

Preparatory Training, States of Goal Orientation, and Mentoring Relationship Effectiveness

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We used an online academic-advising program to examine the effects of preparatory training designed to elicit high states of learning-goal orientation and low states of avoid goal orientation. Results indicate that training was effective in some cases for manipulating states of goal orientation. The training did not directly affect behaviors as anticipated; however, perceptions of partner behaviors showed effects. Moreover, learning-goal orientation was related to advisee postprogram academic self-efficacy. Thus, individuals working with such mentoring programs should consider implementing goal-oriented preparatory training programs to increase mentoring relationship effectiveness.

KEY WORDS: computer-assisted advising, computer-mediated communication, negative self-disclosure, self-efficacy

Many institutions utilize formal academic mentoring and advising programs for facilitating the transition for incoming students (Campbell, 2007), and the evidence available generally supports their use (e.g., D'Abate & Eddy, 2008). Because the current statistics for students in secondary and post-secondary education indicate that attrition often exceeds 50% (Martinez, Sher, Krull, & Wood, 2009; Morisano, Hirsh, Peterson, Pihl, & Shore, 2010; Roach, 2007), academic leadership considers such interventions imperative to retention efforts. However, data on ways to maximize outcomes for mentoring relationships remain elusive. Many overseers of formal mentoring programs have implemented various forms of preparatory training, but little is known about the best structure for such endeavors. In this research, we provide some insight for individuals planning advising and mentoring programs.

Mentoring and Academic Advising

Mentoring typically refers to any relationship in which a more senior individual provides some form of information or support to a less senior or knowledgeable individual (e.g., Kram, 1985; Levinson, Darrow, Klein, Levinson, & McKee,

1978). Academic advisors offer a specific type of mentoring relationship in academic settings. The mentoring relationships we examine in this study, although based on student volunteers as proxies for academic advisors, closely mirror typical advisor-advisee connections in various ways. First, mentors in this study provide functions that an academic advisor may be expected to offer (e.g., relaying advice that they received from their own academic advisors over their course of study). For example, according to guidelines published by the United Nations Education, Scientific and Cultural Organization (UNESCO) (2002), academic advisors serve in numerous roles, including but not limited to, assisting students in overcoming personal and educational problems, identifying personal and systemic issues that may limit students' chances of success, helping students understand academic policies and procedures, and familiarizing students with campus resources. The mentors and advisors in the program under study provide these UNESCO-described functions.

Second, the interactions between mentors and protégés are limited. That is, mentees must effectively benefit from their mentors in the time allocated for their meetings.

Finally, the majority of the volunteer mentors that participated in the current study express genuine desire to help their protégés. This level of interest in students' well-being is consistent with the expected role of academic advisors (National Academic Advising Association, 2005).

Academic advisors arguably offer a most important type of mentoring relationship because they potentially affect their advisees and their educational institution as well as impact the advisees' future educational community and society in general (National Academic Advising Association, 2005). Because of the potential implications of these developmental relationships, both advisors and advisees should be as well prepared, such as via training, as possible.

Preparatory Training

Many have posited the potential benefits of implementing training to prepare mentors and

protégés for their roles (e.g., Johnson, 2002; Tang & Choi, 2005). Many others provided some form of training regardless of the limited understanding about the reasons for training program effectiveness. In one of the few studies that examined training and mentoring relationship outcomes, Allen, Eby, and Lentz (2006) found that mentor and protégé ratings of training quality related to perceptions of mentorship quality. Still, the question remains: What constitutes quality training for mentoring?

High quality, preparatory, mentoring training provides individuals with reasonable expectations of the course of the relationship, understanding of important objectives, and opportunities to learn skills necessary for successful relationships (Allen et al., 2006; Burke & McKeen, 1989; Kram, 1985). For the current study, we selected a training approach perceived as high quality but that does not require a great deal of time or cognitive processing for the undergraduate participants and offers motivation for participation in effective mentoring relationships. Thus, we examined the effects of training designed to manipulate individuals' approaches to this moderately challenging learning opportunity. Specifically, we used social motivation theory coupled with research from the goal orientation literature as a basis for developing the training.

