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IDENTIFYING CHARACTERISTICS SHAPING MALAYSIAN UNDERGRADUATES' ORGANIZATIONAL CITIZENSHIP BEHAVIORS

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ABSTRACT

Organizational citizenship behavior (OCB) is behavior that goes beyond formal essential tasks, such as helping colleagues, being actively involved in organizational development, and being able to tolerate shortcomings and difficulties at work. Past studies have shown that OCB contributes positively to individual, group, and organizational level outcomes. The importance of OCB to students has also received the attention of previous studies, albeit only slightly. This study was conducted to examine whether OCB among university students can be explained based on their demographic factors. The respondents in this study were 312 Malaysian undergraduates. This study contributes to the OCB body of knowledge by demonstrating differences in OCB based on demographic factors. The results of the study found that university students showed a relatively high level of OCB, and there were some differences in terms of the level of certain OCB dimensions based on gender, level of study, and field of study. Additionally, this study also found that students' OCB levels had a positive relationship with self-efficacy as well as intrinsic motivation. Implications from this study as well as recommendations for future research are presented.

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1. Introduction

Organ (1983) used the term "organizational citizenship behavior" (OCB) to describe a type of voluntary behavior. In most cases, OCB is not included in a person's contractual obligations. Assisting coworkers with work-related difficulties, respecting others, making good use of working

time, being actively engaged in the organization's development, and being ready to work hard and surpass work objectives for the organization's interests are all examples of OCBs. OCB is defined as behavior that goes above and beyond what is anticipated, and it can take various shapes depending on the individual (Joirman, Daniels, & Kamdar, 2006). Some individuals believe it is normal to assist coworkers or refrain from grumbling when faced with difficulties at work (e.g., power outages and increased workload). These behaviors, however, are outside the scope of formal work for some employees and cannot be permitted (Miles et al., 2002).

While researchers contend that these are not formalized behaviors that are included in performance assessments, it cannot be denied that organizations require employees who have a proclivity for the behaviors described above. OCB is defined as an extra-role activity in the literature, whereas formal job duties or performance tasks are considered in-role behaviors. Even though OCBs are extra-role behaviors, research has shown that they are nevertheless taken into account when evaluating performance (Podsakoff, Ahearne, MacKenzie, 1997). This indicates that, although OCB is an extra-role in nature, management considers an employee's OCB when making decisions about performance assessment or promotion. High levels of OCB have been found in studies to improve several elements of individual achievement, including performance assessment, financial rewards such as pay raises and promotions, withdrawal behaviors, and student academic performance (Podsakoff, MacKenzie, Paine & Bachrach, 2000; Allen and Rush, 1998; Chen et al., 1998; Allison, Voss & Dryer, 2001; Khalid et al., 2009).

It would be great if our young generation had a natural or learned inclination to act well from an early age. It benefits not only themselves but also the organization in which they will work in the future, as well as the community and country's growth. Although OCB has been shown to influence a person's short-term achievements, such as academic achievement (DiPaola & Hoy, 2013), and longer-term performance, such as promotion (Podsakoff, Whiting, Podsakoff, & Blume, 2009), research into the extent of OCB among Malaysia's younger generations is unexplored. Our students should value OCB not only for job progress but also for the role it plays in shaping them into decent citizens for the country. Students in higher education are an essential segment of the community who will be actively involved in the development of society and the country both during and after graduation. They are the ones who should be cultivated to achieve not just intellectually, but also to possess qualities and behaviors that are beneficial to society.

Higher educational institutions are thought of as training grounds for the next generation and national development inheritors. A student must satisfy academic requirements such as attending courses, sitting for examinations, participating in co-curricular activities, and other activities that require the accumulation of credit hours to complete their studies. The chances for fostering OCB behaviors during their time in higher education, whether spontaneously, through the influence of friends and staff, or development programs, are extensive. Helping classmates, participating in philanthropic initiatives, adhering to institutional standards even when no one is looking, and taking an active role in improving the institution's reputation are all examples of OCB behavior, regardless of whether they influence credit hours or not. Strengthening OCB among the younger generation will undoubtedly impact student achievement and help the organization, community, and country (Astin, 1977; LeBlanc, 2014).

