

The Application of Team-Based Learning in an Event Management Course

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Abstract

This paper empirically discussed on the application of team-based learning approach in an event management course. Students were surveyed at the beginning of the semester about their experience and beliefs on working in groups or teams. These responses were compared to their responses after a semester of team-based learning, regarding the extent to which the team-based learning classroom environment enhanced their experience and beliefs about working in groups or teams. The overall mean scores showed that students' experience and beliefs have improved after they experienced the teaching method used by the instructor. Additionally, most respondents agreed that they have experienced a teaching technique called team-based learning in their other courses. This case study investigated one event management course only, therefore, future researchers could do a comparison study between different courses under a similar program that utilize team-based learning method in their classroom. Future researchers could also conduct a longitudinal study to analyze the patterns of change in terms of students' experience and beliefs about team-based learning method over time and investigate to what extent team-based learning help improve students' academic performance.

Keywords: Group Learning; Self-Efficacy, Team-Based Learning, Blended-Learning

Introduction

Choosing appropriate teaching approaches are crucial because they are used to enhance the teaching and learning processes (McKeachie & Svinicki, 2006). The teaching approaches used in higher education are influenced by the evolution of the hospitality industry. Since the industry players criticized the higher institutions for not producing quality graduates (Kitterlin-Lynch et al., 2015; Wang, Ayres, & Huyton, 2010), many hospitality researchers encouraged higher institutions to focus more on developing hard skills and soft skills among students (Gursoy, Rahman, & Swanger, 2012; Marinakou & Giusmpasoglou, 2015; Sisson & Adams, 2013). Experiential learning is one of the teaching approaches used in higher institutions, where students learn through experience. It allows students developing those

skills needed by the industry players. Additionally, hospitality educational researchers highlighted the importance of experiential learning approach in improving student level of satisfaction, motivation, and engagement (Gruman, Barrows, & Reavley, 2009; Stansbie & Nash, 2016), as well as, in developing student managerial competencies (e.g., Kolb, Lublin, Spoth, & Baker, 1986; Warnick & Schmidt, 2014). Ideally, the experiential learning approach assists hospitality students in getting some hands-on experience.

Team-based learning is a teaching method framed by experiential learning theory which emphasize a learning process that “combines experience, perception, cognition, and behavior” (Kolb, 1984, p.21). Team-based learning is defined as a structured form of small-group learning in strategically formed, permanent teams that emphasizes student preparation and application of knowledge in class (Bishop & Verleger, 2013; Michaelsen, 1992). Generally, in a team-based learning classroom, the out-of-class time is used for knowledge transfer and more structured in-class application activities are used to check on student comprehension and understanding of the course content (Hamdan, McKnight, McKnight, & Arfstrom, 2013). Team-based learning promotes collaborative learning (e.g., peer-to-peer) through team building activities and encourages students providing constructive feedback through peer evaluation. Because of the more structured teaching method, it could be said that team-based learning goes beyond simply flipping a classroom.

This case study investigated the application of team-based learning method in an event management course. The research objective was to compare students’ experience and beliefs before and after working in groups or teams for one semester.

Literature Review

Team-Based Learning

Many higher institutions started to offer blended courses that using both online and face-to-face learning experiences in class. Sciarini, Beck, and Seaman (2012) stated that blended course is more popular than the full online courses. Team-based learning can be considered as a blended course because instructors utilize both in-class and out-of-the-class time to maximize students learning. Nevertheless, instructors are flexible to use online or other teaching strategies (i.e., team activities or discussions) for the out-of-the-class time portion in a team-based learning format. In other words, team-based learning is more than just a blended of online and in-person learning experience.

A typical team-based learning format contain two main components which are the readiness assurance and the application of the course concepts. According to the team-based learning sequence, the readiness assurance includes pre-class preparation (where students learn individually), individual test (called i-RAT), team test (called t-RAT), written appeals (if needed, from teams), and clarifying lecture by the instructor. Next, the application of the course concepts is where the instructor designed interactive activities to encourage critical thinking and team development. Michaelsen and Sweet (2011) suggest instructors using 4-S application activities within one to four hours of the class time (i.e., address a significant problem, make a specific choice, work on the same problem, and provide simultaneous report on the teams’ decisions). This active learning is aligned with Kolb (1984), as students learn better by doing class activities (compare to just sitting and listening to lectures). The last part of a typical team-based learning format is where students do peer evaluation (Michaelsen,

Knight, & Fink, 2004; Michaelsen, Parmelee, McMahon, & Levine, 2008; Michaelsen & Sweet, 2011). Formative and summative feedback should be provided to students (by their team members) so that the students are aware of their contributions in the team.

