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HOPE AND GOAL ATTAINMENT: TESTING A BASIC PREDICTION OF HOPE THEORY

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Despite the impressive literature addressing Snyder's (1994) Hope Theory, the theory's basic hypothesis that hope predicts goal attainment has never been tested. We provide a longitudinal test of this prediction among 162 college students. Participants completed measures of hope and goal importance at the beginning of the semester. Three months later, they completed measures of goal attainment and hope again. Results indicate that a goal-specific measure of hope (particularly the agency subscale) predicted goal attainment better than the Hope Scale (Snyder et al., 1991), which measures hope regarding goals in general. The influence of Time 1 goal importance upon Time 2 attainment was largely mediated through goal-specific hope. Moreover, participants appeared to adjust their Time 2 hope levels based on their actual goal attainment.

Since its inception 18 years ago, hope theory (Snyder et al., 1991) has generated a sizable literature empirically documenting the relationships between higher hope and better academic performance (Gilman, Dooley, & Florell, 2006; Snyder, Shorey, & Cheavens, 2002),

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athletic performance (Curry & Snyder, 2000; Curry, Snyder, Cook, Ruby, & Rehm, 1997), psychological adjustment (Chang & DeSimone, 2001; Feldman & Snyder, 2005), coping with physical illness (Irving, Snyder, & Crowson, 1998), sense of life meaning (Feldman & Snyder, 2005), and likelihood of finding benefit in adversity (Tennen & Affleck, 1999; Feldman, 2005). Moreover, therapeutic interventions derived from hope theory have received empirical support (Klausner, Snyder, & Cheavens, 2000; Cheavens, Feldman, Gum, Michael, & Snyder, 2006).

Despite this extensive research, the central tenet of hope theory—that hope drives successful goal pursuit and attainment (Snyder, 1994)—has not been tested. Although the aforementioned beneficial effects of hope could be due to its influence upon goal attainment, no study has explicitly measured such attainment, rendering this assertion speculative rather than empirical. If this premise were not supported by the data, it would mean that hope's mechanism of action should be reconsidered. In the present article, then, we provide a longitudinal test of the ability of hope to predict goal achievement. First, however, we briefly review hope theory.

HOPE THEORY

C. R. Snyder and his colleagues (1991) have conceptualized hope as a cognitive, goal-directed phenomenon. Hope is defined as, "the perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking to use those pathways" (Snyder, 2002, p. 249). Pathways are cognitive routes to goals (Snyder, 1994). People engage in pathways thinking when they plan ways to reach their goals. Agency thinking is defined as "the thoughts that people have regarding their ability to begin and continue movement on selected pathways" (Snyder et al., 1991, p. 180). As in Watty Piper's (1978) *The Little Engine That Could*, agency thoughts such as "I think I can," fuel the goal-pursuit engine, serving as motivation in the goal-pursuit process.

It is important to note, however, that hope reflects a *perception*, not necessarily a reality. The subjective experience of hope does not require that concrete pathways exist nor that agency thoughts coincide with reality (Snyder et al., 1991). It is theoretically possible for an individual to be high in hope and yet not attain his or her goals.

Nonetheless, hope is thought to provide the cognitive foundation necessary to bring about successful goal pursuit.

Another important point about hope theory involves its iterative nature. Snyder (2002; Snyder et al., 1991) theorized that hope and goal-accomplishment reciprocally influence one another. Not only should hope lead to goal pursuit and attainment, but hope should then be readjusted to bring it into line with level of goal success. If an individual makes good progress toward goals, hopeful cognitions should receive a boost; if not, they should diminish.

Related to the iteration hypothesis, Snyder (2002) theorized that people possess both a trait level of hope as well as specific agency and pathways thoughts about particular goals. Their hopeful cognitive set regarding goals *in general* (i.e., trait hope) informs goal-specific agency and pathways thoughts for any particular goal, but is not synonymous with them. Goal-specific hope thoughts also are fine-tuned to reflect individuals' perceptions of the particular goal.

