

A Spoonful of Success: Undergraduate Tutor-Tutee Interactions and Performance

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Abstract

We explore how the dynamics of the tutor–tutee relationship influence students’ self-reliance and, ultimately, course performance. We examine 333 tutor and tutee pairs at a student success center at a public, comprehensive, university attended by approximately 5,000 undergraduates enrolled in more than 60 courses during spring 2015. The results indicate that, as the frequency and quality of the interactions between tutor and tutees increase, the tutors are more likely to foster independent study habits in the tutee. The incorporation of independent study habits was then associated with better course outcomes.

Keywords: student success, tutors, peer education, college, higher education, tutee

Learning in college should not be torture. As Mary Poppins sang, “a spoonful of sugar helps the medicine go down.” Tutoring and the tutor–tutee relationship offer ways to create a learning environment that is enjoyable, encouraging, impactful, and—most of all—non-threatening. Yet myths about student tutoring services and

its benefits continue to persist on college campuses. Some instructors believe that tutoring services act to undermine traditional classroom dynamics. Faculty members might think that tutors “coddle” students and prevent them from “grappling” with course content (i.e., “spoon feeding” students). Normal behaviors typically associated with student success, such as attending class, doing homework, asking questions in class, or going to the professor’s office, may be reduced in favor of seeking assistance from the tutor instead. Such misuses of success centers are thought to hinder the development of a student’s independent study skills. Indeed, although well intended, tutors may unknowingly be enabling such practices. This paper busts these myths and shows how a spoonful of peer tutoring, in tandem with faculty members’ efforts, can help student learning go down.

Advocates and scholars associated with learning centers have recognized and addressed the effects of the tutor–tutee relationship for many years. More than 20 years ago, Ross MacDonald (1994) warned that:

unless we specially train tutors in techniques to encourage students’ self-reliance, those students will continue to have the same academic difficulties which brought with them to tutoring in the first place. The irony is that those difficulties will have been reinforced, not corrected, by the tutor (as cited in McBride, 1995, p. 3).

The learning center profession (Rings & Sheets, 1991; Maxwell, 1991; McBride, 1995) has confronted this challenge by advancing tutor training, marketing to campus constituents, and explicitly stating tutoring objectives and outcomes to clients. In fact, studies have shown that cognitive gains have been made by both tutors and students as a result of peer tutoring (Britz, Dixon, & McLaughlin, 1989). Effects on both peer tutors and students were positive in the areas of learning, attitude toward subject matter, and self-concept (Cohen, Kulik, & Kulik, 1981).

Although many researchers recognize the need for directing attention to the social interactional context for learning (Topping, 1996; Topping & Ehly 1998), Colvin (2007) highlighted the “virtual absence” in research on the dynamics occurring among students,

tutors, and instructors. Colvin's qualitative study found that tutor–student relationships are riddled with misunderstandings and power struggles. Meanwhile, Young and Dziuban (2000) offered insightful suggestions on how to refine tutoring dynamics based on the tutees' unique learning characteristics. Yet clearly more empirical and qualitative work on how the tutor–tutee interactional dynamics affect salient outcomes is needed.

This paper provides an empirical exploration of tutor–tutee dynamics. We hypothesize that a positive social interactional context between the tutee and tutor is associated with how the tutee embraces the traditional student role (i.e., going to class, doing homework, and incorporating cognitive learning strategies). Thus, the acquisition of these traits leads to better course performance.

Historical and Theoretical Underpinnings

Popular concerns about the decline of traditional academic norms date back to Cold War fears that extracurricular activities in American schools (such as football or cheerleading) were diverting attention from learning (Coleman, 1961). The United States was believed to be losing its educational edge to its foes behind the Iron Curtain. However, research has consistently contradicted this thesis. Students who participate in school-sponsored extracurricular activities (academic, social performance, athletic) generally outperform those that do not on a variety of indicators, including graduation rate and performance (Busseri et al., 2010; Eccles & Barber, 1999). The general findings have been echoed for all levels of school (primary and secondary) and across gender, income, and ethnic groupings (Fredricks & Eccles 2006; Schwartz, Cappella, & Seidman, 2015; Simmons, Black, & Zhou, 1991). Although a threshold in the benefits of involvement may exist (Astin, 1984; Koehler, 2014; Mahoney, Harris, & Eccles, 2006; Marsh & Kleitman, 2002) and the finding may not be generalizable to all student organizations (Baker, 2008), a certain level of involvement in pro-school groups has been found to be beneficial on a range of positive academic outcomes and retention.

