



Brief Report

When competence and love are at stake: Achievement goals and perceived closeness to parents in an achievement context [☆]

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ARTICLE INFO

Article history:

Available online 14 June 2008

Keywords:

Achievement-goals
Mastery-approach
Performance-avoidance
Attachment
Parents
Competence
Motivation

ABSTRACT

In two studies, college students' achievement goals were linked to their perceptions of closeness to their parents following an exam. In Study 1, mastery-approach goals positively predicted perceived closeness immediately after an exam, prior to receiving feedback. In Study 2, mastery-approach goals again positively predicted perceived closeness, but performance-avoidance goals interacted with exam performance in predicting closeness. Specifically, poor exam performance predicted feeling distant from parents among those high in performance-avoidance goals but not among those low in performance-avoidance goals. This suggests that parental attachment may be involved in the achievement strivings of adults.

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1. Introduction

A fundamental tenet of attachment theory is that the attachment and exploration systems are closely intertwined (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969). According to Bowlby (1969), infants are innately prone toward exploration, yet exploration inherently involves exposure to risk. During healthy development, children learn to use their primary attachment figure as a “secure base” from which to explore, and optimal competence strivings naturally emerge in this supportive relational context. This secure base for exploration is not present for children who are insecurely attached to their primary caregiver, which interferes with and inhibits the child's natural tendency to explore the environment.

Recently, Elliot and Reis (2003) applied Bowlby's theorizing to adulthood, arguing that attachment relations influence the ways in which adults are motivated with regard to competence. Specifically, these theorists argued that secure attachment fosters optimal, approach-based competence motivation in the form of need for achievement (a dispositional tendency to orient toward success) and mastery-approach goals (situation-specific striving to attain intrapersonal or task-based competence). Insecure attachment, on the other hand, was said to reorient competence motivation toward a self-protective concern with avoiding incompetence, as manifest in fear of failure (a dispositional tendency to orient toward failure) and performance-avoidance goals (situation-specific striving to avoid normative incompetence). Elliot and Reis (2003) empirically documented these links in a series of four studies.

In a related line of research that explored fear of failure and attachment, Elliot and Thrash (2004) demonstrated that fear of failure is linked to undergraduates' perceptions that their parents will withdraw love from them if they fail at an

[☆] The authors wish to express their gratitude to Kou Murayama for lending his statistical expertise and insight, and to the peer-reviewers whose feedback greatly improved the quality of this manuscript.

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achievement activity. Additional, experimental, work by McGregor and Elliot (2005) has linked undergraduates' fear of failure to their perceptions of parental closeness following failure on an achievement task. Specifically, McGregor and Elliot showed that individuals high in fear of failure feel less close to their parents after a failure experience.

The present investigation extends the line of research started by Elliot and Reis (2003), and later McGregor and Elliot (2005), by focusing on the relation between perceptions of closeness to parents and achievement goals, which are concrete, situation-specific variables that explain the specific aim or direction of people's competence pursuits. Further, this link between context specific achievement goal pursuit and perceived closeness to parents was studied in a real world setting, representing an important step toward extending and establishing the ecological validity of the proposed attachment-achievement link. Moreover, the present investigation explored the attachment-achievement link across different time points in the achievement sequence. McGregor and Elliot (2002) have suggested that most achievement tasks are best understood as an unfolding sequence of events. Similarly, Folkman and Lazarus (1985) have argued that an analysis of coping with a stressful event (such as a college examination) should be conducted at different time points around the event. Specifically, we assessed individuals' feelings of closeness to their parents immediately after completing an exam but before receiving performance feedback (Study 1), and after completing an exam and receiving performance feedback (Study 2).

We hypothesized that, to the extent that attachment underlies the adoption of specific achievement goals, those goals will be differentially related to feelings of closeness to one's parents both while taking and receiving feedback on a college examination.