Of note, hope forms part of a nomological network with other expectancy constructs such as self-efficacy, optimism, and locus of control (Tennen, Affleck, & Tennen, 2002). The study detailed subsequently will not make use of these other constructs, because its purpose is to test the specific predictions of hope theory. Thus, it is important to reflect upon how these constructs differ. Studies demonstrate that hope accounts for variance over and above these variables with regard to pain tolerance (Snyder et al., 2005), problem-focused coping (Snyder et al., 1991), well-being (Magalleta & Oliver, 1999), and mental health symptoms (Snyder et al., 1991) in college students, academic effort investment in children (Lackaye & Margalit, 2006), and quality of life in substance-abusing homeless veterans (Irving, Seidner, Burling, Pagliarini, & Robbins-Sisco, 1998). Additionally, in factor analytic studies, measures of hope have been shown to load on different factors than measures of optimism (Bryant & Cvengros, 2004; Magalleta & Oliver, 1999) and self-efficacy. Moreover, Snyder (1995, 2002) has pointed out theoretical distinctions between these constructs and hope. Self-efficacy is concerned primarily with the expectancy that one can perform a behavior, locus of control with the perception that reinforcement in contingent upon one's behavior, and optimism with the expectancy that positive outcomes will occur regardless of one's personal actions. None of these constructs directly concern goal-directed planning. Hope, on the other hand, encompasses both the cognitive elements of plan-

ning (pathways) and motivation (agency) that lead an individual to behave so as to attain personal goals. Thus, predictions regarding the pursuit and attainment of such goals are extremely important if the theory underlying the hope construct is to stand.

THE PRESENT STUDY

As mentioned previously, no research has directly tested whether hope predicts goal attainment. The present study is a three-month longitudinal investigation of this relationship in college students. Perhaps such research has not been undertaken previously due to the way hope is typically measured. Existing measures tap hope related to goals *overall*, as opposed to hope regarding particular goals (Feldman & Snyder, 2002; Snyder et al., 1991; Snyder et al., 1996). Due to this measurement issue, it has been difficult to evaluate whether hope predicts success on specific goals. Thus, for the present study, we have produced a goal-specific measure of hope by slightly altering the items on an existing scale (Snyder et al., 1991).

We assessed college students' hope and goals during the first week and final week of the Spring semester, three months apart. At Time 1, participants nominated seven goals that they wished to accomplish by the end of the semester, rated the importance of each goal, and completed goal-specific hope measures for each goal as well as an overall measure of hope. We chose seven goals to allow participants to more-or-less comprehensively sample the desired outcomes in their lives. It also allowed us to test our hypotheses seven times, essentially producing seven replications of our study in the present sample. At Time 2, participants then filled out measures of goal attainment for their Time 1 goals and completed a second set of goal-specific hope measures.

We principally used path analysis to test the following hypotheses. First, we expected trait hope (i.e., agency and pathways) to directly influence goal-specific hope at Time 1. Although goal-specific hope should be based partly on situational factors, trait hope should influence hope for any particular goal. Second, we expected goal importance to directly influence goal-specific hope. According to Snyder (2002), more important goals should elicit greater motivation (agency) and goal-directed planning (pathways). Nonetheless, hope and importance are theoretically distinct constructs, with hope

reflecting cognitions regarding one's ability to accomplish a goal and importance representing the value of that goal. Thus, although goal importance may predict goal-specific hope, we also expected these two constructs to independently influence goal attainment. In contrast, we did not expect trait hope to directly influence goal attainment, as its effects should be mediated through goal-specific hope. As previously stated, Snyder (2002) hypothesized that trait hope should influence one's hope thoughts for a particular goal, but that goals also possess their own goal-specific levels of hope; these goal-specific hope thoughts should more strongly influence goal attainment because they more directly concern the particular goal. Last, we hypothesized that goal attainment would iteratively influence goal-specific hope. In other words, we expected participants to use their levels of success or failure with goals as feedback to readjust goal-specific hopes.

METHOD

PARTICIPANTS

Participants were 162 college students (63 males and 99 females) who took part in the study as one means of fulfilling the requirements of their introductory psychology courses. Participants ranged in age from 18 to 33, with a mean of 18.97 (SD = 1.72). There were no exclusion criteria for participation, and no demographics besides gender and age were collected.

