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Previous research has identified peer evaluations as reliable and valid measures of performance in team settings, and has investigated factors contributing to user acceptance of these systems. In light of the lack of empirical research on peer evaluation in classroom settings, this study examined student reactions to a web-based peer evaluation system. Although students responded that the evaluation process was not enjoyable, they strongly agreed that it was useful. Utility-type items were found to be predictive of acceptance of the evaluation process and the perception that the course would help future career success. Implications are discussed for teaching industrial/organizational psychology.

In teaching industrial/organizational psychology and other subjects, instructors often incorporate team-based projects to enhance students' learning experiences. Team projects can facilitate cooperative learning and may enhance students' communication and interpersonal skills (Persons, 1998). However, in assessing a team's performance on a class project, instructors face the problem of holding each team member accountable when unable to directly view each individual's contribution. An increasingly common method of assessing individual team member behaviors in industrial settings involves peer evaluation (Stubblebine, 2001). Peer evaluation techniques include ratings, nominations, rankings, or observations. Incorporating the evaluations of other team members can reduce "free riding" or "social loafing" and hence encourage individuals to contribute to the group effort (Bacon, Stewart, & Silver, 1999, Harkins & Szymanski, 1989; Hart, Bridgett, & Karau, 2001). Though peer evaluation techniques have been utilized in classroom settings as well, the majority of the empirical research to date has focused on their application in the workplace.

Despite criticisms that these systems can introduce leniency errors and "friendship biases" (Cederblom & Lounsbury, 1980; McEvoy & Buller, 1987), previous research has suggested acceptable reliabilities and above average predictive validities for peer evaluations (DeNisi & Mitchell, 1978; Imada, 1982; Kane & Lawler, 1978; Lewin & Zwany, 1976; Reilly & Chao, 1982). Furthermore, incorporating peer evaluations can introduce new information (Borman, 1991) and provide a more complete picture of performance (Murphy & Cleveland, 1991). Nevertheless, those in both classroom and work settings who are hesitant to implement this technique often are concerned with user reactions and perceptions of the process. In light of this concern, the primary purpose of this research was to explore student reactions to various facets of a team project incorporating peer evaluations. Moreover, this study was aimed at investigating the relationships between these reactions and the students' acceptance of the process in determining their grade, and their perception of the utility of the course in helping their career.

Much of the research on reactions to peer evaluation in work settings has focused on user acceptance of the practice. Though operationalized in different ways, acceptance is conceptualized as "the extent to which individuals believe peer evaluation should be used in an organization" (Stubblebine, 2001, p. 85). While a recent study found acceptance to be lower for peer evaluations than for supervisor evaluations on several dimensions (Stubblebine, 2001), other studies have indicated varying degrees of user acceptance in relation to other factors. For instance, Cederblom and Lounsbury (1980) found a negative relationship between perceived friendship bias and user acceptance, and a positive relationship between perceived feedback value and acceptance. Furthermore, other studies have indicated more favorable user attitudes toward the process and higher levels of acceptance when the evaluations were perceived as more for developmental feedback purposes (Fedor, Bettenhausen, & Davis, 1999; McEvoy, & Buller, 1987).

In regard to peer evaluation in classroom settings, few studies have addressed the topic. Bacon et al. (1999) found the use of peer evaluations to be negatively associated with "good team experiences," and Sherrard and Raafat (1994) found that students held "considerable concern" about being evaluated by their peers. Encouraging, however, was the latter study also indicated that the demographics of peer evaluators introduced little bias into the evaluation process. Additionally, Morahan (1996) found that students accepted the peer evaluation process, as evidenced by their perceptions of the fairness of the system. Despite a few examples (e.g., Bastick, 1999; Johnson, 1993; Persons, 1998), specific research on peer evaluation in the classroom context is clearly lacking. More information should be gathered regarding student reactions and perceptions of the process, specifically concerning different types of reactions. For example, in their research on reactions to job training, Alliger, Tannenbaum, Bennet, Traver, and Shotland (1997) classified reactions into "affective" and "utility" categories. Affective reactions consist of the degree to which an individual liked the training, and utility refers to the extent that an individual found the training useful. Interestingly, utility-type reactions have been found to be more strongly associated with on-the-job performance (Alliger et al., 1997, Colquitt, LePine, Noe, 2000). Additionally, other research (e.g., Conway, Lombardo, & Sanders, 2001) demonstrates that peer evaluation contributes unique variation in objective performance measures above and beyond

the contribution of evaluations from other sources (e.g., subordinates).