Specifically, mastery-approach goals are posited to emerge from secure attachment relations, and when individuals pursuing these goals are confronted with an examination, they are able to take comfort in the implicit safety that their secure base provides. Thus, we anticipated that individuals pursuing mastery-approach goals would be more likely to maintain a sense of closeness to their parents throughout the course of the evaluative event, both before receiving feedback (in Study 1) and after receiving feedback (in Study 2). That is, we predicted a positive relation between mastery-approach goals and perceived closeness to parents, and that this positive relation would be present regardless of the receipt of success or failure feedback (i.e., the relation would not be moderated by performance outcome).

Performance-avoidance goals, on the other hand, emerge from insecure attachment relations, and when individuals pursuing these goals are confronted with competence feedback, the contingent nature of their relations with others is likely to be salient. Thus, although we did not anticipate a link between performance-avoidance goals and perceived closeness to parents *before* receiving feedback (Study 1), we did expect such a link *after* the receipt of feedback (Study 2). That is, we predicted that the link between performance-avoidance goals and perceived closeness to parents would be moderated by performance outcome; for those strongly pursuing these goals a success experience was expected to boost perceived closeness and a failure experience was expected to diminish perceived closeness, whereas for those not strongly pursuing these goals no such relations were expected.

2. Study 1

2.1. Methods

2.1.1. Participants

Sixty-two male and 120 female undergraduates in a psychology class participated for extra credit. The average age of participants was 19.5 years old.

2.1.2. Procedure

One week prior to their midterm exam, participants completed an exam-specific achievement goal measure in a large group session. Immediately after turning in the exam and prior to receiving feedback, participants completed a brief measure assessing their perceived closeness to their parents at that moment.

2.1.3. Measures

2.1.3.1. Achievement goals. A revised, exam-specific, version of Pekrun, Elliot, and Maier's (2006) Achievement Goal Questionnaire was used to assess the three goals in Elliot and Harackiewicz's (1996) trichotomous model: mastery-approach, performance-approach, and performance-avoidance. Each of the goal items was given the prefix "My goal," and minor adjustments were made to each subscale (for mastery-approach goals, a task-based standard for one item was changed to an intrapersonal standard; for performance-approach goals, a grade-focused item for one item was replaced with an (explicitly) interpersonally-focused item; for performance-avoidance goals, an item containing reference to "the rest of the class" was replaced an item containing reference to "the other students"). Participants responded to the items on a 1 (strongly disagree) to 7 (strongly agree) scale, and the items were summed to form mastery-approach ($M = 17.11$, $SD = 3.30$, $\alpha = .82$), performance-approach ($M = 14.54$, $SD = 4.32$, $\alpha = .94$), and performance-avoidance ($M = 13.26$, $SD = 4.49$, $\alpha = .94$) goal indexes.

2.1.3.2. Perceived closeness to parents. McGregor and Elliot's (2005) measure was used to assess perceived closeness to parents ("Right now, how close do you feel to your mother?"; "Right now, how close do you feel to your father?"). Participants responded on a 1 (not at all close) to 7 (strongly agree) scale, and the scores were summed to create a perceived closeness to parents index (r for the two items = .72, $p < .001$, $M = 9.33$, $SD = 3.32$).

2.1.4. Results and discussion

A hierarchical regression approach was used to analyze the data (Cohen, Cohen, West, & Aiken, 2003). The basic model was comprised of the three achievement goal variables and Sex. Sex was included as a covariate, as past research has shown that this variable is related to a variety of relationship outcomes, including social competence. Regressing perceived closeness to parents on the basic model revealed that mastery-approach goals were a positive predictor of closeness to parents following the exam, $F(1, 177) = 9.36, p < .01$ ($\beta = .19$). No other variables attained significance (see Table 1). However, the significant positive effect found for mastery-approach goals was not significantly different from the nonsignificant effects found for performance-approach and performance-avoidance goals.

In sum, the results indicated that the more individuals pursued mastery-approach goals for their midterm exam the closer they reported feeling to their parents immediately following the evaluative experience.

3. Study 2

In Study 2, we examined the link between achievement goals and perceived closeness to parents following the receipt of performance feedback, and tested whether perceived and/or objective feedback moderated this relation. We hypothesized that mastery-approach goals would be associated with greater closeness to parents regardless of feedback, while the relation between performance-avoidance goals and closeness would be moderated by the quality of perceived and/or objective feedback. We further hypothesized that the relation between achievement goals and perceived closeness would emerge specifically in the potentially stressful context of receiving exam feedback, and not at baseline (one week prior to the exam).