PROCEDURE

Data were collected at two time points, approximately three months apart—the first and last weeks of the Spring semester. At both times, participants reported to classrooms in groups of 10 to 15 and were seated at separate desks. At Time 1, each participant was given a packet of questionnaires. These questionnaires consisted of a survey asking participants to nominate seven goals that they would like to accomplish by the end of the semester, importance scales for each goal, the Hope Scale, and one Goal-Specific Hope Scale for each goal (see Measures section).

At Time 2, each participant received a list of the seven goals that he or she nominated at Time 1. This list was accompanied by a packet of questionnaires consisting of items assessing the participant's levels of goal attainment as well as one Goal-Specific Hope Scale for each goal. To match up Time 1 and Time 2 surveys while keeping responses anonymous, we used the last four digits of participants' student identification numbers.

MEASURES

Hope Scale. The Hope Scale (Snyder et al., 1991) is a trait-like measure of hope. It assesses hope for goals *in general*, rather than for a specific goal. It contains 4 items tapping pathways thinking, 4 tapping agency thinking, and 4 serving as distracters. Respondents rate each item on a 1 (*definitely false*) to 8 (*definitely true*) scale. Sample pathways and agency items, respectively, are "There are lots of ways around any problem," and "I energetically pursue my goals." Researchers have provided evidence supporting the reliability and validity of the Hope Scale (Snyder et al., 1991). In the present sample, the Hope Scale had a Cronbach's alpha of .82. The means were 26.24 (SD = 2.98) and 25.30 (SD = 3.21) for agency and pathways, respectively.

Goal-Specific Hope Scale (GSHS). The GSHS, designed for this study, measures hope for a particular goal at a particular time (see Appendix 1). This scale resulted from a slight rewording of items on the original Hope Scale (Snyder et al., 1991). For instance, the item, "I energetically pursue my goals," was changed to, "I energetically pursue this goal." All items from the Hope Scale appear on the GSHS, except two. It was not possible to rephrase one agency item while maintaining its original meaning ("I've been pretty successful in life"). To keep the number of agency and pathways items even, one pathways item also was eliminated ("I can think of many ways to get the things in life that are most important to me"). This particular item was chosen because it also posed some difficulties in rewording while fully maintaining its original meaning. The GSHS thus contains 6 items, with 3 tapping pathways and 3 tapping agency. Respondents rate each item on a 1 (*definitely false*) to 8 (*definitely true*) scale. In the present sample, the GSHS had Cronbach's alphas ranging from .74 of .88 across the seven goals and two time-

points. At Time 1, the agency subscale means ranged from 18.83 to 19.59 (*SD*s = 3.07 to 4.08), and the pathways subscale means ranged from 19.13 to 19.91 (*SD*s = 2.99 to 3.71). At Time 2, the agency subscale means ranged from 18.77 to 19.89 (*SD*s = 3.63 to 4.36), and the pathways subscale means ranged from 19.04 to 20.37 (*SD*s = 3.14 to 4.24).

As a check of convergent validity, one would expect moderate correlations between the GSHS and Hope Scale. Correlations between these measures ranged from .30 to .48 across the seven goals. In a multiple regression analysis predicting Hope Scale scores, we simultaneously entered the Time 1 GSHS scores for all seven goals. This model's multiple correlation was quite high, $R = .63$, $F(7, 154) = 14.59$, $p < .001$. These relationships are of the magnitude expected given that the Hope Scale measures hope in a trait-like manner regarding goals in general, whereas the GSHS measures hope at a particular time (i.e., in a state-like manner) regarding a particular goal. The two-factor structure of the GSHS also is supported in the present sample.[1]

Goal Survey and Importance Ratings. Participants were asked to write down seven goals that they wished to accomplish during the next three months. To ensure that participants would name goals personally relevant to their lives, they were not given any limitations regarding the type of goals to nominate. Participants' descriptions of their goals encompassed diverse areas of life. Some representative goals are "Pay off credit card bill," "Get a 3.0 GPA," "Win the mid-states bowling tournament," "Break my social circle and meet different types of people," and "Dedicate more time in my life to God." For each goal, participants responded on a 0 (*not at all important*) to 6 (*extremely important*) scale to the item, "How important

1. In the present sample, each participant filled out the GSHS 14 times (once for each of seven goals over two time-points). These fourteen GSHS were subjected to principle components analysis with a direct oblimin rotation and a request for two factors. Consistent with past studies (Snyder et al., 1991, Snyder et al., 1996) an oblique rotation was used because of the expectation, based on hope theory, that the two components of hope reciprocally influence one another (and thus should be correlated). In 12 of the 14 cases, all three agency items loaded on the agency factor and all three pathways items loaded on the pathways factor. In both cases where this did not occur, only one item (a different item each time) loaded on the opposite factor. These results support the validity of the GSHS items with regard to their measurement of agency and pathways distinctly.

is this goal to you?" Mean importance ratings ranged from 4.41 to 5.44 (*SD*s = .78 to 1.26).

