

KEY DRIVERS OF ACADEMIC SUPPORT SYSTEM IN HEIs: ANALYSIS FROM STUDENTS' PERSPECTIVES IN OMAN

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Abstract Academic support is a key topic of discussion in the area of higher education and students' academic performance. It refers to a variety of instructional modules, learning-based resources, and educational services to enable their academic success. Strategies, courses, and practical learning sessions are being implemented in colleges these days to enhance the academic support provided to students. The same is witnessed in the case of higher education institutions in the Sultanate of Oman. This study seeks to identify the drivers of academic support in higher education institutions in Oman and thereafter suggest a model to enhance the effectiveness of academic support interventions for students of higher education institutions in Oman. The study adopted a structured questionnaire with a mix of close-ended and open-ended questions involving 750 students selected randomly from 15 higher education institutions in Oman. The statistical approach included descriptive analysis, along with major findings from the qualitative surveys. The study found face to face education with a continuous academic support system as a top priority for students of HEIs.

Keywords: Academic Support System, Drivers of Academic Support, Higher Education Institutions, Oman, Academic Support Intervention, HEI Students

JELs: D83, I0, I2, O53, P46

INTRODUCTION

About Higher Education Institutions (HEIs) in Oman

It has been aptly remarked that “to educate is to enlighten,” and the most efficient and effective way to self-development or national progress lies in education (Baporikar, 2013, p. 140). This phenomenon has been well understood now a days in most countries but with the effect of globalisation, the world is dawning over this realisation. The Sultanate of Oman, an oil-rich nation situated in the Persian Gulf, has around 35 universities and colleges, including one public university: Sultan Qaboos University. In fact, higher education in Oman has evolved after the founding of Sultan Qaboos University, the country's only public university. All

Omani students have access to higher education paid for by the government. Private higher education is also provided and is continuing to expand to meet the increasing demand for qualified labour. Currently, the number of HEIs in Oman seeking affiliations and partnerships with American or European universities is increasing.

This active and rapid expansion of Oman's education system has resulted in outstripping the capacity of the higher education system. This dilemma has created a serious challenge for authorities to maintain the quality of the educational services provided. To address the need to enhance the quality of higher education in terms of teaching, research, student enrolment numbers, facilities and services, the Ministry of Higher Education, Research, and Innovation (MoHERI) established Oman Academic Accreditation Authority (OAAA) in 2001 (OAAAQA, 2022). As their main aim is “guiding and supporting the education sector in

Oman to meet the relevant national priorities and objectives while maintaining internationally benchmarked standards”, OAAA developed and shared the criteria on which HEIs are audited and ranked in Oman.

A key aspect of HEIs’ performance evaluation is the academic support services to students. There is mounting evidence that higher education must address the basic academic needs of students by providing a comprehensive set of student support services and programs commonly run by units referred to as Academic Support Centers (ASCs). These centers have a variety of names including learning resource centers, services for students, academic achievement services, and student support centers. Despite differing names, they all have the same mission, which is to help students identify and achieve their academic goals (UNESCO, 2009).

About the Academic Support System

Academic support is a pivotal topic of discussion in higher education and students’ academic performance. It refers to the variety of instructional modules, learning-based resources, and educational services to enable their academic success. A number of strategies, courses, and practical learning sessions are being implemented in colleges these days to enhance academic support provided to students (Carney-Crompton & Tan, 2002). The same is witnessed in the case of Omani higher education institutions. ASCs play a crucial role in the educational success of students. Their role varies from one institution to another, from private to public, and from one region to another. There is no standard operational structure for ASCs in Oman. In most cases, each HEI decides how to structure the ASC. For this reason, their services could vary from one institution to another. The academic advice services, however, are generally very well established and equipped in all HEIs and each institution is responsible for the service of advice to the students that is guided through the system of advisers (supervisors). It is the ASCs and their services that differ greatly from one institution to another in terms of function and structure.