The present research was hence aimed at identifying both affective and utility-type reactions to several facets associated with a class team project. In line with the general purpose of the present study, we examined the following three research questions:

Q1: How will students react to various facets of a team project incorporating peer evaluations?

Q2: What influences the acceptance of peer evaluations for determining grades, perceptions of utility or affective reactions?

Q3: What influences perceptions of the long-term benefit of the course, perceptions of utility or affective reactions?

Through an investigation of these research questions, this research was intended to specifically address issues surrounding the practicality, acceptance, and perceived utility of incorporating peer evaluation into a course's performance appraisal process. In courses where performance measurement is actually part of the curriculum (e.g., industrial-organizational psychology), it is especially important that the utilized peer evaluation process should be viewed as a teaching tool, reflecting current theory, research, and practice in the discipline.

Methods

Participants

Study participants consisted of 48 female students [1] enrolled in one of three courses [2] in the human resources management (HRM) curriculum at a small, private women's college in the Southeastern United States. The students were sophomores, juniors, and seniors, and the majority majored in psychology, business, or human resources management.[3] The participants were required to work in teams to complete a project for their respective class (e.g., in one class, each team was required to design and implement a survey related to HRM). Each class had three teams consisting of four to six members. The participants assessed both their own and their fellow team members performance using a web-based peer evaluation instrument followed by a short process evaluation survey. In all three classes, peer evaluations contributed to the final project grade. Evaluation survey results did not contribute to the project or course grades. One class produced results for two separate projects.[4] Only the evaluation survey responses from one of these projects were included in this study.

Procedure and Instrument

Each participant was required to complete a web-based peer evaluation instrument followed by an eleven-item reaction measure to assess utility and affective attitudes toward teamwork, the project, and the peer evaluation methodology. After the completion of each project, the course instructor gave all members of the course the URL for the web-based peer evaluation form that was hosted on a private website and deployed using commercially available surveying software.[5] The instrument was designed with response-keyed branching (i.e., by indicating their class and team, students were sent to the appropriate pages). This allowed all three classes to use the same evaluation form, requiring the use of only one URL.

When students submitted the URL, the first page displayed an overview and purpose statement. Four reasons for students completing the peer evaluation process were provided: (a) to provide your teammates with performance feedback to

improve future team interactions; (b) to provide practice in completing peer evaluation (as often used in industry); (c) to demonstrate the rating process and several rating scales as described in the I/O course; and (d) to help determine the final course grade. Students were informed that they would be completing Behaviorally Anchored Rating Scales (BARS) related to five performance categories and then assigning a percentage contribution, a ranking, and numerical grade (0-100) with rationale for each team member. The categories were reliability, cooperation, participation, productivity, and interpersonal communications. Before being asked to click through to the instruction page, students were notified that only aggregate results would be reported for grading or feedback.