Attainment Survey. At Time 2, participants were asked to provide two ratings of their success in pursuing each goal nominated at Time 1. The first item was, "Overall, how successful do you think you have been in pursuing this goal?", to which participants responded on a 0 (*not at all successful*) to 6 (*very successful*) scale. The second item was, "Please indicate the percent of progress you have made toward achieving this goal." Mean goal success ranged from 3.62 to 3.98 (*SD*s = 1.57 to 2.05) and mean progress ranged from 62.88 to 70.20 (*SD*s = 25.04 to 33.23).

RESULTS AND DISCUSSION

To determine if the two measures of goal attainment (i.e., level of success and percent progress) were redundant, we obtained Pearson correlation coefficients across all seven goals. Because these correlations were very large (.83 to .97), we standardized these two variables for each goal and summed them to yield the overall attainment index used in subsequent analyses.

AGE AND GENDER DIFFERENCES

In order to check for age-related differences regarding hope and goal attainment, Pearson correlation coefficients were computed among age, trait hope, goal-specific hope, importance, and attainment for all seven goals. No significant relationships with age were found.

In order to check for gender differences in hope, we conducted a one-way MANOVA with gender as the predictor variable and trait hope, Time 1 goal-specific hope for all seven goals, and Time 2 goal-specific hope for all seven goals as criterion variables. MANOVA was chosen because of the moderate intercorrelations among the various hope measures. The result showed no gender effect on hope, Wilks' $\Lambda = .956$, $F(8, 152) = .875$, $p = .539$, partial $\eta^2 = .044$.

Similarly, we conducted a one-way MANOVA with gender as the predictor variable and the importance ratings of all seven goals as criterion variables. The result showed a gender effect on importance, Wilks' $\Lambda = .854$, $F(7, 153) = 3.726$, $p = .001$, partial $\eta^2 = .146$. Follow-up

TABLE 1. Pearson Correlations between Time 1 Goal-Specific Hope Scale (GSHS) Scores, Trait Hope Scale Scores, and Time 2 Goal Attainment Ratings

	Time 2 Goal Attainment						
Time 1 GSHS	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Goal 7**
Goal 1	.33**	.12	.06	.09	.27**	.12	.04
Goal 2	-.06	.21**	.04	.06	.03	.11	.17*
Goal 3	-.10	.09	.28**	-.03	-.05	.16*	.01
Goal 4	-.05	-.04	.13	.21**	.04	.13	.04
Goal 5	.14*	.05	-.08	.06	.32**	.09	.17*
Goal 6	.01	.05	.02	-.05	.19*	.36**	.09
Goal 7	.02	-.04	.15*	.07	.13	.14*	.33**
Trait Hope	.16*	.15*	.13†	.13†	.15*	.09	-.01

Note. *$p < .05$, **$p < .01$, $^{\dagger}p < .06$.

ANOVAs on each importance rating were conducted. Each ANOVA was tested at the .007 level (i.e., .05/7) to control for Type I error. The results showed a significant gender difference on goal importance only for goal #6, $F(1, 159) = 14.69$, $p < .001$, partial $\eta^2 = .085$. Women ($M = 5.69$, $SD = 1.14$) rated goal #6 of higher importance than did men ($M = 4.94$, $SD = 1.32$).

Finally, we conducted a one-way MANOVA with gender as the predictor variable and goal attainment for all seven goals as criterion variables. The result showed no gender effect on goal attainment, Wilks' $\Lambda = .964$, $F(7, 153) = .811$, $p = .580$, partial $\eta^2 = .036$.

