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Mentor and protégé goal orientations as predictors of newcomer stress

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Abstract: Although many academic organizations offer formal mentoring programs, little is known about how individual characteristics of peer mentors and their protégés interact to reduce new-student stress. First-year college students participated in a peer-mentoring program designed to reduce stress. The results of this study demonstrated that protégés who received greater psychosocial and career support showed greater stress reduction. Additionally, protégés with a higher avoid performance goal orientation showed lesser stress reduction. Mentor avoid performance goal orientation was positively associated with stress reduction for protégés high on avoid performance goal orientation, but negatively associated for those low on avoid performance goal orientation.

Keywords: newcomer socialization, mentoring, goal orientation, stress reduction

First-year college students often undergo a stressful induction to their new environments. This stress is likely to result from a struggle with new academic structures, classroom expectation uncertainty, and exam performance pressures (Shields, 2008). Researchers have long recognized the harmful effects stress can have on academic performance (e.g., Felsten & Wilcox, 1992; Shields, 2008; Silver, 1968).

A key desired outcome of formal mentoring programs for first-year students is to reduce the stress inherent in adjusting to new roles, responsibilities, and expectations. Such stress can slow the process of developing critical skills, lengthening the time in which the student requires educational training, and extending coursework completion, and can even lead to attrition (Cooper-Thomas & Anderson, 2005). Each of these outcomes can have a negative impact on the student's academic success.

Most institutions look for strategies to reduce attrition of new members (Sanchez, Bauer, & Paronto, 2006). Schools hope to socialize new students quickly and efficiently so that the first-year students can become academically and socially successful. Saks and Ashforth (1997) provide a multi-level process model of socialization. In this model, the researchers outline the contextual and socialization factors that influence cognitive sense making. Cognitive sense making consists of information, uncertainty reduction, and learning. *Newcomer socialization* has been referred to as the process of learning and adjusting to organizational norms and standards that follows selection into an organization (Cooper-Thomas & Anderson, 2005) and is a critical component to improving student commitment and reducing attrition.

This paper focuses on the portion of the model that suggests that socialization factors (i.e., orientation programs, mentoring programs) influence the cognitive sense making of

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newcomers. Furthermore, we hope to find that first-year students benefit from positive outcomes when academic socialization programs (e.g., mentoring) are used to provide information, reduce uncertainty and promote learning. Orientation programs that foster student participation, feedback seeking, and the discovery and application of knowledge can enhance a student's educational experience. From the administrator's perspective, a productive student will contribute to the school's scholarly reputation as well as the marketable statistics for the institution.

For many years, formal mentoring programs have been used in universities (Allen, McManus, & Russell, 1999; Sanchez et al., 2006) to facilitate the socialization of first-year students and to promote the positive outcomes that have been associated with formal mentoring programs (e.g., higher satisfaction, increased self-esteem, greater university commitment, lower school stress). Formal mentoring programs are often used to augment classroom or computer-based orientation and training programs designed to move newcomers through this process effectively and efficiently (Joiner, Bartram, & Garreffa, 2004). Mentors can help guide first-year students through their transition into college life. Specifically, a mentor can be someone to go to for information regarding classes, career ambitions, stress reducers, and information about the college atmosphere and city area.

A. Defining Mentoring and Goal Orientation.

Kram (1985) defined *mentoring* as a relationship between two individuals whereby the more experienced individual, the mentor, commits to providing developmental support to the less experienced individual, the protégé. When an academic organization sponsors a formal mentoring program with the purpose of socializing students, it typically matches the new students with more experienced students and provides some sort of guidance as to the expected frequency and goals of mentor-protégé meetings. Formal mentors serve as role models, help their protégés to network, make sense of organizational signs and symbols, and acquire knowledge about rules, resources, and expectations that may be difficult for the protégés to find on their own (Raabe & Beehr, 2003). This is expected to reduce the stress associated with the uncertainty of adjusting to new student roles and responsibilities.