3.1. Methods

3.1.1. Participants

Seventy-one male and 146 female undergraduates in a psychology class participated for extra credit. The average age of participants was 19.4 years old.

3.1.2. Procedure

At Time 1 (T_1), one week prior to their first exam, participants came to a large group session in which they completed a questionnaire that assessed their exam-specific achievement goals and their perceived closeness to their parents at that moment. At Time 2 (T_2), one week after the exam, participants came to a large group session where they consulted a chart that informed them of their exam grade. They then completed a questionnaire that assessed their perceived performance on the exam, and their perceived closeness to their parents at that moment.

3.1.3. Measures

3.1.3.1. Achievement goals. A slightly revised version of the measure used in Study 1 was used to assess the goals in the trichotomous model. The prefix of each item was changed from “My goal is” to “I will be trying to,” and a minor adjustment was made to one performance-approach goal item (“perform better” was changed to “do better”) and one performance-avoidance goal item (“compared to others” was changed to “compared to other students”). Participants responded to the items on a 1 (strongly disagree) to 7 (strongly agree) scale, and the items were summed to form mastery-approach ($M = 17.66, SD = 3.14, \alpha = .89$), performance-approach ($M = 16.19, SD = 4.50, \alpha = .96$), and performance-avoidance ($M = 15.62, SD = 4.73, \alpha = .97$) goal indexes.

3.1.3.2. Perceived performance. McGregor and Elliot's (2005) measure was used to assess perceived performance on the exam. On this measure, participants respond to two items (e.g., “I think I did very well on the exam”) on a 1 (strongly disagree) to 7 (strongly agree) scale, and a third item (“How do you think you did on the exam?”) by circling one of four options (very poorly, somewhat poorly, somewhat well, or very well). The scores for each item were standardized and averaged to form the perceived performance index ($M = 0.06, SD = 2.88, \alpha = .92$).

3.1.3.3. Graded performance. Participants' exam grade was used as an indicator of actual performance. Grades were assigned a value from 1 (F) to 11 (A; $M = 6.47, SD = 2.01$).

Table 1
Regression Model (Study 1)

	<i>B</i>	<i>SE</i>	β (95% CI)	<i>t</i>	<i>p</i> -value
Constant	6.27	1.669		3.75	<.001
Mastery-approach goals	.19	0.075	.19 (.04–.33)	2.58	<.01
Performance-approach goals	–.09	0.090	–.12 (–.30–.06)	–0.97	.33
Performance-avoidance goals	–.01	0.087	–.01 (–.18–.16)	–0.05	.96
Sex	.66	0.516	.10 (–.90–.99)	1.28	.20

3.1.3.4. *Perceived closeness to parents.* The same measure of perceived closeness to parents used in Study 1 was used at both T1 ($M = 9.90$, $SD = 2.77$) and T2 ($M = 9.39$, $SD = 3.08$).

3.1.4. Results and discussion

Hierarchical regression was used to analyze the data (Cohen et al., 2003). For Model 1, the three achievement goal variables, sex, T1 perceived closeness to parents, and perceived performance were entered. Perceived closeness to parents was regressed onto Model 1, and the model was significant, $R^2 = .595$, $F(6, 209) = 51.81$, $p < .001$. For Model 2, the three goal \times perceived performance interaction terms were added to Model 1, and the model fit improved marginally, $\Delta R^2 = .012$, $F(3, 206) = 2.16$, $p < .10$. Regression coefficients, including confidence intervals, are reported in Table 2.