INFLUENCE OF HOPE UPON GOAL ATTAINMENT

Pearson correlation coefficients of Time 1 GSHS and Hope Scale scores with Time 2 goal attainment can be found in Table 1. Participants with higher hope displayed higher levels of self-rated goal attainment approximately three months later. The predictive ability of hope differed, however, depending on whether it was measured at the goal-specific or trait level. As can be seen, the trait Hope Scale (Snyder et al., 1991), which measures individuals' levels of hope regarding goals in general, significantly predicted goal attainment for only three of the seven goals. Two of the four remaining relationships approached significance. GSHS scores, in contrast, significantly predicted goal attainment in every instance. Notably,

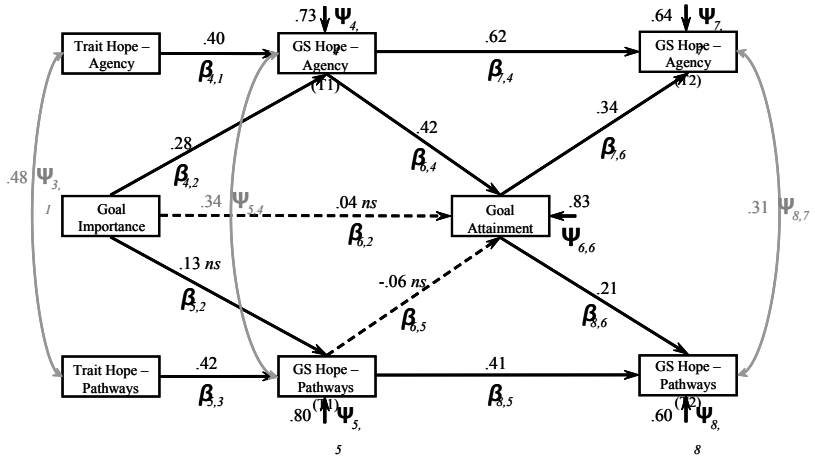

FIGURE 1. Path Model of Trait Hope, Goal Specific Hope, Goal Importance, and Goal Attainment. Single-headed arrows are causal paths. Double-headed arrows are correlations. Solid lines represent paths that were significant in a majority of the models. Dashed lines represent paths that were non-significant in a majority of the models. For convenience, the coefficient values for the model of Goal 1 are presented. All coefficients are significant at $p < .05$, unless otherwise noted.

the GSHS for any particular goal predicted attainment for that goal, but generally not for other goals. This result demonstrates that the GSHS measures hope in a goal-specific way.

We used path analysis to test the influence of the specific components of trait and goal-specific hope (i.e., agency and pathways) on goal attainment, as well as to test a number of additional hypotheses. These analyses were conducted using LISREL 8.8 (Jöreskog & Sörbom, 2006), which enables the testing of theoretical causal models based on the observed pattern of relationships (e.g., correlations) among a set of measured variables. Two goodness-of-fit statistics were used to evaluate the causal models in this study: chi-square and root mean square error of approximation (RMSEA; Steiger, 1990). The chi-square statistic measures the absolute fit between the hypothesized model and the observed pattern of relationships. A nonsignificant chi-square suggests no difference between hypothesized and observed patterns of relationships and hence, the hypothesized model is acceptable. The RMSEA statistic adjusts the measure of absolute fit based on the complexity of the hypothesized

model, with more complex models receiving a penalty. Values less than .06 represent acceptable fit (Hu & Bentler, 1999).

Our hypothesized causal model involved the following pathways (see Figure 1). We believed that the trait components of hope (i.e., agency and pathways) would directly influence the goal-specific components of hope at Time 1. In addition, we hypothesized that the subjective importance of the goal would exert an influence on goal-specific agency and pathways. Goal importance, goal-specific agency, and goal-specific pathways were, in turn, expected to directly influence goal attainment; whereas, neither trait-hope agency nor trait-hope pathways were expected to directly influence goal attainment. Finally, we hypothesized that goal attainment would directly influence Time 2 goal-specific pathways and agency.