Providing academic support to higher education students is important for several reasons. Firstly, it amplifies students’ academic success and enhances their learning experience (Penn-Edwards & Donnison, 2011). Secondly, it contributes to reduce university dropout rates and enhances their overall experience in the university through building an academic, social and emotional connection with the university (Chappell et al., 2015; O’Connor et al., 2015). Thirdly, it helps to prepare the students for active participation in society, particularly in the workforce (Eshbach, 2020; UNESCO, 2002). Lastly, academic support strategies inculcate important values in students by addressing problems and important policies and help them meet their academic, emotional, and personal development needs (Ciobanu, 2013; Borsato & Alves,

2015). In short, ASCs are instrumental to retention and graduation effort, and often serve as the institution’s central resource for such initiatives (Chen, 2005). Student support centers are not fully functioning in all HEIs in Oman, as the educational role of ASCs is not yet clearly understood. However, wherever ASCs are functioning, their personnel may include 1 to 5 people depending on the composition of the services provided. A senior member of staff is assigned responsibility for the management and development of ASC services (Deursen, 2000).

ASCs across different Higher Education Institutions (HEIs) provide various services. They all usually offer tutoring and small group learning sessions in different academic areas. With the support of these academic support services, students are able to excel academically and develop skills that promote lifelong learning through critical thinking. These services are designed to enable and empower students to focus deeper on their studies and their personal growth and maturation, both cognitively and emotionally. Additionally, these services are aimed to achieving in greater student learning outcomes (UNESCO, 2009). The academic support services provided in some HEIs in the country include, but are not limited to, some services listed:

- One-on-one and small group tutoring sessions for different courses.
- Seminars that focus on a variety of topics.
- Workshops and presentations for students on topics such as time management, testing strategies, learning styles, and study skills.
- Small group learning sessions for students.
- Mentoring opportunities for students that promote personal and academic growth.

According to OAAA (2016), “the range and extent of student services for a particular institution may vary according to the mission and the nature of the student population”. These support services should be carefully planned as an integrated element in instruction and instructional support. Student Support Services ought to provide useful learning experiences for students, ensuring that they are responsive to students perceived academic needs (Lassen et al., 2006). HEIs have the responsibility to ensure fair and equitable provision for all students. The structure and ways through which student support centers provide their services are, as expected, heavily dependent on factors such as size, budget, and institutional mission, among others (Ofori & Charlton, 2002). Despite the significance of the student services offered by ASCs in Oman, it can be argued that in most Omani higher education institutions, ASCs are far from reaching their full potential. Due to this and many other factors, there is an urgent need to identify the drivers of academic support in colleges in Oman to enhance the effectiveness of academic support interventions for HEIs in Oman.

Objectives

- Understand the scope of the academic support system in HEIs in Oman.
- Identify the key drivers of the academic support in HEIs in Oman.
- Analyse the academic support drivers from the perspective of HEI students of Oman.

Significance of the Study

The present study aims to identify the drivers of the academic support in the colleges of Oman. While higher education implements some form of academic support there are few issues with this (Ofori & Charlton, 2002). One concern is many teachers have questioned whether is the support system just one educational “fad” that will come and go? Many times, teachers feel a load when something else is added to their days. They begin to think, will this work, how long are we going to take up this work? Another challenge is the time spent during academic support apart from regular teaching hours. The amount of time that is required to take this academic support successfully. This is a system, that if successfully planned and ran, can potentially increase student achievement (Hunter & White, 2004). The study explores and identifies types of academic support that would be beneficial to the students at the beginning of the college or if it is something that is more of a nuisance.

The academic support system aims for active intervention at various learning stages, especially at the entry-level so that overall satisfaction can be generated with education experience at the tertiary level, leading to the creation of intrinsic motivation and sustaining motivation levels throughout the tertiary education process (Wilks, 2008). Moreover, the study has implications for Oman’s economy as it would develop an effective education system which has appropriate academic support facilities for the students which can eventually result in the better outcome on part of the students. The study is also to see if there are any significant benefits with academic support system or not from student’s perspective.

Benefits to Oman

Oman’s focused efforts towards enhancing its education sector and expanding the education provisions, academic support activities have resulted in increased student enrolments. Student body has exhibited a noticeable trend towards increased engagement with their learning. Moreover, the initiatives have focused on the importance of quality and the relevance of teaching and learning. The improvement in the quality of the student’s learning outcomes will have