Prior research has demonstrated that mentoring can reduce protégé stress (Ülkü-Steiner, Kurtz-Costes, & Kinlaw, 2000). However, little is known about the manner in which dispositional characteristics (e.g., goal orientation) of the mentor and protégé influence the success of mentoring on stress reduction. The present study investigated the additive and interactive effects of mentor and protégé goal orientations on new-student stress reduction during a formal peer-mentoring program.

Eby and Lockwood (2005) found that mentor-protégé mismatch was reported to be a common source of dysfunctional mentoring experiences. This is particularly an issue with respect to formal mentoring since mentors are typically paired with their protégés by a third party rather than on the basis of mutual attraction as is the case for informal mentorships (Ragins & Cotton, 1999). The mismatch experiences discussed by Eby and Lockwood further confirm the consensus that mentor-protégé similarity is a critical component for success (Allen & Eby, 2003). Further, Eby, Butts, Lockwood, and Simon (2004) found that mentor-protégé mismatches were associated with less learning and less psychosocial and career support reported by the protégé.

The concept of *goal orientation* was first introduced in the educational psychology literature to explain variability in how people interpret and respond to achievement situations (Deshon & Gillespie, 2005; Dweck, 1986; Elliot & Dweck, 1988; Sideridis, 2005). Dweck (1986) argued that those with a learning goal orientation engage in learning for its own sake, whereas those with a performance goal orientation are primarily motivated to gain favorable evaluations (or avoid negative ones) from others.

Empirical research on goal orientation later indicated that learning and performance goal orientations do not reflect opposite ends of a single continuum, but instead represent two relatively independent dimensions (Brophy, 2005). Furthermore, it has become recognized that performance goal orientation consists of two subcomponents that are correlated with each other, yet show a different pattern of correlations with the same antecedents and consequences. Specifically, prove performance goal orientation describes the motivation to approach situations in which one's competence can be demonstrated, whereas avoid performance goal orientation describes the motivation to withdraw from situations in which one's lack of competence might be demonstrated (Vandewalle, 1997).

A recent meta-analysis by Payne, Youngcourt, and Beaubien (2007) demonstrated that prove performance goal orientation tends to be uncorrelated or weakly correlated with learning processes and outcomes whereas avoid performance goal orientation tends to be negatively correlated to the same variables. Given the demonstrated relationships between goal orientation and learning in educational contexts, this construct may well be related to learning in the context of mentoring relationships.

Two recent studies report evidence to suggest that greater mentoring behaviors were provided when the mentor and protégé both shared a high learning goal orientation (Egan, 2005; Godshalk & Sosik, 2003). Additionally, Welsh and Wanberg (2009) found that learning goal orientation was associated with higher levels of career-related mentoring received. This also supports the theoretical framework outlined by Kim (2007) in which she posits mentors high in learning goal orientation will provide, and protégé high in learning goal orientation will receive more mentoring. However, mentor-protégé avoid goal orientation similarity, which has been commonly related to anxiety (Elliot & Thrash, 2002; Payne, et al., 2007; VandeWalle, 1997), has yet to be examined.

The present study extends this prior research in two important ways. First, we focus on the influence of avoid performance goal orientation on stress reduction during a formal mentoring program designed to socialize incoming first-year students. Second, we jointly tested main and interactive effects of mentor and protégé levels of avoid goal orientation.

B. Theory and Hypotheses.

Research has consistently shown us that similarity breeds success in mentoring relationships. However, there are many different dimensions upon which a mentor-protégé dyad can be similar or different. The nature of the specific outcome desired should be considered in this regard. For instance, learning goal orientation pertains to the degree to which an individual strives to achieve mastery. Consistent with this notion, Godshalk and Sosik (2003) demonstrated that mentor and protégé learning goal orientation influenced the development of protégés' enacted career aspirations (i.e., actions protégés took towards fulfilling career-related mastery). In terms of stress reduction, however, we reasoned that avoid goal orientation should be the more

relevant construct given its established links to anxiety and to responses to anxiety producing events (Elliot & Thrash, 2002; Payne, et al., 2007; VandeWalle, 1997).