The instruction page contained a description of the evaluation process, an attempt to standardize the rater's frame of reference, and a disclaimer that the instructor reserved the right not to use the peer-assigned grades if they were found to be inconsistent, to reflect rater error or bias, or to contradict known facts. On subsequent pages, students were asked to identify their name, their class (sending them to the team page for their class), and their team (sending them to the peer evaluation pages for their team).[6] Each peer rating page contained the performance construct title (e.g., Productivity), its definition, the BARS anchor for each scale point, and a table with each team member's name and radio buttons for each scale point.[7] The BARS utilized in this study were developed and administered in paper mode in a previous semester.[8] Table 1 contains the performance constructs and definitions. As an example, Table 2 contains the BARS anchors for the cooperation construct. After completing the BARS, participants were instructed to rank the performance of their teammates, to assign a percentage contribution to the project for each person (limited to using 0-40% in 5% increments with the requirement that all percentages assigned total to 100%), to assign a numeric grade (0-100) with rationale for each team member, and to provide additional comments.[9]

After completing the peer evaluation process, each participant was asked to assess the entire process. Students provided affective- and utility-type reaction ratings on working in teams, the project, the peer evaluation methodology, and the web-based administration mode. In addition, students responded to two items included as criteria for the present study. Specifically these items were, "I think peer evaluations should be used to determine a percentage of a student's project/course grades," and "I think what I learned in this course will help me succeed in my career." The former item was meant to assess the student's acceptance of the peer evaluation process, and the latter item was meant to assess their perception of the long-term utility of the course in helping their career. A listing of the 11 evaluation items can be found in Table 3. All reaction items were rated on a Likert-type scale ranging from "strongly disagree" to "strongly agree." Once the reaction measures were submitted (by clicking the "finish" button) the students were redirected to the college's homepage.

Results

Table 3 displays the sample sizes, means, and standard deviations for all peer evaluation process items. These data were useful in addressing the study's first research question. Two of the affective reaction items showed the lowest mean ratings (e.g., "I enjoy doing peer evaluations" and "I enjoy working in teams"), while two of the utility reaction items had the highest mean ratings (e.g., "I

think what I learned in this course will help me succeed in my career" and "I think the project helped me learn useful knowledge and skills"). Table 4 also addresses research question 1, by presenting the results of analyses of response frequency for the peer evaluation items. These data allow for a more detailed view of the response patterns given by the students involved in the peer evaluation. Similar to the Table 3 results, utility reaction items displayed the most favorable (i.e., agree or strongly agree) response frequencies. A notable result was that students responded that they agreed that peer evaluations were important in providing developmental feedback (75%). The item that received the most unfavorable responses (54.5%) asked if students found peer evaluations to be enjoyable. Also apparent, was that students responded favorably, both to affective and utility items, to doing peer evaluation via the Internet. In sum, this evidence suggests that despite the perception that peer evaluations are not exactly "enjoyable", they are indeed perceived to be useful. Moreover, the utility reaction measures tended to display higher mean level ratings, as well as more favorable response category frequencies, than did the affective reaction measures.

In order to address research questions 2 and 3, zero-order correlations among the peer evaluation items were computed and stepwise regression analyses were conducted. Prior to these analyses, all missing data was replaced with item means. Less than 2% of the data were replaced (11 of 528 individual data points). Table 5 displays the correlations among the peer evaluation process items. The pattern of significant correlations showed that the utility reaction items tended to intercorrelate more than they correlated with the affective reaction items. The highest correlation was between the two items addressing the effectiveness and enjoyableness of using the Internet for peer evaluations ($r = .96$).

Per research question 2, Table 6 shows the results of a stepwise regression analysis of the model designating the item "I think peer evaluations should be used to determine a percentage of a student project/course grades" as the criterion. The final model identified by the stepwise procedure accounted for a significant amount of variance in the criterion (F [2, 47] = 47.61, $p < .0001$). The item relevant to the usefulness of peer evaluations was the stronger of the two retained predictors ($p < .01$). Interestingly, the affective reaction item about enjoying team-based work was a significant inverse predictor ($p < .05$). The results from Table 6 suggested that the greater the extent to which students perceived peer evaluation as useful, the greater the degree of support for using the evaluations as part of their course grades. Additionally, the data suggested that the lower the affective attachment to team-based work, the greater the agreement with using peer evaluations for coursework appraisal.