Goal Orientation and Social Motivation Theory

The learning context, including the individuals' approach to it, is acknowledged as a critical component of effective learning. According to social motivation theory, individuals monitor their behaviors in accordance with the expectations of the consequences of those behaviors in a specific context (Atkinson, 1957, 1964; Elliot & Church, 1997). Individuals with a high need to achieve are more inclined to welcome perceived challenges, persist longer at difficult tasks, seek out feedback, attribute their performance to internal factors, and enjoy evaluation from others. These individuals are drawn to situations in which they may stand only a 50% chance of success. To the contrary, individuals scoring high in the need to avoid failure items more give up easily, attribute performance to external factors, and may eschew challenging tasks, feedback, and evaluative situations. These individuals either seek situations with a small chance for failure or very little chance of success. Thus, in a moderately challenging situation, such as posed in a mentoring relationship

(e.g., opening up to another individual, allowing for some evaluation, seeking advice and feedback), the propensity of individuals to behave in a certain way depends upon the perceived context.

Goal orientation, informed by social motivation theory, refers to the way in which individuals approach new achievement situations (Payne, Youngcourt, & Beaubien, 2007). First used in the educational sector as a mechanism for explaining the differences in the ways that children approach learning tasks (Dweck, 1986; Eison, 1979, 1981), goal orientation is related to numerous academic-related outcomes. Although intricately tied to social motivation theory, it offers an additional advantage: Goal orientation allows examination of contextual factors, identifiable by *states of goal orientation*, and relatively stable dispositions, *trait goal orientation*. The two components of goal orientation were chosen for this study that most closely mirror Atkinson's (1957, 1964) need for achievement—learning-goal orientation (LGO)—and need to avoid failure—or avoid goal orientation (AGO).

Individuals with an LGO tend to be relatively motivated to learn for the sake of learning, whereas individuals with an AGO prefer to circumvent situations in which failure is plausible. Although some of the behaviors associated with goal orientation seem to represent different ends of a continuum, the goal orientation constructs are distinct and uniquely contribute to behaviors in various learning contexts (Payne et al., 2007). Moreover, LGO has consistently been found to be a positive predictor of learning processes and outcomes, whereas AGO has generally been negatively related to these variables.

Goal Orientation and Advising

Mentoring relationships may present difficult situations for both the mentor and the protégé, requiring that both prepare to address uncomfortable and challenging situations (Johnson, 2002; Tang & Choi, 2005). Because of the range of potentially negative situations that arise in college (e.g., bad grades, distressing interpersonal experiences with roommates, unpleasant feedback from a professor, etc.), those engaged in academic advising probably experience difficulties at some point. Individuals with a high LGO and low AGO will likely be the most successful in confronting these challenges. A handful of studies (Egan, 2005; Godshalk & Sosik, 2003; Singleton, Smith-Jentsch, & Feldman, 2007; Sosik, Godshalk, & Yammarino, 2004) show that trait goal orientation affects mentoring relationships.

Although to date no one has examined states of goal orientation in mentoring relationships specifically, numerous studies have demonstrated the efficacy of various environmental manipulations and training approaches as a means of modifying these states (Breland & Donovan, 2005; Dragoni, 2005; Kozlowski & Bell, 2006; Stevens & Gist, 1997). According to these previous works, preparatory training could elicit desired states of goal achievement. In turn, effective advising processes and outcomes can be achieved, as proposed by the following hypotheses:

- H1. Advisees and advisors who receive goal orientation training will report higher states of LGO than those who do not.
- H2. Advisees and advisors who receive goal orientation training will report lower states of AGO than those who do not.

Process Behaviors

Numerous studies have documented the behavioral changes associated with states of goal orientation; thus, training that effectively changes states of goal orientation will also lead to more effective advising-relationship behaviors. Although a plethora of potential behaviors relate to the effectiveness of mentoring relationships, we selected two variables based on their probable importance for mentoring relationships and also the likelihood that they will be affected by the goal orientation training: negative self-disclosure (NSD) behaviors and dialogue interactivity (DI).

Negative Self-disclosure

NSD refers to communication of unpleasant or embarrassing emotional information about one's self (Hoffman-Graff, 1977; Tolor, Cramer, D'Amico, & O'Marra, 1975). Previously found instrumental for counseling relationship success (Hoffman-Graff, 1977), it is presumably important for mentoring relationships because advisees in academic mentoring programs may lack awareness of their own shortcomings in knowledge or expertise (e.g., cramming for an exam is not the best strategy). However, by explaining past failures, protégés can identify and correct some behaviors that have led to poor outcomes. Moreover, most advisors recognize that advisees often feel overwhelmed in their new academic environments, expressing feelings that the university mistakenly accepted them, that they truly do not belong, and that most other students are better prepared academically than they are. Such perceptions of

incompetence often preclude advisees from wanting to share their stories with their mentors, who they may view as superior. However, if advisors share memories of similar feelings and failures, advisees soon gain a more realistic perception of their standing. Moreover, advisees low in state or trait AGO should be more inclined, in general, to share their embarrassing moments and concerns with their advisors as well as be more comfortable discussing difficult issues.