Mentoring Behaviors. House (1981) suggested four types of social support that may lead to stress reduction. The first type is *emotional*, incorporating such aspects as trust, concern, and listening. The second is *appraisal*, which refers to aspects such as affirmation, feedback, and social comparison. The third type is *informational*, which incorporates aspects such as providing advice, directives, and suggestions. The final form of social support is *instrumental*, referring to aspects such as modifying the environment and providing financial guidance.

Allen et al. (1999) suggested that the former two forms (emotional and appraisal) of social support correspond with psychosocial support behaviors provided by mentors, whereas the latter two (informational and instrumental) correspond with the career support behaviors. In partial support of this notion, Allen et al. (1999) found a positive relationship between career support received and a protégé's perception that their mentor helped them cope with stress. In the present study, we tested the hypotheses that both career and psychosocial support would be unique predictors of protégés' stress reduction. The following direct effects were hypothesized.

Hypothesis 1. Psychosocial support provided during a formal mentoring program will be positively associated with stress reduction for first-year students.

Hypothesis 2. Career support provided during a formal mentoring program will be positively associated with stress reduction for first-year students.

Avoid Performance Goal Orientation. Although formal mentoring has the potential to reduce first-year student stress, we expected that mentor and protégé levels of avoid performance goal orientation would moderate these effects. First, avoid performance goal orientation has been shown to relate positively to state anxiety and negatively to emotional stability and self-efficacy (Payne et al., 2007). Therefore, protégés who have a strong avoid performance goal orientation are likely to enter a formal mentoring program with lower confidence in themselves and higher levels of stress to begin with. However, although they may be in the greatest need for stress reduction they may be less likely to benefit from mentoring as a stress reducer.

First, those high on avoid performance goal orientation tend to believe that ability is stable. Thus, their mentor is less likely to be able to convince them that things will get easier for them. Second, since they are motivated to hide their weaknesses, they should be less likely to vent their frustrations or seek feedback on their level of understanding. This, in turn, should make it more difficult for their mentor to address the specific issues that are causing them stress. Thus, we hypothesized that:

Hypothesis 3. Protégés who score higher on avoid performance goal orientation will show less reductions in stress during a formal mentoring program than will those who score lower on avoid performance goal orientation.

In a sincere effort to reduce their protégés' stress, mentors are likely to project their own beliefs about what causes and reduces stress on their protégés and to adopt stress reduction strategies accordingly. Since avoid performance goal orientation influences the types of things that induce and reduce stress for a student, a mentor's attempts to reduce a protégé's stress may be ineffective or may even increase stress if the two do not share similar levels of avoid performance goal orientation.

For instance, a mentor who has a low avoid performance goal orientation would be more likely to share his/her own personal challenges during their collegial career and to encourage protégés to do the same. "One common finding in the self-disclosure literature is the 'dyadic effect,' a subject tends to reciprocate the same level of intimacy to the discloser that has been revealed to him" (Chaikin & Derlega, 1974, p.117-118).

For protégés who are also low in avoid performance goal orientation this is likely to be a cathartic experience that allows them to vent frustrations, express fears and concerns, and to receive empathy, acceptance and feedback that their concerns are normal. By contrast, protégés who have a high avoid performance goal orientation are likely to experience increased stress at the prospect of being put on the spot to detail their personal weaknesses. Moreover, given their propensity to view ability as unchangeable (Dweck & Leggett, 1988), they may perceive a mentor's self-disclosures as a sign of the mentor's lack of competence. As a result, they may lose confidence in that mentor and in his/her ability to provide useful guidance.

Conversely, a mentor who is high on avoid performance goal orientation is unlikely to reveal personal information that would make him/her appear less competent and is unlikely to ask his/her protégés to do so either (e.g., Tolor, Cramer, D'Amico, & O'Marra, 1975). Both high and low avoid performance goal orientation protégés should be less likely to reveal concerns to a mentor who does not encourage them to share such concerns and who appears not to have ever had those concerns themselves. However, protégés high on avoid performance goal orientation should be happy to avoid such uncomfortable topics, and be less likely to expect their mentor to reveal his/her own prior weaknesses. On the other hand, protégés low on avoid performance goal orientation may be more likely to interpret the absence of such self-disclosure either as a sign that their mentor never faced the same challenges as they are and therefore cannot provide empathy or acceptance. It follows that our final hypothesis stated:

Hypothesis 4. Mentor and protégé levels of avoid performance goal orientation will interact to predict the protégé's stress reduction. Specifically, mentor avoid performance goal orientation will be negatively associated with stress reduction for low avoid protégés and positively associated with stress reduction for high avoid protégés.