The results of the stepwise regression analysis conducted to address research question 3 are shown in Table 7. Again, the final stepwise selected model accounted for a significant amount of variance in the criterion item of "I think what I learned in this course will help me succeed in my career" (F [2, 47] = 47.77, $p < .0001$). Both retained predictor items were utility reaction measures and statistically significant ($p < .01$). Of these two predictors, the item pertaining to working in a team as a valuable experience had the stronger predictive relationship. The results of this regression analysis suggested that team-based project work that was perceived by students as a forum for learning useful knowledge and skills was related to an increased perception of the future benefit, in terms of careers, of the course project itself.

Discussion

This research was conducted in order to explore student reactions to a team project incorporating web-based peer evaluation. Although several limitations of this study must be acknowledged and discussed, some important implications of the results are noted before doing so. First, in regard to research question 1, although a lower proportion of the students enjoyed doing peer evaluations, a higher proportion found them useful and important for developmental feedback. Additionally, a greater proportion of students accepted the use of peer evaluations in determining their course grade and perceived them as useful in helping their future career success. These results support an affective/utility distinction and imply that although students may not like working in teams and being evaluated by their peers, they may still perceive these processes as valuable and will hopefully benefit from the experience. Instructors who are incorporating team assignments into their classes and including peer evaluations should reinforce the practical value of these activities and emphasize the potential benefits. Furthermore, although most students did not enjoy doing peer evaluations, they responded favorably to a web-based format, both in terms of affect and utility. Therefore, if implementing a peer evaluation system, this type of format may be desirable in that students appreciate the ease of use and consider it a more effective mode of administration.

There are also implications with respect to the results of the regression analyses. Research question 2 was concerned with the issue of acceptance of peer evaluations in determining one's grade. Two predictors were significant, with the item regarding the usefulness of peer evaluation being the strongest predictor. In other words, the more useful the students perceived the evaluation process to be, the more likely they were to accept the evaluation as contributing to their grade. This implies that concerned instructors may bolster acceptance of their peer evaluation system by increasing the student's perceptions regarding its usefulness. Furthermore, in regard to the negative regression coefficient associated with the item about enjoying team-based work, it may be that attempting to make a team-project more "fun" actually undermines the appraisal process in some way. That is, incorporating exercises in attempt to make the experience more enjoyable may de-emphasize the usefulness of the project, and consequently lower acceptance of the evaluations in determining grades. Experimental research that manipulates project content and process to alter perceptions of usefulness and enjoyment would be an interesting undertaking to explore this notion.

Research question 3 focused on the relationships between the predictor items and the criterion item concerning perceptions that the course was helpful in contributing towards future career success. Both of the significant predictors were utility-type items, one concerning the usefulness of the project and the other concerning the value of working in teams. This suggests the importance of communicating to students the value and usefulness of all of these aspects of the assignment and process. Instructors should design their team-based projects and peer evaluation systems so that students are made aware from the beginning that teamwork, projects, peer evaluation, and all other aspects of the evaluation experience are linked to "tangible" outcomes for their future careers. This is especially true in courses such as those included here, where the course curriculum stresses the importance of performance assessment as

being highly useful. In other words, the team project and evaluation process should be designed and promoted to the students as a teaching tool with direct relevance in the real world.

As mentioned, there were several notable limitations of this research. Though the results were similar to those from the training/job performance literature in that utility-type reaction measures were more strongly related to the criterion items than affective-type measures (Alliger et al., 1997; Colquitt et al., 2000), the study described here used only attitudinal measures and included no distal criteria. Future research should incorporate criterion measures such as course grades or actual career success attitudinal measures. Furthermore, this research was conducted using a somewhat small sample from a population of female students at a private women's college. The findings here need to be cross-validated across different student populations, types of institutions, and types of courses. The data collected here were taken from three different courses, taught by two different instructors. Given a larger sample, it would be interesting to investigate these relationships while taking into account the influence of the course and instructor. It may be that affect towards the instructor or perceived usefulness of the actual project content and process influence students' reactions to and acceptance of peer evaluations. Furthermore, more information is needed regarding web-based administration of peer evaluation systems versus paper-and-pencil. Though over half of the sample under study here had previously completed peer evaluations on paper, the rest of the sample had not and therefore did not truly have a point of comparison.