In addition, two factors, self-efficacy, and intrinsic motivation have been shown to influence the OCB. Given the relevance of these two factors, the impact of these two variables on students' OCBs was investigated in this study. It is believed that by investigating the effects of these two factors on students' OCBs, efforts to identify the features of OCBs among students will yield clearer and more comprehensive findings. It will be easier to take suitable steps to improve the level of OCBs among students while they are still at university if we can anticipate their OCB based on some demographic factors, self-efficacy, and intrinsic motivation.

Based on the above discussion, this study was conducted to answer the following research questions:

1. To what extent do students practice OCBs?

2. To what extent can the students' OCBs be influenced by their self-efficacy and intrinsic motivation?
3. Can students' factors of age, gender, level of study, and field of study determine their OCBs?

2. Literature Review

Organizational Citizenship Behavior

OCB is distinguished by its discretionary behavior, which is not explicitly or implicitly recognized by the official remuneration system but is beneficial to the organization's overall efficiency (Organ 1988). The phrase discretionary implies that OCB is a personal decision for the employee, and failing to display OCB does not usually result in disciplinary action. However, it is widely accepted that the organization expects individuals to contribute in ways other than those specified in the job description. This includes helping coworkers with task-related activities, voluntarily reducing rest time to finish a job or assist clients, maintaining good relationships with colleagues and supervisors, resisting complaining about any shortcomings in the office, and actively participating in organizational development, such as serving on various committees and providing constructive feedback to the department and organization.

Although in the early stages, studies have focused more on the determinants of its antecedents (e.g., Smith, Organ & Near, 1983; Borman, 2004; Podsakoff, MacKenzie, Moorman & Fetter, 1990), studies have also begun to examine the effects of OCB, such as work performance and performance evaluation. The impact of OCBs on performance has been studied at the individual level (Allen & Rush, 1998; Chen et al. 1998; Khalid et al. 2009) and organizational level (Podsakoff, Ahearne & Mackenzie, 1997). Studies on the factors contributing to the OCB are carried out on the assumption that OCBs contribute to performance. Additionally, several dimensions of OCB have been studied by researchers. Among them are Williams and Anderson (1988), who indicated that OCB has two dimensions that benefit both the organization and the person. OCB that benefits the organization is labeled as OCB-O while the one that benefits the individual is labeled as OCB-I. Organ (1990) suggested that OCB is a 5-dimensional construct, namely altruism, courtesy, athletics, civic virtue, and conscientiousness.

It is believed that DiPaola and Tschannen-Moran (2001) were among the first researchers to study OCB in an educational context. They found that OCB in the educational context is unidimensional. The five dimensions of OCB, namely altruism, civic virtue, conscientiousness, courtesy, and civic virtue, as discussed by Organ (1990) were the most widely used in research. The meaning of each dimension is provided in Table 1.

*Table 1
Descriptions of OCB Dimensions*

OCB Dimension	Meaning	Source
Altruism	Actions are taken voluntarily to help others such as colleagues to complete work-related tasks	Podsakoff & MacKenzie 1994
Civic virtue	Active participation in the development of the organization as well as being very concerned with the life of the organization	Podsakoff & MacKenzie (1994)

Conscientiousness	The use of working time, attendance, and compliance with all forms of organizational rules exceeds the minimum standards	Organ (1990)
Courtesy	Actions were taken to prevent the occurrence of work-related problems with other parties such as supervisors and colleagues	Podsakoff & MacKenzie (1994)
Sportsmanship	Ability and willingness to tolerate any discomfort or difficulty in the workplace and perform tasks without complaining	Organ (1990)