I. Methods.

A. Participants.

Protégés were 271 college first-year students who took part in a formal peer-mentoring program designed to assist them in acclimating to a large southeastern university. These protégés were randomly assigned to one of 58 senior (class standing) undergraduate mentors. One-hundred and twenty-four protégés and 31 mentors were female. The mean age was 18.24 years for protégés and 21.43 years for mentors. Protégés and mentors were compensated $8 and $10 per hour respectively for their participation in this research.

B. Measures.

Mentoring Behaviors. Protégés reported the extent to which they felt psychosocial support and career support was provided to them using an adapted 25-item version of a measure by Noe (1988). Modification of the measure included the addition/deletion of items as well as the

modification of question wording to fit the academic context of our study (see Appendix). Responses were made on a 6-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). For the original scale, Noe (1988) reported internal consistency estimates of .92 for the psychosocial scale and .89 for the career-related scale. The internal consistency reliability estimates obtained in the present study for protégé reports of psychosocial support and career support were .89 and .90, respectively.

Goal Orientation. Mentor and protégé learning goal orientation and avoid performance goal orientation were assessed using scales developed and validated using confirmatory factor analysis, reliability analysis, and nomological network analysis by VandeWalle (1997). Participants were asked to respond to each item using a six-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). The learning goal orientation measure consisted of five items (e.g., "I enjoy challenging and difficult tasks where I'll learn new skills") and the measure of avoid performance goal orientation consisted of 4 items (e.g. "I prefer to avoid situations where I might perform poorly"). The full scale can be found in VandeWalle (1997; Table 2). VandeWalle (1997) reported internal consistency estimates of .89 for learning goal orientation and .88 for avoid performance goal orientation. The internal consistency reliability estimate obtained in the present study was .89 for learning goal orientation and .60 for avoid performance goal orientation.

Stress. Protégés were asked to report their levels of school-related stress prior to their participation in the mentoring program using a three-item measure extracted from House and Rizzo's (1972) anxiety-stress questionnaire. The three items were, "Problems with school have kept me awake at night this semester," My schoolwork this semester has had a negative impact on my health," and "I have been under a great deal of tension this semester" (revised from House & Rizzo, 1972). Item responses were averaged to form indicators of pre-program stress. House and Rizzo (1972) found a Kuder–Richardson reliability estimate of .83 for the three items we used to measure pre-program stress. This item was used as a control variable in all of our analyses.

Protégés were also asked to report their level of mentor-related stress reduction upon completion of the third mentoring session. Allen et al.'s (1999) two-item measure was used including, "Having a mentor has really helped to reduce my school tension," and "My mentor has helped me better cope with my school stress" (revised from Allen et al., 1999). The two items were averaged to form an indicator of mentor-related stress reduction. Allen et al. (1999) found a correlation of .71 between these two items in their original study.

All stress items were rated using a 6-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). The internal consistency reliability estimate obtained in the present study was .76 for pre-program stress and .91 for mentor-related stress reduction.

C. Procedure.

All participants attended a protégé or a mentor orientation, completed a demographic survey, and the goal orientation measures. Protégés additionally completed the pre-program stress measure. Next, each protégé was randomly assigned a mentor. Due to the greater number of protégés than mentors, each mentor was assigned 3-4 protégés. During an initial 3-week probationary period, each dyad was asked to hold weekly fifteen-minute sessions. These sessions took place either face-to-face, through video-teleconferencing technology, by phone, or through electronic chat. One week following the final mentoring session, participants completed the stress measure once again and completed the mentoring behaviors measure. At this point in time, mentors and protégés were free to meet when and where they pleased.

II. Results.

Table 1 presents means, standard deviations, and correlations among study variables.

