

# Team Satisfaction and Student Group Performance: A Cross-Cultural Study

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The authors examined the relationship between team satisfaction and students' performance in group projects in two universities, one from the United States and one from Qatar. The results showed that there is a significant positive correlation between team satisfaction and group performance only for the American students. Demographic factors such as gender, employment, course level, course subject, and group gender were partially significant in influencing students' responses. American students performed better than Qatari students, but they were less satisfied with their team members. These differences may be attributed to the cultural dissimilarities between the American and the Qatari students; thus, students' cultural backgrounds should be considered when forming groups.

**Keywords:** cultural dimensions, Qatar, student performance, team satisfaction, teamwork, USA

One of the important learning outcomes for business programs that is overemphasized by the educational systems and business communities is enhancing teamwork skills. Therefore, organizations will continue to expect business schools to prepare their students to work in a collaborative environment. Additionally, various accreditation agencies require team skills to be incorporated into academic curriculums. The need for teamwork is likely to increase due to the dynamic nature of the business models that are characterized as networked and clustered groups of alliances (Applegate, Austin, & Soule, 2010). Business schools usually include in their curricula coverage for teamwork skills through group projects and case studies. Instructors need to highlight the importance of teamwork skills not only from career perspective, but also from student performance perspective.

Previous research endeavors focused on many aspects of student group projects such as peer evaluation, group formulation, impact of grade point average on group performance, grade assignment, and group satisfaction. For example, Persons (1998) examined the impact of peer evaluations among group members in an introductory financial accounting class. The result indicated that accounting majors and students with higher grade point averages were given the highest peer eval-

uations and recommended that this phenomenon be considered in assignment of students to teams. The result of the study by Leon and Tai (2004) revealed that communication and greater student–faculty interaction with instructors present at all student group meetings had a positive impact on student learning. Group work was used and implemented by students in different universities around the world reflecting the importance of teamwork in education and business (Shaw, 2004). According to Ruiz Ulloa and Adams (2004) several studies about teamwork attitudes have been conducted in the United States and the results were mixed. However, comparative studies that reflect the effect of cultural differences on teamwork were very limited.

## PURPOSE OF STUDY

The vast majority of previous research focused on the importance of teamwork skills for students in order to prepare them for the workplace (Alshare, Slocombe, & Miller, 2005). However, few attempts have been devoted for addressing team forming in group assignments and evaluating the relationship between team satisfaction and students performance. Even fewer attempts have examined the previously mentioned issues across culture. Therefore, this study intends to fill in this research gap and contribute to this literature. The primary objectives of this study were to measure the association between the grade earned for group project and team

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satisfaction and to compare students' responses from the United States and Qatar. These two countries were selected because they differ in terms of cultural characteristics (Hofstede, 1991). We believe that cultural differences will influence students' perceptions and satisfaction of teamwork. Moreover, the study examined selected demographic variables such as gender, employment (employed students vs. full-time students), course level (lower level courses vs. upper level courses), course subject (information systems vs. finance), and group orientation (mixed gender and male- and female-oriented groups) that may influence student responses. More specifically, the following research questions were proposed:

- Research Question 1 (RQ<sub>1</sub>):* Is there a relationship between students' satisfaction and group performance?
- RQ<sub>2</sub>:* Are there significant differences in responses between American and Qatari students?
- RQ<sub>3</sub>:* Do demographic variables such as gender, employment, course level, and course subject affect students' responses?

## LITERATURE REVIEW

### Group Performance and Satisfaction

Hoegl and Gemeunden (2001) used six aspects of teamwork quality (communication, effort, coordination, mutual support, balance of member contribution, and cohesion). Their result showed that teamwork quality associated with team performance and team members' personal success. Liu and Cheng (2007) examined the social talks in the group discussion and group task-related dialogue as indicators of students' satisfaction. They found that students' overall learning satisfaction is high. Druskat and Kayes (2000) used a sample of postgraduate students involved in group projects to investigate the effect of team processes on student team learning and performance. They found that there is no relationship between team performance measured by grade and team learning measured by sharing knowledge. A study by Sher (2009) showed the importance of interaction for student learning and satisfaction within web-based online learning programs. The population of his study was students enrolled in multiple academic disciplines at a private university in Washington, DC. He analyzed the relationship of interaction variables with student learning and student satisfaction. He found that student-to-student interaction is a significant contributor of student learning and student satisfaction. Matta, Luce, and Ciavarrò (2010) reported that students act in selecting their team members has a small impact on their satisfaction. A study by Alshare et al. (2005) showed that there is a positive relationship between team satisfaction and group performance. Thus, the following hypothesis was proposed:

- Hypothesis 1 (H<sub>1</sub>):* There would be a significant positive relationship between students' satisfaction and group performance.