An additional limitation of this study was the lack of multiple items assessing each construct. Future research should incorporate sets of items for each construct to allow for a latent investigation of the relationships between these factors. Also, the use of stepwise regression in the analysis of research questions 1 and 2 presents a potential point of criticism. Though the stepwise procedure identifies a single "best" regression model, it can therefore hide other models that may also be "good" (Neter, Kutner, Nachtsheim, & Wasserman, 1996). However, given the highly exploratory nature of this study, the stepwise procedure was deemed acceptable. Future research can incorporate other methods to test more specific hypotheses. Finally, the study conducted here included peer ratings and rankings, however student reactions were not measured with regard to these different methodologies. Subsequent research should investigate whether students prefer ratings, rankings, or other peer evaluation methodologies (e.g., nominations), or whether some combination of these methods is preferred.

Team projects can facilitate learning in the classroom (Persons, 1998) and also prepare students for work contexts they are likely to face at some point in their careers. Teamwork, projects, and peer evaluations are all increasingly prevalent factors in corporate life (Guzzo & Dickson, 1996; Mohrman, & Quam, 2000). For example, the popularity of 360 assessment ensures peer evaluation will be utilized as part of the corporate development process for some time, and as organizations utilize teams more heavily the need for adequate measures of individual contributions to team performance may lead to incorporating peer evaluations as is commonly done in the military (e.g., Schwarzwald, Koslowsky, & Mager-Bibi, 1999). Furthermore, previous research has suggested that peer evaluations are consistent and accurate measures of team performance (DeNisi & Mitchell, 1978; Imada, 1982; Kane & Lawler, 1978; Lewin

& Zwany, 1976; Reilly & Chao, 1982). However, course instructors implementing peer evaluations must have a well thought-out and designed system. Careful concern should be taken in communicating the value and relevance of the team projects and evaluation processes. Providing specific and meaningful examples of similar projects and processes in the "real world" might foster increased perceptions of usefulness and therefore procedural acceptance. Although students may not enjoy the project or evaluation process itself, if they perceive them to be useful they may be more willing to accept and benefit from their use. Most importantly, instructors should consider and plan carefully all aspects of the design and implementation of team projects and their evaluation systems. A fly-by-the-seat-of-your-pants approach to team-based projects will probably do more harm than good.

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Footnotes

[1] There was actually only 43 women in the study. Although most participants were enrolled in only one course, five of the women were enrolled in two of the courses. Therefore, these five students completed the process evaluation survey twice, producing a total of 48 evaluations. Both sets of process evaluation survey responses were maintained for analysis and treated as separate individuals because they reflect different classes, projects, teams, and data collection times.

[2] The three courses were introduction to industrial/organization (I/O) psychology, performance management (PM), and individual/organization change (I/OC).

[3] The I/O course was required for human resources and business majors and was an elective for psychology majors. PM was a required course for human resources majors. I/OC was an upper-level elective for human resources majors and minors. I/O psychology was a prerequisite for the other two courses.

[4] The PM class teams had two projects, a paper and an in-class presentation/ demonstration. Complete sets of ratings were collected for both projects. Due to contextual similarity and timing (i.e., collected within days of each other), only one set of the process evaluation survey responses were utilized.

[5] For inquiries concerning the web hosting or the survey software utilized, please contact the second author of the poster. Both were donated by a local consulting firm.

[6] Additionally, the PM students were asked to identify the project the ratings reflected.

[7] Contact the second author for more information about the instrument's web design and features or content.

[8] The original performance constructs and BARS were developed by another instructor and were redesigned and piloted on paper in the fall 2000 semester by the second author. Approximately 55% of the participants should have had experience with a previous paper version of the peer evaluation instrument.

[9] The numeric grades were actually utilized in computing course grades. The BARS, rankings, and percentages contribution were used to assess the validity and reliability of the assigned grades.