The standardized beta weights for the causal paths and the fit statistics for each of the seven models are shown in Table 2. Each of these models represents one of the goals nominated by participants, in whatever idiosyncratic order they were nominated. For instance, the first model represents the first goal nominated by each participant, the second model represents the second goal nominated, etc. No attempt to group goals by content was made; this would have introduced unacceptable dependency into the analyses, because any particular participant may have nominated more than one goal in the same content area. Note that the heterogeneity of the goals utilized in each path analysis offers a conservative test of the hypothesized relationships. As the table shows, all models demonstrated acceptable fit, with the exception of the model for goal #4, with marginally acceptable fit.

Goal-specific agency usually (5 of 7 goals) directly influenced goal attainment (βs = .24 to .42), whereas goal-specific pathways did not (1 of 7 goals). Recall that agency consists of thoughts regarding one's ability to motivate oneself to pursue goals (Snyder, 1994). According to the present results, such agentic thoughts more strongly influenced subsequent attainment than the person's perception that he or she could generate multiple routes to the goal. Figure 2 illustrates the relationship between goal-specific agency and goal attainment. To construct this graph, we divided participants into three groups based on Time 1 goal-specific agency scores for each of the seven goals. For each goal, individuals with goal-specific agency one standard deviation below or above the mean were classified as having low or high goal-specific agency, respectively. Those within

TABLE 2. Standardized Betas and Fit Indices for All Path Models

	β4,1	**β4,2**	**β5,2**	**β5,3**	**β6,2**	**β6,4**	**β6,5**	**β7,4**	**β7,6**	**β8,5**	**β8,6**	χ^2	*p*	**RMSEA**
Goal 1	.40	.28	.13 ns	.42	.04 ns	.42	-.06 ns	.62	.34	.41	.21	9.86	.27	.038
Goal 2	.28	.32	.19	.28	.19	.33	-.18 ns	.50	.41	.49	.25	11.18	.26	.039
Goal 3	.20	.35	.07 ns	.28	.12 ns	.30	-.03 ns	.56	.51	.54	.28	9.10	.43	.008
Goal 4	.25	.28	.14	.41	.20	.17 ns	.00 ns	.52	.48	.55	.27	17.46	.04	.077
Goal 5	.20	.30	.21	.21	.10 ns	.30	.02 ns	.66	.39	.52	.17	9.60	.38	.020
Goal 6	.24	.28	.25	.20	.19	.12 ns	.21	.46	.49	.34	.23	13.02	.16	.053
Goal 7	.16	.30	.14 ns	.21	.11 ns	.24	.09 ns	.52	.48	.40	.44	11.95	.22	.045

Note. $df = 8$ and $N = 162$ for all models. All standardized beta coefficients are significant at $p < .05$ unless otherwise indicated.

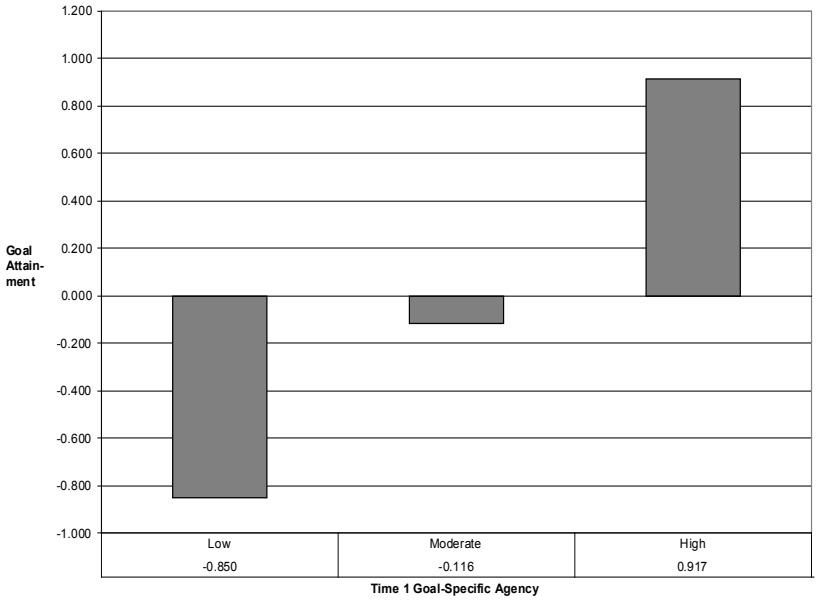

FIGURE 2. Level of Time 2 Goal Attainment by Time 1 Goal-Specific Agency.

one standard deviation of the mean were classified as having moderate goal-specific agency. Aggregating across all participants and all goals, this resulted in 186 low, 689 moderate, and 259 high agency participant-goals. As the figure shows, goals with low goal-specific agency at Time 1 resulted in an attainment rating .85 standard deviations below the group mean at Time 2. In contrast, goals with high goal-specific agency at Time 1 resulted in an attainment rating .92 standard deviations above the group mean.