Students' Engagement in OCB

According to Podsakoff, Whiting, Podsakoff, and Blume (2009), a total of 200 publications linked to OCB were published in meta-analysis research. The majority of this research looked at OCB in the setting of conventional workplaces. According to Allison, Voss, and Dryer (2001), OCB studies in the educational sector are still few. According to a review of related literature, certain studies of OCB at educational institutions place a greater emphasis on OCB among instructors (Skarlicki & Latham, 1995; Ertuk, 2007). Several studies that have been conducted involving educational institutions aimed at reviewing the factors that contribute to OCB or the effect of OCB have also reported the means of OCB for students. However, these studies were not intended to describe the characteristics of students who are prone to OCB. Generally, students regardless of the level of education have exhibited a rather moderately high level of OCB.

Table 2
Students' OCB Reported by Previous Studies

Study/Location	Sample	OCB measurement	Findings
Allison et al.(2001) – United States	To examine the relationship between OCB and academic performance among 222 undergraduates	17 items by Podsakoff and Mackenzie (1994); 7-point scale	Within the range of 4.33 (civic virtue) to 6.00 (Courtesy).
Blondheim & Somech (2019) - Israel	The used of focus group interviews to extract citizenship behaviors from 19 students from elementary and middle schools	Development of new citizenship behaviors (e.g., helping behavior toward students, OCB toward school personnel)	This study reveals that school students do indeed exhibit unique characteristics and dimensions of OCB
Azila-Gbettor et al. (2019) - Ghana	To examine the relationship between self-esteem and OCB among 354 undergraduates	10-item scale by Allison et al. (2001); 7-point scale	Reported a composite mean score of 4.974 (SD=0.968) for undergraduates OCB

Chai et al. (2020) United States	To examine the relationship between family and community support and OCB among 1,436 undergraduates/graduates	11 items from OCBO and OCBI by William and Anderson (1991); 7-point scale	Reported a mean value of 5.30 (SD=0.89) for OCBI and a mean value of 6.09 (SD=0.79) for OCBO
Khalid et al. (2013) Malaysia	To examine the relationship between religiosity and OCB among 237 undergraduates	11 items from OCBO and OCBI William & Anderson (1991); 5-point scale	Reported a mean value of 3.44 (SD=0.50) for OCBI and a mean value of 3.13 (SD=0.34) for OCBO
LeBlance (2014) USA	To examine characteristics of students' OCB among 490 undergraduates	24-item scale by Podsakoff, MacKenzie, Moorman & Fetter (1990)	-Means OCB of female students is higher and significant than that of male students -Year in school did not show a significant relationship with OCB engagement -Undergraduate major is positively related to OCB engagement
Terzi (2011) Turkey	To examine the relationship between locus of control and OCB among 252 undergraduates	The scale used in regards to OCB was developed by the researcher	OCB levels between male and female students are the same

Table 2 summarizes the studies. As far as we know, the first study that examined OCB based on characteristics of students was the study by LeBlanc (2014). Their study involving 490 university students attempted to assess students' OCB based on gender, number of years of study, religious practice as well as field of study. As mentioned earlier, limited number of studies have discussed the importance of OCB among students (LeBlance, 2014; Allison et al., 2001). Allison et al., (2001) emphasized the importance of OCB in the student context, where OCB is not only able to have a positive impact in terms of academic achievement but also has the potential to benefit students in terms of career advancement. LeBlanc (2014) emphasizes the importance of students' OCB to improve the effectiveness of the organization as a whole as well as the impact of OCB on student development. Allison et al., (2001) and LeBlance (2014) also emphasized the role that educational institutions need to play as the most appropriate place to train students in terms of the importance of OCB.

Several studies that have been conducted involving educational institutions aimed at reviewing the factors that contribute to OCB or the effect of OCB have also reported the means of OCB for students. However, these studies are not intended to describe the characteristics of students who are prone to OCB. Generally, students regardless of the level of education have exhibited a rather moderately high level of OCB. Table 2 summarizes the studies. A study by LeBlanc (2014) involving 490 university students attempted to assess students' OCB based on gender, number of years of study, religious practice as well as field of study.