Since mentors had multiple protégés, Hierarchical Linear Modeling (HLM) analyses were used to test whether the mentor accounted for unique variance in mentoring outcomes. Results of our HLM analyses indicated that the random factor for the nested variable (i.e., mentor) did not account for unique variance in protégé stress reduction (*Wald's Z* = 0.69, $p = 0.49$). Thus, multiple regression analysis was used to test hypotheses regarding stress reduction. Time-one stress level was used as a control variable. The results of the regression analyses are presented in Table 2.

While we are specifically interested in avoid goal orientation, learning goal orientation is typically correlated (negatively) with avoid goal orientation. In order to rule out the possibility that learning goal orientation rather than avoid goal orientation was responsible for differences in stress reduction, we included mentor and protégé learning goal orientation and their interaction in our analysis as well as mentor and protégé avoid performance goal orientation. Protégé stress reduction was regressed onto time one stress levels ($t = 1.78$, $p = 0.07$), career support ($t = 5.22$, $p < 0.01$), psychosocial support ($t = 1.79$, $p = 0.07$), mentor ($t = -.47$, $p = 0.64$) and protégé ($t = -0.32$, $p = 0.75$) learning goal orientations and mentor ($t = 1.42$, $p = 0.16$) and protégé ($t = 2.24$, $p = 0.02$) avoid performance goal orientations, as well as two product terms representing interactions among mentor-protégé learning goal orientation and avoid performance goal orientation. The overall model was significant ($F = 11.93$, $p < 0.01$), accounting for 36% of the variance in stress reduction.

Hypothesis 1 stated that those who received greater psychosocial support would show greater stress reduction than those who received lesser psychosocial support. This hypothesis was supported ($t = 1.79$, $p = 0.04$, two-tailed). In support of Hypothesis 2, the amount of career support received by the protégé also accounted for unique variance in stress reduction ($t = 5.22$, $p < 0.01$). Hypothesis 3 stated that protégés who scored higher on avoid performance goal orientation would show lesser stress reduction than those who scored lower on avoid performance goal orientation. This hypothesis was not supported. Instead, we found the opposite. Protégés who scored higher on avoid performance goal orientation showed *more* stress reduction than those who scored lower on avoid performance goal orientation ($t = 2.24$, $p = 0.03$). Finally, as depicted in Figure 1, mentor avoid performance goal orientation was positively related to stress reduction for protégés with high avoid performance goal orientations and negatively related to stress reduction for protégés with low avoid performance goal orientations ($t = -0.60$, $p = 0.04$). Thus, Hypothesis 4 was also supported.

III. Discussion

This study provided additional support for the positive influences of formal mentoring programs on first-year students. Consistent with prior research (Allen et al., 1999), results from this study indicated that first-year students who received greater career support from their mentors reported greater stress reduction than did those who received lesser career support. In the present study, however, psychosocial support received also had a uniquely positive relationship with stress reduction. Our results extend prior research by demonstrating that beyond the effects of career and psychosocial support, the level of avoid goal orientation possessed by first-year students and their peer mentors played a significant role in determining stress reduction levels. First-year students who were higher on avoid goal orientation started the mentoring program with higher stress levels and reported more stress reduction than did first-year students who were lower in avoid goal orientation.

Table 1. Inter-correlations among study variables.

Variable	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. Pre-program School Stress	2.80	1.13	1.00							
2. Protégé Learning Goal Orientation	4.43	0.84	0.05	1.00						
3. Protégé Avoid Goal Orientation	3.07	0.93	**0.24***	**-0.24****	1.00					
4. Mentor Learning Goal Orientation	5.22	0.64	0.03	-0.01	-0.10	1.00				
5. Mentor Avoid Goal Orientation	2.32	0.75	-0.04	0.05	0.13	**-0.41****	1.00			
6. Protégé-reported Stress Reduction	3.00	1.23	**0.67****	**0.16***	**0.15***	-0.08	0.04	1.00		
7. Career Development Support	2.87	0.94	0.12	-0.04	0.07	**0.18****	-0.12	0.01	1.00	
8. Psychosocial Support	4.20	0.86	0.10	**0.14***	-0.05	0.12	-0.08	0.04	**0.68****	1.00

Note. $N = 203$. *$p < 0.05$; **$p < 0.01$

Table 2. Multiple regression analyses for the prediction of stress reduction.

