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On Campus Social Support and Hope as Unique Predictors of

Perceived Ability to Persist in College

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Abstract

The psychological construct of hope, characterized by goal directed thinking rooted in personal agency and the ability to develop pathways to achieve goals, has long been demonstrated to predict academic success. A sample of 994 undergraduates participated in this study to better understand the role of hope and on campus social support in predicting students' perceived ability to persist and succeed in college. Results demonstrated that on campus support, particularly from teachers and professors, significantly predicted academic outcomes and hope. Additionally, we found evidence of a "support gap" in which students from underrepresented ethnic minorities were far more likely to report that they had no support from educators on campus. Findings demonstrate the need for more research on the role of social support in developing hope in college students and highlight the value of encouraging meaningful relationships between students and faculty on campus.

Keywords: social support; hope; academic success; college students; retention

On Campus Social Support and Hope as Unique Predictors of Perceived Ability to Persist in

College

As more students attend college and the cost of higher education continues to rise, universities and students alike face pressure to prevent dropout and encourage on-time graduation in higher education. The challenge of retaining and supporting college students towards graduation is one that has been studied for decades (Tinto, 1993). Now, more than ever, it is important to understand the factors that influence students' success in college and likelihood to graduate. Student characteristics like goal persistence, as well as more contextual factors like connection with campus and social support, are important in predicting college retention (Tinto, 1993, 2006). One such factor that has been well demonstrated to predict academic success is Snyder et al.'s (1991) construct of hope. Research has extensively examined the relationship between hope and academic success in college students, but little has explored the combined impact of social support with hope on student outcomes. The present study looks at the factors of on campus support from faculty, advisors, and staff in conjunction with students' trait and academic hope in predicting student success and their perceived ability to persist in college.

Hope and Academic Success and Persistence

Hope theory posits that individuals' behavior is directed towards goals (Snyder, 2002) and that goal achievement requires both pathways and agency thinking (Snyder et al., 1991). Pathways thinking involves creating a plan to achieve goals, whereas agency thinking includes the motivation to achieve them and involves the perceived ability to carry out the plan (Snyder, 2002). Individuals with higher levels of hope are better able to come up with plans to achieve their goals and modify those plans in the face of obstacles (Snyder, 2002).

Not surprisingly, hope has been linked to numerous desirable educational outcomes that can lead to greater academic success (Marques, Gallagher, & Lopez, 2017). Most prominently, higher levels of hope have consistently been found to predict higher GPA across studies (Buckelew, Crittendon, Butkovic, Price, & Hurst, 2008; Snyder, Shorey, Cheavens, Pulvers, Adams, & Wiklund, 2002), and hope predicts academic performance and retention beyond educational history, self-efficacy, and engagement with the academic environment (Gallagher, Margues, & Lopez, 2017). Similarly, hope uniquely predicts academic achievement in college beyond intelligence and previous academic achievement (Day, Hanson, Maltby, Proctor, & Wood, 2010) and has been linked to graduation outcomes, such as higher graduation rates, graduating in 4 years, and lower rates of dismissal for poor academic performance (Gallagher et al., 2017; Snyder et al., 2002). Among law students, higher levels of hope, but not optimism, predict higher GPA in the first semester of law school beyond the impact of previous academic achievement (Rand, Martin, & Shea, 2011). These effects may exist in part because students with higher levels of hope are better able to clearly formulate goals and remain focused on achieving goals (Snyder, 2002; Snyder et al., 2002). They have greater motivation to achieve educational goals because their higher levels of agency and their previous successful goal achievements result in motivation to achieve goals even in the face of obstacles (Hansen, Trujillo, Boland, & MacKinnon, 2014; Snyder et al., 2002).

While most hope research considering academic outcomes has used the Trait Hope Scale (Snyder et al., 1991), which measures overall agency and pathways thinking regardless of the specific emphasis of goals, some research has also employed a Domain Specific Hope Scale for Academics which assesses hope for achieving academic goals (Sympson, 1999). Academic hope, as captured by this scale has been demonstrated to be a better predictor of GPA than trait hope

(Robinson & Rose, 2010) and has been shown to mediate the relationship between trait hope and GPA (Feldman & Kubota, 2015).

Hope and Supportive Relationships

In addition to understanding important outcomes associated with hope, research in this domain has begun to parse the life circumstances and experiences that make individuals more hopeful. For instance, perceived social support and positive social interactions are correlated with trait hope (Snyder, Cheavens, & Sympsom, 1997). In fact, individuals tend to feel most hopeful in the context of being supported by others (Bishop & Willis, 2014), and supportive relationships have been found to assist in developing and sustaining hope in children and adolescents (Bishop & Willis, 2014; Guthrie, Ellison, Sami, & McCrea, 2014; Kemer & Atik, 2012; Sahranç, Celik, & Turan, 2017). Among children, social support has been found to be a powerful predictor of hope (Sahranç et al., 2017), as children sustain hope in the face of obstacles through the encouragement of supportive others, including parents, caregivers, teachers, or peers (Snyder et al., 1997). Similarly, among adolescents, hope is sustained though interactions with supportive others, such as teachers, social workers, mentors, family members, and friends (Guthrie, 2011; Guthrie et al., 2014).

Despite the growing body of literature suggesting that supportive others are integral in the development and maintenance of hope, current conceptualizations of hope minimize the role of support and relationships with others in developing and sustaining hope. For instance, a manuscript by Snyder et al. (1997) and a number of other theoretical works argue that there is an interpersonal nature to hope (Elliott & Sherwin, 1997; Snyder, 1994), yet the role of supportive others in nurturing hope has received relatively little empirical attention. What research has explored the role of supportive relationships in building hope has emphasized this effect in children and adolescents, providing very limited evidence on the role of supportive relationships and hope in college students or adults. Just one study found that having supportive adult relationships predicts hope in college students (Fruiht, 2015); however, it did not differentiate the impact of on campus support from familial and community support.