Thus, to avoid moments of embarrassment and revealed incompetency, individuals high in AGO will be disinclined to negatively self-disclose (Tolor et al., 1975). The following hypothesis tests this assertion:

- H3. Advisee and advisor state AGO will be negatively related to NSD behaviors.

Dialogue Interactivity

DI refers to the amount of back-and-forth discussion between an advisor and an advisee (e.g., speaker transitions). Ames and Archer (1988) found that students who perceived the learning environment to be geared toward a learning orientation tended to prefer challenging tasks, believe that success and effort were related, and enjoy their classes more than those who did not. Thus, individuals higher in state LGO may be more willing to effectively engage themselves in communication, approach the relationship as a difficult yet manageable task, and believe that their attempts at communication will be rewarded.

Moreover, individuals high in state AGO may avoid some of their partner's requests or monopolize the conversation to keep it going in a direction with which they feel comfortable. Consistent with this argument, Singleton et al. (2007) found that trait LGO relates to DI while trait AGO does not. Their result is probably attributable to the trait being measured; in the current study, we assess the state characteristic. Due to the closer connection of a state to behaviors, the state may prove predictive for DI:

- H4. Advisee and advisor state LGO will be positively related to DI.
- H5. Advisee and advisor state AGO will be negatively related to DI.

Mentoring Functions

Researchers often attempt to measure the quality of mentoring relationships by assessing the mentoring functions undertaken during the course

of the relationship. Kram and Isabella (1985) proposed that psychosocial and career development functions characterize mentoring relationships. Psychosocial functions address psychological or socially related issues, such as friendship, that emerge in counseling situations, whereas career development functions focus on more task, work, and career related issues that characterize coaching and protecting. Numerous outcomes are associated with reports of these mentoring functions (e.g., Allen, Eby, Poteet, Lentz, & Lima, 2004). Thus, advisees' perceptions of these characteristics presumably provide valuable insight regarding the effectiveness of mentoring relationships.

Interactions between State Goal Orientation and Process Variables

In advising relationships characterized by high levels of advisor NSD, advisees should receive increased mentoring. However, if an advisor demonstrates extensive NSD behaviors, the advisee experiencing high state AGO may be less likely to recognize the psychosocial support than will an advisee with a lower state AGO. Specifically, individuals high in AGO may feel that the advisor uses NSD to elicit feelings of discomfort (as they may feel pressure to provide sensitive personal information). Furthermore, some advisees may consider a partner relaying embarrassing information about personal weakness as incompetent. However, advisees low in state AGO will tend to believe that advisors expressing NSD are sharing valuable stories of successful negotiation of past obstacles and offering psychosocial support, and they will readily accept and respond to such dialogue. These observations form the basis for the sixth hypothesis of the study:

- H6.* Advisor NSD behaviors will interact with advisee state AGO to predict advisees' perceptions of the psychosocial support received. Specifically, high state AGO advisees' perceptions of psychosocial support will be associated negatively with advisor NSD, and low AGO advisees' perceptions of support will be positively associated with it.

Self-efficacy

Self-efficacy is among the most important variables likely affected by states of goal orientation. According to Bandura (1977), self-efficacy refers to the extent to which an individual feels that he or she is able or competent to complete desired tasks.

Egan (2005) found that the trait LGO of advisees related to reports of managerial career aspirations, which is similar to the construct of self-efficacy but tailored to the job Egan studied. Based on the population in this study, the consideration of self-efficacy for academic tasks is presumably the most important form of the goal orientation trait. Specifically, the greater focus that high LGO individuals place on learning from the mentoring relationship, the more likely they will critically evaluate the information and suggestions, as well as seek guidance, from their advisors. Subsequently, they may begin developing better strategies for and feel more confident about overcoming challenging academic issues. The final hypothesis of this study is based on self-efficacy measures:

- H7.* Advisee state LGO will be positively associated with advisee postmentoring academic self-efficacy.