Self-Efficacy, Intrinsic Motivation and OCB

Self-efficacy refers to a person's belief in his or her ability to carry out the behaviors required to achieve certain performance goals. Self-efficacy is a measure of one's belief in one's capacity to regulate one's motivation, behavior, and social environment (Bandura, 1997). He

went on to say that believing in one's own ability to complete a task is a big part of the achievement that comes from doing it. When opposed to students who are less confident in their abilities, a student with a high level of self-efficacy can learn hard, is effective in the learning process, has stamina, and is not emotionally upset when faced with obstacles (Zimmerman, 2000). Individuals who have high expectations of themselves and feel they can perform efficiently and successfully can undertake extra duties beyond those explicitly allocated to them, according to Bolger and Somech (2004).

The previous study has discovered that self-efficacy is one of the most important elements determining OCB (e.g., Sheikh, 2015; Dussault, 2006). Intrinsic motivation is described as a desire to engage in work because it is intriguing and gratifying, as opposed to extrinsic motivation, which is defined as a drive to attain certain goals, such as rewards or recognition (Amabile et al., 1994). (Amabile, 1993). Existing research also emphasizes the significance of employees' intrinsic motivation for OCB participation (e.g., Kim, Kim & Holland, 2019; Ibrahim & Aslinda, 2014). According to previous research, employees with intrinsically exciting occupations are more inclined to go above and beyond their formal work obligations (Bolino, Turnley, & Bloodgood, 2002; Saavedra & Kwun, 2000). A good or non-self-serving motivation causes OCB (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). These actions go above and above the call of duty (Organ, 1997). As a result, there should be a positive relationship between OCB and intrinsic motivation.

3. Methodology

Participant

This research is correlational and cross-sectional with a quantitative approach (Gravetter & Forzano, 2009) aimed at achieving the objective of evaluating students' OCB based on age, gender, level of study, and field of study. Additionally, this study also examined the relationship of two important variables which are self-efficacy and intrinsic motivation with students' OCB. This study was conducted at one of the branch campuses of the largest public university in Malaysia. The branch campus offers business management studies, accountancy as well as science technology. Six thousand seven hundred students enrolled in bachelor's degree and diploma programs make up the study's population.. The sample size required is about 362 (Krejcie & Morgan, 1970).

Procedure

The process of gathering data for this research was conducted using Google forms distributed using several WhatsApp groups. Due to Movement Control Order (MCO) which limits the ability of researchers' mobility, a convenience systematic sampling technique was used to collect the data (Sekaran & Baugie, 2010). Clear instructions accompanied these Google forms and the contact details of the researcher are also included in the questionnaire form so that the respondents may ask if there are any inquiries about any clarifications that need to be explained more. The objectives of this study have also been clearly stated in the questionnaire. Participation is voluntary and researchers have ensured that confidentiality is fully preserved. Respondents were informed that it took approximately 10 minutes to respond.

Measurement

Students' Organizational Citizenship Behavior was measured using a 10-item scale by Allison, Voss, and Dyer (2001). The 10-item scale was intended to measure the 5 OCB dimensions – altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. It is measured using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Sample items include "I willingly give my time to help other students who have study-related problems" and "I take steps to try to prevent problems with other students in my class". Self-Efficacy was measured using a 3-item

scale from Spreitzer (1995) and intrinsic motivation was measured using a 4-item scale from Pintrich et al., cited in Hsieh (2014). Demographic information is collected such as age, gender, level of study whether bachelor's degree or diploma as well as field of study. Except for age which is measured as a ratio scale, other demographic items are nominal scales.

Data Analysis

Data were analyzed using Statistical Procedure for Social Sciences (SPSS). Among the statistics used include means, standard deviation, correlations, and t-test.