On Campus Support and College Students

Like hope, on campus support has been suggested to increase retention and success in college students (Tinto, 1993; 2006). Such support can come in the form of teachers, academic advisors, and other staff members (such as counselors, student organization advisors, program coordinators, or coaches) who take an active interest in the success of a student. Most notably, relationships with faculty members are integral to retention and academic success (Astin, 1993), as students who have regular contact with a faculty member feel a greater connection to the campus and therefore are less likely to leave (Fischer, 2007; Heisserer & Parette, 2002). Advisors also play an important role in student retention, especially for at-risk students (Heisserer & Parette, 2002), as one recent study suggested that for every additional meeting with advisors first generation college students have in a given year, their odds of persistence increase by 13% (Swecker, Fifolt, & Searby, 2013). Thus, it is clear that on campus support plays a role in student retention, however the research discussed above emphasizes the role of supportive adults in promoting connection to campus, rather than considering the more instrumental roles they may play in promoting student success. It is therefore important to consider the significant functional roles that supportive adults on campus play in the lives of college students (Nora & Crisp, 2007).

In addition to fostering a connection to campus, on campus support may be important for building hope (Williams & Butler, 2010). Faculty and staff may develop agency and pathways

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thinking in students by helping promote their strengths and using classroom experiences and advising sessions as the context for building hope. Specifically focusing on the role of teachers, Snyder (2005) identified ways teachers can build hope in students such as spending time with and caring about students, setting clear goals for students and for the class, having a clear plan to achieve course goals (pathways), demonstrating enthusiasm about the course material to promote motivation (agency), and praising student effort in the learning process along with the learning of course content. If students understand how to learn (pathways) and are motivated to learn (agency), this increases hope and helps increase academic success beyond that particular course. When working with at-risk students, relationships with teachers can increase hope if teachers explore students' strengths and then work to mobilize those strengths (Snyder, Shorey, & Rand, 2006). While there is a strong theoretical basis for the importance of relationships with supportive others for developing hope, as well as a good deal of research on the contributions of hope and social support independently on academic persistence, no study to date has considered the interplay of these factors.

Purpose of the Current Study

The purpose of this study was to explore the role of hope and social support in predicting college students' overall satisfaction with academic progress and perceived ability to graduate and achieve educational goals. These indicators were used to complement the already large body of literature demonstrating the role of hope and social support in predicting GPA. As Snyder's theory has been criticized for underestimating the role of relationships in hope (Bishop & Willis, 2014), we first aimed to explore the role of relationships, specifically in the form of supportive relationships, in predicting hope among college students. In addition to understanding how supportive relationships on campus might predict hope, we investigated the role of on campus

support in predicting expectations of graduating and perceived academic success. Specifically, we assessed support from teachers, advisors, and other academic staff both in terms of their unique and cumulative support. Finally, we tested the hypothesis that both hope and social support predict unique variance in these academic outcomes. Given the under-utilization of the Academic Hope Scale, which may be a more effective predictor of academic success than the Trait Hope Scale, we looked at the role of both trait and academic hope in predicting these outcomes.

Method

Participants

A representative sample of 994 undergraduate students from a mid-sized public university participated in this study. Participants were 496 women, 495 men, and 3 individuals who identified as non-gender binary. The sample included 828 Caucasian students (83.3%), 46 African American students (4.6%), 42 Latinx students (4.2%), 28 students from other underrepresented minority groups (2.8%), and 50 biracial or multiracial students (5%), which is representative of the university where the research was conducted. The "other underrepresented minority" category included students who identified as Asian, Southeast Asian, Native American, Indian, Middle Eastern, and Pacific Islander. The group was used in analysis due to the small sample size of each represented group in the category. The average age was 19.4 years (SD = 2.18), with a range of 18-52 years. The majority of the sample (75%) were in their freshman or sophomore year (defined as having completed less than 60 college credit hours).

Measures

Trait hope. The Trait Hope Scale includes four items to measure agency, four items to measure pathways, and four distractor items. Items are measured with a 4–point Likert scale

ranging from 1 (definitely false) to 4 (definitely true). The scale has Cronbach's alphas ranging from .74 to .84 in the initial validation studies, demonstrating acceptable internal consistency (Snyder et al., 1991). Snyder and colleagues (1991) reported mean hope scores for college students at 25.3. Scores in this sample were consistent with Snyder et al.'s (1991) findings.

Academic hope. The Academic Hope Scale is a subscale of the Domain Specific Hope Scale and includes 8 items measured with an 8–point Likert scale ranging from 1 (definitely false) to 8 (definitely true). The scale has a Cronbach's alpha of .90, demonstrating good internal consistency. In the initial validation study, a mean score of 49.38 was found (Sympson, 1999), which is consistent with the mean score in this study.

Supportive individuals on campus. In order to identify their on campus support networks, students were asked to identify all people who had a positive influence on their ability to achieve their goals from a list of on and off campus supporters. The three options that comprised on campus supporters were teachers/professors, academic advisors, and other academic staff members. Students specified that other staff members included Resident Assistants, organization advisors, program coordinators, staff at the Center for Students with Disabilities, coaches, and counselors.

Perceived ability to persist. Academic outcomes included students' confidence in graduating, confidence in achieving educational goals, and satisfaction with their academic career. These were measured with the questions: "How confident are you that you will be successful in graduating from the University?", "How confident are you that you will achieve your educational goals?", and "How satisfied are you with the way your academic career has progressed?". The three questions used 5-point Likert scale responses, ranging from 1 (highly satisfied/ extremely confident) to 5 (highly dissatisfied/ not at all confident).