Regressing T2 perceived closeness on to Model 1 revealed that T1 perceived closeness to parents was a positive predictor of T2 perceived closeness to parents ($\beta = .73$, $p < .001$). More importantly, mastery-approach goals were a significant positive predictor of T2 perceived closeness, $F(1, 206) = 4.91$, $p < .05$ ($\beta = .10$). However, we note that this significant effect cannot be considered significantly different from the nonsignificant effects found for performance-approach and performance-avoidance goals. Of the interaction terms tested in Models 2, only the performance-avoidance goal \times perceived performance interaction attained significance, $F(1, 206) = 5.17$, $p < .05$ ($\beta = .13$). Simple slope analyses revealed that when performance-avoidance goals were high (1 *SD* above the mean) there was a significant positive relation between perceived performance and perceived closeness to parents, $F(1, 206) = 10.41$, $p < .01$ ($\beta = .23$), but when performance-avoidance goals were low (1 *SD* below the mean), a null relation was observed ($\beta = -.01$, $p = .86$). The significant performance-avoidance \times perceived performance interaction effect, however, was not significantly different from the nonsignificant interaction effects found for mastery-approach and performance-approach goals.

We then repeated the above set of analyses, using graded performance in place of perceived performance. For Model 3, the three achievement goal variables, sex, T1 perceived closeness to parents, and graded performance were entered. For Model 4, the three goal \times graded performance interaction terms were added. See Table 3 for regression coefficients and confidence intervals.

In Model 3, mastery-approach goals was a significant positive predictor of T2 perceived closeness, $F(1, 207) = 4.70$, $p < .05$ ($\beta = .10$); however, this significant effect cannot be considered significantly different from the nonsignificant effects found for performance-approach and performance-avoidance goals. Of the interaction terms tested in Model 4, only the performance-avoidance goal \times graded performance interaction attained significance, $F(1, 204) = 5.34$, $p < .05$ ($\beta = .13$). Simple slope analyses revealed the same patterns that were found in the perceived performance analyses reported above. When performance-avoidance goals were high (1 *SD* above the mean) there was a significant positive relation between graded performance and perceived closeness to parents, $F(1, 204) = 8.27$, $p < .01$ ($\beta = .20$), but when performance-avoidance goals were low (1 *SD* below the mean), the relation between graded performance and perceived closeness to parents was null ($\beta = -.06$, $p = .42$). The significant performance-avoidance \times graded performance effect, however, was not significantly different from the nonsignificant interaction effects found for mastery-approach and performance-approach goals.

Furthermore, to examine whether the relation between mastery-approach goals and perceived closeness to parents is specific to potentially stressful achievement contexts (i.e., an examination), we regressed T1 perceived closeness to parents on the three achievement goals and sex. Mastery-approach goals were not a significant predictor in this analysis ($\beta = .08$).

In sum, the results indicated that the more individuals pursued mastery-approach goals for their exam the closer they reported feeling to their parents immediately after receiving performance feedback. This finding conceptually replicated the finding for mastery-approach goals in Study 1. The interactions obtained between performance-avoidance goals and perceived performance, and performance-avoidance goals and graded performance were essentially identical. These interactions indicated that for individuals strongly committed to performance-avoidance goals, closeness to parents was dependent on their performance outcomes, whereas this was not the case for those not strongly committed to performance-avoidance goals.

Table 2
Regression Models 1–2 (Study 2)

	<i>B</i>	<i>SE</i>	β (95% CI)	<i>t</i>	<i>p</i> -value
<i>Model 1</i>					
Constant	-.16	0.991		-0.18	.86
Mastery-approach goals	.10	0.046	.10 (.01-.19)	2.22	<.05
Performance-approach goals	.01	0.042	.01 (-.07-.09)	0.18	.86
Performance-avoidance goals	.01	0.040	.02 (-.06-.10)	0.33	.74
Sex	-.38	0.297	-.06 (-.64-.52)	-1.28	.20
T1 closeness to parent	.82	0.050	.73 (.63-.83)	16.43	<.001
Perceived Performance	.31	0.139	.10 (-.17-.37)	2.24	<.05
<i>Model 2</i>					
Mast-app \times PP	-.15	0.139	-.05 (-.32-.22)	-1.07	.29
Perf-app \times PP	-.22	0.164	-.07 (-.34-.25)	-1.31	.19
Perf-avoid \times PP	.37	0.164	.13 (-.19-.45)	2.27	<.05

Note. Mast-app, Mastery-approach goals; Perf-app, Performance-approach goals; Perf-avoid, Performance-avoidance goals; PP, Perceived Performance.