Team-based learning is known as the best evidence-based teaching method and many research are found examining the effectiveness of team-based learning in health science education (e.g., Jiang, Tian, Chen & Chen, 2017; Persky, Henry, & Campbell, 2015; Thompson et al., 2015). Thompson et al. (2015) examined the application of team-based learning method on medical students' ($n = 975$) and found that team test scores were positive and significantly associated with individual test scores ($r = 0.62, p < 0.01$) and team size (five to seven members in a team) ($r = 0.28, p < 0.01$). Later, Jiang et al. (2017) found that most of the students improved their expressive skills, teamwork, critical thinking, reasoning ability, and practical application after their instructors changed the teaching method from a full lecture to a blended format (i.e., integration of team, case, lecture).

To date, a limited number of educational research are found examining the application of team-based learning in social science disciplines particularly in the hospitality and event management related courses. Team-based learning method is important for hospitality and event management students because these students are increasingly expected to acquire the knowledge and skills required to effectively function within a team. Maier and Thomas (2013) found that hospitality students favored the blended-experiential teaching approach (e.g., team-based learning method) than the traditional (e.g., lecture method) because students can learn through experience the out-of-the class and the in-class activities. To certain extent, real-life hospitality businesses are included in the course (e.g., discussion on case studies, organize real events) to help preparing hospitality students for industry employment (Sox, Crews, & Kline, 2014). Nonetheless, a strong support system is imperative for the successful implementation of the teaching method. Like team-based learning method, factors like the instructor, the course materials, and others (e.g., team formation, application activities) influence the success of a team-based learning implementation in a classroom.

Therefore, there is a need to evaluate the effectiveness of a team-based learning method to strengthen the positive effect of the teaching method in improving students' learning experiences, particularly in hospitality and event management related courses.

Individual and Group/Peer Learning

Team-based learning utilizes both individual and group or peer learning strategies. For instance, the pre-class preparation (i.e., out-of-the-class time component) as well as the individual readiness assurance test (i-RAT) (i.e., in-class time component) are completed individually. On the other hand, the team-readiness assurance test (t-RAT), the written appeals, and the application activities are completed in groups or students working with their peers. Depending on the task assigned by the instructor, some groups will meet outside of the class time for further group discussions.

As mentioned earlier, a small-group learning is strategically formed, and the team should be permanent throughout the semester. In other words, students will be working with the same team members for the entire semester or about fourteen weeks of classes. The

team size or the total of number of students on each team should be between five to seven students for an effective team development (Thompson et al., 2015). Depending on the instructors' strategy, some instructors used personality tests and mixed students with various personality traits in a team to categorize students based on their dominant personality during team formation. For example, Frame et al. (2015) examined the use of Myers-Briggs personality types in the distribution of students to team-based learning groups and found that 50 percent of students were extroverts and 40 percent were sensing-thinking-judging type.

How instructors divide students during team formation is important because poor strategy could lead to dysfunctional team or low team performance. Choi and Ro (2012) examined 379 hospitality management students and found that team problems ($\beta = -0.10, p < 0.01$) negatively influenced students' attitudes toward group projects. Furthermore, Choi and Ro (2012) found that instructor's support ($\beta = 0.25, p < 0.01$) and suitable projects given by the instructor ($\beta = 0.31, p < 0.01$) positively influenced students' attitudes toward group projects. Team-based learning instructors play an important role in helping students develop the key competencies required by the industry. Students normally develop their competencies through experience. Wolfe and Gould (2001) highlighted the importance of team-based learning in the field of hospitality and believed that team-based learning method helps preparing students for a collaborative team environment in the industry. In this sense, experience can be gathered through team-based learning classroom environment. In a lecture-based teaching method, normally the instructor is the expert. However, the instructor's role changed once they decided to implement a team-based learning method because in a team-based learning classroom, the instructor is a facilitator that helps the students to work in teams effectively and productively.

Based on the abovementioned discussion, it could be said that students' experiences, attitudes, and beliefs about learning are important part of student assessment in a team-based learning course. Owing to that, a discussion on student perceived self-efficacy is presented next.