Procedure

Participants were students recruited from two different general education courses that all students are required to take, one that students take earlier in their academic careers and one students take after achieving junior status. Instructors for all sections over one academic year were sent an email asking if the researcher could administer surveys in class. If the instructor agreed, the scales and survey were administered and all students in the class were invited to participate, but given the option to opt-out of participating without penalty. The researcher administering the surveys was not the instructor of the course. Surveys were administered in 40 out of 114 sections. Grounded in Snyder's theory of hope (Snyder et al., 1991), participants completed the Trait Hope Scale and Academic Hope Scale. Participants also responded to items created for this project related to social support, experiences on campus, and demographic information.

Results

Missing data on the hope scales were handled using expectation-maximization estimation for participants with less than 5% missing data. Participants missing data for the entire Hope or Academic Hope Scales were not included in analyses. For single item measures of academic success, participants with missing data were excluded listwise by model. Because of issues with platykurtosis in single item measures of academic outcomes, a natural log transformation was performed on the variables of confidence in graduating and ability to achieve educational goals prior to data analysis.

To test our hypothesis that support from teachers, advisors, and other staff members would predict higher hope and academic hope scale scores and better perceived educational outcomes we ran a series of hierarchical linear regressions. First, we looked at the outcomes of hope and academic hope as predicted by the cumulative availability of support from teachers, advisors, and other staff members in supporting students' goals. We calculated an on campus support score for each student by summing their dichotomous responses to items about the influence of teachers, academic advisors, and other academic staff. Just 14 (1.4%) participants reported a positive influence of all three, so scores were winsorized to range from 0 to 2. Age, race, and gender were entered in the first step of the model as covariates. In both the hope and academic hope models, the second steps including the potential supportive relationships were significant, *F* (7, 980) = 4.08, *p* < .001 and *F* (7, 980) = 6.43, *p* < .001, respectively. As hypothesized, cumulative on campus support was a significant predictor of both hope ($\beta = .13$, *p* < .001) and academic hope ($\beta = .16$, *p* < .001). The only other variable in the final models that was significant was gender. Gender differences, however, were not consistent across outcomes. While men reported being significantly more hopeful than women ($\beta = .08$, *p* = .016), women reported having significantly more academic hope than men ($\beta = ..10$, *p* = .002). See table 1 for complete models.

We then ran comparable models to consider the relationships between on campus support and perceived ability to persist. The only model that significantly predicted an outcome at the first step was the model created to predict confidence in graduating (F (6, 981) = 2.12, p = .049). At this first step, individuals who identified in the "other underrepresented minority" category felt significantly less confident in their likelihood of graduating (β = .11, p = .001). Again, all three final models predicted significant variance in educational outcomes and cumulative on campus support predicted more confidence in graduating (F (7, 980) = 4.714, p < .001), confidence in achieving educational goals (F (7, 980) = 5.04, p < .001) and satisfaction with one's academic career progress (F (7, 965) = 5.36, p < .001). Students who perceived experiencing more support

on campus also reported significantly more satisfaction with academic progress ($\beta = -.17, p < .001$), felt more confident in their ability to graduate ($\beta = -.14, p < .001$) and felt more confident in their ability to achieve their educational goals ($\beta = -.18, p < .001$). See table 1 for complete models.

To better understand which relationships may be most important in predicting these outcomes, we then created a second series of hierarchical linear regressions in which we included each individual type of support, rather than a composite score for on campus support. Again, all five final models were significant (p < .001), and comparable gender differences were found for hope variables. However, the only significant predictor of hope ($\beta = .13, p < .001$) and academic hope ($\beta = .20, p < .001$) was the availability of support by teachers. This trend also held in the models for satisfaction with academic progress ($\beta = -.20, p < .001$), confidence in ability to graduate ($\beta = -.18, p < .001$) and confidence in ability to achieve educational goals ($\beta = -.20, p < .001$). See table 2 for complete model information.

While our initial analyses demonstrated the relationship between feeling supported and positive outcomes, our second set of results suggested this relationship may be driven exclusively by the support of teachers. Given these findings, we utilized a multivariate analysis of variance to look more specifically at the role of cumulative support in predicting outcomes to compare the impact of having just one positive influence, to two or three positive influences on campus. As expected, the overall test was significant Wilks' $\lambda = .95$, F(10, 1930) = 5.15, p < .001. Individual analysis of between-subjects effects demonstrated that on campus support was a significant predictor of all five outcomes. See table 3.

Post hoc comparisons showed that significant differences in trait hope exist between individuals who reported no positive influence and those who reported two types of influence (*p*

< .001), as well as significant differences between those who reported one and two (p = .010). Individuals with two types of support had hope scores about one full point higher than those with no on campus supporters. In predicting academic hope, it was the sample of students who had no on campus positive influences who were significantly different from those who had one or two (p < .001 and p < .001, respectively). Each type of support added about a one-point increase on the academic hope scale. In predicting perceived ability to persist, there were significant differences between all levels (0, 1, 2 or more) of support in predicting all outcomes (p < .05) with the exception of confidence in graduating, where the only significant difference was between no on campus support and two or more types of support. Taken together these results suggest that while teachers are very important in predicting a student's perceived ability to persist in college, we cannot discount the accumulation of support from multiple trusted adults on campus.

Finally, we tested the hypothesis that both hope and social support make a unique contribution in the prediction of perceived positive academic outcomes using a final series of hierarchical linear regressions. Demographics were entered at the first step of the model and number of on campus supporters was entered at the second step. As was demonstrated in our first analyses all three models were significant at this second step. At the third and final step we entered trait and academic hope scores. In all three final models we found a significant effect of on campus support, trait hope, and academic hope in uniquely predicting perceived ability to persist. See Table 4 for model details.