Table 1

Performance Constructs and Definitions

Reliability	Prompt attendance to team meetings; stays the duration of the meeting; prepared consistently for meetings; assignments are completed consistently on time.
Cooperation	Willingness to collaborate, to work with, and to assist others to achieve group objectives.
Participation	Extent of contribution in terms of ideas, discussion, leadership, and initiative.
Productivity	Assigned tasks are appropriately completed (consider quality, quantity, timeliness).
Interpersonal Communications	Utilizes effective communications skills including reflective listening, open-ended questions, and summarizing. Adapts interpersonal skills to the needs of an individual, the team, or the situation.

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Table 2

BARS Anchors for Cooperation

Performance level	Scale point	Behavioral anchor
Highest Performance	5	Always supports or gives help to other group members; is helpful in crisis. Utilizes effective conflict management skills and collaboration skills to take the lead in resolving conflict and facilitating collaboration. Works well with all group members.
	4	Works well with all group members. Is willing to collaborate to solve group problems when asked.
Moderate Performance	3	Yields to others when appropriate; flexible when dividing work. Works well with most group members, most of the time. Willing to compromise to solve problems/conflicts.
	2	Frequently is difficult to work with. Doesn't work well with some group members. Will compromise to solve problems when pushed, but doesn't collaborate to resolve conflict. Not very flexible—insists things be done her way and tries to control group decisions. Doesn't respect others in the group.
Lowest Performance	1	Doesn't play well with others. Is not flexible—insists things be done her way, dominates the group and may unnecessarily redo the work of others without discussing it with them. Reacts inappropriately to conflict with avoidance, accommodation, forcing, or competitive tactics. Doesn't collaborate or compromise to resolve conflict. Doesn't respect others in the group.

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Table 3

Descriptive Statistics for Peer Evaluation Items

Item	*N*	*M*	*SD*
I think peer evaluations are useful.	48	3.77	1.17
I think peer evaluations are important for providing developmental feedback.	48	3.96	0.85
I think peer evaluations should be used to determine a percentage of a student project/course grades.	46	3.37	1.08
I enjoy doing peer evaluations.	44	2.48	1.05
I think doing peer evaluations on the web is more effective than paper-and-pencil.	47	3.79	1.21
I think doing peer evaluations on the web is more enjoyable than paper-and-pencil.	47	3.79	1.20
I think the project helped me learn useful knowledge and skills.	48	4.23	0.99
I enjoyed doing this project.	47	3.57	1.14
I think working in teams provided a valuable experience.	48	4.13	0.96
I enjoy working in teams.	48	3.25	1.16
I think what I learned in this course will help me succeed in my career.	45	4.24	0.93

Note. Analyses performed on raw data.

Table 4

Response Frequencies for Peer Evaluation Items

	Scale Points					
Item	1	2	3	4	5	*N*
I think peer evaluations are useful.	6.25	8.33	18.75	35.42	31.25	48
I think peer evaluations are important for providing developmental feedback.	0.00	6.25	18.75	47.92	27.08	48
I think peer evaluations should be used to determine a percentage of a student project/course grades.	6.52	10.87	36.96	30.43	15.22	46
I enjoy doing peer evaluations.	18.18	36.36	27.27	15.91	2.27	44
I think doing peer evaluations on the web is more effective than paper-and-pencil.	4.26	14.89	14.89	29.79	36.17	48
I think doing peer evaluations on the web is more enjoyable than paper-and-pencil.	4.26	14.89	12.77	34.04	34.04	47
I think the project helped me learn useful knowledge and skills.	0.00	8.33	14.58	22.92	54.17	48
I enjoyed doing this project.	6.38	10.64	23.40	38.30	21.28	47
I think working in teams provided a valuable experience.	0.00	8.33	14.58	33.33	43.75	48
I enjoy working in teams.	6.25	20.83	31.25	25.00	16.67	48
I think what I learned in this course will help me succeed in my career.	0.00	6.67	13.33	28.89	51.11	45