4. Results

Sample Characteristics

The Google form survey has been completely used to collect data from students who are directly involved with online learning from March 2020. A total of 312 students have answered to the Google form that was disseminated over multiple WhatsApp groups to a total of 747 students. Females made up the bulk of the participants in this study (64.4 percent). Around 70.8 percent of students are enrolled in bachelor's degree programs, with the remaining enrolled in diploma programs. The number of students studying science and technology (52.2%) is about similar to the number of students studying management science (52.2%). (47.4 percent).

Goodness of Measures

Before answering the research questions, the principle component analysis (PCA) method with varimax rotation (Hair, Anderson, Tatham & Black, 1998) is used to identify underlying dimensions of students' OCB, learning motivation, and self-efficacy. PCA is the most frequently used approach (Cooper & Schindler, 2001). Table 3 illustrates the result of factor analysis for 10 items measuring students' OCB. As shown, the 10 items were loaded into 3 factors. Two altruism items, two courtesy items, and one conscientiousness item loaded together in factor 1. This factor was labeled as courtesy/altruism. Factor 2 consists of two civic virtue items and one conscientiousness item and was labeled as a civic virtue. The last factor consists of two sportsmanship items. Next, the four items intended to measure intrinsic motivation loaded nicely in a single factor (see Table 4). Finally, Table 5 indicates that the 3 items intended to measure self-efficacy are also loaded in a single component.

Table 3
Factor analysis for students' OCB items

No	Item	Component		
		1	2	3
1	I take steps to try to prevent problems with other students in my class.	.82	.04	.16
2	I "touch base" with other students before initiating actions that might affect them (e.g., in team projects).	.79	.10	.09
3	I willingly give of my time to help other students who have faculty/university-related problems.	.67	.38	.09
4	I am willing to take time out of my busy schedule to helps students with their homework.	.59	.51	.17
5	I return phone call calls from students/lecturers and respond to other messages and requests for information promptly.	.56	.32	.15
6	I attend and actively participate in faculty/university meetings.	.17	.81	.01

7	I attend special classes or other meetings that students are encouraged but not required to attend.	.11	.78	.23
8	I turn in homework, projects, reports, etc. earlier than is required.	.34	.47	.19
9	I always focus on what is wrong with my situation rather than the positive side of it.	.18	.01	.89
10	I always find fault with what the faculty/university is doing.	.06	.52	.71
KMO Measure of Sampling Adequacy		=	.793	
Bartlett's Test of Sphericity, Chi-Square		=	933.541	
	df	=	45	
	Sig.	=	.000	

Table 4
Factor analysis for students' intrinsic motivation items

No	Item	Component	
		1	
1	In my course, I prefer course material that challenges me so that I can learn new things.	.77	
2	In my course, I prefer course material that arouses my curiosity, even if it is difficult to learn.	.86	
3	The most satisfying thing for me in my course is trying to understand the content as thoroughly as possible.	.65	
4	When I have the opportunity, I choose course assignments that I can learn from, even if they don't guarantee a good grade.	.79	
KMO Measure of Sampling Adequacy		=	.712
Bartlett's Test of Sphericity, Chi-Square		=	693.496
	df	=	21
	Sig.	=	.000

Table 5
Factor analysis for self-efficacy items

No.	Item	Component	
1	I am confident about my ability to do my academic tasks.	.911	
2	I am self-assured about my capabilities to perform my academic tasks.	.915	
3	I have mastered the skills necessary for my academic tasks.	.861	
KMO Measure of Sampling Adequacy		=	.725
Bartlett's Test of Sphericity, Chi-Square		=	503.689
	df	=	3
	Sig.	=	.000

Table 6
Reliability Analysis

Variable	No. of Item	α
Self-Efficacy	3	.88

Intrinsic motivation	4	.74
Students' Courtesy/Altruism	5	.79
Students' Civic virtue	3	.71
Students' sportsmanship	2	.72

Table 6 indicates the Cronbach's alpha for these dimensions. According to Nunnally (1978), Cronbach alpha should be greater than 0.70. As indicates in Table 3, the alpha values for all variables are above 0.70.