One theoretical explanation for this finding is offered by the balance theory (Crandall, Silvia, N'Gbala, Tsang, & Dawson 2007;

Heider, 1958; Newcomb, 1961). Balance theory holds that humans like internal experiences (such as attitudes) to be congruent with external experiences (such as behaviors). Heider (1958) wrote that “the assumption that sentiment and unit relations tend toward balance state also implies that where balance does not exist, the situation will tend to change in the direction of balance” (p. 208). Crandall et al. (2007) summarized that people “make attributions to keep simple, compact, harmonious, consistent, univalent representation of a person or group” (p. 14).

For our purposes, people tend to like characteristics that they associate with the people they like. Coaches, teachers, and students engaged in extracurricular activities are typically pro-school, as the institutions often provide rewards and status. Such associations influence students, including those at-risk, to have enhanced academic performance and higher aspirations. We argue that peer tutoring is a special case of the same dynamic. Peer tutors are advocates for the school and embrace the traditional student role, including active learning skills. Overall, we hypothesize that strong, positive tutor-tutee relationships are associated with the adoption of independent study skills, positively impacting student performance. We explore if positive relationships between the tutee and tutor create an increased probability of the tutee adopting pro-school behaviors, even when those are lacking originally. Ultimately, we examine the incorporation of cognitive study skills during tutoring sessions to result in better academic outcomes for tutees.

Method

Participants and Setting

The participants in this study were $N = 333$ tutee–tutor dyads at a student success center at a mid-sized comprehensive university (5,000 undergraduates) located in the southern region of the United States. In its early history, the university was the premier female teacher training college in the state. Although it has been fully co-educational since 1974, it remains predominately female (67%). Furthermore, the university has a proud tradition of African-American/Black attendance (30%), along with an impressive graduation rate for this population (81%).

Table 1

Descriptive and Demographic Information about Tutors and Tutees in the Study of Social Interaction, Independent Study Habits and Performance
(N=333 tutor/ tutee pairs)

Variable (Percentage or Mean ^a)	Tutors	Tutees
Race		
White	69.7	39.0
Black	21.6	52.6
Other	8.7	5.4
Gender	77.7	80.0
Mean Tutoring Sessions Attended		5.5 (2.64) ^a
Mean Semesters as Tutor	2.4 (1.45)	
Tutor's Training Level		
Novice	75.4	
Experienced	24.6	
Perceived Performance Upon Entry to Success Program		
A		4.6
B		17.3
C		40.2
D		20.7
F		12.7
N/Withdraw		4.3
Perceived Performance After Success Program		
A		23.3
B		50.2
C		23.8
D		2.8
F		.6
N/Withdraw		0
Mean Perceived Improvement in Grade		1.2(.99)
Courses		
Math		28.0
Sciences		31.0
Business		21.0
Other		20.0

The success center offers free individual tutoring services for over 50 different general education courses to all undergraduate students at the university. The tutees voluntarily participate in these services. When tutees receive tutoring in the success center, they commit to meet weekly with the same tutor for the duration of the semester. Tutees are allowed to have up to two tutors per semester and meet for 60 minutes per tutor, per week. Before participating in tutoring, the tutees must attend one orientation meeting per academic year. At these events, the tutees participating in the current study were briefed about the study and completed the Institutional Review Board (IRB) consent forms; they also learned about tutoring objectives, expectations, and protocol.

All tutors are paid and undergo a required training program that is certified through the College Reading and Learning Association (CRLA). Advanced training opportunities are also available for tutors who want to pursue additional skills. Tutors learned about the current study through their respective trainings, during which time they also signed IRB consent forms.

