# The Effect of First-Year Experience (FYE) Program on Junior College Students

短期大学生に対する初年次教育プログラムの効果に関する研究

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### Abstract

This paper reports a brief review of the first-year experience (FYE) program implied in three seminar classes at Josai Junior College from April 2020 to January 2021. The program is reimplemented more explicitly and intends to infuse the learning motivation among the management course students to develop competent human skills, with the acquisition of the basic skills integrating into professional learning outcomes. This small periodic study seeks to gather empirical evidence to support and develop the quality of assistance to first-year students during their university and college transition. This study evaluated the FYE effect on students' knowledge, attitude, and behaviour (KAB) after one year for the spring 2020 cohort of first-year students. The ten respondents are grouped into two; group one (5) is the experimental group with participants involved in the FYE program, and group two (5) is the control group with no involvement in the FYE program. Even though the findings showed an overall positive FYE effect on students' knowledge, attitude, and behaviour (KAB), some aspects show no significant difference between the two groups.

Keywords: First-Year Experience (FYE), Knowledge, Attitudes, dan Behaviour, Transition

# Introduction

Many students enter university and college without preparation to meet the academic demands and social challenges of postsecondary education (Schrader & Brown, 2008). In their first year at university, they face various challenges due to the significant differences compared to the school years they have become accustomed to. According to Brooker et al. (2017), the most significant difficulties the first-year students face are time management, the workload of their studies, and others' (peer, family, teachers) expectations. The students' perceptions of these difficulties depend on how they view and deal with them. Research on students' first-year university experiences shows that students' perceptions are vital during

their first academic year, that is, during the transition period. However, the perceptions could turn critical, leading to the decision to continue pursuing the studies or drop out.

The first-year experience (FYE) program assists the first-year students in their transition period (i.e. high school to college) and facilitates the acquisition of academic skills and the social skills of the first-year students in the university. Variables involved in the transition period are the students' academic and social involvement, family background, and socioeconomic status (Schrader & Brown, 2008). According to Bowles et al. (2011), the variables for the transition period are grouped into two main categories, the intrinsic and the extrinsic; other variables during the transition period include learning skills development, orientation programs, participation motivation, use of support services in the university, benefits of social interaction (i.e. seminar, club activities), and the learning culture development. Chin, Kam and Genevieve (2019) say that dropping out has become a severe problem for universities and most drop-out students from the first year; the number of the dop-out could be lesser if the first-year experience is well-taken care of. At Josai Junior College, the FYE program is still at the experimental stage, with three seminar classes involved from the beginning of 2020. The study however is not intend to examine the relation between the FYE program with the drop-out cases, instead it aims to see the impact of the FYE on students' knowledge scale, attitude scale and behaviour scale.

#### **Problem statement**

Brooker, Brooker & Lawrence (2017) cited that even though the difficulties faced by the first-year student are generally rooted and occur outside of the academic space, the impact on the students' academic experiences is very significant and damaging. The most common reason students who dropped out of university is emotional distress (social skills). This study acted as a pilot study for a larger group in junior college. Has the existence of the FYE program the formation of student morals and discipline successfully developed? Could implementing such a program cultivate the students' personalities in a better direction? Did their first-year life in university improve after attending the program?

# Purpose and significance of the study

This study aims to identify the effectiveness of the first-year experience (FYE) program on the junior college students' knowledge, attitude and behaviour. The results of this study will give a more detailed understanding to the educator in producing a first-year teaching approach that suits the needs of college students today.

### **Research Question**

- 1. Is there a significant difference in the level of knowledge between students involved in the FYE program and students not involved in the FYE program?
- 2. Is there a significant difference in the level of attitude between students involved in the FYE program and students not involved in the FYE program?
- 3. Is there a significant difference in the level of behaviour between students involved in the FYE program and students not involved in the FYE program?

