

Undergraduate-community Engagement: Evidence from UiTM Sarawak

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ABSTRACT

Undergraduate-Community engagement is a form of experiential education in which students engage in activities that address human and community needs. In Malaysia, most undergraduates have at one point or another taken part in community engagement activities. However, the outcome of participating in community engagement has not been properly measured. This study was conducted to investigate the benefits undergraduates gain as a result of community engagement experience, as there is limited studies done in the Malaysian context. This study adopted Student Community Engagement Benefits Questionnaire (SCEBQ) by Chung and Coates (2016). SCEBO has four benefit constructs, namely career skills, diversity skills, interpersonal skills and civic skills. A total of 143 responses were analysed and results showed that female undergraduates, those who participated in voluntary projects and respondents between 21 to 23 years old reported higher mean gains across the four benefit constructs. Nevertheless, these mean gains did not show any statistically significant difference between gender, community engagement projects types, except age groups. The study is important as it lays the foundation in the process of creating a better understanding of what students learn outside the classroom and it contributes to the practical knowledge of undergraduate-community engagement experience in the context of Malaysian higher education.

Keywords: Community engagement, undergraduates, SCEBQ, career skills, diversity skills, interpersonal skills, civic skills

INTRODUCTION

'Undergraduate-community engagement' is defined as 'a form of experiential education in which undergraduate engage in activities that address human and community needs'. 'Community' refers to the local, regional, national and international community. 'Human and community needs' are those defined by the communities. It is mutually beneficial and carried out in the spirit of reciprocity (Chung & Coates, 2016). Much effort has been put in to assess the outcomes of teaching and learning, and research and research training (e.g. Campbell & Norton, 2007; Gribble, Meyer & Jones, 2003; Warhust, 1994; Meek & Van der Lee, 2005; Katyal & Evers, 2008). These academic attainments were assessed using examinations, tests, research projects, research funding, patents, copyrights, spinoff companies and others. Since the 1990s, studies into the benefits of undergraduatecommunity engagement were mostly concentrated in American universities (e.g. Astin & Sax, 1998; Friedman, 1996; Eyler & Giles, 1999; Govekar & Rishi, 2007; McCarthy & Tucker, 2002; Moore & Sandholtz, 1999; Tucker, Hoxmeier & Lenk, 1998; Vogelgesang & Astin, 2000). There were also studies conducted in South Africa (e.g. Eramus 2007), Hong Kong (e.g. Lee, Olszewki-Kubulius, Donahue, & Weimholt, 2007; Yang, Luk, Webster, Chau, & Ma, 2016), Australia (e.g. Chung, 2012; Chung & Coates, 2016) and other countries. In Malaysia, most undergraduates have taken part in some form of community engagement throughout their tertiary education. Yet, there is a lack of empirical studies done on this activity. There are also limited studies done to investigate the benefits of community engagement on undergraduates (e.g. Musa et. al, 2017).

Thus, this study aims to investigate the benefits undergraduates gained in community engagement. The objective of this study is to investigate to what extent the undergraduate's career skills, diversity skills, interpersonal skills and civic skills have improved as a result of community engagement activities. This study is significant as it marks the first attempt in Universiti Teknologi MARA (UiTM) Sarawak to map out the outcomes of community engagement among undergraduates. It contributes to the study of community engagement, especially in Malaysian higher education context where such study is lacking. This is in line with the Malaysian Education Blueprint (2015-2025) where the first shift focuses on forming holistic, entrepreneurial and balanced graduates to enhance graduate employability. By capturing

the benefits of undergraduate-community engagement, this study provides evidence of tertiary education in totality which includes teaching and learning, research and community engagement.