Salient tutor and tutee background information is provided in Table 1. The participating tutors ($N = 113$) reflect the composition of the school. The tutors were predominately White (70%) and female (78%), although it is noteworthy that roughly one third of participating tutors were non-White. The typical participating tutor was experienced (the mean was more than one semester of tutoring), and approximately one quarter of participating tutors had taken additional coursework in tutoring beyond the original training required.

Tutees participating in the current study were receiving tutoring in subjects that cut across many areas of study: math (28%), sciences (31%), business (21%), and other (20%). On average, each tutee met more than five times with the tutor ($SD = 2.6$). The modal perceived grade upon entry into the program was a “C,” with more than 20% of tutees entering the program having an even higher grade. In other words, the program was not being utilized exclusively by struggling students. Many students felt pressured to retain a higher than “B” average to retain state scholarships.

Measurement Tools

The primary focus of the current study was to examine tutor–tutee relationships, traditional student role acquisition, and performance. To this end, we introduced several scales to gain insights into these concepts (Appendix 1). We administered separate questionnaires (see Appendix 2) to each tutor–tutee pair in approximately week 10 or 11 of the semester, and data collection lasted several weeks. We modified the Student–Teacher Relationship Scales (STRS) developed by Pianta (1992) to develop the scales, which measured student–teacher relationships in terms of conflict, closeness, and dependency. Such factors have proven instrumental in understanding children’s school outcomes through elementary school (Hamre & Pianta, 2005). Modifications were made to the instrument so that questions were transferrable to college-aged students and tutors were asked to respond to the questions utilized to construct the indicators. All subscales (conflict, closeness, and dependency) had moderate to high internal consistency. Cronbach’s alpha and item-total correlations are provided in Appendix 1.

We also employed an additional measure: tutoring sessions attended (see Table 1). The more times that the tutee meets with the tutor may be an indicator of comfort level with the tutor. Furthermore, we recognize that frequent attendance directly provides more learning opportunities for the tutee. In addition, we developed scales to understand suggested independent study skills advanced by the tutors and the resulting independent study skills. The resulting independent study skills, such as class attendance, preparation for class, and use of office hours, correspond to the expectations of the traditional student role. Both these indicators record the perceptions of the tutees. Each scale demonstrated moderate to high internal consistency. Cronbach’s alpha and item-total correlations are provided in Appendix 1.

Performance improvement, the ultimate endogenous variable, reflects the difference between the students’ perceived grade upon entry into tutoring and their anticipated grade at course completion. Students receive interim grade reports, so their grade expectations should have a foundation for determining their anticipated grade. Table 1 shows the students reported approximately one whole grade

improvement on average ($M = 1.2$, $SD = .99$). It is important to note that students' improvement was truncated by the grade they were receiving upon entry into the program. To control for this effect, the researcher included the original grade that the tutee was receiving in all salient analyses.

We used ordinary least square techniques for the analyses. The investigation culminated with a path analysis that models the relationship among tutor–tutee relationships, independent study skill acquisition, and performance.

Results

In Table 2, we provide fully saturated models for grade improvement, resulting study skills, and suggested study skills. The models provide standardized coefficients. Demographic traits, such as race and gender, did not have an independent impact on any of the criterion variables explored. Likewise, we did not find independent influences for course tutored or—somewhat surprisingly—tutors' experience or training level.

The models were reviewed by what we deemed to be a logical temporal sequence. First, tutors would suggest independent study skills for students. Next, the student would acquire independent study skills. Finally, the independent study skills would impact performance. Model 3 in Table 2 explores the suggested study skills. Tutoring dynamics were the only set of predictors that influenced suggested study skills. The greater the expressed closeness and the lower the level of conflict, the more the tutees indicated that the tutor advanced independent skill development.