Table 3
Regression Models 3–4 (Study 2)

	<i>B</i>	<i>SE</i>	β (95% CI)	<i>t</i>	<i>p</i> -value
<i>Model 3</i>					
Constant	9.37	0.135		69.25	<.001
Mastery-approach goals	.30	0.140	.10 (–.17–.37)	2.17	<.05
Performance-approach goals	.06	0.195	.02 (–.36–.40)	0.32	.75
Performance-avoidance goals	.11	0.196	.04 (–.34–.42)	0.57	.57
Sex	–.18	0.140	–.06 (–.33–.21)	–.132	.19
T1 closeness to parent	2.33	0.139	.75 (.48–.99)	16.83	<.001
Graded Performance	.24	0.139	.08 (–.19–.35)	1.70	.09
<i>Model 4</i>					
Mast-app x GP	.01	0.150	.01 (–.28–.30)	0.02	.99
Perf-app x GP	.29	0.186	.09 (–.25–.45)	1.54	.12
Perf-avoid x GP	.40	0.175	.13 (–.47–.21)	2.31	<.05

Note. Mast-app, Mastery-approach goals; Perf-app, Performance-approach goals; Perf-avoid, Performance-avoidance goals; GP, Graded Performance.

4. General discussion

Across two studies, the achievement goals that individuals endorsed were systematically linked to feelings of closeness toward their parents following an exam. In Study 1, mastery-approach goals were a positive predictor of students' perceived closeness to their parents prior to receiving performance feedback. In Study 2, perceived closeness toward parents was assessed both before and after receiving feedback on an exam, and mastery-approach goals were a positive predictor of residualized change in feelings of closeness. Also, significant interactions indicated that for individuals strongly committed to performance-avoidance goals, feelings of closeness to their parents were dependent on their perceived and actual performance outcomes.

Our data may be interpreted in terms of the conditionality of parent-child relations in achievement contexts (Elliot & Reis, 2003). Specifically, our data suggest that mastery-approach goals represent achievement strivings unfettered by concerns about whether parents will link love and acceptance to performance outcomes. Individuals pursuing mastery-approach goals appeared to return—in a psychological sense—to the unconditional secure-base provided by their parents when faced with an evaluative event (Waters & Cummings, 2000). By contrast, felt closeness to parents was shown to be contingent upon success and failure for individuals pursuing performance-avoidance goals. In essence, performance-avoidance goals not only represent striving to avoid incompetence, but also represent striving to avoid rejection as well. Given the enormity of what is riding on achievement outcomes for those pursuing performance-avoidance goals, it is not surprising that these goals have consistently been linked to anxiety, task distraction, and (ironically, given their focus) poor normative performance (Elliot & Harackiewicz, 1996; McGregor & Elliot, 2002; Moller & Elliot, 2006).

Importantly, it must be noted that the interpretation of our findings depended in part on our predicting the null hypothesis, in the instances of the main effect of performance-avoidance goals and the interaction of mastery-approach goals with performance. Strictly speaking, observing a predicted null leads to no generalizable conclusions. Hence, this study should be replicated and the results analyzed using some form of model testing technique such that where there are no predicted and observed null results, these would be part of a model that constrains the effects to zero.

Another future direction for this line of research might involve examining whether interpersonal concerns and activated attachment representations mediate the relation between performance-avoidance goals and performance outcomes. Indeed, the following sequential mediational model would be optimal to test: performance-avoidance goals → interpersonal concerns → anxiety/distraction → performance attainment. Further, a number of additional limitations of the current research need to be addressed, including the large proportion of females and restricted age-range in this sample, as well as the potential for hidden or third variables given the correlational nature of these data.

In closing, we believe this research highlights an under-explored and complex dynamic that exists between attachment and achievement, a dynamic that remains active well into adulthood. Prior research has shown that achievement goals emerge from attachment representations, and the present research shows, in turn, that achievement goals are linked to attachment-relevant processes in important achievement settings. We believe that continuing to untangle this complex dynamic represents a generative and important area for future research on competence, affiliation, and motivation.

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