Self-Efficacy

Perceived self-efficacy in this context is related to student beliefs about their capability to perform specific tasks in a team-based learning classroom format (e.g., Gist & Mitchell, 1992; Bandura, 1977; Zimmerman, 2000). A study by Sovajassatakul, Jitgarun, and Shinatrakool (2011) found that instructors and students perceived team-based learning as a valuable teaching method because it encourages active learning and have a reliable assessment tool to boost students' performance in the class. Students preferred the team component while instructors favored the instructional design of the team-based learning method, which include the individual and team readiness assurance tests and application activities to meet the learning needs and goals (Sovajassatakul et al., 2011).

Freeman et al. (2014) found that active learning approach in a team-based learning classroom help increases students' performance, however, this teaching method might be more beneficial in a small classroom setting as compared to a sizeable classroom with larger number of students. The effectiveness of a team-based learning method might be affected by the class size (Thompson et al., 2015), but then, instructors could utilize the technology (e.g.,

i-clicker) to encourage student engagement. Zimmerman (2000) stated that self-efficacy is highly predicted students' motivation and learning. Next, a discussion on how students' motivation could influence the successful of a team-based classroom format is presented.

Motivation

There is growing evidence that motivation influenced student academic performance (e.g., Gomez, Wu, & Passerini, 2010; Jeno et al., 2017). The willingness of student to learn the course materials and the new information offered in the course is considered as motivation in the classroom (e.g., Cole, Field, & Harris, 2004). Because of the individual and team components in a team-based learning method, students should be self-motivated because they are required to complete multiple tasks either individually (e.g., pre-class preparation, i-RAT) or with their team members (e.g., t-RAT, appeal process). Normally, there will be external (or extrinsic, such as parents' expectations, grades, instructor influence, rewards, incentives given by the instructors) and internal (or intrinsic, such as a sense of accomplishment in mastering the course concept, feel interested with the course) factors motivating students to perform in a team-based learning classroom format.

Gomez et al. (2010) found that motivation influenced the association between team interactions and students' perceived learning. Balan, Clark, and Restall (2015) investigated students' perception on the pre-class preparation portion of a team-based learning classroom format through a series of activities. They found that students understand their roles and responsibilities on the pre-learning component and students were better engaged during in-class activities when they have learned the materials prior to the class time. Simply stated, students are willing to put their effort to study the class materials when they are self-motivated. A recent study by Jeno et al. (2017) found that students' intrinsic motivation increased significantly in a team-based learning environment. Specifically, increases in intrinsic motivation predicts increases in students' engagement and perceived learning.

Critical Thinking

The success of a team-based learning classroom format is influenced by student individual and group learning, perceived self-efficacy, as well as, student internal and external motivation. Several researchers stated that team-based learning also promotes critical thinking ability among students. Earlier study by Yuretich and Kanner (2015) reported that students' overall satisfaction on the course, final grades, and in-class discussions have improved in a team-based learning classroom environment. When students are satisfied with the course and fully engaged during in-class discussions, they are more incline to improve their critical thinking ability. This is because, the application activities designed using team-based learning format will require students to solve significant problems which potentially could boost their critical thinking skills.

Many researchers found that students perceived that their critical thinking skills improved in a team-based learning classroom environment (i.e., Espey, 2018; McInerney & Dee Fink, 2003). Even so, McInerney and Dee Fink (2003) emphasized the importance of designing "challenging projects" to encourage critical thinking skills among students and the importance of student-instructor interactions throughout the learning process. Challenging projects also could improve students' knowledge and attitude towards the course, as well as,

improve retention of information related to the course (McInerney & Dee Fink, 2003). As more research related to team-based learning are dominated by the science, engineering, and mathematics (STEM) and health science disciplines, there is a need to investigate this teaching method from social sciences perspective (e.g., hospitality and event management courses).

Method

This study conveniently sampled 100 undergraduate students in an event management capstone course. All data was collected at a university in Iowa, United States of America. Using a quantitative approach, this study used pre- and post-surveys to gather data. Many researchers utilized pre- and post-surveys to examine the effectiveness of a teaching method to identify the pattern of change in student learning experiences (e.g., Espey, 2018; Jeno et al., 2017). Both pre- and post-survey instrument was developed by Bickelhaupt et al. (n.d.) and consisted of six sections: (a) individual learning, (b) group/peer learning, (c) self-efficacy, (d) motivation, (e) critical thinking skills, and (f) demographic profiles. All 35 items were measured on a five-point Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree* (0 = *not applicable*). Demographic questions include current relationship status, current documented disability, and experience in professional work environment or internship. Table 1 shows the measurement items used in this study.