LITERATURE REVIEW

In Malaysia, among the challenges faced by the universities is the understanding of what community engagement is. Different universities and different sections of a university seem to have different understandings of what community engagement entails. As a result, integration of community engagement related activities at university level do not seem to occur (Nordin et al, 2008). Misunderstanding the core function of a university and overly focussing on the university's aspiration to excel at the international level may have caused the core duty of serving and benefitting the community to be underemphasised. On top of that, efforts to reach out to the community have largely been carried out on an ad-hoc basis. They have traditionally lacked coherent and comprehensive policy as well as direction on its implementation. As a result, linkages occurred mostly through universities' and students' community service programs, and actions of individual lecturers. Even though student-based community engagement were usually organised through the students and alumni office, ad-hoc committees were commonly formed to organise to form specific engagement activities. In order to promote a more organised and structured university-community engagement, universities in Malaysia have employed several mechanisms since 2017. Among them include the establishment of the industry and community network division in the Research Universities and UiTM. The Ministry of Higher Education has also developed a new crucial agenda project known as Knowledge Transfer Program (KTP). KTP recognizes a broad range of activities to support mutually beneficial collaborations between universities, industries and communities. It provides the platform for the exchange of tangible and intangible intellectual property, expertise, learning and skills between academia, industry and the community (KTP Policy, 2011). However, there are limited publication of the importance of community engagement programs benefitting the students, apart from opportunity to develop their soft skills (Nordin et al, 2008), communication skills, sense of responsibility and leadership (Musa et al, 2017).

In UiTM Sarawak specifically, community engagement has been part and parcel of undergraduates' life for the longest time. According to the information collected through internal newsletter (e.g. Infokampus, UiTM Sarawak, 2013, 2014, 2015, 2016, 2017), observations and random conversions with academic staff, it was revealed that students often engage with the Samarahan communities in different ways. These activities are done mostly by student clubs or on the academic staff's own initiatives while others are carried out by academic advisors as part of student activities. However, there are limited documentations (e.g. Ramachandra, Abu Mansor, Abu Mansor, Anvari, Abd.Rahman, 2013) of how such activities have benefitted the students' overall development as part of human capital.

Literature on the outcomes of community engagement related activities abounds especially in USA. Both large scale studies and smaller case studies conducted over the years have shown the significant impact of engaging with community in enhancing student competencies (Friedman, 1996), team building, leadership, conflict resolution, communication, organisation and time management (Tucker, McCarthy, Hoxmeier & Lenk, 1998), promoting self-efficacy (Moore & Sandholtz, 1999), increased personal development, social responsibility, interpersonal skills, tolerance, learning, and application of learning (Eyler & Giles, 1999). It was also recognised that service-learning has the effect of enhancing student competencies through providing theory to real world linkages, with the ability to change with the environment and foster innovation (Govekar & Rishi, 2007). In a cross-disciplinary survey of research on service-learning and student outcomes, Rama, Ravenscroft, Wolcott and Zlotkowski (2000) highlight the potential of service-learning to enhance technical and cognitive capabilities and citizenship skills among students. Further to that, engagement in service-learning projects also have shown to increase students' commitment to service (McCarthy & Tucker, 2002), preparedness for careers (Gray, Ondaatje & Fricker, 2000), personal growth, self-esteem, and personal efficacy (Primavera, 1999), communication skills and social issue awareness (Leung, Liu, Wang & Chen, 2006), citizenship (Lester et al., 2005), and commitment to social justice and social change (Roschelle, Turpin & Elias, 2000).

Apart from gaining benefits from the opportunity to connect the engagement experience to the intellectual content of the classroom, students engaged with community gain a glimpse of the real world by

engaging with the community (Volgelgesang & Astin, 2000). Eyler, Giles, Stenson & Gray (2001) identified a number of positive student outcomes associated with student participation in service-learning. They include academic development (mastery of discipline material, problem solving, and critical thinking), personal development (personal efficacy, leadership, and communication skills), social development (reducing stereotypes, facilitating racial and cultural understanding, and social responsibility), and career development (confidence, networking, and 'real world' experience).

Chung and Coates (2016) in their investigation of community engagement activities among 151 students in three Australian universities found that students gained benefits in four different dimensions. These dimensions are interpersonal skills, diversity skills, career skills and civic skills. The 32 items questionnaire marked the first attempt to measure objectively community engagement benefits in the Australian higher education context. The four dimensions have factor loadings ranging from 0.41 to 0.72, and alpha reliability coefficient between the values of 0.79 to 0.91. Apart from that, a scale to measure students' perception of service learning experience - The Service Learning Benefits (SELEB) scale was developed by Toncar, Reid, Burns, Anderson, & Nguyen (2006). The purpose of their study was to develop and evaluate a scale that could capture and measure the benefits of student-learning as perceived by the student themselves. After an iterative process of factor analysis, reliability and validity tests, the final scale has 20 items. This scale represents four underlying constructs – practical skills, interpersonal, skills, citizenship, and personal responsibility. These four scales had factor loadings ranging from 0.69 to 0.91 which provided the evidence of being convergent. The internal consistencies were between the values of 0.78 to 0.84 on the Cronbach's alpha coefficient.