### Cultural Effect

It has been reported by researchers that cultural differences impact learning/teaching process and teamwork, team structure, performance, and satisfaction (Hofstede, 1984, 1991, 2008; Pineda, Barger, & Lerner, 2009; So, West, & Dawson, 2010). In his work related to culture, Hofstede identified five cultural dimensions, including power distance (the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally), uncertainty avoidance (the extent to which the members of a culture feel threatened by uncertain or unknown situations), masculinity–femininity (in general, people in a masculine society believe that a person lives to work, whereas people in a feminine society more widely adopt a work-to-live philosophy), individualism–collectivism (the degree to which people in a culture prefer to act as individuals rather than members of groups), and short- and long-term orientation. The two extremes of the individualism–collectivism continuum can be contrasted as the me society versus the we society; and the long- and short-term oriented (it is related to the culture's orientation to the future).

Hofstede (2008) discussed the cultural differences in teaching and learning and provided the following comparisons. In a culture with large power distance such as in China and Qatar, the teaching–learning environment could be described as teacher-centered education, students dependent on teachers, and teachers initiate all communication in class. For a culture with small power distance such as in the United States and Germany, the teaching–learning environment could be described as student-centered education: students treat teachers as equals, and students initiate some communication in the class. For the cultural dimension (uncertainty avoidance), the teaching–learning environment may be described in a strong uncertainty avoidance cultures such as in Korea and Qatar, where students want to know right answers, emotions in class can be expressed and there is pressure among students to conform. In cultures with weak uncertainty avoidance such as the United States or the Netherlands, the teaching–learning environment may be described as students want good discussions, emotions would be controlled anywhere, and students have tolerance for differences in the class. In masculine cultures such as in the United States and Qatar, students overrate their own performances and the best student is the norm (i.e., everyone aims to be recognized as number one). In feminine cultures such as in Russia and Chile, students underrate their own performances and the average student is the norm. In an individualism cultures such as in the United States and Spain, the teaching–learning environment could be characterized as: the purpose of education is learning how to learn and students associate according to interests. Teaching–learning environments for collectivism cultures such as in Qatar and China could be described as: the purpose

of education is learning how to do and students associate according to in-groups. Finally, the teaching–learning environment for long term–oriented cultures such as in China and Japan may be described as: students attribute success to effort and failure to lack of effort, and studying hard is the norm. For the short term–oriented cultures such as in Qatar and African countries, the education environment is characterized as: students attribute both success and failure to luck and occult forces, and enjoyment is the norm.

According to Hofstede (1984, 1991), Pineda et al. (2009), and So et al. (2010) cultural differences may affect teamwork performance, attitude, and group satisfaction. In their study, So et al. compared the effect of cultural differences on teamwork and team satisfaction using two samples from Hong Kong and the United Kingdom. They found that culture had an impact on team structure and job design. Another study by Pineda et al. (2009) compared the attitudes of American students group and the Lithuanian students group about the teamwork. They found that Lithuanian students have more positive attitudes toward teamwork than American students. Additionally, American students' satisfaction level and desire to work in group were less compared to those of Lithuanian students. According to Pineda et al., American and Lithuanian students belong to different societies that place different values on teamwork. Based on the previous discussion, and because the two studied countries (United States and Qatar) represent a different culture set, we expected both groups to differ in their perception about teamwork. Therefore, the following hypotheses were proposed:

*H*<sub>2a</sub>: There would be a significant difference in students' satisfaction between American and Qatari samples.

*H*<sub>2b</sub>: There would be a significant difference in students' performance between American and Qatari samples.

In the following paragraphs, we discuss demographic factors that may impact student responses such as gender, employment status, course level, and subject.