At first glance, it is perplexing that goal-specific pathways generally failed to predict goal attainment. However, the focused and short-term nature of this study may explain this finding. The pathways construct originally was conceived as the perception that one could generate multiple ways of getting to goals (Snyder et al., 1991) as well as a tendency to set more goals, especially when original goals are blocked (Snyder, 1994; Snyder, 2002). When considering an individual's life globally, the ability to generate pathways may be useful, as the pursuit of at least one goal is likely to be obstructed at any time. When examining a single goal over only three months, however, pathways may prove less valuable. Because most empirical research into the effects of hope does not examine

TABLE 3. Correlations and Residual Variances for All Path Models

	Ψ3,1	Ψ 5,4	Ψ 8,7	Ψ 4,4	Ψ 5,5	Ψ 6,6	Ψ 7,7	Ψ 8,8
Goal 1	.48	.34	.31	.73	.80	.83	.64	.60
Goal 2	.48	.52	.23	.81	.88	.87	.50	.56
Goal 3	.48	.50	.16	.80	.91	.88	.27	.49
Goal 4	.48	.45	.22	.84	.82	.91	.35	.53
Goal 5	.48	.58	.27	.85	.91	.87	.38	.58
Goal 6	.48	.55	.34	.85	.90	.84	.49	.65
Goal 7	.48	.57	.23	.87	.93	.88	.34	.53

agency and pathways separately (see Chang, 2003), more research clearly is needed to support this assertion. Nonetheless, there is some evidence that agency may be the more influential component of hope. For example, researchers have found that agency is better than pathways at predicting life satisfaction (Bailey, Eng, Frisch, & Snyder, 2007), psychological adjustment and coping in parents of disruptive children (Kashdan et al., 2002), problem solving among middle-age men (Chang, 2003), and early therapeutic outcomes (though not later outcomes; Irving et al., 2004).

RELATIVE INFLUENCE OF GOAL-SPECIFIC HOPE AND IMPORTANCE

A second major finding of this study was that goal importance influenced both goal-specific pathways and agency. In the path analysis, the majority of direct paths from goal importance to the goal-specific components of hope were significant. Namely, goal importance had a direct influence on goal-specific agency across all seven goals (βs = .28 to .35) and on goal-specific pathways for 4 of the 7 goals (βs = .14 to .25). Additionally, only for a minority of participants' goals (3 of the 7) did Time 1 importance have a direct effect on goal attainment three months later (βs = .19 to .20). Taken together, these results suggest that the influence of importance on goal attainment is largely mediated by goal-specific agency. In other words, the importance of a goal influences an individual's cognitive motivation (i.e., agency-related thoughts), which in turn influences goal attainment.