two major benefits for the economy of Oman. Firstly, is that it will help create a culture of high standards and could simultaneously help in developing the pedagogical capacity of the teaching force (Madiha Al-Shaibani, 2012). A student body that takes ownership for their study, results in increased quality of academic performance, leading to the creation of a body of motivated and critical thinking workforce, which, in turn, leads to high-performing organisations that can compete effectively in a global business environment. For instance, Sohar University in Oman has a full-fledged academic support system with the objectives like providing holistic co-curricular support for students; enhance academic as well as interpersonal skills by organising activities and events; adequate support to at-risk students to improve their academic performance; promote peer tutoring initiatives among students and, empower students for running student-led initiatives (*Student Academic Support Unit | Sohar University | Oman*, n.d.). Similarly, Oman College in Oman has Academic Support Services Committee (ASSC) that is subordinated to the Academic Affairs Committee. The committee is required to plan, deploy, and review all related issues to academic support services provided by the college to the students; library, academic, teaching and learning resources, and technologies. It is to assist in achieving the institutional key performance indicators related to academic support services (*Academic Support Services Committee | Oman College of Management & Technology*, n.d.).

LITERATURE REVIEW

Academic Support System

The significance of academic support for students has been studied by Penn and Donnison (2011). According to authors, academic support improves students’ academic capability and thereby reduces the dropout rate. It helps in building social and emotional connections with the university (Chappell et al., 2015; O’Connor et al., 2015). The concept of student services or academic service is paramount in the area of higher education and students’ academic performance, especially when a student develops a vision for his career growth and personal development. These support services contribute to the quality of student’s learning experience, followed by their academic success (Ping, 1999). According to The Trends IV (S & C, 2005) report, “when redesigning the curriculum that focuses on the students, the institutions should take into consideration the fact that they need more guidance and counselling in order to find their individual academic paths in a more flexible educational environment.”

A study by Hill et al. identified the quality of teaching/ learning and support systems for students as crucial factors in service systems (Hill et al., 2003). Therefore, the support system is important, and sometimes it poses challenges to

management due to the increasing number of students and their needs. They also support the management to reduce the university dropout rate and increase the diversity of students' experiences (Wagenaar & Tinto, 1988). An essential role of such kind of academic support is to ready students for active participation in society. They also contribute to elevated learning possibilities and community involvement through organising or promoting internships, experiential devices and alumni interactions included in the curricula (Ghalth, 2002). The organisation gives college students a sequence of values by way of addressing decisions, problems, and policies (Das & Bhattacharya, 2015). Of all the services available to students, the most critical are those which meet their academic, development, personal and emotional development (McInnis, 2004). Studies argue on evidence of the discrepancy in the range of services for students that are

declared officially and their accessibility and practical use (Dhillon et al., 2008). For instance, ambiguity on the role of the faculty member and inconsistency in terms of its support only suggests that there is a need to review the practical role that it plays (Kinzie & Hurtado, 2017). The main challenges facing student services are globalisation in higher education, lack of network resource professionals, insufficient funding, diverse needs, and growth requirements due to increased mass enrolment in higher education. Colleges generally support the importance of student life outside classrooms (Gresk & Niehaus, 2019).

UNESCO outlines with a policy document on the main responsibilities for student academic services and academic institutions. The main essence of the document is provided below (International Association of Student Affairs and Services, 2022).

Table 1: Role of Academic Support System in HEI's

In Relationship with Academic Institutions	In Relationship with Students
<ul style="list-style-type: none"> ● Inculcate values, mission, and policies of the institution. ● Participates in leadership and decision-making process. ● Evaluates experiences of students and leads to efficiency. ● Awareness of policies and programs that contribute to campus safety. ● Encourages student's participation in institutional governance. ● Provision of services such as admissions, registration, counselling, financial aid, health, housing, and so on. ● Represents the institutional resource to work with students individually or in groups. ● Encourages student-college interaction through programs and activities. ● Contributes to the creation of ethnic and cultural diversity. ● Takes a leadership role in crisis situations. ● Active intellectually and professionally. ● Maintain working relationships with the local community. 	<ul style="list-style-type: none"> ● Assists students in the transition to university life. ● Clarify their values. ● Development of relationships of friendship and a sense of belonging to a campus community. ● Identifying financial aid resources in further education. ● Create opportunities to expand the cultural and aesthetic horizons of students. ● Assistance in sorting personal and group conflicts. ● Special programs and services for students who have learning difficulties.

Source: UNESCO, International Association of Student Affairs and Services, 2022, last accessed, 26 February 2022.