Methods

Participants

Seventy-two advisor-advisee dyads from a large southeastern university participated in the study. Advisors consisted of juniors and seniors with a minimum GPA of 3.0, and advisees were incoming freshmen to the university. Participants were recruited through a variety of means, including e-mail, honor society recruitment (advisors only), flyers, and classroom solicitations. The advisee cohort consisted of 18 males and 54 females, whereas 17 males and 55 females comprised the advisor group. Majors at the university were well represented, with advisees coming from 37 majors and advisors from 27 different majors.

Measures

Trait goal orientation. The learning (five items) and avoid (four items) subscales of the trait goal-orientation scale constructed by VandeWalle (1997) were used. The following shows an example of a featured LGO item: "I am willing to select a challenging assignment that I can learn a lot from." This measure was based on a 6-point Likert scale (1—*strongly disagree* to 6—*strongly agree*), and data were collected immediately following training. Using coefficient α , the estimated reliability for advisee LGO items was .92, and for AGO items it was .86. The estimated reliability for advisors was .85 for LGO and .85 for AGO items, respectively.

Academic self-efficacy. The *College Self-efficacy Inventory* (Solberg, O'Brien, Villarreal, Kenel, & Davis, 1993) was used to assess academic

self-efficacy. This measure consisted of 15 items on a 6-point Likert scale: 1–*not at all confident* to 6–*extremely confident*. Participants rated the extent to which they felt confident to complete various academic-related tasks, such as “research a term paper.” Data on this measure were collected before and after the formal mentoring sessions. An α value of .91 was obtained for the preprogram measure items and the α coefficient was .93 for the postprogram items.

State goal orientation. The state goal-orientation scale, used to assess state LGO and AGO, was constructed specifically for this study with four (two for each construct) mentoring-specific items placed on a 6-point Likert scale: 1–*strongly disagree* to 6–*strongly agree*. The following reflects an advisee state learning-goal orientation item: “Today, I am most interested in talking about strategies I can use to reach my fullest potential” (see Table 1 for additional items). As measured across sessions, the coefficient α value of advisor state LGO was .87, and it was .75 for state AGO. The coefficient α value for advisees’ state LGO was .92, and it was .85 for state AGO. Because of the reasonably high consistency of the scores, the averaged data from four sessions constituted the overall indicator for both of these constructs.

Psychosocial functions. Allen, McManus, and Russell’s (1999) mentoring functions scale was used to assess advisee perceptions of the amount of psychosocial support that advisors provided during the course of the mentoring relationship. This scale consisted of 14 items on a 6-point Likert scale: 1–*strongly disagree* to 6–*strongly agree*. Data were collected from advisees after completion of the mentoring sessions. This scale resulted in an α coefficient of .92.

Coded dialogue interactivity. The code for DI

was based on the count and summation of each transition in speakers per session. The DI frequency data yielded a reliability coefficient of .88 for the four sessions. The average DI values from the four sessions provided the overall indicator of the DI construct.

Coded negative self-disclosure. An example of an advisor NSD includes a statement such as, “I felt like such an idiot after I failed the exam.” The following shows an example of an advisee statement: “I’m really afraid I’m not really as smart as the other students.” Words identified as indicative of NSD behavior were counted and summed to provide an indicator for each session. The consistency measures of these behaviors across the four sessions, based on NSD word counts, showed α values of .80 for advisees and .85 for advisors. The average total word counts for the four sessions and e-mails provided the overall indicator.

Procedures

Advisor and advisee pairs were initially chosen based upon their mutual availability for mentoring sessions. To assure similar composition in each set of partners, the pairings were refined based on gender. Advisors and advisees either received training designed to foster effective goal-orientation states or acquire *computer-mediated communication* (CMC) (e.g., emoticon and acronym usage) skills. CMC training served as a control for this study based on the belief that participants benefit from the information relayed in their mentoring relationships such that the training method does not affect the influence of the goal-orientated training on behaviors. This underlying principle resulted in the creation of four different training conditions for this study: goal-oriented advisor/goal-oriented advisee; goal-oriented advisor/CMC advisee; CMC

Table 1. State goal-orientation items

Advisee Items	Advisor Items
<i>State Learning-Goal Orientation</i>	<i>State Learning-Goal Orientation</i>
<ul style="list-style-type: none"> • Today, I am most interested in talking about strategies I can use to reach my fullest potential. • I hope to learn something about myself through the chat I have with my mentor today. 	<ul style="list-style-type: none"> • What my protégé needs most from me today is knowledge that will help him/her to reach his/her fullest potential • I hope to learn something about myself through the chat I have with my protégé today.
<i>State Avoid-Goal Orientation</i>	<i>State Avoid-Goal Orientation</i>
<ul style="list-style-type: none"> • Today, I am most interested in talking about how I can avoid situations where I may fail. • I am not in the mood to talk about my personal challenges today. 	<ul style="list-style-type: none"> • What my protégé needs most from me today is knowledge that will help him/her to reach his/her fullest potential. • I am not in the mood to talk about my personal challenges today.

advisor/goal-oriented advisee; and CMC advisor and advisee.