Given the demonstrated importance of on campus support, and in particular the supportive role of teachers in predicting perceived ability to persist, we conducted a chi-squared test of independence to consider differences in perceived on campus support between individuals

of different racial backgrounds in our sample. The significant chi-squared test of independence demonstrated that support was experienced differently between students of different racial backgrounds, $\chi^2(8) = 18.253$, p = .019. Post hoc paired comparisons showed that there were no significant between group differences in prevalence of two types of support, between 19.0% and 26.9% percent of students fell into this category. However white and multiracial students were the least likely to report having no on campus support (35.9% and 27.7%, respectively). Conversely, half (50.0%) of African American students, and well over half (61.9%) of Latinx students reported having no on campus support sources. None of these groups differed significantly from students of other races, of which 46.7% had no on campus supporters. We investigated these same differences in prevalence of support from teachers, advisors, and other staff on campus and found that significant differences only existed in support from teachers γ^2 (4) = 20.306, p < .001. Again, white and multiracial students were the most likely to report support from teachers on campus (54.9% and 57.4% respectively). This was significantly more than African American (32.6%) and Latinx (28.6%) students. However, neither group differed significantly from students in the other underrepresented minority group (43.3%).

Discussion

Results support our hypotheses that 1) on campus support from teachers, advisors, and other staff members predicts higher hope and academic hope scale scores and a greater perceived ability to persist in college and 2) on campus support and hope each uniquely predict students' perceived ability to persist in college. Additionally, in line with the growing body of research considering the factors that predict the success and retention of underrepresented minority (URM) college students, our results demonstrated differences in on campus support between white and URM students. That is, we found evidence of a "support gap" between white and URM students, which is especially concerning given the critical role of on campus support demonstrated by this and past research (Astin, 1993; Heisserer & Parette, 2002) and the importance of support for URM student success (Hurd, Loeb, & Tan, 2016).

On Campus Support Promotes Positive Outcomes

Having support from teachers, advisors, and other staff members predicted higher levels of hope and academic hope. This support was also a significant predictor of students' confidence in graduating, confidence in achieving educational goals, and satisfaction with academic career. While teacher support was the strongest predictor of hope and perceived ability to persist, having support from more than one positive influence on campus was also important, suggesting that an accumulation or network of support may lead to even greater outcomes. Thus, we can conclude that overall, students who have support from multiple caring adults on campus, and most importantly teachers, reported more positive academic self-perceptions.

While this finding speaks to the importance of on campus support for student success, we also found that students from some URM groups were more likely to report having no on campus supporters. White and biracial/multiracial students were the least likely to report having no on campus support, while significantly more African American students and Latinx students reported having no on campus support. African American and Latinx students were also significantly less likely to identify having support from teachers. This is particularly concerning given that support from adults on campus has been demonstrated to be of even greater importance for URM students (Syed, Azmitia, & Cooper, 2011), and relationships with teachers have been shown to serve a compensatory role in supporting the academic success of those with fewer social and economic resources (Pascarella, Pierson, Wolniak, & Terenzini, 2004). There were also differences in students' confidence in graduating, with URM students who identified

with a race other than African American, Latinx, or biracial/multiracial feeling less confident in their ability to graduate from the institution. However, it is important to note in interpreting these findings that the majority (87%) of the students who identified as biracial or multiracial indicated "White" as one of their identities, which could explain the similarities in perceived support between the two groups, and that 5 (17%) of the students who identified in the other underrepresented minority group were international students.

Hope Predicts Positive Outcomes Beyond Social Support

Beyond our findings about the importance of on campus support, we found support for our hypothesis that on campus support, trait hope, and academic hope each uniquely predict the educational outcomes of confidence in graduating, confidence in achieving educational goals, and satisfaction with academic progress. As has been found in previous research (Feldman & Kubota, 2015; Robinson & Rose, 2010) academic hope was a stronger predictor of all of the educational outcomes than trait hope. Results also indicate that hope (both trait and academic hope) were stronger predictors than social support.

These findings support previous research that hope is important for many different academic outcomes, with higher levels of hope associated with greater academic achievement (Marques et al., 2017). They also make a contribution in exploring how social support relates to hope, a topic that has received little previous attention in the literature. Furthermore, these findings speak to the need for future research assessing the role of hope as a partial mediator in the relationship between social support and academic success.

Implications for Student Development and Retention

These findings highlight the value of supportive relationships with faculty and staff on campus and demonstrate the need for opportunities for students to build these relationships in

many capacities. There are a variety of potential strategies that campuses may use to help foster these types of relationships and campuses of different sizes and with different institutional goals may approach this important work in different ways. Encouraging formal and informal mentoring relationships with students and building an ethnically diverse body of faculty and staff may each help contribute to closing the support gap on college campuses. In addition, hope building skills can be embedded in both curricular and co-curricular experiences to capitalize on opportunities for modeling and supporting agency and pathways thinking while building meaningful relationships with faculty and staff facilitators.

One important strategy for building supportive relationships on campus is through promoting mentoring and coaching based programs for students in which they work closely with adults on campus (Crisp & Cruz, 2009). For instance, students can be encouraged to engage in high impact practices like first year experience programs and undergraduate research (Kuh, 2008) that often involve formally pairing a student or group of students with a faculty mentor with whom they build a relationship. Some private universities are looking to more intensive wrap-around advising and mentoring models in the hopes of supporting and retaining students (Biemiller, 2018; Supinao, 2018) in the hopes of guaranteeing at least one positive supportive relationship on campus for every student. At larger pubic institutions, TRIO programs like Student Support Services are intended to create a sense of community and support for firstgeneration students and other students with fewer financial and social resources (U.S. Department of Education, 2008). Programs like TRIO's McNair Scholars Program are targeted at identifying underrepresented and first generation students and providing them with structured mentoring relationships in which students learn to conduct research and master the skills necessary for graduate education (U.S. Department of Education, 2008). Students in these

programs learn practical research and academic skills, but the perceived value of these relationships to URM students may be in the socio-emotional support and social capital that they receive from their mentors (Ishiyama, 2007; Smith, 2007). When discussing their McNair supervisors, for instance, African American students reported that mentors' "personal concern" about them as a protégé was one of the most salient features of a good mentor (Ishiyama, 2007). Regardless of the scale or pedagogical and programmatic goals of these programs, providing a formal one-on-one mentoring relationship with a designated faculty or staff person is one obvious way to promote more on campus support.