Table 2

OLS Regression Coefficients (Standardized) for Tutee-Tutor Characteristics with Salient Criterion Variables (N=333 tutor/tutee pairs)

	Model 1 Saturated Grade Improvement	Model 2 Saturated Resulting Study Skill	Model 3 Saturated Suggested Study Skills
Demographic Traits			
Tutor Race (0=other, 1=white)	-.073	.053	-.018
Tutee Race (0=other, 1=white)	.058	.028	-.078
Tutor Gender (0=female, 1=male)	-.029	-.030	.033
Tutee Gender (0=female, 1=male)	.023	.054	.068
Tutor Training Level (0=novice, 1=experienced)	-.019	-.048	-.025
Semesters as Tutor	-.019	.075	.097
Tutoring Dynamics			
Conflict Scale	-.008	-.051	-.228**
Closeness Scale	.005	.013	.299**
Dependency Scale	-.049	.039	-.120#
Tutoring Sessions Attended	.006**	.158**	.033
Independent Learning			
Suggested Independent Learning Skills	-.093	.453**	-----
Resulting Independent Learning Skills	.223**	-----	-----
Controls			
Tutored Course (0=other, 1=math, science, business)	-.023	.053	-.104
Program Entry Grade	-.743**	.123*	-.024
R Square	.551	.265	.121

* $p < .05$ ** $p < .01$ (two tailed) #approached significance .07

Model 2 in Table 2 explores tutees acquiring independent study skills. Only three predictor variables were found to have an independent impact on this scale: tutors' suggestion of study skills, the number of tutoring sessions attended, and student's course grade upon entry into the success center. In other words, better students who visit tutors that promote independent study skills are most likely to report the acquisition of independent study skills.

Finally, Model 1 in Table 2 explores the predictor variables associated with grade improvement. Unsurprisingly, the grade at the entry point of tutoring has the largest impact on improvement. Obviously, students who are doing poorly in a course have the greatest room for improvement whereas those earning higher grades can only improve so much. The variable should be interpreted as a control. Only two other true explanatory variables had a net influence: the number of tutoring sessions attended and the acquisition of independent study skills. Students who embrace the traditional student norm, such as going to class prepared, asking questions, and attending office hours, reported the greatest grade improvement. The tutees who frequently met with their tutors also generally showed improvement.

Table 3

Coefficients of Variables in Standard Form in a Reduced-form Model of Perceived Grade Performance Improvement in an Undergraduate Student Success Center at a Southern Public Institution in Spring 2015
(N=333 tutor/tutee pairs)

Criterion Variable	Predictor Variable	Direct Effect	R Square
Suggested Study Skills	Conflict Scale	-.270**	.090
	Closeness Scale	.307**	
	Dependency Scale	-.135**	
Resulting Independent Study Skills	Conflict Scale	-.085	.241
	Closeness Scale	.028	
	Dependency Scale	.028	
	Tutoring Sessions Attended	.159**	
	Suggested Study Skills	.447**	

Grade Improvement	Conflict Scale	.000	.549
	Closeness Scale	.014	
	Dependency Scale	-.040	
	Tutoring Sessions Attended	.087*	
	Suggested Study Skills	-.086	
	Resulting Independent Study	.219**	
	Program Entry Grade	-.739**	

* $p < .05$ ** $p < .01$ (two tailed)

Table 3 presents the reduced models built upon the findings from the previous saturated models. These layered equations inform the creation of the path model illustrated in Figure 1. In the first layer, we see the direct effects of the tutor–tutee relations on suggested study skills. In the second layer, the criterion variable resulting study skill is only directly influenced by suggested study skill and number of tutoring sessions attended. The tutor–tutee relationship scales have no direct impact on the adoption of independent study skills; but conflict, dependency, and closeness have an indirect influence through the promotion of independent study skills. Finally, in the third layer, the ultimate criterion variable is explored: grade improvement. In addition to the previously mentioned control variable, program entry grade, only tutoring sessions attended and resulting study skills actually improved performance. The tutor–tutee relationship variables only impacted performance indirectly.