Participants attended an hour-long CMC or goal-orientation training session, which featured similar information for advisors and advisees, but which was tailored for each. They were informed not to disclose personal information (e.g., last name, e-mail address, phone number) to prevent them from communicating with one another outside of the controlled mentoring program. Upon completion of the training, participants completed the first set of measures.

For 4 consecutive weeks, partners met with one another online once a week for 30 minutes at each session. Moreover, they also had access to an internal e-mail account through which they could communicate with one another between sessions. Once participants completed the 4 formal sessions, they completed the final set of measures. Upon finishing of the formal mentoring portion of the study, four undergraduate research assistants coded for the variables of interest.

Results

Mean, standard deviation, and intercorrelation statistics for all study variables are presented in Table 2. All of the analyses were conducted using multiple regression.

The first hypothesis proposed that advisees and advisors who received goal-orientation training would report higher state LGO than those who did not. Both advisee condition ($\beta = .31, p < .01$, one-tailed) and advisee trait LGO ($\beta = .29, p < .01$, one-tailed) ($F[2, 76] = 8.82, p < .01$, adjusted $R^2 = .17$) were unique predictors of advisee state LGO. Specifically, advisees in the goal-orientation training condition showed higher state LGO than those in the CMC condition over the course of the program. However, the advisor condition did not predict advisor state LGO. Thus, the hypothesis as related to advisees was supported, but not as it related to advisors.

The second hypothesis suggested that advisees and advisors who received goal-orientation training would report lower state AGO than those who did not. Advisee condition did not relate to advisee state AGO. Advisor condition related to advisor state AGO ($\beta = -.20, p = .04$, one-tailed), including advisor trait AGO as a covariate ($\beta = .17, p = .07$, one-tailed), $F(2, 76) = 3.00, p = .06$, adjusted $R^2 = .05$ (without the covariate, [$\beta = -.21, p = .03$, one-tailed], adjusted $R^2 = .03$). Advisors in the CMC training condition showed higher state AGO than those in the goal orientation condition. Thus, the

second hypothesis as it related to advisors was supported, but not as it related to advisees.

For the third hypothesis, advisees' and advisors' state AGO was expected to be negatively related to NSD behaviors. The hypothesis was not supported for advisees or advisors.

Hypothesis 4 proposed that advisee and advisor state LGO would be positively related to DI. The hypothesis was unsupported for both advisees and advisors.

The fifth hypothesis suggested that advisee and advisor state AGO would be negatively related to DI. It was not supported for either population.

Hypothesis 6 proposed that advisor NSD behaviors would negatively relate to psychosocial support for advisees high in state AGO but positively related with psychosocial support for advisees low in state AGO. DI was related to advisee-perceived psychosocial support functions, thus it was included as a covariate. Advisor NSD was also associated with advisee state AGO in predicting advisee-reported psychosocial support (see Table 3). As demonstrated in Figure 1, the relationship was in the expected direction.

Hypothesis 7 proposed that advisee state LGO would be positively related with the postmentoring academic self-efficacy of advisees. Including preprogram self-efficacy as a covariate to control for preprogram levels, findings show that advisee state LGO was related to postprogram self-efficacy. See Table 4. Thus, this hypothesis was supported. Additionally, advisor and advisee state LGO interacted (i.e., the relationship of advisee state LGO with postprogram self-efficacy depended on the level of advisor state LGO) to predict postprogram self-efficacy. As shown in Table 5, and depicted in Figure 2, advisee state LGO was positively related to self-efficacy only when paired with advisors low in state LGO.

Discussion

Advising relationships are moderately challenging tasks for both advisors and advisees, and few have undertaken a thorough examination of the effect of the greater context on them. Therefore, in this study, we attempted to broaden the understanding by looking at the degree to which a simple, preparatory, training intervention that ties in goal orientation concepts might be effective in fostering beneficial advisee-advisor relationships.