# First Year Experience (FYE)

FYE is a comprehensive and deliberate approach to introducing first-year students to the university (Kasim et al., 2012). Many locally and abroad universities are increasingly making the FYE program focus to help first-year students overcome the transition into tertiary education challenges. The benefits of FYE implementation include social skills and the study skill, use of resources provided on campus, self-reliance skills and personality development of the students. The FYE program, first introduced in the United States in 1888 with Boston college, was the pioneer to introduce the FYE program to its students. More institutions of higher learning then follow the approach in practising the program. In the earlier stage, the FYE program focused more on increasing the university resources such as computers (including the personal laptop), academic materials, libraries, and other supporting departments. It then emerged to offer more courses and seminars to develop the students' academic and social skills and instil the knowledge and experience to the students. According to Schrader & Brown (2008), one of the earliest studies of FYE by White, Goetz, Hunter in 1995's research assesses the assessment of outstanding academic skills and achievement among first-year student success and focuses on design and implementation of the FYE program. In addition to the study, White et al. (1995) state that FYE should provide opportunities for students to be able to interact socially in the university either with their friends or with faculty members; as well as taking charge to introduce students to the faculties, academic facilities and counselling and health centre. The program shall not be categorised as part of the university event; indeed, it should be implied continuously with related fundamental programs. The FYE program aims to stimulate first-year students to adjust to life and the university academic system. Through this FYE program, the educators will play a role as knowledge communicators, but they will also focus on the diverse backgrounds of first-year students. The program is also seen as a bridge to strengthen good relations with first-year students between the universities (including teaching staff and administration management staff). Factors leading to the development of the FYE program include the increasing number of students, students coming from various backgrounds, and the number of students who withdraw halfway from continuing their studies at universities. In addition, the increased use of technology in teaching and learning activities for more flexible delivery of learning compared to the past (Hushin & Rahim, 2007). However, some studies doubt the effectiveness of the FYE program applies to the whole population (first-year students). The researchers stressed that each university is a different individual institution in many ways. These differences are significant in informing their respective FYE programs that match their respective objectives. Therefore, an evaluation strategy for the effectiveness of the FYE program is vital so that it is appropriate to the specific needs of each university. According to Schrader & Brown (2008), the evaluation of the FYE program is complex, with a large number of variables involved as the variability of topics and student needs are diverse. The following is the FYE model of the program designed by Cutright (2002), excerpted from Kasim et al. (2012); according to the model, the FYE program should yield six outcomes.

- 1. It should improve the interaction between students.
- 2. It should increase interaction between students and the faculty.
- 3. It can increase student involvement and their time on campus.
- 4. It should closely connect between the co-curriculum and the curriculum.
- 5. It can help students improve their level of academic expectations.
- 6. It can help students who lack academic preparation for college and university.

# Knowledge, Attitudes, and Behavior (KAB) Approach

The evaluation of the FYE program is complex as many variables are involved. The development of the knowledge, attitudes, and behaviour (KAB) approach measures and evaluates the FYE program. This approach functions to measure the cognitive, affective, and behavioural constructs of the participants to which they contribute an interference (Schrader & Brown, 2008). Due to its ability to measure multiple constructs holistically, the KAB approach is an appropriate assessment for the FYE program. Regarding to Schrader & Lawless (2004), the KAB approach is complex and complicated; however, such complexity offers a more comprehensive understanding of cognitive constructs that cling to the circulation of change and development. Even though each sector of the assessment is different, previous studies have proven the KAB method to be reliable, and it is valid to assess changes resulting from various interventions (Schrader & Lawless, 2004). The following diagram shows the use of the KAB approach in evaluating theory, approach or program in the education field.

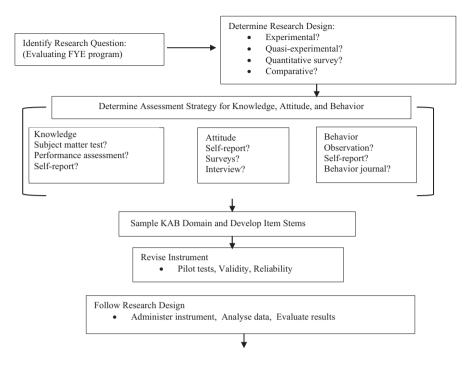


Figure 1 KAB, Schrader (2004)