### Gender Effect

Gender factor has always been an important factor that could contribute to differences in participants' responses. Shallal (2011) conducted a study on job satisfaction for employed Emirati females in the United Arab Emirates using a sample of 1,272 workers in private and public sectors. She found that female workers' satisfaction was affected by the level of education and their income. Men and women have different communication styles (see, for example, Aries, 1996; Briton & Hall, 1995) that may affect group performance and satisfaction. Communication goals for men when working with others tend to be more task oriented, while for women it may focus more on gaining trust and social oriented activities (see, for example, Dennis, Kinney & Hung, 1999; Troemel-Ploetz, 1991). Some studies found that group heterogeneity led to more job satisfaction (Fields & Blum,

1997), while others found that job satisfaction is higher for homogeneous group (Konrad, Winter, & Gutek, 1992). According to Walters, Stuhlmacher, and Meyer (1998), as women are more cooperative in negotiations than men, they are expected to be more effective than men. Furumo and Pearson (2007) analyzed whether gender impacts teams' trust and satisfaction. They found that women reported higher trust than men. They also found that men had less ability to control team interaction than women. Hamlyn-Harris, Hurst, von Baggo, and Bayley (2006) found that students who were working in mixed gender teams on long projects were more satisfied than those students who were working on short projects. In this study, the impact of gender on team satisfaction was examined by testing the differences in satisfaction and performance among men, women, and mixed gender groups. Thus, the following hypotheses were posited:

*H*<sub>3a</sub>: There would be a significant difference in students' satisfaction between males and females.

*H*<sub>3b</sub>: There would be a significant difference in students' performance between males and females.

*H*<sub>4a</sub>: There would be a significant difference in students' satisfaction among students in mixed gender groups, male-oriented groups, and female-oriented groups.

*H*<sub>4b</sub>: There would be a significant difference in students' performance among students in mixed gender groups, male-oriented groups, and female-oriented groups.

### Employment, Course Level, and Subject Effects

Possession team skills are considered to be significant for successful workplace outcomes. Even though the educational environment and real business are not the same, yet given the students the chance to work in teams will stimulate the real world environment. Caspersz, Skene, and Wu (2003) identified the differences between student and real-world team initiatives. For example, student teams had much shorter time durations, represented only one component of a learning experience, and were composed of persons from a variety of disciplines. Students with working experience most likely would have enhanced teamwork skills. In a study by Drury, Kay, and Losberg (2003) regarding the relationship between student experience in teamwork and team satisfaction, they found that a student's experience in a team work had a strong effect on his or her team satisfaction.

Hamlyn-Harrise et al. (2006) examined the correlation between teamwork and students satisfaction using two samples. The first sample consisted of 270 database students working in teams of 3–4 students (junior students who had no experience in working in groups), while the second sample contained 100 software engineering project students (senior students who had no experience in working in groups). They found that there was no correlation between teamwork and the students satisfaction for database students. However,

weak correlation was found for the software engineering project students. Nead (1995) stated that students in team-taught business courses felt more confident and better prepared for future business than other students who did not have a team taught course. It was expected that students who had teamwork experience would perform better and be more satisfied with their team members than those who did not or had a limited experience in teamwork. Similarly, students in the upper level courses, compared to those in the lower level courses, would perform better and be more satisfied with their team members. Therefore, the following hypotheses were posited:

- H*<sub>5a</sub>: There would be a significant difference in students' satisfaction between full-time employed students and full-time students in such a way that employed students will be more satisfied with their team members.
- H*<sub>5b</sub>: There would be a significant difference in students' performance between full-time employed students and full-time students in such a way that employed students will perform better.
- H*<sub>6a</sub>: There would be a significant difference in students' satisfaction between students at lower-level courses and students at upper-level courses.
- H*<sub>6b</sub>: There would be a significant difference in students' performance between students at lower-level courses and students at upper-level courses.
- H*<sub>7a</sub>: There would be a significant difference in students' satisfaction between students enrolled in information systems courses and students enrolled in finance courses.
- H*<sub>7b</sub>: There would be a significant difference in students' performance between students enrolled in information systems courses and students enrolled in finance courses.

RESEARCH METHODS

Data Collection, Instrument, and Statistical Procedures

Data were collected from twelve courses at graduate and undergraduate levels at a Midwestern university in the United States and a university at Qatar. In both countries, students were allowed to form their own groups. The group size was ranged from three to seven students. Group performance was based on the final grade for the group projects, which ranged from 10% to 15% of the total grade for the course. The grade for the group project was distributed between the written report (70%) and the presentation (30%). All team members were asked to participate in the presentations. The nature of the group projects varies based on the course. For example, for the information systems courses the students were asked to develop a database for a small business and design a website for a particular business. For the finance courses,

students were asked to analyze the financial position of two selected companies.