In addition to individual formal mentoring relationships, an emerging body of research suggests the value of support from a network of naturally-occurring mentoring relationships for student success (Hurd et al., 2016). Programing that allows students to organically develop supportive relationships in the academic context without necessarily creating formal mentoring relationships may be another promising avenue to promote on campus support. Relationships may develop in any number of contexts on campus in which students have the opportunity to get to know faculty and staff outside of more formal classroom contexts. Global and service learning, undergraduate research, capstone projects, and internship experience are all highimpact practices demonstrated to help students succeed (Kuh, 2008) perhaps in part because they provide opportunities for students to work closely with faculty and staff and build relationships. Similarly, students who are more involved on campus through social organizations do better academically and are more likely to persist in college (Fischer, 2007). Again this may be in part because of the opportunity to build meaningful connections with adults on campus (Schreiner, 2014). Findings in the youth mentoring literature suggest that the ability to recruit a high quality mentor may be a unique skill set that can be cultivated in young people (Schwartz, Kanchewa,

Rhodes, Cutler & Cunningham, 2016). Therefore, in addition to encouraging students to be more engaged in activities and groups on campus, explicit discussions with younger students with fewer social resources about how to identify and recruit mentors may be another key component to building communities of support for URM students.

Another way to address the support gap, in particular at a predominantly white university, is for underrepresented minority students to have faculty and staff of color on campus (Harper, 2013; Park & Denson, 2009). URM students are more likely to experience what Harper and colleagues (2011) term "onlyness," wherein they must navigate their university experience on a campus with few peers and role models from their own ethnic backgrounds. Similarly, African American, Latinx, and first-generation students are least likely to report feeling like their mentors in adolescence and emerging adulthood served primarily as role models (Fruiht & Chan, 2018; Raposa, Erickson, Hagler, & Rhodes, 2018), which may speak to a lack of representation of individuals with these socio-cultural backgrounds on their campuses. Not surprisingly, when identifying the other staff members that students in the present study found as positive influences, some students specifically identified faculty and staff of color as important influences. This demonstrates the importance of students having faculty and staff on campus that share the same racial or ethnic background and suggests that one fruitful strategy for closing the support gap is to work intentionally to build a more ethnically diverse faculty and staff.

Just as supportive relationships can promote success through building both connections with the campus community and academic skills, our results suggest another way to increase student achievement and retention may be through building hope. Because hope is closely tied to the tangible skills of goal setting and striving, hope building interventions often emphasize teaching participants how to set appropriate goals and to develop strategies to achieve them even in the face of challenges (Cheavens, Feldman, Gum, Michael, & Snyder, 2006; Green, Grant, & Rynsaardt, 2007; Pedrotti, Edwards, & Lopez, 2009). While hope skills can be taught with a good deal of success, like any successful intervention these programs require sustained training over many sessions and iterations. A one-session workshop or program can have an immediate impact on a college student's level of hope, but the impact is not sustained over time (Davidson, Feldman & Margalit, 2012). Instead, it is often suggested that the most effective way to develop hope in college students is to embed hope-building skills into existing structures of college life. For instance, Williams and Butler (2010) recommend using a hope-based curriculum in first-year experience courses or building support groups in which college students learn about hope and see the success of others.

While it may not always be feasible for institutions to incorporate formal hope building interventions into the student experience, a more practical option may be to provide professional development to help faculty and staff intentionally incorporate some of the principles of the hope building interventions into the classroom and existing curriculum. For instance, professors can be encouraged to embed goal setting and pathways thinking skills into their classes by asking students to set explicit goals for a course and to develop a plan to achieve these goals (Snyder, 2005). Academic counselors, professional advisors, and career counselors may also be a potential entrance point for teaching the skills of hope to college students, as they are actively involved in setting academic and career goals and developing concrete pathways to achieve those goals. In fact, in their recent meta-analysis on hope and academic success, Marques and colleagues (2017) found that the connection between hope and academic success was stronger in elementary, middle, and high school compared to college. This may be because teachers are less involved with and spend less time with students in higher education, whereas K-12 teachers have

a more interpersonal connection with students where they can help nurture hope informally. Just as faculty and staff members can support academic success programs, there may also be a natural overlap between hope building interventions and the scaffolding of supportive relationships with faculty and staff, as supportive relationships are very important to the connection between hope and academic success.

Limitations and Future Directions

While our findings replicate and build upon past research regarding the relationship between hope, social support, and academic success, it is important to address the limitations of this study. The sample, while large and representative of the university from which it was sampled, was primarily Caucasian, making it more difficult to fully understand the experience of students from greatly underrepresented ethnic groups. Additionally, first and second year students were oversampled. Given class sizes and curriculum at a medium-sized public institution, these students likely had fewer opportunities to build strong positive relationships with their faculty and advising teams than a student closer to graduation. Therefore, prevalence of these relationships may be lower in this sample than they might be in the entire student body.

The relatively short college experience of the sample also limited our ability to consider more objective markers of academic success such as degree progress and GPA. Because many participants were finishing their first or second semester of college and sometimes did not yet have a college GPA to report or enough college experience to have been academically dismissed, these outcomes were difficult to assess. Therefore, while these findings speak to the role of hope and on campus support in predicting students' perceived ability to persist in college, future research should also consider more objective outcomes. Although this was a representative sample of college students including students from a wide range of socio-economic backgrounds, the present study did not account for differences between first-generation and continuing generation college students, nor did we consider the role of family income in predicting student outcomes. Given the role of such demographics in predicting college success and connection to campus, it is possible that they may also influence students' likelihood of findings support on campus. Given recent findings regarding the unequal distribution of community based mentors between youth with more resources (Raposa et al., 2018), future research should continue to explore the role of student social and economic capital in predicting on campus support.