# Methodology, Sample & Instrument

This quantitative study was part of the FYE project (involving three classes known as the seminar class) that involved the self-report scale questionnaire. The seminar class is a two-credit compulsory course required for all first-year students. The seminar classes met once a week for 15 sessions. The three instructors formed the FYE program with a customized syllabus before the seminar classes. The shared FYE topics are implied into the syllabus upon the agreement of all three members. All ten respondents are first-year students in the same department. There are two groups of respondents: the group involved in the FYE program and the group not involved in the FYE program. The instrument, known as the selfreport scales, measured the participants' knowledge scale, attitudes scale and behaviour scale (KABs; Schrader & Lawless, 2004) and it adopts Schrader & Brown's (2008) study in evaluating the FYE program. The knowledge and attitude scales contain 22 questions, while the behaviour scale contains 18 questions. All items in this instrument are a type of 5-point Likert response format. A scale of 1 indicates a strongly disagree stage, and a scale of 5 indicates a strongly agree stage.

# **Statistical Analysis**

Table 1. The Knowledge Scale

	Mean	Scores
Item	Group 1 (involved in the program)	Group 2 (did not involve in the program)
1. I know how to effectively focus my effort on my schoolwork. 自分の努力を学業に効果的に集中させる方法を知っています。	4.6	3.6
2. I know what it takes to manage my time effectively. 自分の時間を効果的に管理するために何が必要かを知っています。	4.4	4.0
3. I know how to stay motivated in school. 大学でやる気を維持する方法を知っています。	3.8	3.8
4. When making a decision, I know how to consider ethical factors and implications. 決定を下すとき、倫理的要因と影響を考慮する方法を知っています。	4.2	3.8
5. I know how to avoid rash, spontaneous decision-making. 信頼できない自発的な意思決定を回避する方法を知っています。	4.0	3.4
6. I am aware of the University counseling and support services. 大学のカウンセリングとサポートサービスを知っています。	4.6	3.4
7. I know how to effectively cope with academic stresses and setbacks. 学問的なストレスや挫折に効果的に対処する方法を知っています。	3.8	4.4
8. I know how to resolve conflicts responsibly. 責任を持って対立を解決する方法を知っています。	4.0	4.0
9. I know how to develop long term academic goals. 長期的な学問的目標を立てる方法を知っています。	4.4	4.0
10. I am aware of my own personal limitations. 自分自身の個人的な限界を認識しています。	4.2	3.4
11. At the University, I know who to go to when medical issues arise. 大学では、健康上な問題が発生したときに誰に行くべきかを知っています。	4.4	3.2
12. I know how to use the library's electronic resources to help with my courses. 図書館の電子リソースを使用して、授業でを支援する方法を知っています。	3.8	3.6
13. When deciding which courses to take, I know who to talk to for help. どの授業を受講するかを決めるとき、誰に助けを求めるべきかを知っています。	4.4	3.8
14. I know how to act responsibly when confronted with issues of a sexual nature. 性的な性質の問題に直面したときに責任を持って対応できる。	4.2	2.8
15. I know of the different signs of illicit drug use in my peers. 仲間の違法薬物使用のさまざまな兆候を知っています。	4.4	3.4
16. I know how to take good notes in class. 授業で有効なメモを取る方法を知っています。	4.6	4.0

17. I know how to use computers for my courses. 授業でパソコンを使用する方法を知っています。	5.0	4.0
18. I know the sequence of courses I have to complete in order to graduate on time. 時間通りに卒業するために完了しなければならない一連の授業を知っています。	4.4	4.0
19. I know the value of a healthy diet. 健康的な食事の価値を知っています。	4.2	4.2
20. I know it is important to exercise weekly. 毎週運動することが重要であることを知っています。	4.4	4.2
21. I know how to solve problems. 問題を解決する方法を知っています。	4.4	3.8
22. I know how to work in groups. グループで働く方法を知っています。	4.4	3.8

Looking at table 1 above, the difference in mean scores between the two groups of students is significant. The group of students (group 1) who followed the FYE program showed a higher mean overall in the knowledge scale category than the group of students (group 2) who did not follow the program. However, items 3, 7, 8 and 19 showed different score analyses. For item 3, "I know how to stay motivated in school", both groups of respondents scored the same mean value of 3.8. Item 7, " I know how to cope with academic stresses and setbacks effectively." showed that group 2 displayed a higher mean score than group 1. The difference in the scores of the two groups was relatively high between 4.4 (group 2) and 3.8 (group 1). For item 8, "I know how to resolve conflicts responsibly.", both groups showed the same mean score of 4.0, and then item 19, "I know the value of a healthy diet." also showed the same mean score between the two groups, i.e. a score value of 4.2.