Descriptive Statistics and Inter-Correlations

Table 7
Descriptive Statistics of Mean and Standard Deviation

Variable	Mean	SD	Range
Age	20.9	1.38	14
Self-Efficacy	3.78	.68	3
Intrinsic motivation	3.83	.59	4
Students' Courtesy/Altruism	4.06	.54	3
Students' civic virtue	3.55	.76	4
Students' sportsmanship	3.16	.96	4

Table 8
Correlational analysis

	Variables	1	2	3	4	5	6
1	Age	-					
2	Self-Efficacy	.12*	-				
3	Intrinsic motivation	.13*	.48**	-			
4	Courtesy / Altruism	.02	.39**	.35**	-		
5	Civic virtue	.11	.43**	.23**	.00	-	
6	Sportsmanship	.03	.01	.15*	.00	.00	-

*p<.05; **p<.01

Descriptive statistic of mean was used to answer the first research question - to what extent do students practice OCBs? Table 7 shows the means, standard deviations, and ranges of all measures in this study. All the constructs were measured based on the 5-point Likert scale. As can be seen, all the mean values for students' courtesy/altruism, civic virtue, and sportsmanship were above the mid-point of three, with the highest of 4.06 for altruism/courtesy. In general, the values of standard deviations for most constructs indicated that the observations were tended to be closed to the mean. This analysis showed that the students showed relatively high levels of OCB. In addition, the mean age is 20.9 years with a standard deviation of 1.38. Intercorrelation was conducted to answer the second research question - to what extent can the students' OCB be influenced by their self-efficacy and intrinsic motivation? As can be seen in Table 8, courtesy/altruism has a significant relationship with self-efficacy ($r=.39$, $p<.01$), and intrinsic motivation ($r=.35$, $p<.01$). Civic virtue has a significant relationship with self-efficacy ($r=.43$, $p<.01$) and intrinsic motivation ($r=.23$, $p<.01$). Finally, sportsmanship has a significant relationship with intrinsic motivation ($r=.15$, $p<.05$). The result of correlation also indicated that age is not significantly related to any dimensions of OCB.

Test of Differences

Independent sample of t-test were conducted to answer the third research question - can students' gender, level of study, and field of study determine their OCB? The first independent sample t-test was conducted to examine whether there is a significant difference in terms of the level of OCBs between male and female students. As shown in Table 9a and 9b, significant differences exist only for the sportsmanship dimension. Means for males (3.44) are higher than for females (3.00) and significance for males at .000. Sportsmanship is a form of OCB that involves the ability to tolerate any discomfort or difficulty in the workplace and perform tasks without complaining (Organ, 1988). Students were enrolled in online learning at the time of this research. Students encounter a variety of challenges when it comes to online learning, including arranging group assignments among group members, unreliable internet lines, concerns linked to long-term isolation, and so on. Female students are more likely to experience conflicts between their responsibilities as students and the duty of assisting parents while they are at home for online study. Females who undertake dual tasks may experience greater conflict than males. As a result, females may have a negative perception of a scenario, causing them to criticize the faculty/university's actions. There are disparities between male and female students when it comes to online learning. For example, females reported experiencing higher stress during virtual learning (AlAteeq, Aljhani, & AlEesa, 2020) while males tend to hold more stable positive attitudes toward online learning (Nistor, 2013).

Table 9a
OCB Composite and OCB Dimensions Differences Based on Gender – Group Statistics

	Gender	N	Mean	SD	Std. Error Mean
OCB Composite	Male	111	3.76	.62	.059
	Female	201	3.71	.48	.034
Courtesy / Altruism	Male	111	4.01	.59	.056
	Female	201	4.09	.51	.036
Civic virtue	Male	111	3.54	.83	.078
	Female	201	3.56	.72	.051
Sportsmanship	Male	111	3.44	1.04	.099
	Female	201	3.00	.87	.062