From the review above, Malaysian Higher Education faces challenges in creating a common understanding of what community engagement entails, and there is lack of documented evidence of the benefits undergraduates gain from such activities. This may be due to the lack of a valid and reliable instrument to objectively measure these benefits. On the other hand, such benefits have been objectively measured and reported in other countries. As such, the same could be carried out in a in the Malaysian Higher Education as well.

RESEARCH METHODOLOGY

This study adopts a quantitative research method through the administration of Student Community Engagement Benefits Questionnaire (SCEBQ) developed by Chung and Coates (2016). SCEBQ has four community engagement benefits constructs, namely career skills, diversity skills, interpersonal skills and civic skills. SCEBQ has a "before engagement" section to gauge the skills the respondents already have before taking part in community engagement, and an "after engagement" section to gauge the improvement in these skills. The response scales ranged from 1 being "Poor", 2 being "Average", 3 being "Good", 4 being "Very good" to 5 being "Excellent". Data was collected over two semesters in 2016 and 2017 from a group of undergraduates from several Degree and Diploma courses. The community engagement programmes in the university under study was designed for undergraduate involvement in various types of activities. either on a voluntary basis, or as compulsory part of a course. Onsite survey method was used because it was proven in the past to be an effective means of obtaining a high rate of return. SCEBQ was first administered to these students prior to them attending community engagement activities to complete the "before engagement" section. The "after engagement" section was then completed during the debriefing session after the activity was completed. Data collected was analysed using SPSS. The Cronbach's alpha coefficient in Table 1 shows between good to excellent internal consistency for before and after engagement. Subsequent to that, frequency tests, descriptive analysis and one way analysis of covariance (ANCOVA) are carried out.

Table 1: Cronbach's Alpha for Student Community Engagement Benefits for before Engagement and after Engagement

| Skills | Items | Before engagement | After engagement |
|----------------------|-------|-------------------|------------------|
| Career skills | 10 | 0.88 | 0.89 |
| Diversity skills | 8 | 0.89 | 0.91 |
| Interpersonal skills | 8 | 0.89 | 0.91 |
| Civic skills | 6 | 0.89 | 0.92 |

FINDINGS

Respondents' Background

From the 159 responses received, 16 were dropped as they were incomplete and deemed invalid, leaving 143 useable responses. Table 2 shows a list of community engagement activities the students took part in while Table 3 is a summary of respondents' background. As depicted in Table 3, out of the 143 respondents, 28.0% were male. About 83% of the respondents were between 21 to 23 years old. Only about one in every ten was in the range of 19 to 20 years old, meanwhile the remaining respondents were 24 years old or older. All of the students surveyed were undergraduates. Nearly 45% of the respondents surveyed are in their first year of studies, while 42% were in their second year of studies. In terms of academic achievements, half of the respondents had a cumulative grade point average (CGPA) of between 2.50 to 3.00. One in every ten has a CGPA of between the ranges 3.50 to 4.00 and between 2.00 to 2.49, respectively. The remaining 28% were between the ranges 3.01 to 3.49.

Two thirds of the respondents had between 1 and 10 hours of community engagement experience, one in every four had between 11 to 20 hours. Out of these students, a total of 101 respondents had a community engagement section as part of the Personal Development and Ethics course they signed up for in their studies, while the remaining 42 respondents took part in community engagement activities on a voluntary basis. These students majored in Finance (61.5%), Marketing (18.9%), Nursing (12.6%) and Administrative Science (7.0%). Collectively, based on the total hours these 143 respondents have spent in community engagement activities in a year, they have spent 1,757 hours in community engagement activities, an average of only 12 hours per student per academic year.