Goal orientation has been found to be important for various educational outcomes, and it shows promise in facilitating successful advising relationships. Similar to Atkinson's (1957,

Table 2. Intercorrelations, means, and standard deviations of study variables

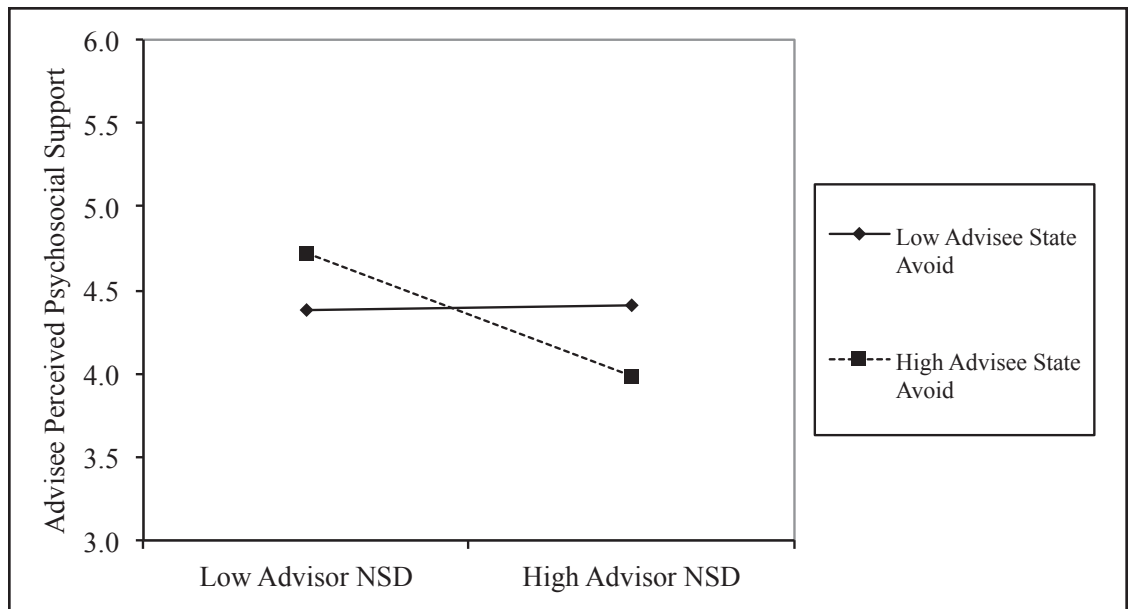
Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Posttraining Measures																			
1. Advisee Training Type (0 = CMC, 1 = GO)	0.49	0.50	*																
2. Advisor Training Type (0 = CMC, 1 = GO)	0.53	0.50	.09	*															
3. Advisee Trait Learning-Goal Orientation	4.47	1.05	.01	.08	.92														
4. Advisee Trait Avoid-Goal Orientation	2.89	1.04	-.18	.09	-.04	.86													
5. Advisee Preprogram School Self-efficacy	4.42	0.92	-.07	.12	.37	-.16	.91												
6. Advisor Trait Learning-Goal Orientation	5.23	0.62	.27	.28	.20	-.01	-.05	.85											
7. Advisor Trait Avoid-Goal Orientation	2.44	0.86	-.27	-.13	.19	.01	.00	-.45	.85										
Precession Measures																			
8. Advisee State Learning-Goal Orientation	4.29	1.13	.29	.16	.33	-.04	.23	.15	.02	.92									
9. Advisee State Avoid-Goal Orientation	3.38	0.80	.14	.08	-.05	.10	.00	-.05	-.07	.51	.85								
10. Advisor State Learning-Goal Orientation	5.12	0.82	.02	-.13	-.04	-.17	-.05	.18	-.20	-.11	.04	.87							
11. Advisor State Avoid-Goal Orientation	3.42	0.79	-.18	-.23	.04	.06	-.10	-.25	.13	-.21	.02	.20	.75						
Process Variables																			
12. Dialogue Interactivity	35.61	14.54	-.10	-.13	.04	.16	-.26	.03	.05	-.11	-.14	-.02	.03	.88					
13. Advisee Negative Self-disclosure	57.38	47.43	.08	-.25	-.10	-.11	-.17	.16	-.02	-.10	-.02	.09	-.05	.17	.80				
14. Advisor Negative Self-disclosure	112.35	79.68	-.06	.08	-.19	.16	-.28	.05	.05	-.19	-.08	-.23	.09	.21	.26	.85			
Outcome Variables																			
15. Advisee-Reported Psychosocial Support Received	4.87	0.80	.14	-.01	.25	-.10	.05	.13	.04	.42	.02	.03	-.03	.24	.00	-.17	.93		
16. Advisee Postprogram School Self-efficacy	4.83	0.90	-.01	.24	.28	-.15	.62	.01	.08	.31	.07	-.03	-.03	-.23	-.20	-.24	.16	.86	

Note. GO stands for goal orientation; CMC stands for computer-mediated communications. Sample sizes range from 69 to 72.
* $p < .05$, $p < .01$, two-tailed.