Table 2. The Attitude Scale

	Mean	Scores
Item	Group 1 (involved in the program)	Group 2 (did not involve in the program)
1. Focusing my effort on my schoolwork is important to me. 学業に力を注ぐことは重要です。	4.8	4.4
2. I believe effective time management is a useful tool. 効果的な時間管理は便利なツールだと思います。	4.6	4.2
3. I believe that my motivation for school is important. 学校へのモチベーションは重要だと思います。	4.2	4.2

4. When making a decision, I should consider ethical factors and implications. 決定を下すとき、倫理的要因と影響を考慮しなければなりません。	4.8	3.2
5. I should avoid rash, spontaneous decision-making. 急いで自発的な意思決定を避けるべきです。	3.8	4.2
6. I believe it is important to use the University's counseling and support services. 大学のカウンセリングやサポートサービスを利用することが重要だと思います。	4.2	3.2
7. It is important to effectively cope with academic stresses and setbacks. 学問的なストレスや挫折に効果的に対処することが重要です。	4.4	4.0
8. I should always resolve conflicts responsibly. 常に責任を持って競合を解決する必要があります。	4.6	3.8
9. I should work towards my long term academic goals. 長期的な学術目標に向けて取り組む必要があります。	5.0	4.4
10. It is important to understand my personal limitations. 個人的な限界を理解することが重要です。	5.0	4.0
11. It is important to meet with the appropriate University personnel when medical issues arise. 健康的な問題が発生した場合は、適切な大学の職員と会うことが重要です。	4.6	4.4
12. It is important to use the library's electronic resources to help with my coursework. 図書館の電子リソースを使用して、授業を支援することが重要です。	4.2	3.2
13. I should talk to someone to help decide which courses to take. 受講するコースを決定するために、誰かに相談する必要があります。	4.0	3.0
14. It is important to act responsibly when confronted with issues of a sexual nature. 性的な問題に直面した場合は、責任を持って行動することが重要です。	4.8	3.6
15. Being able to recognize the signs of illicit drug use in my peers is important. 仲間での違法薬物使用の兆候を認識できることは重要です。	4.6	4.2
16. Good note taking skills are important. 良いメモを取るスキルが重要です。	4.8	4.2
17. Learning how to use computers for my courses is important. 授業でパソコンを使用する方法を学ぶことは重要です。	4.8	4.4
18. It is important to complete courses when recommended time in order to graduate on time. 時間通りに卒業するためには、推奨される時間に授業を完了することが重要です。	4.6	4.2
19. I believe it is important to maintain a healthy diet. 健康的な食生活を維持することが重要だと思います。	4.8	4.2
20. I should exercise weekly. 毎週運動する必要があります。	4.8	4.2
21. I believe it is important to solve problems. 問題を解決することが重要だと思います。	4.8	4.0
22. I believe it is important to work in groups. グループで働くことが重要だと思います。	4.6	3.4

For the attitude scale, two items showed different scores from the overall high score favouring the respondents who followed the program. Item 3, "I believe that my motivation for school is important." showed that both groups of respondents followed the same mean value of 4.2. Next item 5, "I should avoid rash, spontaneous decision-making." showed that group of respondents 2 (who did not participate in the program) scored a higher mean score of 4.2 compared to group 1 with a value of 3.8.