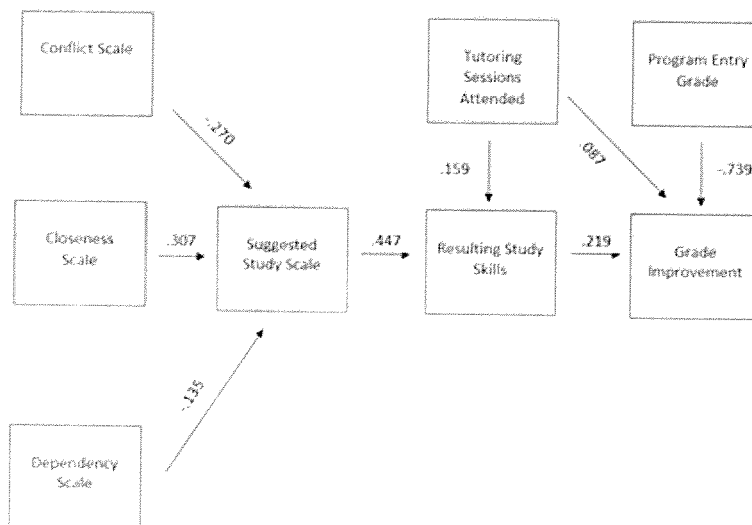


Figure 1. Outcome diagram of causal relationships of tutee grade improvement in an undergraduate student success center.

In a sustained and supportive tutor–tutee relationship, tutees more actively promoted and/or acknowledged independent study skills; the advancing of the skills by tutors increases the chances that tutees will enact the independent study skill. Those students who enact independent study skills, such as being prepared for class or asking questions in class, report the greatest course performance. In other words, a poor tutor–tutee relationship indirectly reduces the chance that the students will become active learners. Although the key to performance improvement is acquiring traditional study skills, we found that development is advanced by attending tutoring sessions on a regular basis and creating a trusting positive learning dynamic.

Conclusion

Before discussing our conclusions, some caveats are necessary. First, the university and the specific learning center that served as the setting for this study may not be representative of most colleges. Additional studies at other colleges' programs are necessary before drawing definitive conclusions. Second, the current study only explored perceptions. Future research would be aided by incorporating more objective measures on items such as the entry grades and the final grades earned in the courses.

Despite these limitations, this exploratory project makes several important methodological contributions and offers several provocative findings with important implications for tutor training and success center administration. The first set of contributions is in the area of methodology. First, the study's novel unit of analysis—tutee and tutor dyads—allowed the researchers to explore how the relational dynamic affected performance. Second, the researcher's modification of a series of well-established relationship scales (i.e., STRS), which normally measure teachers' perceptions of elementary-aged children, showed some promise in assessing this college-aged population. Third, the utilization of path analysis uncovered dynamics that inform the structuring of more effective training programs for tutors.

The second set of contributions stems from the findings warranting further research. First, we found no evidence that race

or gender were important explanatory factors to explain either the adoption of study skills or performance outcomes. Second, we found no evidence that course subject area was an important explanatory factor in terms of either the adoption of study skills or performance outcomes.

Third, we found that tutor–tutee relationship factors, such as closeness and interactions free of conflict and dependency, have an indirect impact on the adoption of independent study skills through the increasing chance of suggesting study skills. It appears that a healthy, trusting relationship between the tutee and tutor creates a foundation for an open exchange about any needed changes to work habits.

Furthermore, the number of times that a tutee and tutor meet has both direct and indirect influences on performance. Clearly, the number of visits may help through the material being learned. However, tutees' tutoring sessions also operate indirectly through skill development to help grades.

Finally, the key to performance is ultimately the development of traditional study skills and cognitive learning strategies. Our research findings suggest that they are most likely to develop within a sustained, positive relationship between tutor and tutee.

Returning to our original question and addressing the perceived myths about peer tutors and tutoring—namely, do learning centers advance helplessness on the part of students who undermine the traditional student role?—our research suggests that the answer is no. We found support for the position that success centers are a bridge to the development of traditional independent study skills, such as class attendance and answering professors' questions in class. Tutors are advocates of traditional pro-school norms and behaviors. The social psychological underpinning of improvement is consistent with the reasoning as to why those in extracurricular activities generally do better than the non-engaged. A positive relationship with pro-school persons (tutors) influences the tutee in adopting traditional classroom norms (being prepared, asking questions, and attending class) and ultimately increasing academic performance.

What are the implications for student centers? The importance of the relationship between the tutor and the tutee across the

duration of the semester is critical for students to adopt pro-school behaviors. Centers need to foster tutors' skills in developing strong working relationships with the tutees. Training perhaps may include facilitating "ice breakers" with the tutees. To this end, Lipsky (2011) offered some useful guidelines and role-play exercises. In addition, tutors need to consistently infuse cognitive learning strategies and pro-school behaviors into tutoring sessions so tutees will adopt and employ these skills. Furthermore, centers should try to get a student into the center as early as possible and attempt to sustain tutee-tutor relationships during the entire semester.