Prior investigation of hope in academic contexts has clearly demonstrated the value of agency and pathways thinking in promoting academic success among college students. Similarly, support from teachers on campus may be beneficial not just in developing academic skills and building connection to a campus community, but may play a vital role in the development of hope. Findings speak to the need to encourage students and faculty to build relationships with one another, and to support faculty in their roles as mentors and purveyors of hope. Notably, action is needed to benefit underrepresented minority students in particular to close the "support gap" and to assure that they get access to the support they need to be successful in college.

References

Astin, A. W. (1993). What matters in college? Liberal Education, 79(4), 4-15.

- Biemiller, L. (2018, March 11) Can a signature program save your college? Chronicle of Higher Education. Retrieved from https://www.chronicle.com/article/Can-a-Signature-Program-Save/242783
- Bishop, E. C., & Willis, K. (2014). "Without hope everything would be doom and gloom":Young people talk about the importance of hope in their lives. *Journal of Youth Studies*, *17*(6), 778–793.
- Buckelew, S. P., Crittendon, R. S., Butkovic, J. D., Price, K. B., & Hurst, M. (2008). Hope as a predictor of academic performance. *Psychological Reports*, *103*, 411–414. doi:10.2466/PR0.103.2.411-414
- Cheavens, J. S., Feldman, D. B., Gum, A., Michael, S. T., & Snyder, C. R. (2006). Hope Therapy in a community sample: A pilot investigation. *Social Indicators Research*, 77(1), 61-78. doi: 10.1007/s11205-005-5553-0
- Davidson, O. B., Feldman, D. B., & Margalit, M. (2012). A focused intervention for first-year college students: Promoting hope, sense of coherence and self-efficacy. *Journal of Psychology*, 146, 333-352.

Day, L., Hanson, K., Maltby, J., Proctor, C., & Wood, A. (2010). Hope uniquely predicts objective academic achievement above intelligence, personality, and previous academic achievement. *Journal of Research in Personality*, 44(4), 550–553. doi: 10.1016/j.jrp.2010.05.009

- Elliott, T. R. & Sherwin, E. D. (1997). Developing hope in a social context: Alternative perspectives of motive, meaning, and identity. *Group Dynamics: Theory, Research, and Practice, 1,* 119–123.
- Feldman, D. B., & Kubota, M. (2015). Hope, self-efficacy, optimism, and academic achievement: Distinguishing constructs and levels of specificity in predicting college grade-point average. *Learning and Individual Differences*, 37, 210–216. doi: 10.1016/j.lindif.2014.11.022
- Fischer, M. J. (2007). Settling into campus life: Differences by race/ethnicity in college involvement and outcomes. *The Journal of Higher Education*, 78(2), 125–161.
- Fruiht, V. (2015). Supportive others in the lives of college students and their relevance to hope. Journal of College Student Retention: Research, Theory & Practice, 17(1), 64–87. doi: 10.1177/1521025115571104
- Fruiht, V. & Chan, T. (2018). Naturally occurring mentorship in a national sample of firstgeneration college goers: A potential portal for academic and developmental success. *American Journal of Community Psychology*. doi:10.1002/ajcp.12233
- Gallagher, M. W., Marques, S. C., & Lopez, S. J. (2017). Hope and the academic trajectory of college students. *Journal of Happiness Studies*, 18(2), 341–352. doi: 10.1007/s10902-016-9727-z
- Green, L. S., Grant, A. M., & Rynsaardt, J. (2007). Evidence based life coaching for senior high school students: Building hardiness and hope. *International Coaching Psychology Review*, 2(1).

- Guthrie, D. D. (2011). "Hope is the ticket to life": Insights from disadvantaged African American youth (Doctoral dissertation, Loyola University Chicago). Retrieved from http://ecommons.luc.edu/luc_diss/251
- Guthrie, D. D., Ellison, V., Sami, K., & McCrea, K. T. (2014). Clients' hope arises from social workers' compassion: African American youths' perspectives on surmounting the obstacles of disadvantage. *Families in Society: The Journal of Contemporary Social Services*, 95(2), 131–139. doi: 10.1606/1044-3894.2014.95.17
- Harper, S. R. (2013). Am I my brother's teacher? Black undergraduates, racial socialization, and peer pedagogies in predominantly white postsecondary contexts. *Review of Research in Education*, 37(1), 183–211. doi: 10.3102/0091732X12471300
- Harper, S. R., Davis, R. J., Jones, D. E., McGowan, B. L., Ingram, T. N., & Platt, C. S. (2011).
 Race and racism in the experiences of Black male resident assistants at predominantly white universities. *Journal of College Student Development*, *52*(2), 180–200. doi: 10.1353/csd.2011.0025
- Heisserer, D. L., & Parette, P. (2002). Advising at-risk students in college and university settings. *College Student Journal*, *36*(1), 69-84.
- Hansen, M.J., Trujillo, D.J., Boland, D.L., & MacKinnon, J. L. (2014). At risk students and academic hope: An examination of factors promoting effective academic success strategies. *Journal of College Student Retention: Research, Theory and Practice, 16*(1), 49-71.
- Hurd, N. M., Tan, J. S., & Loeb, E. L. (2016). Natural mentoring relationships and the adjustment to college among underrepresented students. *American Journal of Community Psychology*, 57, 330-341. doi: 10.1002/ajcp.12059