Table 3. The Behaviour Scale

	Mean	Scores
Item	Group 1 (involved in the program)	Group 2 (did not involve in the program)
1. I effectively focus my e ort upon my schoolwork. 自分の努力を学業に効果的に集中させています。	4.0	4.0
2. I manage my time effectively. 時間を効果的に管理します。	4.6	3.8
3. I stay motivated in school. 学校でやる気を維持します。	4.4	3.4
4. When making a decision, I consider important ethical factors and implications. 決定を下すとき、重要な倫理的要因と影響を考慮します。	4.2	3.6
5. I pause and think before I make a decision. 決断を下す前に、よく考えます。	5.0	3.8
6. I effectively cope with academic stresses and setbacks. 学問的なストレスや挫折に効果的に対処します。	4.2	3.8
7. I resolve conflicts responsibly. 責任を持って対立を解決します。	4.4	3.2
8. I strive towards my long term academic goals. 長期的な学業目標に向けて努力しています。	4.4	4.0
9. I work within my personal limitations without taking on too much. 個人的な制限の範囲内で、あまり多くのことをすることなくしています。	4.0	3.2
10. When medical issues arise, I go (or will go) to the appropriate University personnel. 健康的な問題が発生した場合、私は適切な大学の職員に行きます (または行きます)。	4.4	3.6
11. When confronted with issues of a sexual nature, I act responsibly. 性的な問題に直面したとき、私は責任を持って行動します。	4.4	3.4
12. I can recognize the signs of illicit drug use. 違法薬物使用の兆候を認識できます。	4.6	4.2

13. I take good notes in class. 授業で良いメモを取ります。	4.4	3.8
14. I use computers to work on my course assignments. パソコンを使って授業の課題に取り組んでいます。	4.8	4.2
15. I maintain a healthy diet. 健康的な食事を維持しています。	4.0	4.2
16. I exercise weekly. 毎週運動します。	3.8	3.8
17. I solve problems. 問題を解決します。	4.8	3.8
18. I work in groups. グループで働いています。	4.4	4.2

For the behaviour scale, item 1, "I effectively focus my effort upon my schoolwork." showed the same mean score for both groups, which is 4.0. Item 15, "I maintain a healthy diet." meanwhile showed a higher mean score in group 2 compared to group 1, which are 4.2 and 4.0. And item 16, "I exercise weekly." showed identical scores for both groups 3.8.

Table 4. Summary of student perception towards the knowledge scale

Sample	Mean Score
Students involved in the FYE program seminar	4.3
Students did not involve in the FYE program seminar	3.8

Table 4 summarises the overall scores for the knowledge scale category. Group 1 (participating in the program) showed a higher mean score of 4.3 than group two, with mean score of 3.8.

Table 5. Summary of student perception towards the attitude scale

Sample	Mean Score
Students involved in the FYE program seminar	4.6
Students did not involve in the FYE program seminar	3.9

Table 5 above summarises the overall scores for the attitude scale category. Group 1 (participating in the program) had a higher mean value score of 4.6, while group 2 (not participating in the program) had

a lower mean value score of 3.9.

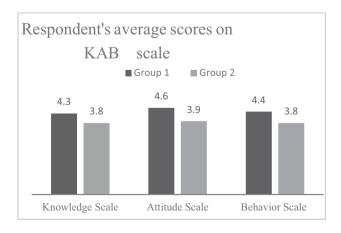
Table 6. Summary of student perception towards the behaviour scale

Sample	Mean Score
Students involved in the FYE program seminar	4.4
Students did not involve in the FYE program seminar	3.8

Table 6 above summarises the overall scores for the behaviour scale category. Group 1 (participating in the program) obtained a higher mean score of 4.4, while group 2 (did not participate in the program) obtained a mean score of 3.8.

# Discussion

The primary purpose of this study was to identify the effectiveness of the FYE program on the intellectual and personality development of students. The benefits of FYE to first-year students at the university are acknowledged by many. FYE acts as a bridge in developing a positive student relationship with his/her peers, with the teaching and administrative staff, and with the entire faculty. Students will learn to identify academic policies at their university, understand the necessary academic processes, use the relevant resources and drive the academic success that will enable them to complete their degree studies on time. The program helps the students to adapt to the university environment and culture and to be able to plan and practice appropriate academic strategies. The first-year students can identify and use appropriate campus resources according to their needs. Through the social opportunities from the program, students learn to explain their values and identities to others, which will lead to the formation of their perspectives and interactions with people who might be different from them.



# Research question 1: Is there a significant difference in the level of knowledge between students involved in the FYE program and students not involved in FYE program?