The team satisfaction construct consisted of 10 items. Several items were adapted from Yazici's study (2004). Students completed a survey questionnaire at the end of the semester before the grades were posted. The survey was administered in English. The 5-point Likert-type survey consisted of a few demographic questions and 10 items related to team satisfaction construct with a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The SPSS (ver. 19) software was used to calculate means, frequencies, reliability coefficients, Pearson correlations, analysis of variance (ANOVAs), and *t* tests.

Data Analysis

The two samples consisted of 65 groups with 282 students. Table 1 provides a summary of the descriptive analysis. Seventy-three students were from the U.S. sample, compared with 209 students from the Qatari sample. Fifty-seven percent of the American students, compared with 10% of the Qatari students, were full-time employed. On the other hand, 43% of the American students, compared with 90% of the Qatari sample, were full-time students. Sixteen percent of the full-time students for the American sample were graduate teaching assistants, compared with none for the Qatari sample. All graduate groups consisted of master of business administration students. The reliability of the team satisfaction construct was assessed using Cronbach's alpha, and it was .914 for pooled sample, .907 for the American sample, and .917 for the Qatari sample. The list of 10 items for team satisfaction is reported in Table 2.

TABLE 1  
Frequency Distributions of Key Variables by Country

Variable	Total (N = 282)		United States (n = 73)		Qatar (n = 209)	
	Number of responses	%	Number of responses	%	Number of responses	%
Gender						
Male	88	31.2	44	60.3	43	20.57
Female	194	68.8	29	39.7	166	79.43
Status						
Full-time employed	63	22.3	42	57.5	21	10
Full-time student	219	77.7	31	42.5	188	90
Course subject						
Information systems	201	71.3	73	100	128	61.24
Finance	81	28.7	0	0	81	38.76
Class level						
Upper	153	54.3	24	32.87	129	61.72
Lower	129	45.7	49	67.13	80	38.28

TABLE 2  
Results of *t*-Test

Statement	United States ( <i>n</i> = 73)		Qatar ( <i>n</i> = 209)		<i>t</i>	Sig. (two-tailed)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I enjoyed working with my team members.	4.410	0.779	4.49	0.815	-0.719	.473
Our team was able to resolve conflicts very well.	4.270	0.902	4.44	0.745	-1.41	.160
Our team members worked well together.	4.360	0.903	4.44	0.836	-0.697	.487
Our team members had low stress.	3.810	1.138	3.70	1.131	0.710	.479
Our team had high level of trust among members.	4.220	0.854	4.48	0.747	-2.340	.021*
I would like to work with the same team members in the future.	4.210	0.912	4.35	0.965	-1.180	.240
Our team had a clear communication plan.	3.840	1.014	4.30	0.859	-3.470	.001*
Our team members were very cooperative.	4.330	0.765	4.37	0.805	-0.376	.707
Our team had a clear statement of role and responsibility for each member.	4.080	0.983	4.40	0.767	-2.520	.013*
I consider my team among the best ones I had.	3.930	1.134	4.17	0.954	-1.590	.114
Average of all items	4.140	0.698	4.31	0.658	-1.804	.074*
Students' performance	90.400	6.361	87.74	5.791	3.140	.002*

\**p* < .10.

## RESULTS

The results of the study are presented in three sections. The initial section provides the answer for the first research question (*RQ*<sub>1</sub>), using Pearson correlation test. The second section addresses *RQ*<sub>2</sub> by comparing the American and the Qatari students' responses using *t*-test. The third section provides the answer to *RQ*<sub>3</sub>, by examining the impact of demographic variables on students' responses using *t*-test and ANOVA procedure.

The average of 10 items for the team satisfaction construct was used in calculating the correlation between team satisfaction and students' performance. There was a significant positive association between team satisfaction and group performance for the pooled sample (Pearson correlation  $r = .139$ ,  $p < .05$ ) and for the American sample ( $r = .362$ ,  $p < .01$ ). However, the relationship for the Qatari sample was positive, but not significant ( $r = .085$ ,  $p = .22$ ). Therefore,  $H_1$  was partially supported.