- Ishiyama, J. (2007). Expectations and perceptions of undergraduate research mentoring: Comparing first generation, low income white/Caucasian and African American students. *College Student Journal*, 41, 540-549.
- Kemer, G., & Atik, G. (2012). Hope and social support in high school students from urban and rural areas of Ankara, Turkey. *Journal of Happiness Studies*, *13*(5), 901–911. doi: 10.1007/s10902-011-9297-z
- Kuh, G. D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Washington, DC: Association of American Colleges and Universities.
- Marques, S. C., Gallagher, M. W. & Lopez, S. J. (2017). Hope- and academic-related outcomes: A meta-analysis. *School Mental Health*. doi: 10.1007/s12310-017-9212-9
- Nora, A., & Crisp, G. (2007). Mentoring students: Conceptualizing and validating the multidimensions of a support system. *Journal of College Student Retention: Research, Theory and Practice, 9*(3), 337–356.
- Park, J. J., & Denson, N. (2009). Attitudes and advocacy: Understanding faculty views on racial/ethnic diversity. *The Journal of Higher Education*, 80(4), 415–438.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249-284.
- Pedrotti, J. P., Edwards, L. M., & Lopez, S. J. (2008). Promoting hope: Suggestions for school counselors. *Professional School Counseling*, 12, 100-108.

- Rand, K. L., Martin, A. D., & Shea, A. M. (2011). Hope, but not optimism, predicts academic performance of law students beyond previous academic achievement. *Journal of Research in Personality*, 45(6), 683–686. doi: 10.1016/j.jrp.2011.08.004
- Raposa, E. B., Erickson, L., Rhodes, J., & Hagler, M. (2018). How economic disadvantage affects the availability and nature of mentoring relationships during the transition to adulthood. *American Journal of Community Psychology*. 1-13.
- Robinson, C., & Rose, S. (2010). Predictive, construct, and convergent validity of general and domain-specific measures of hope for college student academic achievement. *Research in the Schools*, 17(1), 38-52.
- Sahranç, Ü., Çelik, E., & Turan, M. E. (2017). Mediating and moderating effects of social support in the relationship between social anxiety and hope levels in children. *Journal of Happiness Studies*. doi: 10.1007/s10902-017-9855-0
- Schreiner, L. A. (2014). Different pathways to thriving among students of color: An untapped opportunity for success. *About Campus*, 10-19. doi: 10.1002/abc.21169
- Schwartz, S. E. O., Kanchewa, S. S., Rhodes, J. E., Cutler, E. & Cunningham, J. L. (2016). "I didn't know you could just ask:" Empowering underrepresented college-bound students to recruit academic and career mentors. *Children and Youth Services Review*, 64, 51-59.
- Smith, B. (2007). Accessing social capital through the academic mentoring process. *Equity & Excellence in Education*, *40*, 36-46. doi: 10.1080/10665680601088465
- Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. New York, NY: Free Press.
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, *13*(4), 249–275.

- Snyder, C. R. (2005). Teaching: The lessons of hope. *Journal of Social and Clinical Psychology*, *24*(1), 72–84.
- Snyder, C. R., Cheavens, J., & Sympson, S. C. (1997). Hope: An individual motive for social commerce. *Group Dynamics: Theory, Research, and Practice*, 1(2), 107-118.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... Harney, P. (1991). The will and the ways: Development and validation of an individualdifferences measure of hope. *Journal of Personality and Social Psychology*, 60(4), 570-585.
- Snyder, C. R., Shorey, H. S., Cheavens, J., Pulvers, K. M., Adams, V. H., & Wiklund, C. (2002).
 Hope and academic success in college. *Journal of Educational Psychology*, *94*(4), 820–826. doi: 10.1037//0022-0663.94.4.820
- Snyder, C. R., Shorey, H. S., & Rand, K. L. (2006). Using hope theory to teach and mentor academically at-risk students. In W. Buskist & S. F. Davis (Eds.), *Handbook of the Teaching of Psychology* (pp. 170–174). Malden, MA: Blackwell Publishing.
- Supiano, B. (2018, February 8). How one university connects students with mentors and surprising success. *Chronicle of Higher Education*. Retrieved from https://www.chronicle.com/article/How-One-University-Connects/242495
- Swecker, H. K., Fifolt, M., & Searby, L. (2013). Academic advising and first-generation college students: A quantitative study on student retention. *NACADA Journal*, *33*(1), 46-53.
- Syed, M., Azmitia, M., & Cooper, C. R. (2011). Identity and academic success among underrepresented ethnic minorities: An interdisciplinary review and integration. *Journal* of Social Issues, 67(3), 442–468.

- Sympson, S. C. (1999). Validation of the Domain Specific Hope Scale: Exploring hope in life domains. (Unpublished doctoral dissertation). University of Kansas, Lawrence.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press
- Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory & Practice*, 8(1), 1-19.
- U.S. Department of Education (2008). A profile of the federal trio programs and child care access means parents in school program. U.S. Department of Education, Office of Postsecondary, Federal TRIO Programs. Washington, DC: U.S. Government Printing Office. Retrieved from: http://www2.ed.gov/about/offices/list/ope/trio/trioprofile2008.pdf
- Williams, C. R., & Butler, S. K. (2010). A new retention variable: Hope and first generation college students. Retrieved from http://counselingoutfitters.com/vistas/ vistas10/Article_11.pdf

ON CAMPUS SOCIAL SUPPORT AND HOPE

Table 1.