Table 9b
OCB Composite and OCB Dimensions Differences Based on Gender – t-test

		F	Sig.	t	df	Sig. (2-tailed)
OCB Composite	Equal variances assumed	12.056	.000	.725	310	.469
	Equal variances not assumed			.673	183.014	.502
Courtesy / Altruism	Equal variances assumed	1.249	.265	-1.139	310	.255
	Equal variances not assumed			-1.093	200.931	.276
Civic virtue	Equal variances assumed	4.417	.036	-.170	310	.865
	Equal variances not assumed			-.164	203.459	.870
Sportsmanship	Equal variances assumed	6.429	.012	3.931	310	.000
	Equal variances not assumed			3.740	196.133	.000

The second independent sample t-test was conducted to examine whether there were significant differences in terms of OCB between diploma and bachelor's degree students. As shown in Table 10a and 10b, the analysis revealed that significant differences based on the level of study occurred only for civic virtue. Means for bachelor's degree students (3.64) are higher than diploma students (3.34) and significance for bachelor's degree at .003. Civic virtue involves active participation in the development of the organization as well as being very concerned with the life of the organization (Podsakoff & MacKenzie, 1994). There are 3 items used to measure civic virtue that involve active participation with faculty activities, attending non-compulsory special activities or classes as well as submitting assignments in advance. In general, it is expected that these behaviors are more demanding for bachelor's degree students than diploma-level students.

Table 10a
OCB Composite and OCB Dimensions Differences Based on Level of Study – Group Statistics

	Gender	N	Mean	SD	Std. Error Mean
OCB Composite	Diploma	91	3.66	.50	.052
	Bachelor's degree	221	3.75	.55	.037
Courtesy / Altruism	Diploma	91	4.07	.53	.055
	Bachelor's degree	221	4.06	.55	.037
Civic virtue	Diploma	91	3.36	.76	.080
	Bachelor's degree	221	3.64	.75	.050
Sportsmanship	Diploma	91	3.12	.88	.092
	Bachelor's degree	221	3.17	.99	.066

Table 10b
OCB Composite and OCB Dimensions Differences Based on Level of Study – t-test

		F	Sig.	t	df	Sig. (2-tailed)
OCB Composite	Equal variances assumed	1.675	.197	-1.373	310	.171
	Equal variances not assumed			-1.426	182.809	.156
Courtesy / Altruism	Equal variances assumed	.037	.848	.092	310	.927
	Equal variances not assumed			.093	174.538	.926
Civic virtue	Equal variances assumed	.148	.701	-2.989	310	.003
	Equal variances not assumed			-2.965	164.889	.003
Sportsmanship	Equal variances assumed	2.641	.105	-.428	310	.669
	Equal variances not assumed			-.450	187.836	.653

The last independent sample t-test was conducted to examine whether there are significant differences in terms of OCB based on the field of study, namely students majoring in science and technology and students majoring in management and accounting. As shown in Table 11a and 11b, the analysis revealed that significant differences based on the field of study occurred only for the OCB dimension of courtesy/altruism. Means for students from the field of management & accounting (4.13) is higher than students in the field of science technology (4.00) and significance for management and accounting students at .043. Although significant, the difference in the means was not too large. This finding is consistent with some of the previous studies. A study by Coulter, Wilkes, and Der-Martirosian (2007) indicates that business and behavioral science students reported more altruistic attitudes than legal, medical, and engineering students (e.g., Coulter, Wilkes & Der-Martirosian, 2007; Siddiqi, Mishra & Shafiq, 2015).