The result showed that overall, respondents from group 1, the group that received the FYE program through seminar classes, had a mean value score of 4.3, whereas respondents from group 2 had a mean value score of 3.8. The result gives the impression that the FYE program's effect on the students' knowledge scale is positive. Nevertheless, the difference between the two groups was only 10%. Items 3, 7, 8 and 19 showed exceptional scores where the second group scores were higher or equal to group 1. The finding indicates that the effectiveness of the FYE program on these matters is not very significant. Students' knowledge of motivation to pursue studies on the campus is not related to the involvement in FYE. Item 3, "I know how to stay motivated in school." has the scores of equal value for both groups, Item 7, "I know how to cope with academic stresses and setbacks effectively." which in turn showed an inverse score value where group 2 has a higher score than group 1. Items 7 and 3 are interrelated in that it describes the level of stress and the state of student motivation. With the scores of group 2 (those who did not receive the program) were higher, does this mean that the students possess different ways and guidelines in solving stress problems? Is the FYE program that emphasises introducing students and faculty less relevant to handling academic stress? Item 8 is also closely related to items 3 and 7; item 8, "I know how to resolve conflicts responsibly", the respondents of both groups also gave the same mean score value. Item 8, which describes conflict handling, the result of the study showed that students carry the knowledge to handle conflict stress regardless of whether their participation in the FYE program or not. The existence of the FYE program does not have a significant effect on students' motivational, stress and conflict situations. Another Item that showed similar scores was item 19 in this category, "I know the value of a healthy diet."

# Research question 2: Is there a significant difference in the level of attitude between students involved in the FYE program and students not involved in FYE program?

For the attitude scale part, the analysis of the study showed that the scores of group 1 are higher than the scores of group 2. Group 1 scored 4.6 overall, and group 2 scored 3.9. This category saw the highest score value of group 1, compared to the other three categories. Only two items showed inverted scores for this category, namely items 3 and 5. Item 3 again involved the motivational question, "I believe that my motivation for school is important.". Respondents of both groups carried the same score. Students' understanding and beliefs on self-motivation to learn were the same regardless of the participation in the FYE program. Item 5, "I should avoid rash, spontaneous decision-making.", showed a higher score in favour of group 2 students who did not participate in the program. The difference of 8% between the two

groups is not very significant, but it may indicate that the presence of the FYE program does not provide a positive relationship in influencing students' attitudes in decision making.

# Research question 3: Is there a significant difference in the level of behaviour between students involved in the FYE program and students not involved in FYE program?

The analysis of the study also showed a higher score from group 1 than group 2 in the behaviour scale category. Group 1 scored 4.4, while group 2 scored 3.8. A 12% difference between the two groups showed that the FYE program positively affected the student behaviour scale overall. The behaviour category, item 1, "I effectively focus my effort upon my schoolwork." brings identical scores between the two groups. The attitude and focus of students in the learning process that includes completing their work are the same regardless of participation in the FYE program. Items 15 and 16 are "I maintain a healthy diet." and "I exercise weekly.", they showed higher score values (and the same for item 16) by group 2. Students' attitudes in their health management also showed not so closely related to the effectiveness of the FYE program.

### Conclusion & Further study

The study shows necessary implications and displays the FYE program's need on junior college students with the results showed a positive relationship between the FYE program and the developmental level of students' KAB. The existence of FYE assists students in their knowledge of the university, such as on-campus facilities, relevant departments to assist them, and equipment and tools to complete their studies. However, the instructor must carefully consider the aspect of motivation as the results of this small-scale study showed no significant relationship between the level of student motivation with FYE program participation. The results of this study have similarities with the study conducted by Zi & Sendall (2016), where their results showed that students did not feel that the FYE program could help improve their academic achievement directly. Nevertheless, FYE helped them get to know the facilities in the university and academic expectations more closely. In addition, FYE also helps students have better interactions with instructors and classmates.

Further study shall involve a larger scale of respondents with well categorized demography so that the result of the findings may provide more precise outcomes. In addition, the study should not be limited to questionnaires only; interview sessions with students are essential to know in-depth related to the effectiveness of FYE and the expectations of first-year students towards the university.

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