risk. It is also possible that parents were optimistic because they had an immediate affective reaction to the risk question. In the future, it will be important to differentiate these possibilities.

It would be useful to explore the types of interventions that are effective at reducing unrealistic optimism for the self and others in order to communicate risk. In addition, as noted, we utilized a volunteer sample; therefore, the range of parental investment and attachment may have been restricted. These factors may have reduced our ability to detect the influence of these factors on parental optimism. Although a variety of positive and negative events were included in this study, it would be useful to examine parental optimism about other events.

These findings fit with previous proposals that unrealistic optimism is primarily a motivated phenomenon (Kunda, 1990). Furthermore, this study demonstrates that people extend unrealistic optimism to others associated with their own goals and motivations. Because parents have great control over the health practices and behaviors of their young children, this is important information for understanding parents' reactions to health problems and risks. Optimism for a child may assist parents in continuing to invest resources and to be involved with their child despite health risks. Thus, positive illusions may be useful for parents and for children (Taylor & Brown, 1988). However, unrealistic optimism may reduce parents' willingness to follow recommended health regimens (see Dunning, 1999; see Kunda, 1990, for motivated processing). Generally, exposure to accurate information has been shown to have almost no effect on unrealistic optimism for the self (Bauman & Siegel, 1987; Weinstein & Klein, 1995).

Although further research is needed, it appears that only providing accurate information also may be ineffective in communicating risk about children to parents, as it is when communicating risk about oneself. These results indicate that health professionals cannot simply provide parents with information regarding their child's risk for disease, but must engage in procedures to increase parental sense of vulnerability for their child. That is, if parents judge their child to be at low risk as a result of their affective reactions to negative events, an emotion-based intervention may help to

reduce unrealistic optimism for children. Framing events in a way that is not threatening and offers clear advice on how to reduce the chance of negative outcomes may assist parents in making healthy decisions for their children.

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