However, a noble gap exists between expectations and achievements. Students' expectations, operational pressures, access, demands for services, and technology costs have the biggest impact so far. Further, it also poses the vital question, are we seeing students as customers of higher education, or as learners? Authors argue that student support services are a crucial element in this environment for learning and keeping pace with fast changing society (Huijser et al., 2021). Oman's focused efforts towards improving its education sector and expanding the education provisions, academic support activities have significantly

resulted in increased student enrolments and the student body has exhibited a noticeable trend towards increased engagement with their learning. Further, the initiatives have focused on the importance of quality and the relevance of teaching and learning. The improvement in the quality of the student's learning outcomes will have two major benefits for the economy of Oman. The first is that it will help create a culture of high standards and could simultaneously support in developing the pedagogical capacity of the teaching force (Shaibany, 2016). Sangeetha (2021) in her paper attempts to explain the macro and the micro perspectives behind

student dropouts from education. The author collected and analysed secondary data followed by qualitative research at a private educational institution in Oman. The findings were investigated using Gilbert's Behavioural Engineering Model. The results indicated that personal, academic, and financial reasons contribute to the majority of student dropouts. These can be effectively detected, measured, and addressed by putting in place proper institution-wide systems and partnerships and by offering contextually relevant academic and student support services. Al Ghanboosi and Al Qahtani (2013) conducted a comparative study of student drop out at SQU of Oman and Kuwait University and found that the male students have a higher tendency of dropping out of their studies, than the female students. At colleges that are scientifically oriented, the drop-out numbers are even higher. Even the students with higher school GPA have a large drop-out rate. At Kuwait University, freshmen and sophomores tend to have higher drop-out rate than the other students, while at SQU the rates are higher in senior and junior years. However, the reasons that cause students with higher GPAs to drop-out, as well as the reasons behind the higher male students drop-out numbers were not included.

Student services are established as key drivers of many academic systems. Mass recruitment into higher education has diversified student populations. In developing nations, students from underprivileged groups, women, youth, and religious minorities have now the opportunity to study at a higher level (Al-Humaidi, 2015). A student body taking responsibility of their study, results in increased quality of academic performance, leading to the creation of a body of motivated and critical thinking workforce, which, in turn, leads to high performing organisations that can compete effectively in a global business environment (Janmaat, 2020). Continuous concern is necessary to ensure success in higher education. Without effective student services, students that do not have an academic, emotional, and social connection with the institution at a cultural level are more likely to give up their studies. The section on results and findings would throw more light with facts, with special reference to how important is services of academic support for students of higher education in Oman.

Drivers of Academic Support System

Numerous studies have been conducted in the past to identify drivers of academic support in HEIs. One such driver is the implementation flexible learning mode in order to enhance student engagement and interaction with peers (Taylor & Parsons, 2011; Cassidy et al., 2016; Kariippanon et al., 2019; Robinson & Taylor, 2014; Madriaga, 2012). Another such driver is the quality of teaching practice over the online and face to face formats, as it greatly affects students' attendance and attrition levels

(Friedman, Rodriguez & McComb, 2001; Light, 2001). Yet another important driver of academic support is the cost of education, as higher costs lead to a greater burden on the students to find part-time employment (Krause et al., 2005; Allen & Seaman, 2008; "First-year student experience: HE Academy/Lancaster University/Liverpool Hope University, UK," 2007). Ciobanu (2013) in her research emphasises that academic services are influenced by the values and beliefs of the employed staff, the policies of the institution, and by the content of the curriculum. Drivers like supporting and enhancing academic, social and welfare support from first contact through to becoming alumni were recognised as critical for success of higher education (Audin et al., 2003). The NASPA report identifies the student's service division as the engine for their growth and development during the academic experience (NASPA Foundation, 2021). The working pattern of academic services changes from country to country. In some nations these are part of university management (merged into a student services department) in others, such as France, they are outsourced to specialised organisations (Schulze & Ding, 2012). One of the key drivers of academic services is to help students transition into adulthood. It helps in keeping up with the emotional well-being of a student. This life stage requires more personal autonomy and adjustment to academic performance prospects while balancing economic and social needs. Although university life provides opportunities, surveys explain that higher education institution students face unique personal challenges. Some of them also have reported and/or faced diminished self-esteem demonstrating as the imposter syndrome (Holden et al., 2021; Parkman, 2016). The WHO World Mental Health International College Student Initiative has stressed the high need for emotional and mental health care among university students (Auerbach et al., 2018; Ebert et al., 2019; Ballester et al., 2020).