Hierarchical Linear Regressions Predicting Hope and Academic Outcomes from On Campus Support

	Trait Hope			Academic Hope		Confidence in Graduating			Educational Goals			Academic Career			
	R^2	В	В	R^2	В	β	R^2	В	β	R^2	В	β	R^2	В	β
	.028	23.506		.044	51.610		.033	.350		.035	.517		.037	3.950	
Gender		.434	.076		-1.501	098**		.009	.011		004	005		.049	.031
Age		.069	.053		069	020		.003	015		004	024		.005	.013
African American		.184	.014		-1.403	039		.028	.015		016	008		.179	.047
Latinx		.716	.050		.797	.021		015	008		005	002		.125	.031
Other URM		.006	.001		-2.218	050		.232	.100**		.089	.038		.190	.041
Mixed Race		059	004		-1.667	046		.083	.044		.078	.042		.139	.037
On Campus support		.482	.134***		1.584	.164***		071	141***		090	178***		170	170***

Note. This table represents the second and final step of these models. Step 1 of these models contained only demographic variables. Confidence graduating, educational goals, and satisfaction with academic career are all coded such that a lower score represents *greater* academic satisfaction or confidence. *p < .05, **p < .01, ***p < .001

Table 2.

	Trait Hope			1	Academic Hope			Confidence in Graduating			Educational Goals			Academic Career		
	R^2	В	В	R^2	В	β	R^2	В	β	R^2	В	β	R^2	В	β	
	.032	23.965		.055	51.859		.044	0.342		0.044	0.506		0.052	3.953		
Gender		.450	.079*		-1.435	-0.094**		-0.002	0.007		-0.007	-0.009		0.044	0.028	
Age		.064	.049		-0.094	-0.027		0.008	-0.009		-0.003	-0.018		0.007	0.019	
African American		.244	.018		-1.015	-0.039		-0.027	0.004		-0.034	-0.018		0.133	0.035	
Latinx		.748	.052		1.011	0.021		0.227	-0.013		-0.015	-0.007		0.093	0.023	
Other URM		.037	.002		-2.122	-0.050		0.078	0.098**		0.084	0.036		0.182	0.04	
Mixed Race		035	003		-1.546	-0.046		0.078	0.042		0.072	0.038		0.125	0.033	
Teachers		.766	.134***		3.064	0.200***		-0.143	-0.179***		-0.157	-0.196***		-0.322	-0.203***	
Advisors		.140	.023		-0.154	-0.010		0.005	0.006		-0.012	-0.014		-0.029	-0.017	
Other On Campus		.529	.036		0.496	0.013		-0.008	-0.004		-0.037	-0.018		0.043	0.011	

Hierarchical Linear Regressions Predicting Hope and Academic Outcomes from Support Types

Note. This table represents the second and final step of these models. Step 1 of these models contained only demographic variables. Confidence graduating, educational goals, and satisfaction with academic career are all coded such that a lower score represents *greater* academic satisfaction or confidence. *p < .05, **p < .01, ***p < .001

Table 3.

Mean Differences in Academic Outcomes by Number of On Campus Supports

		<u>0 supports</u>		<u>1 supp</u>	ort	<u>2+ supports</u>	
	F	М	SD	М	SD	М	SD
Confidence Graduating	9.726***	.3128 ^a	0.43	.2455 ^{a,b}	0.39	.1708 ^b	0.34
Educational Goals	16.479***	.4322 ^c	0.41	.3521 ^d	0.39	.2478 ^e	0.37
Academic Success	14.916***	2.20^{f}	0.84	2.02 ^g	0.75	1.86 ^h	0.75
Trait Hope	7.731***	25.2337 ⁱ	3.03	25.4627 ⁱ	2.67	26.1298 ^j	2.83
Academic Hope	14.391***	49.1253 ^k	8.15	51.2662 ¹	7.12	52.2965 ¹	7.41

Note. ***p < .001, Superscript letters indicate significant differences demonstrated by post hoc t-tests significant at p < .05. Confidence graduating, educational goals, and satisfaction with academic career are all coded such that a lower score represents *greater* academic satisfaction or confidence. Natural log transformations were performed on confidence graduating and educational goals.

ON CAMPUS SOCIAL SUPPORT AND HOPE

Table 4.

Confidence in Graduating **Educational Goals** Academic Career ΔR^2 ΔR^2 ΔR^2 FFFВ β В β В в .282 .432 4.114 Step 1 2.119* .013 0.606 .004 1.461 .009 Gender .011 .014 -.002 -.003 .054 .034 -.007 -.004 -.024 .005 .014 Age -.014 -.002 .206 African American .040 .021 -.001 .055 Latinx .007 .003 .025 .012 .178 .045 Other URM .245 .105** .103 .044 .222 .048 Mixed Race .074 .039 .066 .035 .121 .032 4.714*** .020 .350 5.037*** .031 .517 5.361*** .021 3.950 Step 2 Gender .009 .011 -.004 -.005 .049 .031 .003 -.015 -.004 -.024 .005 .013 Age African American .028 .015 -.016 -.008 .179 .047 Latinx -.015 -.008 -.005 -.002 .125 .031 Other URM .232 .100** .089 .038 .190 .041 Mixed Race .083 .044 .078 .042 .139 .037 On Campus Support -.141*** -.178*** -.170*** -.071 -.090 -.170 27.530*** .705 .169 1.760 50.289*** .284 2.354 38.738*** .229 Step 3 Gender <.001 <.001 -.018 -.023 .024 .015 -.002 -.009 -.003 -.017 .007 .020 Age African American .007 -.032 -.017 .040 .013 .151 .009 Latinx .018 .038 .019 .202 .051 .086** .022 Other URM .200 .051 .118 .026 Mixed Race .031 .045 .024 .026 .057 .097 On Campus Support -.069* -.086*** -.085** -.034 -.043 -.086 -.267*** Trait Hope -.028 -.203*** -.037 -.064 -.232*** -.278*** -.019 -.356*** -.034 -.326*** Academic Hope -.014

Hierarchical Linear I	Regressions	Predicting	Academic	Outcomes	from Ho	ope and Su	ipport (1	N = 972	2).

Note. Confidence graduating, educational goals, and satisfaction with academic career are all coded such that a lower score represents *greater* academic satisfaction or confidence.

p* < .05, *p* < .01, ****p* < .001