The findings discussed in this paper merely scrape the surface of all there is to be learned about tutor-tutee relationships, but it does demonstrate that peer tutoring can be a very valuable resource for student success, rather than a reliance on tutor aid. Faculty who express concern with the benefits of tutoring can rest assured that their efforts to encourage student learning are being promoted by tutors, rather than impeded by them. Additionally, the findings found in this paper can market the value of regularly recurring tutoring sessions that develop the tutor-tutee relationship. Students, faculty, and campus constituents alike can view recurring tutoring sessions with peer tutors as a repeated dose of sugar to help student learning go down.

References

- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25*(4), 297–308.
- Baker, C. N. (2008). Under-represented college students and extracurricular involvement: The effects of various student organizations on academic performance. *Social Psychology of Education, 11*(3), 273–298.
- Britz, M. W., Dixon, J., & McLaughlin, T. F. (1989). The effects of peer tutoring on mathematics performance: A recent review. *British Columbia Journal of Special Education, 13*, 17–33.

- Busseri, M. A., Rose-Krasnor, L., Mark Pancer, S., Pratt, M. W., Adams, G. R., Birnie-Lefcovitch, S., ... & Gallander Wintre, M. (2011). A longitudinal study of breadth and intensity of activity involvement and the transition to university. *Journal of Research on Adolescence, 21*(2), 512–518.
- Cohen, P. A., Kulik, J. A., & Kulik, C. L. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal, 19*, 237–248.
- Coleman, J. S. (1961). *The adolescent society*. New York: The Free Press.
- Colvin, J. W. (2007). Peer tutoring and social dynamics in higher education. *Mentoring & Tutoring, 15*(2), 165–181.
- Crandall, C. S., Silvia, P. J., N’Gbala, A. N., Tsang, J. A., & Dawson, K. (2007). Balance theory, unit relations, and attribution: The underlying integrity of Heiderian theory. *Review of General Psychology, 11*(1), 12.
- Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band what kind of extracurricular involvement matters?. *Journal of adolescent research, 14*(1), 10-43.
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental psychology, 42*(4), 698.
- Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure?. *Child Development, 76*(5), 949–967.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

- Koehler, J. H. (2014). *Overwhelmed and Under Pressure: The Influence of Extracurricular Over-Involvement on Academic Success and Student-Faculty Relationships* (Doctoral dissertation, Auburn University).
- Lipsky, S. A. (2011). *A training guide for college tutors and peer educators*. Boston, MA: Pearson Education.
- MacDonald, R. B. (1994). *The master tutor*. Williamsville, NY: The Cambridge Stratford Study Skills Institute.
- Mahoney, J. L., Harris, A. L., & Eccles, J. S. (2006). Organized activity participation, positive youth development, and the over-scheduling hypothesis. *Social Policy Report, 20*(4), 3-31.
- Marsh, H., & Kleitman, S. (2002). Extracurricular school activities: The good, the bad, and the nonlinear. *Harvard Educational Review, 72*(4), 464–515.
- Maxwell, M. (1991). The effects of expectations, sex, and ethnicity on peer tutoring. *Journal of Developmental Education, 15*(1), 14.
- McBride, P. (1995). Tutor Training Activities To Improve Student Self-Reliance. Paper presented at the Annual International Conference of the National Institute for Staff and Organizational Development on Teaching Excellence and Conference of Administrators, Austin, TX. Eric data base. (ED 390 487).
- Newcomb, T. M. (1961). *The acquaintance process*. New Jersey: Lawrence Erlbaum.
- Pianta, R. C. (2001). *STRS: Student-teacher Relationship Scale: Professional manual*. Psychological Assessment Resources.
- Rings, S. & Sheets, R. (1991). Student development and metacognition: Foundations for tutor training. *Journal of Developmental Education, 15*(1), 30.