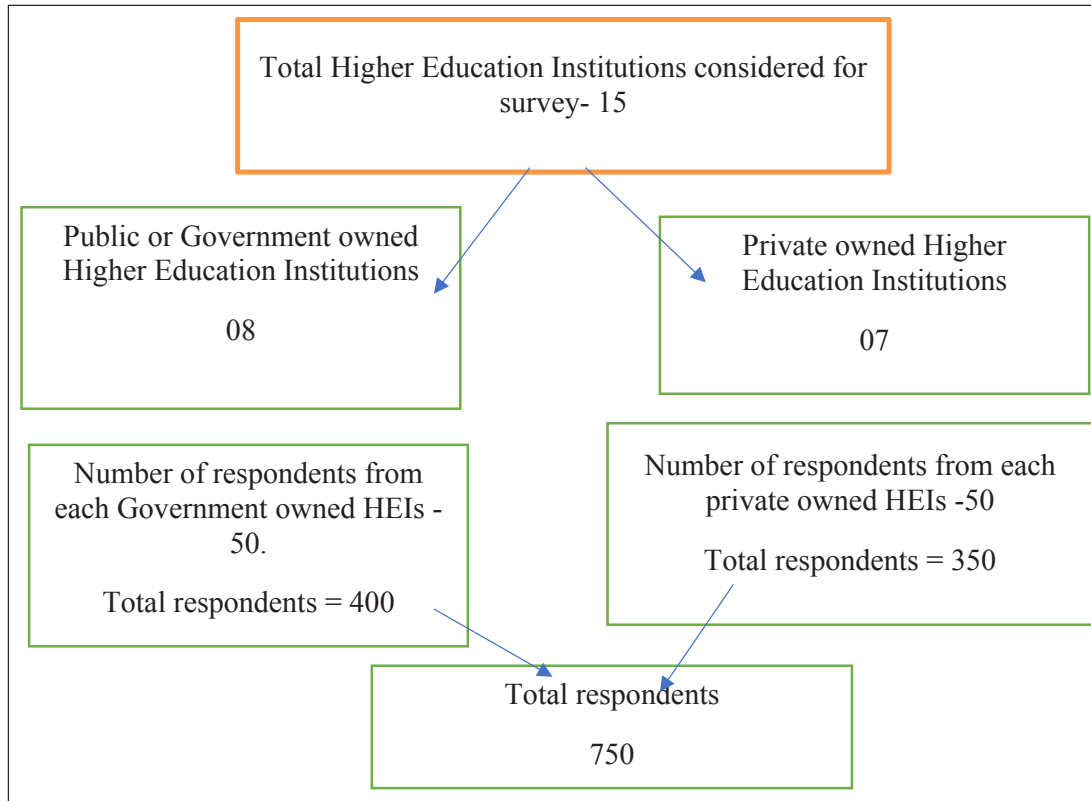
METHODOLOGY

The methodology of the study adopted was a structured questionnaire survey. The questionnaire comprised both qualitative and quantitative questions using a Likert scale at 5 points. We aimed qualitative survey questions to extract information that is not easily quantifiable, such as feelings, behaviours, and motivations for making a choice. Respondents are given the freedom to express what led them to these decisions by asking open-ended questions. Student attitudes, habits and challenges were also included in open-ended questions. We used these questions to gain information about the frequency, likelihood, and ratings of instruments of the academic support system. Likert scale was used for the same.

Pre- and post-test analysis was used to understand and identify the drivers of the academic support in HEI's in

Oman. This comparative test, conducted on the same respondents helps the researcher to check the preparedness and the performance of the students before and after the implementation of the drivers of the academic support. The

respondents consisted of full-time students having active student status during the survey period of April 2021 to December 2021. The below flow chart provides the sample design.



Source: Developed by authors.

Fig. 1: The Sample Design Chart

RESULTS AND DISCUSSIONS

A survey with the closed-ended questionnaire was conducted with fifteen prominent higher education institution students to progress the analysis to identify the academic drivers of the educational institutions in Oman. This questionnaire was with three sections such as Section A has six demographical questions, Section B has questions from seven to fourteen describing the academic background of the participants (pre-academic support system) and Section C contains questions related with post academic support system utilisation responses (Table 2). So, a total of twenty-two questions, out of which five multiple answers questions, four short answer questions and three Likert scale questions were presented. A total of seven hundred and sixty-four responses were collected. This information was analysed using the tool IBM SPSS Statistics (V28). The findings related to each question such as frequency of each variable, graphical representation, and statistical data such as the arithmetic average (mean),

median, maximum, and minimum of each of the categorical variable are discussed in this section. Additionally, the cross-table relationship between the independent variables and the correlations between the categorical variables are also tabulated.

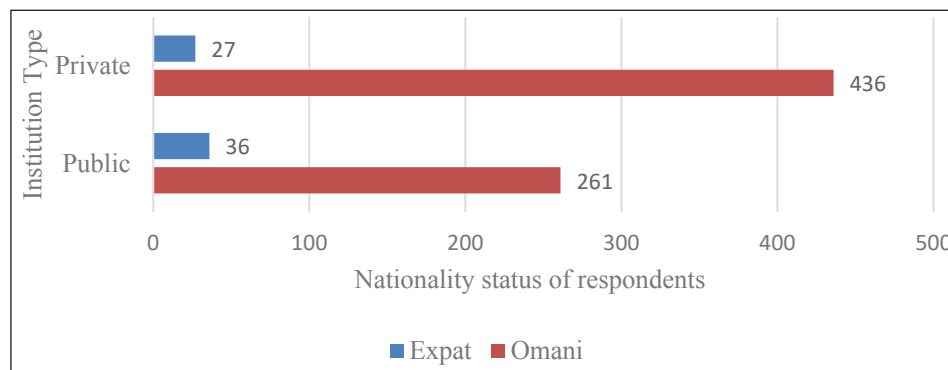
Table 2: Demographic Distribution of Respondents by Age Group and Gender

Age Group	Female	Male	Grand Total
16-18	51	24	75
19-21	254	75	329
22-24	126	30	156
25-27	33	19	52
28-30	14	21	35
31 and above	36	77	113
Grand Total	514	246	760

Source: Primary data collected by authors (May 2021-Dec 2021), Oman.

Table 3: Demographic Distribution of Respondents by Institution Type and Nationality

Institution Type	Expat	Expat %	Omani	Omani %	Grand Total	Total %
Private	27	42.9	436	62.6	463	60.9
Public	36	57.1	261	37.4	297	39.1
Grand Total	63	100.0	697	100.0	760	100.0

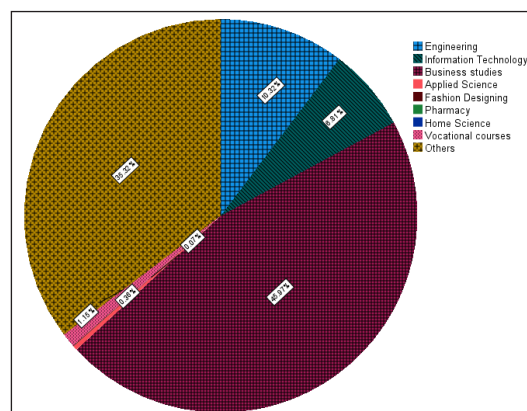
**Fig. 2: Institution Type and Nationality Status****Table 4: Demographic Distribution of Respondents by Age Group and Nationality**

Age Group	Omani	Omani %	Expat	Expat %	Grand Total
19-21	291	41.8	38	60.3	329
22-24	143	20.5	13	20.6	156
31 and above	109	15.6	4	6.3	113
16-18	67	9.6	8	12.7	75
25-27	52	7.5	0	0.0	52
28-30	35	5.0	0	0.0	35
Grand Total	697	100.0	63	100.0	760

The survey's first question pertained to Gender, with options for Male (33%) and Female (67%). This indicates that the highest percentages of female participants were involved in the survey. The age group which was defined as a scaled variable is converted to an ordinal variable in order to get the frequencies in percentage. There are six such as 16 – 18, 19 – 21, 22 – 24, 25 – 27, 28 – 30, 30 and above were included. The ranges for the ordinal variable are from 0 to 5 respectively. The frequency distribution of each option was determined as shown in Table 1 and Table 3.

Fig. 2, it is observed that the majority of the respondents were from the age group of 19 to 21 and its percentage is 42.75%. The lowest percentage of respondents were received from the age group 28 to 30 and the corresponding percentage value is 5.33% (Table 4). The nationality of the respondents was identified with the options such as Omani and Expats in question number five. The frequency of this nationality is depicted in Fig. 2. The figure illustrates that the majority of the participants were nationals. Consequently, the survey responses were qualitatively highly efficient for deciding the

utilisation of academic support system in pre- and post-level in the higher educational institutions in Oman (Table 5).

**Fig. 3: Frequency of Specialisation of HEI Students**

The third question in the survey queried the field of study to which participants belonged. This variables comprised nine

options, ranging from Engineering to Vocational courses (Table 6). These are measured as nominal variable and the order is from 0 to 8. The frequency of this categorical variable is illustrated in Fig. 3. It indicates that the highest rate of responds was received from students who have opted

for business studies as their major subject, i.e., 45.97% and the lowest frequency of 0.07% belongs to the students who were taken home science as their major subject of interest in the survey (Fig. 4).

Table 5: Age Group and Specialisation

Age Group	Business Studies	Not Responded	Engineering	Information Technology	Vocational Courses	Fashion Designing	Applied Science	English Language	Grand Total
16-18	27	29	12	6	1				75
19-21	127	132	40	22	2	3	2	1	329
22-24	76	48	13	19					156
25-27	16	25	2	9					52
28-30	20	12	3						35
31 and above	61	16	29	6				1	113
Grand Total	327	262	99	62	3	3	2	2	760

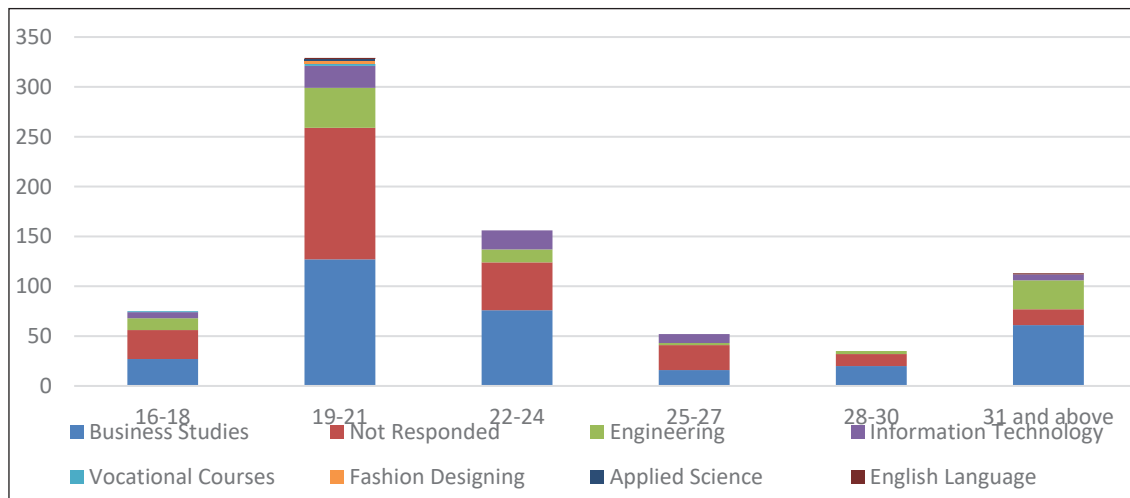


Fig. 4: Age Group and Specialisation

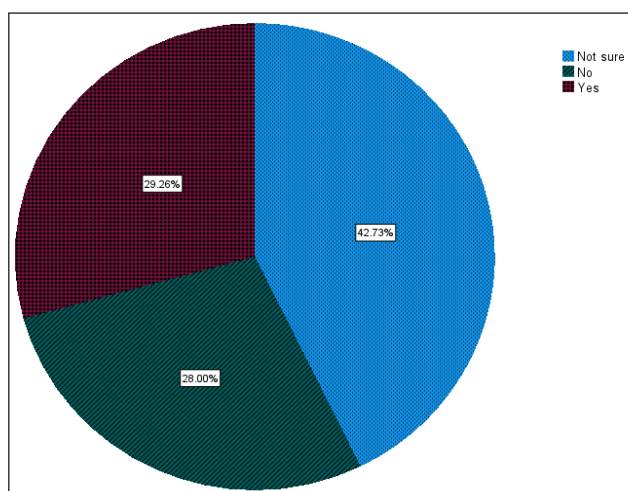
Table 6: Specialisation and Type of Institute