Table 2: Community Engagement Activities Student Participated in

| 1. | Building a shed at the river bank in a local village |
|-----|--|
| 2. | Clearing river of plastic bags, fallen leaves |
| 3. | Carried long pipes, pebbles and sands upstream to build a small reservoir to supply water to villagers |
| 4. | Teaching young children at the village the correct technique of brushing teeth |
| 5. | Teaching young children at the village basic literacy and numeracy skills |
| 6. | Attending to patients who come to the hospital for a variety of treatment needs |
| 7. | Clinical placement for nursing course |
| 8. | Providing lice checking and personal hygiene advice to orphans at an orphanage |
| 9. | Caring for patients in hospital, community and mental health setting |
| 10. | Performing nursing care at accident and emergency unit, acute care nursing, day procedure |
| 11. | Teaching of Mathematics to groups of primary school children in villages through creative workshops and everyday life activities |

Improved Career, Diversity, Interpersonal and Civic Skills

The findings below are based on the four constructs in the SCEBQ – Career skills, Diversity skills, Interpersonal skills and Civic skills. These skills are further analysed by three variables; namely gender (male, female), types of engagement activities (compulsory, voluntary), and age groups (19 to 20 years old, 21 to 23, 24 and above). These data can be seen in Table 4 in the discussion section.

Career skills by gender

Male respondents reported a mean score of 2.83 (average to good) before taking part in community engagement, and 3.75 (good to very good) after the engagement. As for the female respondents, the mean score before community engagement was 2.66 and 3.82 after the engagement. It reported average gains of 0.92 and 1.16 respectively. It shows from the analysis that male respondents reported better career skills compared to the female respondents both before and after community engagement activities. Male respondents claimed to have very good skills in learning from experience, general knowledge and ability to cope with challenges after the engagement. As for the female respondents, they reported very good skills in learning

from experience after the community engagement. Both male and female respondents gained the most in their ability to build contacts and network for their future career.

Statistically, the average gain between the ranges of 0.92 to 1.16 for students does not indicate any significant difference in itself. The scores were used as a way to indicate that the students indeed perceived improvement that could be measured as a result of community engagement. In order to explore if the changes were statistically significant, further analysis using analysis of covariance (ANCOVA) was conducted. This is discussed in a later section.

Table 3: Distribution of Sample by Demographic and Other Related Background

| | Count | Total | Percentage | |
|------------------------------|----------|-------|--------------|--|
| Gender | | | | |
| Male | 40 | | 28.0 | |
| Female | 103 | | 72.0 | |
| | | 143 | | |
| Age | | | | |
| 19 to 20 | 16 | | 11.2 | |
| 21 to 23 | 118 | | 82.6 | |
| 24 and more | 9 | | 6.2 | |
| | | 143 | | |
| Year of study | | | | |
| 1 st year | 63 | | 44.1 | |
| 2 nd year | 60 | | 42.0 | |
| 3 rd year | 16 | | 11.2 | |
| 4 th year | 3 | | 2.1 | |
| 5 th year | 1 | | 0.7 | |
| | | 143 | | |
| CGPA | | | | |
| 3.50 to 4.00 | 15 | | 10.5 | |
| 3.01 to 3.49 2.50 to 3.00 | 40 72 | | 28.0 50.3 | |
| 2.00 to 2.49 | 16 | | 11.2 | |
| | | 143 | | |

Hours spent on community engagement activities

| 1 to 10 hour | 95 | | 66.4 |
|------------------------|-----|-----|------|
| 11 to 20 | 36 | | 25.2 |
| 21 and more | 12 | | 8.4 |
| | | 143 | |
| Types of engagement | | | |
| Compulsory | 101 | | 70.6 |
| Voluntary | 42 | | 29.4 |
| | | 143 | |
| Programme | | | |
| Marketing | 27 | | 18.9 |
| Finance | 88 | | 61.5 |
| Nursing | 18 | | 12.6 |
| Administrative Science | 10 | | 7.0 |
| | | 143 | |

Diversity skills by gender

As cultural and ethnic diversity is part of Malaysian way of life, male respondents generally reported to have average and good diversity skills before engagement activities. They reported gains in all areas of diversity skills. As for the female respondents, like the male respondents, their diversity skills before the engagement activities were between average and good, while the after engagement mean scores were very good (4.19). They found their most improved skill was in the area of relating to people from a wide range of backgrounds and working cooperatively with groups of people different from them. Female respondents also reported higher mean gain compared to the male respondents, 1.18 and 0.88 respectively.