Table 3. Interaction of advisee state avoid-goal orientation with advisor negative self-disclosure behaviors predicting advisee perceptions of psychosocial support

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>	<i>B</i>	<i>SE B</i>	β	<i>p</i>
1. Advisee State Avoid-Goal Orientation	0.30	0.20	0.31	.06	0.31	0.19	0.32	.06
2. Advisor Negative Self-disclosure	0.01	0.01	0.92	.06	0.01	0.01	0.77	.10
3. Advisee State Avoid x Advisor Negative Self-disclosure	0.00	0.00	-1.14	.03	0.00	0.00	-1.04	.04
4. Dialogue Interactivity					0.01	0.01	0.28	.01
Adjusted <i>R</i> ²				.04				.10
Significance (two-tailed)				.14				.02

Note. Significance values are one-tailed, except for the overall models as indicated.

Figure 1. Advisee state avoid-goal orientation and advisor negative self-disclosure predicting advisee-perceived psychosocial support

Note. NSD stands for negative self-disclosure.

1964) social motivation theory, it contributes to the examination of states of individuals' situation orientation while allowing researchers to statistically control the relative stability of individuals' dispositions. In this study, these aspects of goal orientation allowed for a thorough look into the effects of training interventions. Several recent studies showed that circumstances and contexts of various environmental cues impact the state of goal orientation (e.g., Bell & Kozlowski, 2008; Kozlowski & Bell, 2006; Stevens & Gist, 1997). In further support of these past findings, the current study demonstrated that a relatively short training intervention, designed for the purpose of preparing individuals to be successful in their mentoring relationships, positively influences desired states

of goal orientation. Specifically, the training effectively elicited high state LGO for advisees similar to the way social motivation theory is used to raise the need for achievement (Atkinson, 1957, 1964). Also consistent with Atkinson's work, the training lowered states of advisor AGO. Furthermore, in the current study, states of goal orientation remained relatively stable over the course of the 4-week program, demonstrating that training can overshadow many of the other cues that might otherwise influence goal orientation states over the same time period.

Although states of goal orientation are malleable, their modification may not induce desired behavioral change. Specifically, the hypotheses suggested that goal orientation relates to various

Table 4. Advisee state learning-goal orientation and postprogram advisee self-efficacy

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
1. Preprogram Self-efficacy	0.57	0.10	0.58	< .01
2. Advisee State Learning-Goal Orientation	0.14	0.08	0.17	< .05
Adjusted <i>R</i> ²				.40
Significance (two-tailed)				< .01

Note. Significance values are one-tailed, except where otherwise indicated.

Table 5. Advisee and advisor state learning-goal orientation predicting advisee post-program self-efficacy

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
1. Preprogram Self-efficacy	0.58	0.09	0.59	.00
2. Advisee State Learning-Goal Orientation	1.32	0.54	1.65	.02
3. Advisor State Learning-Goal Orientation	1.06	0.48	0.97	.03
4. Advisee x Advisor State-Learning Goal Orientation	-0.23	0.10	-1.68	.03
Adjusted <i>R</i> ²				.41
Significance				< .01

Note. Significance values are two-tailed.

mentoring relationship processes, and while the hypotheses were not supported, the states seemed to affect advisee perceptions. Results show that advisees low in state AGO remain unaffected by advisor NSD; however, advisees with high state AGO expressed negative perceptions of the psychosocial support offered by advisors presenting NSD behaviors. Consequently, advisor training for NSD behaviors may be detrimental to mentoring relationships for advisees high in state AGO and be relatively ineffective in affecting the perceptions of psychosocial support for advisees low in state AGO. Thus, dependent on the context and desired behaviors, additional environmental cues (e.g., explicit consequences for goal-oriented behaviors) may be needed for state manipulations to exert the desired effects on behaviors.