- Schwartz, K., Cappella, E., & Seidman, E. (2015). Extracurricular participation and course performance in the middle grades: A study of low-income, urban youth. *American Journal of Community Psychology, 56*(3–4), 307–320.
- Simmons, R. G., Black, A., & Zhou, Y. (1991). African-American versus white children and the transition into junior high school. *American Journal of Education, 481–520*.
- Topping, K. (1996) Effective peer tutoring in further and higher education: A typology and review of the literature. *Higher Education, 32*, 321–345.
- Topping, K., & Ehly, S. (Eds.). (1998). *Peer-assisted learning*. New York: Routledge.
- Young, B. R., & Dziuban, E. (2000). Understanding dependency and passivity: Reactive behavior patterns in writing centers. *Writing Center Journal, 21*(1), 67–87.

Appendix 1

Test Constructs for Undergraduate Tutor-Tutee Interactions and Independent Learning Skills

Scales Item/Total Correlation	Items
Conflict Subscale Items (modified STRS)	
.66	This tutee and I always seem to be struggling with each other.
.64	This tutee easily becomes frustrated with me.
.28	The tutee sees me as a source of criticism.
.67	The tutee remains angry or is resistant after being corrected.
.61	Dealing with the tutee drains my energy.
.53	When this tutee is in a bad mood, I know we're in for long, difficult session.
.72	This tutee's feeling toward me can be unpredictable or can change suddenly.
.45	Despite my best efforts, I'm uncomfortable with how this tutee and I get along.
.58	This tutee complains when he/she wants something from me.
.44	This tutee is manipulative of me.
.41	The tutee feels that I treat him/her unfairly .
Cronbach's Alpha = .86	
Closeness Subscale Items (modified STRS)	
.60	I share a caring, warm relationship with this tutee.
.53	If upset, this tutee seeks comfort from me.
.58	This tutee values his/her relationship.
.54	When I praise this tutee, he/she reacts positively.
.54	This tutee spontaneously shares information about himself/herself.
.55	It is easy to be in tune with what this tutee is feeling.
.58	This tutee shares his/her feelings and experiences with me.

.44	This tutor follows my direction and suggestions.
.41	My interaction with this tutee makes me feel effective and confident.
Cronbach's Alpha = .83	
Dependency Subscale Items (modified STRS)	
.29	This tutee appears hurt or embarrassed when I correct him/her.
.37	This tutee is overly dependent on me.
.38	He/she asks for help when he/she does not need it.
Cronbach's Alpha = .53	
Suggested Independent Learning Skills	
.40	My tutor suggested working habits.
.41	My tutor expected me to complete homework before the tutoring session.
.46	My tutor encouraged my participation in each session .
Cronbach's Alpha = .63	
Resulting Independent Learning Skills	
.64	As a result of tutoring, I study more effectively for class.
.64	As a result of tutoring, I am more willing to go to class.
.58	As a result of tutoring, I am more prepared for class.
.57	As a result of tutoring, I am more likely to go to the professor's office hours.
.63	As a result of tutoring, I am more likely to ask a question in class.
.54	As a result of tutoring, I am a more independent learner
Cronbach's Alpha = .82	

Appendix 2

Modified Student-Teacher Relationship Scale

What level tutor are you? 1 2 3

How many semesters have you been tutoring? _____

Please reflect on the degree to which each of the following statements currently applies to your relationship with this tutee. Using the scale below, circle the appropriate number for each item.

	Definitely does not apply 1	Not really 2	Neutral, not sure 3	Applies somewhat 4	Definitely applies 5
1.	I share a caring, warm relationship with this tutee.			1 2 3 4 5	
2.	This tutee and I always seem to be struggling with each other.			1 2 3 4 5	
3.	If upset, this tutee will seek comfort from me.			1 2 3 4 5	
4.	This tutee values his/her relationship with me.			1 2 3 4 5	
5.	This tutee appears hurt or embarrassed when I correct him/her.			1 2 3 4 5	
6.	When I praise this tutee, he/she reacts positively.			1 2 3 4 5	
7.	This tutee spontaneously shares information about himself/herself.			1 2 3 4 5	
8.	This tutee easily becomes frustrated with me.			1 2 3 4 5	
9.	This tutee is overly dependent on me.			1 2 3 4 5	
10.	This tutee tries to please me.			1 2 3 4 5	
11.	This tutee depends on me outside of regularly scheduled appointments.			1 2 3 4 5	
12.	It is easy to be in tune with what this tutee is feeling.			1 2 3 4 5	