As shown in Table 2, there were significant differences in satisfaction means between the American and the Qatari students for only three statements. The Qatari students, com-

pared to American students, had a stronger agreement with statements "our team had high level of trust among members," "our team had a clear communication plan," and "our team had a clear statement of role and responsibility for each member." Taking all satisfaction items together, there was a significant difference between the American students and the Qatari students as shown in Table 2. Moreover, there was a significant difference in students' performance between the two groups. Therefore,  $H_{2a}$  and  $H_{2b}$  were supported.

As a follow-up to the previous analysis and due to the fact that the two samples differed in many ways, the effect sizes for significant variables were calculated and the impacts of demographic variables were tested. The effect size was calculated using the Cohen's *d* as described by (Rosenthal & Rosnow, 1991). The *d* values ranged from 0.24 to 0.47, which are considered as low to medium effect sizes. With a difference between the two groups equivalent to an effect size of 0.2, there is still plenty of overlap (14.7% nonoverlap) and the probability of correctly identifying the groups is 0.54. With an effect size of 0.5 (33% of nonoverlap), the probability is 0.60 (Cohen, 1988). It is clear that the overlap between the two groups is substantial.

TABLE 3  
A Summary of *t*-Test Results for Demographic Variables

Statement	Gender			Employment			Course level			Course subject		
	Pooled	USA	Qatar	Pooled	USA	Qatar	Pooled	USA	Qatar	Pooled	USA	Qatar
I enjoyed working with my team members.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	NA	<i>ns</i>
Our team was able to resolve conflicts very well.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	.025*	.022	NA	.068
Our team members worked well together.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	.074	<i>ns</i>	<i>ns</i>	NA	<i>ns</i>
Our team members had low stress.	.004	<i>ns</i>	.019	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	.010	<i>ns</i>	.075	NA	.027
Our team had high level of trust among members.	<i>ns</i>	<i>ns</i>	<i>ns</i>	.026	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	.016	.003	NA	.024
I would like to work with the same team members in the future.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	NA	<i>ns</i>
Our team had a clear communication plan.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<.001	<i>ns</i>	.001	NA	.030
Our team members were very cooperative.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	NA	<i>ns</i>
Our team had a clear statement of role and responsibility for each member.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	.001	0.09	.01	NA	.083
I consider my team among the best ones I had.	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	NA	<i>ns</i>
Average of satisfaction	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	.012	<i>ns</i>	.037	NA	<i>ns</i>
Students' performance	<i>ns</i>	.076	<i>ns</i>	<.001	<i>ns</i>	<.001	<i>ns</i>	.016	<i>ns</i>	.043	NA	<i>ns</i>

Note. NA = not applicable, *ns* = not significant. \* $p < .10$ .

Regarding the impact of demographic variables on the participants' responses, hypotheses ( $H_{3a}$ – $H_{7b}$ ) were partially supported as shown in Table 3. For example, the American students in the upper level courses, compared to their counterparts in the lower level courses, performed better in the group projects and they were less satisfied with their team members. On the other hand, Qatari students in the upper level courses were more satisfied than students in lower level courses. For the pooled and Qatari samples, employed students performed better than full-time students. Moreover, for the pooled and Qatari samples, students in the finance courses, compared to students in the information systems (IS) courses, were more satisfied with their team members, but their performance was not good as students in the IS courses. Once again for the pooled and Qatari samples, female students, compared to male students, felt that their team members had more stress. American female students performed better than male students. It should be noted that all Qatari groups consisted

of one gender (female or male students) because the two genders were separated. Thus, we can conclude that there was no significant difference in the satisfaction and performance between female-oriented groups and male-oriented groups.

However, when comparing mixed gender groups with male-oriented or female-oriented groups, the results of ANOVA revealed that there was a significant difference in the performance among the three groups,  $F(2, 279) = 12.423$ ,  $p < .0001$ , but there was no significant difference in satisfaction among the groups. When conducting post-hoc analysis (pairwise comparison using Bonferroni procedure), there were significant differences in students' performance between mixed and male groups and mixed and female groups. It should be noted that students in the mixed groups performed better than those students in the female and male groups and female groups performed better than male groups. Thus,  $H_{7b}$  was supported.

## CONCLUSIONS AND RECOMMENDATIONS

We investigated the relationship between team satisfaction and students' performance in group projects for 12 courses at two universities in two countries (the United States and Qatar). The results showed that there was a significant positive correlation between team satisfaction and performance for only the American sample. Additionally, the results revealed that there were significant differences in performance and satisfaction between American students and Qatari students. Moreover, the findings of the study showed that gender, employment, course level, course subject, and group orientation to some extent influenced students responses. Finally, the results highlighted differences between the American and the Qatari students as such it serves as a basis for conducting comparative studies among countries from different cultures.

An interesting finding of this study is the significant difference in satisfaction and performance between American students and Qatari students. Even though we cannot contribute such differences to one particular factor, the cultural differences between the American students and the Qatari students could be a reasonable factor. For example, American students, compared to Qatari students, performed better, but they were less satisfied with their team members, this could be explained by Hofstede's cultural dimension of individualism and collectivism. The American society is characterized by being demanding with high expectation from each member, assume individual responsibility, and associate according to interests. On the other hand, Qatari society, which is a part of the Arab countries, is characterized by being less demanding with low expectation, assume group responsibility, and associate according to in-groups (Hofstede, 1991, 2008). Therefore, the American students, compared to the Qatari students, expect more from their team members, and thus they were less satisfied even though they performed better than Qatari students.

The collectivism cultural dimension explains why the Qatari students felt that they had a high level of trust among group members. For both samples, students did not support the statement "our team members had low stress," an explanation for this could be the fact that American students believe in the individual responsibility, which requires to be on time and meeting deadlines this might elevate the stress level. On the other hand, Qatari students believe in group responsibility, which tends to delay tasks and as a result increasing the level of stress. The previous findings are consistent with the findings of a study by Pineda et al. (2009). In that study, they found that American students, compared to Lithuanian students, were less satisfied with their team members and had less desire to work in groups.

The cultural differences between the two countries (the United States and Qatar), with respect to the collectivism-individualisms, power distance, and uncertainty avoidance dimensions, may be one of the main factors that influenced team satisfaction as Qatari students prefer to be in a team

whom they know. This increases and simplifies the communication between team members. This was evident by the finding in which Qatari students in the upper level courses, compared to those students in the lower level courses, were more satisfied with their team members. Students in the upper level courses usually have more experience in dealing with teams than students in the lower level courses and definitely recognize the benefits of teamwork.

Additionally, Qataris students belong to a society that value teamwork, and they have more favorable attitude toward teamwork than American students. It should be noted that previous studies found that American students do not highly appreciate teamwork as they are belong to a society that value individualism (Hofstede 2008; Pineda et al., 2009). Another cultural difference between the American and the Qatari societies is that Qatari students would be hesitant to express their dissatisfaction with the group members. Additionally, they may feel pressure to conform to the group norm and they may express their emotions, compared to American students, who may control their emotions and may not feel the group pressure.

Because the results showed that the employment status, group-gender orientation, and course level influence students' performance, instructors should consider such factors in group formation. For example, they may include in the groups mixed gender, employed and full-time students, different academic majors, and freshmen and senior students. This diversity in the group members will positively impact students' satisfaction and performance. However, students' cultural backgrounds should be considered as well.

Instructors should consider using various approaches to increase students' satisfaction because it impacts their performance. Instructors should focus on the satisfaction items that were reported by students as the least satisfied with such as the low stress and having clear communication plan, thus, instructors could monitor team sessions to facilitate involvement of desired progress and attainment of learning objectives. This type of personal interaction with students helps to assure them of the instructor's personal interest in their project and also enables them to resolve potential conflicts that might arise, which in turn boosts motivation and team spirit, especially, for those students from cultures with small power distance and high individualism such as the USA and France. Moreover, instructors may request students to utilize some of project management templates such as team contract, communication plan, and progress report to facilitate cooperation and communication among the team members and as a result reducing the level of stress.

### Limitations and Future Research

Even though this study had various limitations such as using small sample size, similarity of academic majors (one college), and self-reported information, it represents an initial attempt to study the impact of team satisfaction on

students' performance in group projects across culture. Future researchers should focus on repeating the study to compare perspectives of graduate students with those of undergraduates. In addition, external variables (such as age, disciplines, grade point average) might be used as foundations for comparisons among student teams. Another plausible future research could be testing the students' attitudes toward use of the team approach and their expectations from the group projects at the beginning and at the end of the semester.

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