Table 1
Measurement items

Variable	No. of Items	Sources of Scale	Example (post-survey)
Individual Learning	6	Pintrich (1991)	<i>"I was given the appropriate resources to do well in this course"</i>
Group/Peer Learning	7	Pintrich (1991), Parmelee et al. (2009); Levine et al, (2004)	<i>"The ability to collaborate with peers was necessary to be a successful student"</i>
Self-Efficacy	8	Pintrich (1991); Keller (1987)	<i>"I understood the basic concepts taught"</i>
Motivation	6	Parmelee et al. (2009); Watson, Michaelsen, and Sharp (1991)	<i>"I made sure I kept up with weekly readings and assignments"</i>
Critical Thinking	8	Pintrich (1991); Parmelee et al. (2009); Levine et al. (2004)	<i>"Being a part of a team has improved the ability to think through a problem"</i>

Both pre-and post-surveys were disseminated through emails by the team-based learning community at the university. After the semester ended, the team-based learning community then forwarded the de-identified data to the researchers for analysis and data interpretation. The purpose of the pre-and post-surveys is to examine the change in students' experience and beliefs on working in groups or teams. Therefore, the pre-survey was disseminated at the

beginning of the semester while the post-survey was disseminated within the final weeks. This project was approved by an institutional review board at the university.

The Statistical Program for Social Science version 20 was used to analyze the pre- and post-survey data to examine the frequencies, percentages, mean scores, and standard deviations.

Results and Discussions

Demographic Profiles

Thirty-three participants responded to the pre-survey (response rate: 33%) and fifty-five participants responded to the post-survey (response rate: 56%). The majority of the respondents were single or never married (87.1%) and 80.6% reported that they did not have any current documented disability (e.g., physical, verbal, attention deficit hyperactivity disorder or ADHD, depression, anxiety). Most respondents have experienced professional work environment or internship for at least a month (80.6%). In terms of the duration, only 8% of the respondents had a longer period of professional work or internship (between one to four years). The remaining respondents mostly had one to four months of professional work environment or internship (56%).

Student experiences and beliefs on working in groups/teams

Due to confidentiality issues, only de-identified data such as the total mean scores and the total standard deviations for each item were provided by the team-based learning community to the researchers. The results for student experience and beliefs are discussed next.

Student experience on working in groups/teams

The pre- and post-survey mean scores and the standard deviations for student experience on working in groups or teams are tabulated in Table 2. At least seven out of 14 items asked in measuring respondents' experience of working in groups or teams increased in the mean scores for the post-survey. Although the item mean scores for the remaining seven items were slightly decreased in the post-survey, the decreased were not enormous. At the beginning of the semester, the respondents might have little exposure about the current course, thus resulting in higher mean scores reported in the pre-survey compared to the post-survey. For students' experience, most items in the pre-survey were above 3.50 scale (lowest, $M = 3.55$, highest, $M = 4.06$) and most items in the post-survey were above 3.70 scale (lowest, $M = 3.70$, highest, $M = 4.21$). Based on the mean scores, the respondents agreed that they were given appropriate resources by the instructor which allowed them to perform in the class (pre, $M = 3.84$, post, $M = 4.21$). Furthermore, the respondents agreed that their team had worked well together (pre, $M = 3.84$, post, $M = 4.00$). Such finding corroborated with Gomez et al. (2010), when they reported that students learned much through active collaboration when working in groups or teams. Active collaboration and interaction within the groups or teams further enhance students' critical thinking ability in a team-based learning classroom (Espey, 2018; Gomez et al., 2010; McInerney & Dee Fink, 2003). However, the level of difficulty for the group or team projects should be adequate to challenge the critical thinking skills among students (McInerney & Dee Fink, 2003). The assigned project

should neither be too easy nor too difficult for the students to accomplish for the learning to take place.

Student beliefs about working in groups/teams

The pre- and post-survey mean scores and standard deviations for student beliefs on working in groups or teams are presented in Table 3. The mean scores for twelve out of 21 items in the post-survey are higher than the pre-survey which indicate increased in respondents' beliefs about working in groups or teams. For students' beliefs, most items in the pre-survey were above 3.20 (lowest, $M = 3.29$, highest, $M = 4.35$) and most items in the post-survey were above 3.30 (lowest, $M = 3.39$, highest, $M = 4.27$). For example, the respondents were confident that they understood the basic concept taught by the instructor (pre, $M = 4.10$; post, $M = 4.27$). In addition to that, the respondents were certain that they grasped the skills that were taught in the classroom (pre, $M = 3.94$; post, $M = 4.19$) and believed that they will receive an excellent grade in the course (pre, $M = 4.00$, post, $M = 4.17$). Such findings are aligned with Calimeris and Sauer (2015) when they found that students retain more information in a classroom where students spend out of the class time preparing and in-class time is used for activities designed to master the concepts which facilitated by an instructor. Overall, the current course and the teaching methods used by the instructor had improved the respondents' beliefs about working in groups or teams.

Table 2
Pre- and Post-Surveys about Student Experience.

No.	Item	POST-SURVEY		PRE-SURVEY	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1.	I was given appropriate resources to do well in this course	4.21	0.69	3.84	0.78
2.	My team and I have worked well together	4.00	1.11	3.84	0.97
3.	My team maintained high standards of performance	3.94	1.00	4.00	1.00
4.	I tried to play around with ideas of my own related to what I was learning	3.91	0.90	3.87	0.81
5.	Solving problems in a team was an effective way to apply what I have learned	3.91	0.90	4.06	0.85
6.	My team encouraged each other to give their best efforts	3.87	1.11	3.81	0.98
7.	My team has motivated me to work more collaboratively	3.85	1.06	4.00	1.00
8.	I treated course materials as a starting point and tried to develop my own ideas about it	3.85	0.91	3.68	0.79
9.	Being part of a team discussion has improved ability to think through a problem	3.85	0.91	4.00	0.93
10.	When a theory/interpretations/conclusion was presented, I tried to decide if there was a good supporting evidence	3.79	1.04	3.65	0.80
11.	Being part of a team has helped to challenge previous ideas and improve learning	3.79	1.04	4.06	0.89

12.	Being in a team has helped me become better at problem solving	3.75	1.07	3.90	1.04
13.	Whenever I read/hear a statement/conclusion, I thought about possible alternatives	3.74	0.90	3.55	0.62
14.	My team has motivated me to work harder	3.70	1.19	3.97	0.91

Note: Mean scores in shaded boxes indicates increased in post-survey item mean score.

Table 3

Pre- and Post-Surveys about Student Beliefs.

No.	Item	POST-SURVEY		PRE-SURVEY	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1.	I am confident I understand the basic concepts taught	4.27	0.63	4.10	0.91
2.	I am certain I grasped the skills that were taught	4.19	0.69	3.94	0.73
3.	I expect that I will receive an excellent grade	4.17	0.81	4.00	0.93
4.	When I studied in appropriate ways, I was able to learn the material	4.16	0.76	4.35	0.75
5.	I am confident I did an excellent job on assignments and tests	4.13	0.77	3.87	0.85
6.	I believe I can perform independently with the knowledge I have gained	4.13	0.63	4.03	0.72
7.	If I tried hard enough, then I understood the course materials	4.10	0.81	3.94	0.89
8.	I am satisfied with the grade that I believe I have earned	4.04	0.82	3.97	0.80
9.	I am confident I can apply the knowledge I have learned in future tasks	4.02	0.83	4.13	0.88
10.	The ability to work with peers was a valuable learning experience	3.98	0.95	4.06	0.96
11.	I am certain I understood the most difficult material presented in the readings	3.96	0.85	3.68	0.91
12.	The ability to collaborate with peers was necessary	3.90	1.03	3.68	1.01
13.	Solving problems in a team was an effective way to learn	3.90	1.02	4.03	1.02
14.	Working in teams has been a productive way to spend class time	3.90	0.96	3.94	0.96
15.	Solving problems in a team has led to better decisions than solving problems on my own	3.88	0.95	4.03	1.08
16.	Being part of a team has improved my grades	3.84	1.10	3.77	1.15
17.	Collaborating with peers helped me to be a better student	3.82	0.99	3.97	0.96
18.	It was my own fault if I didn't learn the material	3.75	1.07	3.52	0.93
19.	I made sure I kept up with weekly readings and assignments	3.54	1.09	3.94	0.68

20.	If I didn't understand the course material, it was because I didn't try hard enough	3.53	1.17	3.29	1.13
21.	I believe I could have done more to receive the grade I wanted	3.39	1.30	4.06	0.73

Note: Mean scores in shaded boxes indicates increased in post-survey item mean score.

Conclusions, Limitations, and Recommendations

The pattern of change in students' experience and beliefs before and after experiencing the team-based learning classroom environment was measured using pre- and post-surveys. The learning processes took place for one semester or about fourteen weeks. Generally, the differences in the mean scores for pre- and post-surveys for both experience and beliefs are not very large. It seems reasonable to say that the change is not significant. Since the university has a team-based learning community, most courses offered might have already utilized team-based learning method. Hence, these students might have experienced a teaching technique like team-based learning in their other courses. Although these students might have experienced with team-based learning in other courses, their experiences and knowledge gained might be different as they are influenced by the instructor who is teaching the course.

Referring to tables 2 and 3, the highest mean scores for both experience and beliefs (post-surveys) are related to the role of instructors in ensuring the successfulness of the team-based learning implementation. Choi and Ro (2012) addressed the critical role of instructors in group projects to ensure positive attitudes among hospitality management students. Other than educate students about the benefits of working in groups or teams, instructors should also provide appropriate resources or adequate course materials to allow students to do well in the course. Not to mention, the way instructors deliver information during class time (e.g., clarifying lecture) is important to enhance students' understanding of the course concept. Simply put, instructors should properly design, organize, and integrate the course content so there will be no repetition of content (e.g., McKeachie & Svinicki, 2006) that might be a potential drawback of team-based learning method. Since experiential learning component is critical for hospitality and event management students, team-based learning instructors should create interactive application activities that could help develop students' managerial competencies. For example, instructors can utilize real-scenarios or case-studies related to the industry, ask students to come out with strategies to solve the problems, and ask students to defend their strategies through presentations. These could help students develop their managerial skills such as decision-making skills, communication skills, and problem-solving skills. Additionally, if the course requires students to do group projects, the instructor should ensure that the project is appropriate for the students. When the students perceived the group projects as meaningful to them, they will incline to show positive attitudes toward group projects (Choi & Ro, 2012).

Like other teaching methodologies, team-based learning instructors will face some challenges when they want to implement team-based learning method, such as student acceptance and course preparation. Nevertheless, with a proper planning of the course content and readiness of the students to adapt to a new teaching methodology like team-based learning, will allow both the instructor and the students to enjoy the team-based

learning classroom environment. In addition to that, team-based learning instructors should align the course materials with the students' direct experience and facilitate students' learning to make them see the connections between the academic and the real industry (McKeachie & Svinicki, 2006). Findings from this study could help academicians, particularly those who are involved in curriculum designs, to include team-based learning as one of the teaching methods used in hospitality and event management courses. If properly implemented, team-based learning method could help the higher institutions producing quality graduates.

As mentioned earlier in the previous section, only total mean scores and standard deviations were given to the researchers for interpretation purposes. Because of the limited data provided, the researchers cannot use *t*-test to examine differences between the before and after group of data for both students' experience and beliefs about working in groups or teams. Therefore, future researchers are recommended to compare the pre- and post-survey data using analysis such as *t*-test to gather more information regarding the significant change in students' experience and beliefs about working in groups or teams. If larger number of respondents participated, future researchers can conduct various analyses like path analysis or structured equation modelling to examine the causal effect or interactions between variables. For example, future researchers can investigate whether group or peer learning, self-efficacy, motivation are predicting critical thinking among students in a team-based learning classroom. Additionally, this study merely sampled one event management classroom at a single institution located in the United States. Thus, future researchers could adopt this study, collect data from multiple classes that utilize the team-based learning method, and do a comparison study between different courses to examine the effectiveness of the team-based learning method implemented within the same program. Future researchers could also adopt this study and collect data in institutions located in different countries like in Malaysia. Additionally, future researchers can conduct a longitudinal study to analyze the patterns of change in terms of students' experience and beliefs about team-based learning method over time and investigate to what extent team-based learning help improve students' academic performance.

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