13.	The tutee sees me as a source of criticism.	1	2	3	4	5
14.	He/she asks for my help when he/she really does not need help.	1	2	3	4	5
15.	The tutee feels that I treat him/her unfairly.	1	2	3	4	5
16.	This tutee remains angry or is resistant after being corrected.	1	2	3	4	5
17.	Dealing with this tutee drains my energy.	1	2	3	4	5
18.	This tutee's feelings toward me can be unpredictable or can change suddenly.	1	2	3	4	5
19.	This tutee is manipulative of me.	1	2	3	4	5
20.	This tutee shares his/her feelings and experiences with me.	1	2	3	4	5
21.	When this tutee is in a bad mood, I know we're in for a long, difficult session.	1	2	3	4	5
22.	Despite my best efforts, I'm uncomfortable with how this tutee and I get along.	1	2	3	4	5
23.	This tutee follows my directions and suggestions.	1	2	3	4	5
24.	This tutee complains when he/she wants something from me.	1	2	3	4	5
25.	My interaction with this tutee makes me feel effective and confident.	1	2	3	4	5

Appendix 2

Peer Tutor Evaluation Form—Success Center

Tutor Name: _____

Course Tutored (e.g., MATH 150)

How many times have you been to tutoring with this tutor? _____

Please Rate All Items Using the Following Scale:

Definitely Yes 1	Yes 2	Somewhat Yes 3	Somewhat No 4	No 5	Definitely No 6
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Location

_____ 1. The location of the tutoring services is convenient.

Scheduling

_____ 2. I was able to sign up for a tutor with ease.

_____ 3. There was a wide variety of times to choose from.

Tutor

_____ 4. My tutor communicated clearly with me.

_____ 5. I felt comfortable about asking my tutor questions.

_____ 6. My tutor was familiar with the material.

_____ 7. My tutor explained the subject matter so I could understand it.

_____ 8. My tutor had a genuine interest in the subject matter.

_____ 9. My tutor had good rapport with me.

_____ 10. My tutor listened carefully.

- _____ 11. My tutor answered questions well and provided examples to clarify problems.
- _____ 12. My tutor spoke clearly and distinctly.
- _____ 13. My tutor came well prepared for each session.
- _____ 14. My tutor allocated enough time for me to ask questions.
- _____ 15. My tutor encouraged my participation in each session.
- _____ 16. My tutor suggested ways to improve my study habits.
- _____ 17. My tutor expected me to complete homework before the tutoring session.

Definitely Yes 1	Yes 2	Somewhat Yes 3	Somewhat No 4	No 5	Definitely No 6
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Tutoring

- _____ 18. As a result of tutoring, I study more effectively for the course.
- _____ 19. As a result of tutoring, I am more willing to go to class.
- _____ 20. As a result of tutoring, I am more prepared for each class.
- _____ 21. As a result of tutoring, I am more likely to go the professor's office hours.
- _____ 22. As a result of tutoring, I am more likely to ask the professor a question in class.
- _____ 23. The major objective of the tutoring program is to help you become an independent learner in the course. Was this objective met?
- _____ 24. Were you satisfied with the overall quality of the tutoring program?

Grades (use the provided scale for items 25 and 26)

- _____ 25. Before tutoring, what did you expect your grade in the course to be?
- A B C D F Withdraw
- _____ 26. Now, after being tutored, what do you anticipate that your grade in the course will be?
- A B C D F Withdraw

_____ 27. Has tutoring helped you raise your grades?

_____ 28. Has tutoring kept you from dropping the course?

_____ 29. Are you repeating this course? YES or NO

Future Service

_____ 30. I would refer a friend to the Academic Success Center tutoring program.

_____ 31. If I had problem in another course, I would seek tutoring here.

_____ 32. If my tutor were qualified to tutor another course I was taking, I'd request him/her again.

Please write any additional comments below:
