

Why Alumni Stay Engaged with their Alma Mater? Understanding the Factors in Malaysian Context

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Abstract

Alumni engagement is considered one of the key strategies for education institutes to stay competitive and resourceful. Students after graduation can enable their institutes to tap a number of resources through their networks, thus helping with marketing, increasing employability, donations, and mentorship opportunities. Though universities have started capitalizing extensively on alumni as a resource, little is known about the factors influencing alumni engagement in the Malaysian universities context. To address the issue, this study tried to look into the factors affecting alumni engagement by using the School of Business and Economics, Universiti Putra Malaysia as a case study. A quantitative research design was used to collect data from the respondents. The results showed that student experience, external environment, and networking opportunities have a significant and positive effect on alumni engagement. The study has significant theoretical and practical implications and warrants the need for future studies.

Keywords: Alumni Engagement, Student Experience, External Environment, Networking Opportunities, Malaysia

Introduction

Developing robust ties with alumni is crucial for higher education institutes to strategically expand and prosper. Alumni may remain connected and help with creating a worldwide professional network despite leaving universities to pursue their careers (Fisher & Price, 2021). Institutes of higher learning greatly focus on alumni engagement for a number of reasons. They contribute to the development of institutional branding, enhancement of student recruitment, increased fundraising, mentoring of students, and employability of graduates (Jonbekova, Serkova, Mazbulova, Jumakulov, & Ruby, 2023; Parimala & Jayesh, 2023). Given the financial stress put on every sector across the globe due to the Covid-19 pandemic, higher education institutes are devising different coping strategies to stay

competitive. Leveraging alumni networks to accomplish marketing achievements during aggressive competition has become a prime strategy.

Graduates become a sizable pool of alumni who can serve as mentors for students and another potential source of revenue for the university (Johnson, 2015). To thrive and sustain their competitive edge, higher education institutes must foster a philanthropic culture among their graduates. Moreover, alumni act as crucial leaders for the institution and its faculty, serving as members of alumni boards, cultivating connections with prospective students, and collaborating with businesses (Wendler et al., 2010). However, pursuing the goal of effectively engaging alumni is not an easy feat due to the complexities involved. The obstacles faced by the institutes vary due to their differing engagement strategies.

Realizing the importance of alumni engagement, universities across Malaysia are actively working on strategies to enhance their alumni engagement. Despite the challenging nature of keeping an active alumni network, recent technological advances can help with building a lasting connection between the students and institutions that lasts through the studentship and after graduation (Chase, 2021). Given, the issues associated with alumni engagement and influencing factors are not fully known in the Malaysian context, there is a need for further research to understand the phenomenon.

Studies suggest that professional development opportunities, students experience, external environment, and networking opportunities are some of the factors that affect meaningful alumni engagement in educational institutes (Bruggink & Siddiqui, 1995; David & Coenen, 2014; Okunade & Berl, 1997). However, there is a scarcity of studies assessing the effect of these factors on alumni engagement in higher education institutes in Malaysia. To address the issue;

- This study aims to understand the factors influencing alumni engagement by using undergraduate alumni of the School of Business and Economics, Universiti Putra Malaysia as a case study.

Literature Review

Though there is no universal agreement on the term Alumni or Alumnus, however, according to Hummel (2010), a graduate with a certificate, degree, or honorary degree title is referred to as an alumnus. Alumni engagement is defined as the degree of connection that a graduate have with their alma mater (Hamid, 2021). Meaningful and effective alumni engagement is beneficial for the institutes, alumni themselves as well as currently enrolled students in a number of ways. These advantages consist of the ability to acquire resources through philanthropy or industry partnership, marketing and promotion of the institution, and alumni's capability to assist current students in order to promote job opportunities for graduates (Ebert, Axelsson, & Harbor, 2015; Helgesen & Nessel, 2007). However, the scarcity of research on the factors influencing alumni engagement warrants the need for further studies. In the current study, the effect of three predictors i.e. student experience, external environment, and networking opportunities is assessed. It would help us with explaining the evolution of alumni engagement and its impact on undergraduate students (See Figure: 1). The predictors are selected to reflect on the perspective of undergraduate students of the School of Business and Economics, Universiti Putra Malaysia, and how alumni engagement can be further improved. Each of the hypothesized relationships is discussed in detail as under;

Student Experience And Alumni Engagement

After graduation, the alumni experiences are considered to have a huge impact on their sentiments and views about the institution (Saraeh et al., 2018). That's why scholars are of the view that the effect of alumni's past experiences on the degree to which they would contribute and engage with their alma mater needs to be explicitly investigated. Despite being an important factor, the student's experience with alumni engagement is yet to be thoroughly explored conceptually. Studies suggest that previous students who appreciated their education experience at the institutes provided good recommendations to people in their networks, acted as role models for the existing classes, shared their knowledge and skills, and offered guidance to their alma mater's programs. Institutions may gain support through building long-term relationships with current students and, eventually, alumni.

According to Gray and DiLoreto (2016), students who enjoy their time at the institute tend to stay in contact and engaged with the university as alumni for the rest of their life. Some of their positive experiences include enjoying classes, meeting friends, and obtaining a worthwhile degree. So it stands to reason that being content with their studentship experience might include getting a job after graduation or joining great organizations that will challenge them after graduation. Moreover, students' experiences are also considered crucial in deciding the direction of alumni funding.

Graduates who are satisfied with their university experience are more likely to give back to the institution (Gray & DiLoreto, 2016). Furthermore, research has shown that students' experiences on campus have a substantial impact on their views and attitudes regarding the university as graduates (Saraeh et al., 2018). Moreover, undergraduate students who like their time in school tend to stay in touch with the university as alumni for the rest of their lives. Though the relationship has been established in the literature, however, there is a dearth of studies on the effect of student experience on alumni engagement. Therefore, the following hypothesis is proposed

H1: There is a significant and positive relationship between student experience and alumni engagement.

External environment and alumni engagement

To be effective and competitive, the organization must interact with its external environment and adapt to changing trends. The number of committed volunteers and the number of donations raised demonstrate how effectively the university's external environment was perceived by the students and alumni (Bruggink & Siddiqui, 1995). This implies that the organization's ability to adapt to change in order to meet social demands, as well as the perceptions of current and potential contributors of its efforts to cultivate a relationship with alumni, are important determinants of donations and future support (Hoyt, 2004; Okunade & Berl, 1997).

Alumni perception is greatly shaped by the university environment based on their experiences. A good environment and experience during the studentship period are likely to encourage the alumni in staying connected with the institute once graduated. Higher education institutes can capitalize on the meaningful alumni engagement enabled by the good external environment provided to the students. The prospects of assuring equality to support universities' charitable activities, as well as government choices about tax breaks for donations to higher education institutions, have been shown to promote a giving culture which is one form of alumni engagement to give back to the institute (Bruggink & Siddiqui, 1995). A concerted effort by stakeholders to encourage the public to support higher

education would aid the university's fundraising efforts through alumni engagement (Bruggink & Siddiqui, 1995). Given the scarcity of studies, this research intends to assess the effect of the external environment on alumni engagement. Therefore, the following hypothesis is proposed;

H2: There is a significant relationship between the external environment and alumni engagement.

Networking opportunities and alumni engagement

Higher social capital through networking plays a critical role in early career successes as well as promotions at later stages. The networks help with making resources and opportunities available, which could be leveraged to take advantage of professional achievements (David & Coenen, 2014). Alumni in entrepreneurship use networks and relationships to their advantage when looking for information about the ecosystem and understanding it (El-Awad, Gabriellsson, Pocek, & Politis, 2022).

Alumni engagement benefits significantly from networking opportunities (Fugate, 2019). When alumni have the opportunity to engage with one another, they may share their skills and experiences, provide professional guidance, and offer support. This can lead to increased alumni satisfaction, philanthropy, and volunteerism. Literature suggests that the networking opportunities provided by universities are likely to keep the alumni engaged, which in turn would create a sense of belongingness with their alma mater (Drezner & Pizmony, 2021). Moreover, it would enable and encourage the alumni to act as student ambassadors for their institutes, thus helping with marketing the programs offered (Jonbekova et al., 2023). Studies have shown that graduates who feel satisfied with their universities are more likely to act as donors, offer assistance to current students, and recommend their alma mater to other prospective students (Gray & DiLoreto, 2016).

Moreover, keeping engaged with their alma mater is also greatly beneficial because alumni networks could act as useful resources for job seekers, wherein they can connect with potential employers, inform each other about job openings, and seek career development advice from others (Obukhova & Lan, 2013). In addition, these networks provide opportunities to professionally develop by learning from the experiences of other alumni, being a mentee or mentors, and developing social relations with their peers in the field (Johnson, 2015). To summarize, the networking opportunities provided by the universities could act become a win-win for alumni, institutes, industry, and current students. However, literature is scarce on the effect of networking opportunities on alumni engagement in the Malaysian context. Therefore, the following hypothesis is proposed;

H3: There is a significant relationship between networking opportunities and alumni engagement.

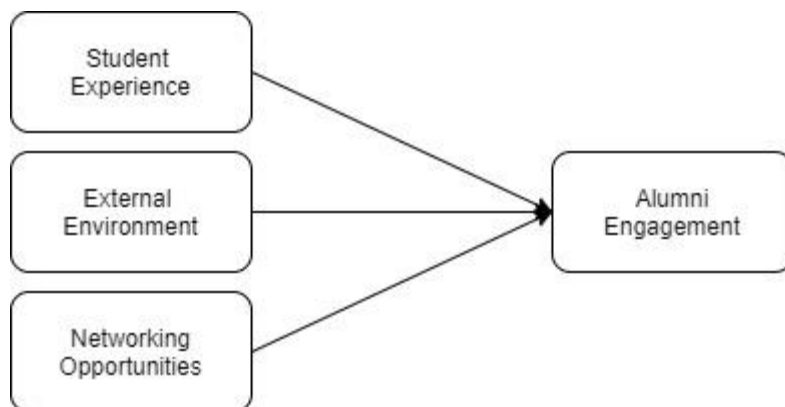


Figure 1: Conceptual Framework

Methodology

This study used a positivist approach with a quantitative research design to assess the relationship between the influencing factors and alumni engagement. Qualitative data is acquired by investigating broad research questions that aim to employ an in-depth investigation of a social phenomenon (Creswell, 2009). According to Bell, Bryman, and Harley (2022), a quantitative research strategy employed in business research produces results that are favorably represented in numbers and are objective in nature. The quantitative research design is utilized to collect and analyze data for this study because it can offer results with great precision and accuracy while being simple to understand. Data was collected for this quantitative study through a questionnaire adapted from previous studies (Saunders, Lewis, & Thornhill, 2019). To test the proposed hypothesis inferential statistics were used.

The population for this study was the undergraduate students of the School of Business and Economics (SPE), Universiti Putra Malaysia. Based on the available data, it was found that SPE has a total of around 2700 students enrolled, among which 1933 (71.59%) are undergraduate while 767 (38.41%) are postgraduate students. Data was collected from the undergraduate students of the school.

Given the study's focus on a specific demographic, a non-probability sampling approach known as the judgment sampling technique was utilized (Saunders et al., 2019). The respondents had to satisfy a number of conditions to be considered for data collection. First and foremost, the study's target population consisted of undergraduates aged 18 to 28. Second, only individuals who have been involved with alumni interaction or had some basic understanding of alumni were eligible. Furthermore, only undergraduate students from the School of Business and Economics were permitted to participate in the research. This was necessary due to the breadth of the study, which studied the variables impacting undergraduate students in the said context. As a result, in order to reply to the polls.

For this study, a self-administered questionnaire was used for data collection (Samani, 2016). Questionnaires were distributed using a combination of face-to-face as well as online social media and messaging platforms. This was done to ensure that the respondents fit the study's conditions, which included being undergraduate students at SPE, between the ages of 18 and 28, and having knowledge of or experience with alumni participation at least once. Using questionnaires, research objectives may be transformed into specific, standardized questions and response categories, encouraging respondents to cooperate (Burns & Bush, 2003), which makes data collection and analysis became simpler.

Items for the questionnaire were adapted from the previous studies i.e. Alumni Engagement (4 items), student experience (3 items), the external environment (4 items), and networking

opportunities (6 items) on a 5-point Likert scale. For the data analysis Statistical Software Package for Social Sciences (SPSS) was used. The statistical analysis involved testing of normality, frequencies, reliability, descriptive analysis, and multiple regressions.

Analysis and Results

Before doing the analysis data cleaning was done to ensure that the data is clean and of good quality. Given the data was collected using self-administered questionnaires using face-to-face and online platforms, the frequencies were checked to confirm that all the responses were within the acceptable range. This was done by running frequencies and no wrong entries were found in the data.

In the next stage, data normality was checked by looking into the data distribution. One of the assumptions for parametric statistics is that population data should be normally distributed. Kolmogorov-Smirnov and Shapiro-Wilk statistics are used in SPSS to check for data normalcy (Hanusz & Tarasińska, 2015). Descriptive statistics is used to examine both skew and kurtosis. The acceptable skewness values range between -3 to + 3, while acceptable kurtosis values range between -10 to + 10 (Brown, 2015; Griffin & Steinbrecher, 2013). The results showed that data was normally distributed as shown in table 1 and 3.

Table 1.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Students Experience	.269	203	.000	.718	203	.000
External Environment	.243	203	.000	.798	203	.000
Networking Opportunities	.206	203	.000	.770	203	.000

The descriptive analysis of the sample demographics showed that out of the total 203 responses collected, 62.6% were male, while 37.4% were female. Among them, 43.3% were local students, while 56.7% were international. In terms of programs registered, 45.8% were studying Bachelor of Business Administration, 26.1% were studying Bachelor of Economics, and the remaining 28.1% were studying Bachelor of Accounting as shown in Table 2.

Table 2*Respondent's Profile*

Student	International	115
		56.7%
	Local	88
		43.3%
Gender	Female	76
		37.4%
	Male	127
		62.6%
Program	Bachelor of Accounting	57
		28.1%
	Bachelor of Business Administration	93
		45.8%
	Bachelor of Economics	53
		26.1%

Table 3 presents the descriptive statistics for the constructs measuring alumni engagement and its influencing factors by looking into the mean (M) and standard deviation (SD) for each construct. This study used a 5-point Likert scale, with 1 denoting "Strongly Disagree" and 5 denoting "Strongly Agree." A score of 3 = Neutral or above indicated agreement with the statement, whereas a score of 3 = Neutral or lower indicated disagreement. All four constructs had high mean scores ranging from 4.012 to 4.112 while their standard deviations ranged from 0.28 to 0.31. These constructs included Alumni Engagement (M = 4.112, SD = 0.31), External Environment (M = 4.012, SD = 0.30), Creating Opportunities in Alumni Network (M = 4.056, SD = 0.28), and Student's Experience and Alumni Giving (M = 4.067, SD = 0.34). This showed that the majority of respondents, whether they agreed with the claims completely or only partially, gave these constructs quite high evaluation scores.

Table 3:*Descriptive Statistics*

	N	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis
Alumni Engagement	203	1.50	5.00	4.1050	.27899	.136	.694
Students Experience	203	1.67	5.00	4.1016	.29613	.004	.586
External Environment	203	2.25	5.00	4.1032	.27669	.068	.437
Networking Opportunities	203	2.00	5.00	4.1030	.26652	.056	.163
Valid N (listwise)	203						

Next, the internal consistency reliability of all the constructs assessed was determined by looking into Cronbach's Alpha(α) values. The recommended threshold for Cronbach's Alpha(α) values is 0.70 or above (Hair, Hult, Ringle, & Sarstedt, 2021). Results showed that all the constructs met the recommended threshold, thus establishing the internal consistency reliability of the measurement scale (Hair, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). Alumni engagement had Cronbach's Alpha(α) value of 0.913, students experience construct had Cronbach's Alpha(α) value of 0.873, external environment has Cronbach's Alpha(α) value of 0.872, while Networking opportunities had Cronbach's Alpha(α) value of 0.867. Given all the values are above the minimum Cronbach's Alpha(α) value of 0.70, thus confirms the internal consistency reliability of the construct (See table: 4).

Table 4:*Internal Consistency Reliability*

Construct	Items	Cronbach's Alpha(α)
Alumni Engagement	4	0.913
Students Experience	3	0.873
External Environment	4	0.872
Networking opportunities	6	0.867

In order to test the proposed hypothesis, a multiple regression analysis was performed. The three independent variables i.e. student experience, external environment, and networking opportunities were regressed on the dependent variable alumni engagement. The multiple regression model was found significant with p-value/ $p = 0.00$ and F- statistic/ F- Value = 29.183, as shown in Table 5. The adjusted R square was 0.306, indicating that the three predictors accounted for 30.6% of the variation in alumni engagement in higher education institutes.

The student experience was found to have a positive and significant effect on alumni engagement. With $\beta = 0.156$, $t = 2.290$, and $p\text{-value} = 0.023$, hypothesis 1 was found to be supportive (See tables: 5 and 6). The external environment with $\beta = 0.167$, $t = 2.250$, and $p\text{-value} = 0.026$ was found to have a significant and positive effect on alumni engagement, thus supporting hypothesis 2. Similarly, a significant and positive effect of the external environment on alumni engagement with $\beta = 0.340$, $t = 4.241$, and $p\text{-value} = 0.000$, thus supporting hypothesis 3.

Table 5:*Regression Analysis*

Model		β	t	$p\text{-value}^*$
1	(Constant)		3.820	.000
	Students Experience	.156	2.290	.023
	External Environment	.167	2.250	.026
	Networking Opportunities	.340	4.241	.000

* $p \leq 0.05$, $t = 1.96$

Table 1*Summary of Hypothesis Results*

No	Hypothesis	Result
H1	There is a significant and positive relationship between student experience and alumni engagement.	Supportive
H2	There is a significant and positive relationship between the external environment and alumni engagement.	Supportive
H3	There is a significant and positive relationship between networking opportunities and alumni engagement.	Supportive

Discussion and Conclusion

This study looked at three factors that influence alumni engagement taking the School of Business and Economics, Universiti Putra Malaysia as a case study. All three important variables were discovered to have a positive influence on alumni engagement in higher education. The findings showed that there is a significant and positive relationship between student experience and alumni engagement. Undergraduate students stressed the need of creating strong links with students and alumni for higher education programs to strategically expand and succeed. Given the good and encouraging student experience, alumni can stay in touch and grow their professional networks throughout the world even after they leave university to pursue their jobs. This benefits the institutions by providing mentorship opportunities and improved rates of job placement (Obukhova & Lan, 2013). Additionally, organizations may collaborate with alumni to collect funds for scholarships and other school improvements thus creating a good student experience for existing students in return. The student experience is usually the phase of the student lifecycle in which institutions make the most direct contact with students (Clark & Hordosy, 2019). The findings matched prior research findings that student experience positively and significantly influences students through alumni engagement (Saraeh et al., 2018).

The study showed a significant and positive relationship between the external environment and alumni engagement. Alumni are more likely to feel connected with their alma mater and more motivated to give back if the external environment is encouraging for them. For instance, if the economy is strong and there are plenty of job opportunities, alumni are more likely to be employed in high-paying jobs, making more money available to donate to their alma mater and more time to assist (Bruggink & Siddiqui, 1995). Moreover, it is easier for graduates to maintain ties with their former universities when the external environment is supportive. This is because alumni would be able to participate in more events and activities when following events at the university is simpler.

Usually, stronger alumni groups that routinely plan events exist in locations where many graduates reside. This facilitates communication between graduates and the university. A satisfying external environment makes alumni more likely to be proud of their alma mater (David & Coenen, 2014). This is owing to the school's success and positive impact on the world. As a result of their pride, alumni may be more motivated to assist their alma mater and are more inclined to support it if the school is well-ranked or produces successful graduates through active engagement (Starace, 2012).

The study also found a significant and positive relationship between networking opportunities and alumni engagement. The networks assist in making resources and opportunities available, which may then be exploited to attain professional success. Alumni can utilize networks and contacts to their benefit while seeking and interpreting information about the

ecosystems that they are interested in (El-Awad et al., 2022). That is why networking opportunities provided by universities have a substantial impact on alumni engagement. When alumni have the chance to interact with one another, they may share their skills and experiences, provide professional advice, and provide support. This can result in higher levels of alumni satisfaction, generosity, and volunteerism. According to the literature, networking possibilities given by education institutes are likely to keep alumni involved, resulting in a sense of belonging to their alma mater (David & Coenen, 2014; Drezner & Pizmony, 2021; Fugate, 2019).

Being involved with their former university is also important given the alumni networks may serve as a valuable resource for job seekers, allowing them to connect with potential employers, share job opening information, and seek career development advice from others (Obukhova & Lan, 2013). Furthermore, these networks offer possibilities for professional development by learning from the experiences of other graduates, serving as a mentee or mentors, and developing social relationships with their colleagues in the area. To conclude, the networking opportunities given by universities are beneficial for alumni, institutes, industries, and current students.

This study makes a number of important theoretical and contextual contributions to the body of knowledge. The study addresses the issue of scarcity of studies on alumni engagement in higher education institutes in the context of Malaysian universities by providing a unique perspective from the undergraduate students' standpoint. Theoretically the study makes an important contribution by confirming the effect of students' experience, external environment and networking opportunities on alumni engagement. The findings are of great importance for universities that want to capitalize on the alumni engagement as resource for development.

References

- Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods*: Oxford university press.
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*: Guilford publications.
- Bruggink, T. H., & Siddiqui, K. (1995). An Econometric Model of Alumni Giving: A Case Study for a Liberal Arts College. *The American Economist*, 39(2), 53-60.
- Burns, A. C., & Bush, R. F. (2003). *Marketing Research: Online Research Applications* (4th ed.): Prentice Hall.
- Clark, T., & Hordosy, R. (2019). Undergraduate experiences of the research/teaching nexus across the whole student lifecycle. *Teaching in Higher Education*, 24(3), 412-427.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*, 3rd ed. Thousand Oaks, CA, US: Sage Publications, Inc.
- David, A., & Coenen, F. (2014). Alumni Networks - An Untapped Potential to Gain and Retain Highly-Skilled Workers? *Higher Education Studies*, 4. doi: 10.5539/hes.v4n5p1
- Drezner, N. D., & Pizmony, L. O. (2021). I belong, therefore, I give? The impact of sense of belonging on graduate student alumni engagement. *Nonprofit and Voluntary Sector Quarterly*, 50(4), 753-777.
- Ebert, K., Axelsson, L., & Harbor, J. (2015). Opportunities and challenges for building alumni networks in Sweden: a case study of Stockholm University. *Journal of Higher Education Policy and Management*, 37(2), 252-262. doi: 10.1080/1360080X.2015.1019117
- El-Awad, Z., Gabrielsson, J., Pocek, J., & Politis, D. (2022). Unpacking the early alumni engagement of entrepreneurship graduates. *Journal of Small Business Management*, 1-34. doi: 10.1080/00472778.2022.2125979

- Fisher, J. F., & Price, R. (2021). Alumni Networks Reimagined: Innovations Expanding Alumni Connections to Improve Postsecondary Pathways. *Clayton Christensen Institute for Disruptive Innovation*.
- Fugate, J. B. (2019). *Life After Graduation: Current Seniors' Perceptions of Alumni Engagement and Their Expectations of the Institution Once They Graduate*: University of South Florida.
- Gray, J. A., & DiLoreto, M. (2016). The effects of student engagement, student satisfaction, and perceived learning in online learning environments. *International Journal of Educational Leadership Preparation*, 11(1), n1.
- Griffin, M. M., & Steinbrecher, T. D. (2013). Large-Scale Datasets in Special Education Research. In R. C. Urbano (Ed.), *International Review of Research in Developmental Disabilities* (Vol. 45, pp. 155-183): Academic Press.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Third Edition ed.): Sage publications.
- Hair, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106-121. doi: 10.1108/EBR-10-2013-0128
- Hamid, O. (2021). *A Faculty-Based Approach to Engaging University Alumni. The Organizational Improvement Plan at Western University*. Retrieved from <https://ir.lib.uwo.ca/oip/191>
- Hanusz, Z., & Tarasińska, J. (2015). Normalization of the Kolmogorov–Smirnov and Shapiro–Wilk tests of normality. *Biometrical Letters*, 52(2), 85-93.
- Helgesen, U. D., & Nasset, E. (2007). What accounts for students' loyalty? Some field study evidence. *International Journal of Educational Management*, 21, 126–143. doi: 10.1108/09513540710729926
- Hoyt, J. E. (2004). Understanding alumni giving: Theory and predictors of donor status. *Online submission*.
- Hummel, R. (2010). *Factors influencing alumni connection and commitment*. Lethbridge, Alta.: University of Lethbridge, Faculty of Arts and Science, c2010.
- Johnson, W. B. (2015). *On being a mentor: A guide for higher education faculty*: Routledge.
- Jonbekova, D., Serkova, Y., Mazbulova, Z., Jumakulov, Z., & Ruby, A. (2023). How international higher education graduates contribute to their home country: an example from government scholarship recipients in Kazakhstan. *Higher Education Research & Development*, 42(1), 126-140. doi: 10.1080/07294360.2021.2019200
- Obukhova, E., & Lan, G. (2013). Do job seekers benefit from contacts? A direct test with contemporaneous searches. *Management Science*, 59(10), 2204-2216.
- Okunade, A. A., & Berl, R. L. (1997). Determinants of Charitable Giving of Business School Alumni. *Research in Higher Education*, 38(2), 201-214. doi: 10.1023/A:1024933720131
- Parimala, V., & Jayesh, S. (2023). Alumni Engagement in Higher Education Institutions: Perspectives from India. In W. Dr. Lee & W. Dr. Sharon (Eds.), *Higher Education - Reflections From the Field - Volume 3* (pp. Ch. 17). Rijeka: IntechOpen.
- Samani, S. (2016). Steps in Research Process (Partial Least Square of Structural Equation Modeling (PLS-SEM) A Review). *International Journal of Social Science and Business*, 1, 55-66.
- Saraeh, U. N., Rahman, N. I. A., Noordin, N., Ramlan, S. N., Ahmad, R., & Sakdan, M. F. a. (2018). *The influence of students' experience on alumni giving in Malaysian Public Educational Institution*. Paper presented at the MATEC Web of Conferences.

- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (Eight ed.): Pearson.
- Starace, M. D. (2012). *Transforming nomads into settlers: A study of community college alumni engagement efforts in Pennsylvania*: University of Pennsylvania.
- Wendler, C., Bridgeman, B., Cline, F., Millett, C., Rock, J., Bell, N., & McAllister, P. (2010). The path forward: The future of graduate education in the United States. *Educational Testing Service*.