Interpersonal skills by gender

In terms of interpersonal skills, male respondents perceived changes in all areas of interpersonal skills with the highest gain were in the area of leading a group project. Female respondents also reported changes in all areas of interpersonal skills, with the biggest average gain in their ability to critically evaluating different approaches to a problem. The overall mean gain for male and females were about the same, 1.01 and 1.07.

Civic skills by gender

Both male and female respondents claimed to have average civic skills prior to participating in community engagement. As a result of community engagement, male respondents reported highest gain in their awareness of issues facing their community, followed by being sensitive to the plight of others and ability to make a difference in the community. For female respondents, they perceived the highest gain in their ability to make a difference in the community, followed by serving people in need and their ability to make a difference in other people's lives. The mean score gain between the gender were 0.98 and 1.25 respectively.

Summary for gains based on gender

From the findings above, female respondents reported higher scores compared to the male respondents after community engagement in all four constructs. Female respondents also had higher mean gain compared to the male respondents in all four benefit constructs. This shows that female respondents have gained more by taking part in community engagement in all the four areas. Specifically, male students reported highest gain in diversity skills, while female in civic skills.

Career skills by types of engagement activities

Students who participated in compulsory community engagement reported a mean score of 2.62 before community engagement. The mean score after community engagement was 3.86, with an average improvement of 1.24. Likewise, for students who participated in community engagement on a voluntary basis reported mean score of 2.92 before participating in community engagement and 3.98 after, with a mean gain of 1.06. For both groups of respondents, they perceived highest gain in ability to build contacts and networks for future career (with mean gain of 1.33 for compulsory projects and 1.14 for voluntary projects) and ability to cope with challenges (with mean gain of 1.22 for compulsory projects and 1.07 for voluntary projects).

Diversity skills by types of engagement activities

Students who participated in compulsory community engagement reported a mean score of 3.02 in diversity skills before taking part in community engagement and a mean score of 4.11 after the engagement. They perceived highest gain in knowledge of different culture and their

ability to adapt to different environments. For students who participated in community engagement on a voluntary basis, they also reported about the same range of before and after mean score, with similar mean gain. They perceived highest gain in working cooperatively in groups of people different from them and gaining knowledge of different culture.

Interpersonal skills by types of engagement activities

The mean scores for before community engagement for the voluntary and compulsory programs were quite close, 3.09 and 2.91. Likewise, the after community engagement mean score for both groups were 4.14 and 3.98 respectively. The mean gains were similar at 1.06. Both compulsory and voluntary students reported their highest gain in leading a group project, followed by critically evaluating different approaches to a problem.

Civic skills by types of engagement activities

As for civic skills, mean score for students before taking part in compulsory community engagement was 2.88 and 2.65 after the community engagement with an average improvement of 1.02. For students who participated in community engagement on a voluntary basis, the mean score before engagement was 2.80, and after the engagement, it was 3.74, with an average gain of 0.94. The areas where the highest gain was recorded for both cohorts were their ability to make a difference in the community and their awareness of issues facing their country, and serving people in need.

Summary for gains based on types of engagement activities

From the findings above, there are two clear observations. Students who took part in community engagement as part of their courses perceived higher gains in all the four constructs. This finding is supported by Astin et al. (2000) who find students are more likely to achieve desired outcomes when service is performed as part of a course rather than as a separate volunteer activity. Secondly, among the four benefit constructs, students reported higher gains in civic skills. This results show that students benefited more in terms of learning how to contribute to the community, making a difference in other people's live, understanding the issues facing the country and becoming a more civic minded person.

Career skills by age groups

Generally, respondents between 21 to 23 years old perceived they have gained more in career skills compared to the older and younger respondents, with an average gain score of 1.12, compared to 1.02 and 0.94 for the other groups. The respondents between 19 and 20 years old reported the highest gain in capability to improve résumé and understanding their possible future career. Meanwhile, the respondents between the ranges of 21 to 23 year's old reported the highest gain in their ability to build contact for their future career. As for respondents 24 years old and above, they reported highest gain in general knowledge and their ability to build contact and networks for future career. The 24 and above age group have reported lower gain compare to the other two groups in the area of readiness for career. This perhaps is an indication that the activities they took part in have very little connection to their potential career path.