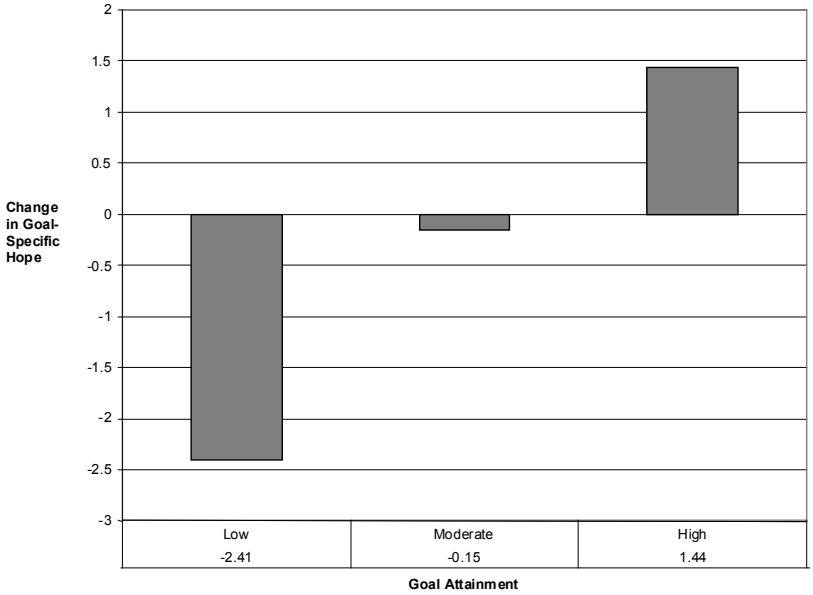

FIGURE 3. Change in Time 2 Goal-Specific Hope by Time 2 Goal Attainment.

ITERATIVE INFLUENCE OF GOAL ATTAINMENT UPON GOAL-SPECIFIC HOPE

A third major finding of this study supports Snyder's (2002) iteration hypothesis that individuals adjust their hope levels based on the relative level of success or failure with goals. We measured goal-specific hope twice, three months apart. At the second time-point, we also measured goal attainment. The results of the path analyses show that Time 2 goal-specific agency was directly influenced by goal attainment (βs = .34 to .51), above and beyond the influence of Time 1 goal-specific agency. Similarly, Time 2 goal-specific pathways was directly influenced by goal attainment (βs = .17 to .44), above and beyond the influence of Time 1 goal-specific pathways.

To illustrate this result (see Figure 3), we divided participants into three groups (i.e., low, moderate, high) based on goal attainment scores for each of their seven goals using the same method detailed previously. Aggregating across all participants and all goals, this re-

sulted in 139 participant-goals being classified as low attainment, 575 being classified as moderate attainment, and 120 being classified as high attainment. As can be seen, participants appeared to adjust their goal-specific hope levels based on their relative success or failure at achieving goals. Participants with low goal attainment reduced their Time 2 goal-specific hope scores by an average of 2.41 points. Participants with high goal attainment, in contrast, increased their Time 2 goal-specific hope scores by 1.44 points. Taken together, these results support the hypothesis that hope for any specific goal is adjusted based on the relative success or failure in achieving that goal.

LIMITATIONS AND FUTURE DIRECTIONS

It is important to note three limitations of the present study. First, the sample consisted of undergraduates. Undergraduates have a pattern of concerns that differ from the population at large, often being more concerned with issues of identity and self-presentation (Sears, 1986). The goals reported by participants are thus representative of those pursued by college students, but not necessarily other groups. The use of undergraduate samples is widespread in the hope literature (e.g., Snyder, Shorey, & Cheavens, 2002; Curry & Snyder, 2000; Snyder et al., 1996; Irving, Snyder, & Crowson, 1998; Snyder et al., 1991). Hence, future research should study different populations in order to investigate the generalizability of the present results.

Second, the findings rely on a self-report measure of goal attainment. Although such measures are common in the expectancy and self-regulation literatures (e.g., Burger, 1985; Hynie, MacDonald, & Marques, 2006; Wrosch, Scheier, & Miller, 2003), it would be informative to use more objective measures of goal pursuit in future research. This will be exceedingly difficult if participants are allowed to nominate their own naturally occurring goals. Thus, it may be necessary to focus research on hope's ability to predict attainment of goals that can be readily measured objectively (e.g., achieving a good grade, obtaining a job, etc.).

Third, the present study assessed trait and goal-specific hope, but not other goal-directed cognitive constructs such as optimism, self-efficacy, and locus of control. As mentioned previously, these constructs have more in common theoretically with the agency compo-

nent of hope than the pathways component. Because our findings indicate that agency contributed to subsequent goal attainment more than pathways, future research should address the contribution of agency relative to these other constructs in predicting attainment.

CONCLUSION

Despite the notable body of research dedicated to hope theory (Snyder, 1994), no previous studies have directly tested its most basic predictions regarding hope's iterative nature and influence on goal attainment. In this article, we have attempted to remedy this situation. Our longitudinal study demonstrates a relationship between hope's agency component and later self-reported goal-attainment. It also provides evidence consistent with the hope-theory assertion that individuals adjust their hopes as they experience success or failure in pursuing goals. These results lend empirical support to some of the theoretical principles used to explain hope for almost two decades.

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