Note. Analyses performed on raw data. Cell entries are percentages. Scale points were 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Table 5

Zero-order Correlations for Peer Evaluation Items

		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
I think peer evaluations are useful.	V1	1.0										
I think peer evaluations are important for providing developmental feedback.	V2	.89**	1.0									
I think peer evaluations should be used to determine a percentage of a student project/course grades.	V3	.81**	.66**	1.0								
I enjoy doing peer evaluations.	V4	.39**	.30*	.27	1.0							
I think doing peer evaluations on the web is more effective than paper-and-pencil.	V5	.28	.29*	.15	.25	1.0						
I think doing peer evaluations on the web is more enjoyable than paper-and-pencil.	V6	.22	.27	.09	.23	.96**	1.0					
I think the project helped me learn useful knowledge and skills.	V7	.70**	.64**	.56**	.46**	.51	.46**	1.0				
I enjoyed doing this project.	V8	.34*	.42**	.17	.56**	.19	.20	.58**	1.0			
I think working in teams provided a valuable experience.	V9	.56**	.61**	.33*	.47**	.30*	.31*	.71**	.78**	1.0		
I enjoy working in teams.	V10	.31*	.38**	.08	.45**	.19	.21	.54**	.81**	.72**	1.0	
I think what I learned in this course will help me succeed in my career.	V11	.62**	.58**	.42**	.45**	.32*	.31*	.73**	.61**	.79**	.53**	1.0

Note. Missing values replaced by variable means prior to analysis.

* $p < .05$. ** $p < .01$.

Table 6

Stepwise Regression Analysis for Variables Predicting Item Three

Variable	*B*	*SE B*	β
I think peer evaluations are useful.	.78**	.08	.86
I enjoy working in teams.	-.17*	.08	-.18

Note. R^2 = .679. Item 3 was "I think peer evaluations should be used to determine a percentage of a student project/course grades".

* $p < .05$. ** $p < .01$.

Table 7

Stepwise Regression Analysis for Variables Predicting Item Eleven

Variable	*B*	*SE B*	*β*
I think the project helped me learn useful knowledge and skills.	.32**	.11	.35
I think working in teams provided a valuable experience.	.51**	.11	.54

Note. R^2 = .680. Item 11 was "I think what I learned in this course will help me succeed in my career".

**$p < .01$.

ABOUT SWA CONSULTING INC.

SWA Consulting Inc. (formerly Surface, Ward, and Associates) provides analytics and evidence-based solutions for clients using the principles and methods of industrial/organizational (I/O) psychology. Since 1997, SWA has advised and assisted corporate, non-profit and governmental clients on:

- Training and development
- Performance measurement and management
- Organizational effectiveness
- Test development and validation
- Program/training evaluation
- Work/job analysis
- Needs assessment
- Selection system design
- Study and analysis related to human capital issues
- Metric development and data collection
- Advanced data analysis

One specific practice area is analytics, research, and consulting on foreign language and culture in work contexts. In this area, SWA has conducted numerous projects, including language assessment validation and psychometric research; evaluations of language training, training tools, and job aids; language and culture focused needs assessments and job analysis; and advanced analysis of language research data.

Based in Raleigh, NC, and led by Drs. Eric A. Surface and Stephen J. Ward, SWA now employs close to twenty I/O professionals at the masters and PhD levels. SWA professionals are committed to providing clients the best data and analysis with which to make solid data-driven decisions. Taking a scientist-practitioner perspective, SWA professionals conduct model-based, evidence-driven research and consulting to provide the best answers and solutions to enhance our clients' mission and business objectives. SWA has competencies in measurement, data collection, analytics, data modeling, systematic reviews, validation, and evaluation.

For more information about SWA, our projects, and our capabilities, please visit our website (www.swa-consulting.com) or contact Dr. Eric A. Surface (esurface@swa-consulting.com) or Dr. Stephen J. Ward (sward@swa-consulting.com).