Diversity skills by age groups

For diversity skills, the highest gain was reported by respondents of 21 to 23 years old, in the area of relating to people from a wide range of backgrounds, followed by working cooperatively in groups of people different from them. As for the 24 years old and above group, the reported gain was relating to people from different background and ability to adapt to different environment. The other areas did not show much gain. As the youngest group, the gain was mostly in the area of tolerance of others' differences and knowledge of different culture. This is so perhaps because it was their first opportunities to be exposed to people of different cultures.

Interpersonal skills by age groups

Respondents between 19 and 20 years old had the highest gain in getting along with others. As for respondents between 21 to 23 years and 24 years old and more, they reported the highest gain in leading a group project. This suggests that students who reported improvement in ability to lead a group were related to their age group; more matured students perceived they have gained more in leadership skill.

Civic skills by age groups

As for Civic skills, all the three age groups of respondents reported highest gain in their ability to make a difference in the community.

Summary for gains by age groups

As a summary, respondents between 21 to 23 years old, they perceived highest gain in all skills compared to the other age groups. In terms of skill constructs, respondents between the ranges of 19 to 20 years old and between 21 to 23 years old perceived highest gain in the area of civic skills. As for respondents of 24 years and more, they reported the highest mean gain in interpersonal skills.

Effects of Gender, Types of Activities and Age Groups on the Skill Constructs

A one-way between-groups analysis of covariance (ANCOVA) was conducted to compare the effects of the types of gender on the benefit constructs of 'after community engagement' for career skills, diversity skills, interpersonal skills, and civic skills. Respondents' 'before community engagement' scores for the four benefit constructs were used as the covariate in this analysis, and are therefore controlled. Preliminary checks were conducted to ensure that there was no violation of the assumption of normality, linearity, homogeneity of variances, homogeneity of regression slopes and reliable measurement of covariate. After adjusting for 'before community engagement' career skill scores, it was found there was no significant difference between male and female on 'after community engagement' scores for Career Skills, Diversity Skills, Interpersonal Skills and Civic Skills. From the findings above, although female respondents showed higher mean gains in all the four benefits constructs, these mean gains do not show statistically significant difference between male and female

Likewise, for the different types of community projects, ANCOVA analyses found that there was no significant difference between compulsory and voluntary types of community engagement projects on 'after community engagement' scores for the four benefits constructs. This shows that the types of projects did not have any effect on difference between before and after engagement scores in the four benefits constructs. This suggests that although students who participated in voluntary community engagement reported higher gains, the gains between these two types of project were not significantly different statistically for the four benefit constructs. However, ANCOVA analysis showed that there was a significant difference on mean

gain for Civic Skills among the different age groups, while the difference for the other three skill constructs was not significant. This indicates that there was a statistically significant difference between before and after community engagement in Civic skills for the respondents of the three different age groups.

DISCUSSIONS

By incorporating the demographic background and other contextual characteristics, analyses found that female students between 21 and 23 or more, who took part in compulsory engagement activities, have reported highest gain in all four benefits constructs. This finding supports the findings by Gray, Ondaatje & Fricker (2000) where students who took part in engagement activities as part of a course who had spent more than 20 hours showed greater improvement from service learning. However, their finding of students above 25 years old have gained greater improvement was not supported in this study. When a comparison was made on the four benefit constructs, it was found that respondents, regardless of their demographic backgrounds, perceived highest gain in civic skill and diversity skills.

Civic skills construct has emerged as the construct where respondents have gained the most. This is similar to the findings studies done by Moely, Mercer, Ilustre, Miron & McFarland (2002), Toncar, Reid, Burns, Anderson & Nguyen (2006), and Chung (2012). The finding in this study suggests that students perceive that they have also gained benefits in diversity skills as a result of community engagement, albeit to a lesser extent compared to career skills. The finding above is confirmed by Blyth (1997) and Yates and Youniss (1996), that community engagement influences students' understanding of and attitudes toward diverse groups in society. The findings in the study is supported by Gray, Ondaatje & Fricker (2000) who find that students who engaged in community engagement in the form of service-learning perceived an increase in their current or expected level of involvement in community affairs. They also find students felt that they had improved in their life skills, particularly skills at dealing with other people. Table 4 shows a summary of mean scores before and after community engagement, and the mean gains for the four benefit constructs and the four demographic and contextual backgrounds discussed earlier. Detailed mean scores and mean

gain for each of the 32 items in the four benefit construct analysed by the different demographic background was omitted due to its size.