Variables					
Dependent	Independent	*B*	*SE B*	β	R^2
Stress Reduction					**0.36****
	Protégé Pre-program Stress	0.12	0.06	**0.11***	
	Mentor Learning Goal Orientation	-0.28	0.60	-0.15	
	Mentor Avoid Goal Orientation	0.48	0.34	0.30	
	Protégé Learning Goal Orientation	-0.22	0.69	-0.16	
	Protégé Avoid Goal Orientation	0.56	0.25	**0.44***	
	Psychosocial Support	0.20	0.11	**0.15***	
	Career Support	0.55	0.11	**0.43****	
	Mentor X Protégé Learning Goal Orientation	0.05	0.13	0.22	
	Mentor X Protégé Avoid Goal Orientation	-0.21	0.10	**-0.60***	

* $p < 0.05$, ** $p < 0.01$. $N = 203$.

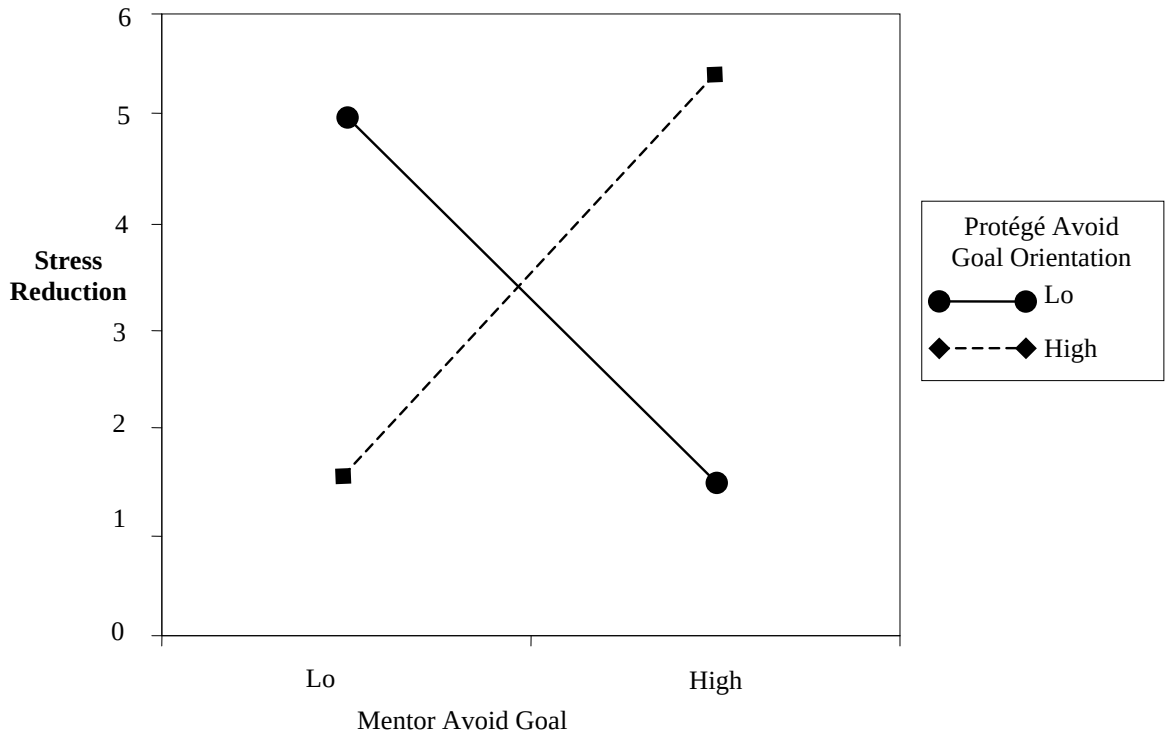

Figure 1. Relationship between mentor avoid goal orientation and protégé stress reduction moderated by protégé avoid goal orientation.