Table 11a
OCB Composite and OCB Dimensions Differences Based on field of study – Group Statistics

	Gender	N	Mean	SD	Std. Error Mean
OCB Composite	Science technology	163	3.69	.54	.042
	Management & accounting	148	3.76	.53	.044
Courtesy / Altruism	Science technology	163	4.00	.57	.045
	Management & accounting	148	4.13	.50	.041
Civic virtue	Science technology	163	3.55	.71	.056
	Management & accounting	148	3.56	.82	.067
Sportsmanship	Science technology	163	3.16	.95	.075
	Management & accounting	148	3.16	.97	.079

Table 11b
OCB Composite and OCB Dimensions Differences Based on Field of study – t-test

		F	Sig.	t	df	Sig. (2-tailed)
OCB Composite	Equal variances assumed	.020	.886	-1.067	309	.287
	Equal variances not assumed			-1.068	306.446	.287
Courtesy / Altruism	Equal variances assumed	.390	.533	-2.007	309	.043
	Equal variances not assumed			-2.019	308.743	.044
Civic virtue	Equal variances assumed	2.665	.104	-.147	309	.883
	Equal variances not assumed			-.146	292.757	.884
Sportsmanship	Equal variances assumed	.187	.666	.038	309	.970
	Equal variances not assumed			.038	305.388	.970

5. Discussion and Conclusion

In general, this study shows that students are inclined to exhibit OCB. However, there are some differences we need to acknowledge. First, male students showed a higher level of sportsmanship than female students. Second, bachelor's degree students showed higher levels of civic virtue than diploma students. Finally, students from the field of management & accountancy showed a higher level of courtesy/altruism than the students from the field of science technology. The results of the study found that age had no relationship with OCBs. Additionally, this study also found that the level of OCBs among students is also influenced by their self-efficacy and intrinsic motivation. The findings that males and students from management & accountancy exhibit higher levels of OCB were not consistent with the findings obtained by LeBlanc (2014). Nevertheless, the findings of this study certainly add to the body of knowledge of OCB. More research needs to be conducted before we can truly confirm the extent to which demographic factors can consistently explain students' OCB. Furthermore, a recent study by Ali (2021) found that demographic factors do not explain the differences in OCB among respondents. Further research is also needed to determine whether demographic factors such as gender act as moderators as evidenced by a study by Yadav, Rangnekar and Srivastav (2019). Their study found that gender and type of organization were found to moderate the relationship between quality of work life and OCB. Factors such as the measurement used to measure students' OCB as well as the selection of demographic factors need to be addressed by future studies. Nevertheless, based on the findings of this study, efforts should be made to increase the level of OCBs among all students with a greater focus on female students, students from diploma level, and students from science technology courses. Several methods can be used to inculcate OCBs among students. These include the use of role models among administrators and educators and extracurricular activities. Administrators and educators should set examples by adopting OCBs to be followed. The importance of role models in influencing student behavior has been emphasized by many previous studies (e.g., Gladstone & Cimpian, 2021). Several extracurricular activities involving group projects such as team building can be carried out. It is also possible to choose the best students based on the level of OCBs and reward them accordingly. Although it may involve self-serving bias among students, it is hoped that the practice of OCBs among them will become a culture and norm in the long run. The management of higher learning institutions can take some actions to improve self-efficacy among the students. This includes providing assignments that can challenge the ability of students so that they can develop valuable experiences. The use of role models among educators who are always visible to students is another option. One of the strategies recommended by Deci and Ryan (2008) to improve intrinsic motivation is to promote autonomy. To achieve intrinsic objectives in all areas of our life, it is critical to establish the idea that we are in control of what we do – as opposed to a lack of control. In the context of students in higher education institutions, it is interesting to allow them more autonomy. Giving students more flexibility to choose what they want to learn (a broader range of optional courses) or pick their co-curricular activities of interest is one thing that may be done. Moreover, intrinsic motivation has been seen as essential for perseverance at work. People who are intrinsically motivated view their work as a means to an end (Fishbach & Woolley, 2022).

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Authors Contributions

Both authors have been directly and actively involved in the writing of this article, involved with data collection and data analysis.

Conflict of Interest

I/We certify that the article is the Authors' and Co-Authors' original work. The article has not received prior publication and is not under consideration for publication elsewhere. This research/manuscript has not been submitted for publication nor has it been published in whole or in part elsewhere. We testify to the fact that all Authors have contributed significantly to the work, validity and legitimacy of the data and its interpretation for submission.

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