Table 4: Summary of Mean Scores before and after Community Engagement for the Four Benefit Constructs Based on Three Variables

| | Mean Before | Mean After | Mean Gain | | Mean Before | Mean After | Mean Gain |
|-------------------|----------------|---------------|--------------|-------------------------|----------------|---------------|--------------|
| Career skills | | | | Interpersonal skills | | | |
| Male | 2.83 | 3.75 | 0.92 | Male | 2.98 | 3.99 | 1.01 |
| Female | 2.67 | 3.83 | 1.16 | Female | 2.97 | 4.04 | 1.07 |
| Compulsory | 2.62 | 3.79 | 1.17 | Compulsory | 2.92 | 3.98 | 1.06 |
| Voluntary | 2.93 | 3.85 | 0.92 | Voluntary | 3.09 | 4.15 | 1.06 |
| 19 -20 years old | 2.92 | 3.88 | 0.96 | 19 -20 years old | 2.97 | 3.91 | 0.94 |
| 21 - 23 years old | 2.67 | 3.78 | 1.11 | 21 -23 years old | 2.97 | 4.04 | 1.07 |
| 24 and above | 2.89 | 3.91 | 1.02 | 24 and above | 3.08 | 4.13 | 1.15 |
| Diversity skills | | | | Civic skills | | | |
| Male | 3.21 | 4.09 | 0.88 | Male | 2.88 | 3.86 | 0.98 |
| Female | 3.01 | 4.19 | 1.18 | Female | 2.66 | 3.91 | 1.25 |
| Compulsory | 3.02 | 4.12 | 1.10 | Compulsory | 2.65 | 3.86 | 1.21 |
| Voluntary | 3.18 | 4.28 | 1.10 | Voluntary | 2.88 | 3.98 | 1.10 |
| 19 - 20 years old | 3.12 | 3.98 | 0.86 | 19 -20 years old | 2.77 | 3.81 | 1.04 |
| 21 - 23 years old | 3.02 | 4.18 | 1.16 | 21 -23 years old | 2.69 | 3.89 | 1.20 |
| 24 and above | 3.61 | 4.35 | 0.74 | 24 and above | 3.07 | 4.09 | 1.02 |

CONCLUSION AND RECOMMENDATION

This study has successfully investigated undergraduates' gain in a community engagement in the context of UiTM Sarawak. Through this study, it contributes to the practical knowledge of student community engagement experience in the context of Malaysian higher education. The study is important as it lays the foundation in the process of creating a better understanding of what students learn outside the classroom in Malaysia. With the findings of this research, University and faculties can better plan and manage future community engagement activities in order to enhance

students learning in the real world, to build human capital, and help solve social problems in the communities around the University. It is worthwhile to note that this study was based on students' self-report, which is supported by previous studies (e.g. Coates, 2005; Marsh, 1987, 1990; Ramsden, 1991; Hu & Kuh, 2001; Brennan, Brighton, Moon, Richardson, Rindl & Williams, 2003; Bradburn & Sudman, 1988) where it was shown that students' self-reports gathered using questionnaire is a reliable and accurate source of information. Indeed, for a concept like student community engagement, gathering information from students themselves may be the only feasible method of measuring the target constructs.

Future research should look into data collection method incorporating journal or log book in order to gain a deeper understanding other benefits student gain in community engagement activities. Respondents should be required to write down their reflection periodically over four specific occasions. Qualitative data will be analysed using thematic approach to identify commons themes on the outcomes of student community engagement not captured in the quantitative survey instrument. Apart from that, this study was conducted based on undergraduates' perspective only. Since community engagement is a mutually beneficial activity, it is important to understand what these outcomes are on other stakeholders. Future studies should look into the various stakeholders such as lecturers, faculty, university and community. By combining these different stakeholders, it will paint a more holistic picture of the study on community engagement.

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