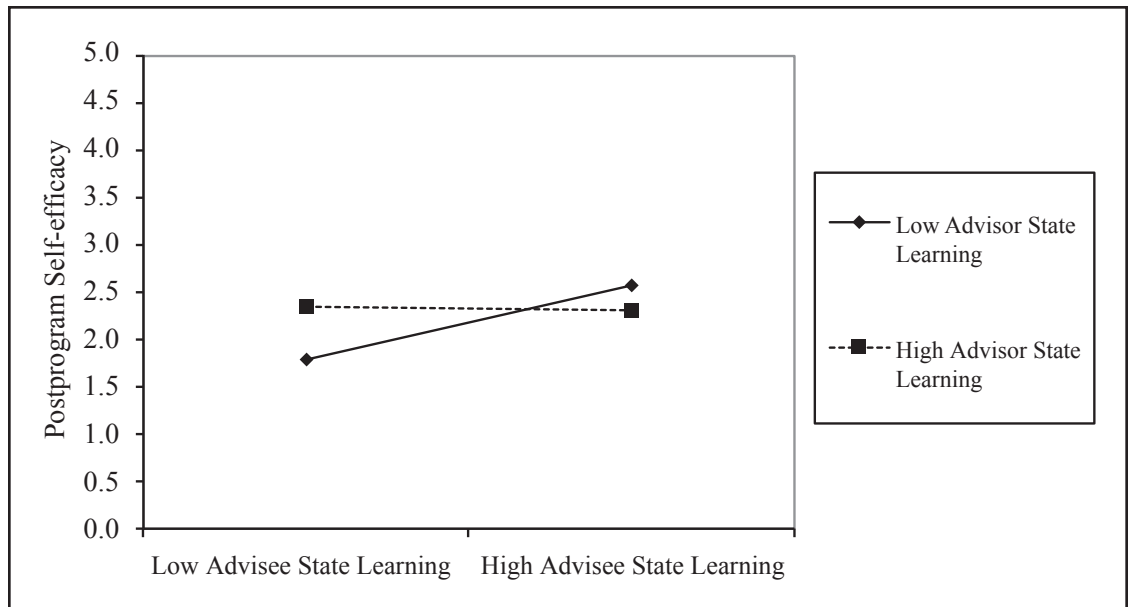
Furthermore, although the results show a main effect for advisee state LGO on postprogram self-efficacy when an advisor shows high state LGO, they were dependent on the levels of state LGO of the advisor. In other words, if an advisor was high in state LGO, the advisee's level of state LGO was not important in regard to self-efficacy. However, to encourage self-efficacy, advisees low in state LGO should work with an advisor high in state LGO. Thus, compared with peers low in state LGO, advisees high in state LGO may be more inclined to obtain applicable problem-solving information from advisors, especially from those who less eagerly give it.

Practical Implications

Most important, this study demonstrated the importance of the larger context in advising relationships. Specifically, findings suggest that preparatory mentoring-relationship training programs designed to elicit states of goal orientation using an online academic-advising program may be effective. This type of training can be administered quickly (thus reducing the strain on individuals overseeing such programs), and the outcomes probably outweigh the efforts of administering the training in a more traditional format. In addition, the training allows for program overseers to provide some cues for participants and set expectations for the program.

Results suggest that training should be provided to both advisors and advisees to maximize mentoring relationship success as measured by expressions of perceptions of psychosocial support. In turn, advisees who perceive relationships as high in support may be more inclined to continue them beyond the formal period or attempt to initiate other such relationships in the future. However, this research demonstrated that training alone was insufficient for inspiring behavioral change in the advising relationship. Perhaps behaviors of the relationship partner offer more salient cues than those learned from the training. Thus, if behavioral change is desired in the advising relationship, formal strategies (e.g., a specific requirement to talk about certain topics on a certain day) may be

Figure 2. Interaction of advisor and advisee state learning-goal orientation predicting advisee post-program self-efficacy



necessary. Moreover, advisees receiving training designed to modify their orientation toward learning may show increased academic self-efficacy, which in turn may lead to positive academic outcomes. This research also provides some additional support for using the Internet for academic advising programs and thus reducing the burden for administrators currently attempting to oversee face-to-face programs.

Future Research and Limitations

In the future, researchers may further examine different types of preparatory training programs in addition to utilizing types of communication indicators not yet employed in a study. Furthermore, in the current study, the state measures may have been insensitive, which may explain some of the unsupported findings. Future researchers should develop and further validate different advising-specific state goal-orientation indicators.

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