Our most interesting finding further specified that mentor avoid performance goal orientation was positively related to stress reduction for first-year students who were also high on avoid performance goal orientation, but negatively related to stress reduction for protégés who were low on avoid performance goal orientation. This finding supports the notion that in addition to mentor-protégé similarity on surface level characteristics (e.g., gender, race) similarity on deep-level characteristics such as personality or goal orientation also contributes to the success of mentoring relationships. Eby et al. (2000) noted that negative mentoring was most likely to occur when mentors were perceived by their protégés to have divergent values, beliefs, and attitudes.

Although prior research has demonstrated interactive effects for mentor and protégé learning goal orientation, mentoring behaviors received, and affective outcomes (Sosik & Godshalk, 2004), we found that the learning goal orientation of mentors and protégés did not interact to predict stress reduction. Instead, mentor and protégé avoid performance goal orientation interacted to predict first-year student stress reduction. These findings were consistent with our expectation that the avoid goal orientation dimension was more conceptually related to anxiety and responses to anxiety, and thus, would be the more relevant dimension upon which mentor-protégé similarity should be considered. Future research on mentor and protégé goal orientation should continue to specify the dependent variables that are most related to either the learning or the avoid performance goal dimension. In this way, we can provide more tailored guidelines for administrators of formal mentoring programs.

The fact that protégés were randomly assigned to mentors also enables us to rule out the possibility that those high in avoid performance goal orientation somehow attracted or were attracted to less capable mentors or protégés. In addition, the effects of avoid performance goal orientation were not explained by differences in the provision of career or psychosocial support. Instead, mentor and protégé avoid goal orientations (and the interaction of the two) contributed uniquely to stress reduction beyond the direct effects of career and psychosocial support.

It may be that although protégés with high avoid performance goal orientation mentors did not receive quantitatively less career or psychosocial support, the support that was provided may have been less relevant to their specific needs. We base this argument on the notion that mentors high in avoid performance goal orientation should be less likely to ask their protégé for feedback on the degree to which they are meeting his/her needs, and protégés high on avoid performance goal orientation are less likely to reveal developmental needs that they feel threaten the appearance of their personal competence. Other potential contributing factors are that high avoid performance goal orientation individuals are more prone to state anxiety and less prone to engage in self-regulation (Payne et al., 2007). Additional research is needed to explore these and other possibilities.

We have argued that mentors, in a sincere effort to reduce their protégés' stress, are likely to project their own beliefs about what causes and reduces stress onto their protégés and to adopt stress reduction strategies accordingly. Thus, mentor levels of avoid performance goal orientation should be positively related to stress reduction for protégés with high avoid performance goal orientation but negatively related for protégés with low avoid performance goal orientation. Our results fully supported this hypothesis. These findings suggest that formal mentoring programs designed to reduce first-year student stress should pair mentors to protégés in a way that maximizes similarity on avoid performance goal orientation. However, certain limits to generalizability must be noted.

It is important to point out that our data were collected after only the first three weeks of the mentoring relationships. It is unclear whether the initial negative effects of mentor-protégé avoid goal orientation mismatch on stress reduction continue over time, dissipate, or become accentuated. It is also important to note that most peer mentoring programs are designed with multiple desired outcomes in mind. It is unclear whether mentors with high avoid goal

orientation are beneficial to high avoid protégés with respect to these other criteria (e.g., learning, self-efficacy). The fact that mentor and protégé learning goal orientation has been found previously to be beneficial (e.g., Egan, 2005) yet was unrelated to stress reduction in the present study highlights the fact that the appropriate matching criteria may differ for different types of outcomes. Future research should examine the possibility that protégé and mentor levels of avoid goal orientation may also have very different effects on different types of outcomes.

Implications for Practice

The results presented here have important implications for colleges that implement formal mentoring programs**.** We demonstrated that short-term formal mentoring relationships can reduce first-year student stress, but we also found that this was not true for all participants. Eby and Lockwood (2005) identified mentor-protégé mismatch as a factor contributing to dysfunctional mentoring outcomes. Results from the present study specify one of the dimensions on which mentors and protégé need to be in alignment. Administrators of formal mentoring programs intended to reduce newcomer stress should attempt to match protégés that are high on avoid goal orientation with mentors who are also high on avoid goal orientation, and to match protégés low on avoid goal orientation with mentors who are also low on avoid goal orientation.

Additionally, our results suggest that administrators of formal mentoring programs may provide training/instructions to first-year students that help them to understand the importance of the role that they play in assisting their mentors in targeting areas in which they are in greatest need of support. Both the needs of the protégé and the composition of the mentoring relationship influence a mentor's behavior (Ragins, 1997). If the mentor and protégé do not possess congruent levels of avoid goal orientation, the mentor may misperceive the needs of the protégé and engage in behaviors the protégé perceives negatively.

In sum, we know from the literature that similarity fosters interpersonal comfort (Allen, Day, & Lentz, 2005) and satisfaction with the relationship (Ensher & Murphy, 1997). We took this one step further to examine goal orientation similarity and found consistent results: congruence with respect to mentor and protégé avoid performance goal orientation matters when it comes to first-year college students' stress reduction. Mentoring can be a valuable source for stress reduction when mentors supply first-year students with social support in the manner consistent with their characteristic dispositions. These types of mentoring relationships may help to reduce academic stressors such as coursework overload, ambiguity with academic expectations, and first-year student adjustment to the college environment. Future research should continue to explore these effects to expand the nomological network related to goal orientation, mentoring, and student stress reduction.

Our findings contribute to the literature by emphasizing the need to consider personality differences in student populations and to consider how first-year students respond to mentoring and stress. Early developmental experiences impact later career development and mentoring in particular (Berlew & Hall, 1966) can have significant longitudinal effects (Chao, 1997) for individuals as they progress through their academic careers. The first year of college is a critical period of adjustment for students. This time is also often associated with great deals of stress as students attempt to juggle course deadlines, assignments, extracurricular engagements, and the socialization process. Peer mentors can be a source of support and guidance to help alleviate tensions during this time.

Appendix.

Mentoring Behaviors.

Modified Psychosocial Support Items

(Original scale: Noe, 1988, Table 1)

Please indicate on the scale from 1-6 the extent to which the following statements describe the relationship you had with your mentor.

1. My mentor shared the history of his/her academic career with me.
2. My mentor encouraged me to prepare for academic advancement
3. My mentor encouraged me to try new ways of behaving in school.
4. My mentor demonstrated good listening skills in our conversations.
5. My mentor discussed my questions and concerns regarding feelings of competence.
6. My mentor discussed my questions concerns regarding commitment to academic advancement.
7. My mentor discussed my questions and concerns regarding relationships with peers.
8. My mentor discussed my questions and concerns regarding relationships with faculty.
9. My mentor discussed my questions and concerns regarding work/family conflicts.
10. My mentor shared personal experiences as a different perspective to my problems.
11. I expect that my mentor will provide suggestions for how to manage my personal stress levels.
12. I expect that my mentor will suggest ways to be involved in *non-academic* extracurricular activities.
13. I expect that my mentor will suggest ways to deal with personal concerns.
14. I expect that my mentor will encourage and support me.

Modified Career Support Items

(Original scale: Noe, 1988, Table 1)

1. My mentor reduced unnecessary risks that could threaten the possibility that I would advance through my program of study.
2. My mentor helped me review assignments/tasks or meet deadlines that otherwise would have been difficult to complete.
3. My mentor offered to help me meet with other students.
4. My mentor gave me ideas for increasing contact with school administrators and faculty.
5. My mentor gave me ideas for activities to prepare me for an internship or job.
6. My mentor gave me ideas for activities that will present opportunities for me to learn new skills.
7. My mentor provided me with practical tips on how to accomplish academic objectives.
8. My mentor offered to introduce me to others who can provide me with academic opportunities.
9. My mentor helped my mentor develop interpersonal communication, leadership, or team skills through feedback.
10. My mentor helped me to develop study skills.
11. My mentor offered to recommend me to faculty, staff, employees, etc., for desired opportunities.

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