Specialisation	Private	Private %	Public	Public %	Grand Total	Grand Total
Business Studies	194	41.9	133	44.8	327	43.0
Not Responded	154	33.3	108	36.4	262	34.5
Engineering	63	13.6	36	12.1	99	13.0
Information Technology	46	9.9	16	5.4	62	8.2
Vocational courses		0.0	3	1.0	3	0.4
Fashion Designing	3	0.6		0.0	3	0.4
Applied Science	1	0.2	1	0.3	2	0.3
English Language	2	0.4		0.0	2	0.3
Grand Total	463	100.0	297	100.0	760	100.0

Table 7: Specialisation and Type of Institute

Specialisation	Female	%	Male	%	Grand Total	%
Business Studies	225	43.8	102	41.5	327	43.0
Not Responded	181	35.2	81	32.9	262	34.5
Engineering	60	11.7	39	15.9	99	13.0
Information Technology	38	7.4	24	9.8	62	8.2
Vocational courses	3	0.6		0.0	3	0.4
Fashion Designing	3	0.6		0.0	3	0.4
Applied Science	2	0.4		0.0	2	0.3
English Language	2	0.4		0.0	2	0.3
Grand Total	514	100.0	246	100.0	760	100.0

Questions 6 to 8 were given for short answers and the response were grouped in distinct categories (Table 7). The frequency distribution of these answers is presented in the frequency table (Appendix-A). Additionally, the usage of academic support system was assessed in question number 11 and the frequency of these response is illustrated in Fig. 5.

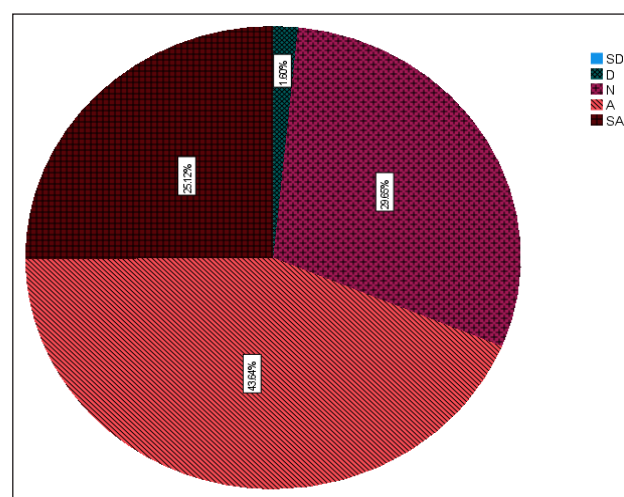
**Fig. 5: Frequency of the Use of Academic Support System**

From the above figure, it is clearly analysed that the highest percentage, 42.73% shows that the participants were not sure about the academic support systems used in their institutions. However, 235 participants (29.26%) have selected the use of academic support system for their educational purposes. The academic support system was not used in the institutions and is indicated by 200 out of 760 participants. This indicates that awareness about the importance of academic support systems should be made among students.

Questions 15 to 17 were analysed using the Likert scale since each question was provided with the different number of subdivisions and the frequency response of each question as a sample is described below. The fifteenth question assessed whether the use of learning materials increases the

effectiveness among students. This question was included under the post academic support system utilisation responses, with the scales ranging from Strongly Disagree to Strongly Agree. The frequency distribution is illustrated in Fig. 6.

The majority of the respondents agreed with the statement that the use of learning materials improves the students' academic performance, and the corresponding frequency in percentage is given as 43.64% and 29.66% of participants were neutral about the statement. Additionally, 1.6% of participants disagreed that instructional modules increase the effectiveness among students. The relationship between the Resource-Based Learning (RBL) and the increase in student efficiency and involvement within the institution was checked in question 16 with the scale ranging from Strongly disagree to Strongly agree.

**Fig. 6: Frequency of Effectiveness among Students by Instructional Modules**

The frequency distribution in percentage is shown in Fig. 7. It is observed that 203 participants (25.8%) strongly agreed that RBL can increase student efficiency and involvement. The majority of participants, comprising 379 were agreeing that there is a correlation between RBL and the increase

in student efficiency and involvement. Its corresponding frequency is 49.80%. Also, there is disagreement among 10 participants about this statement.

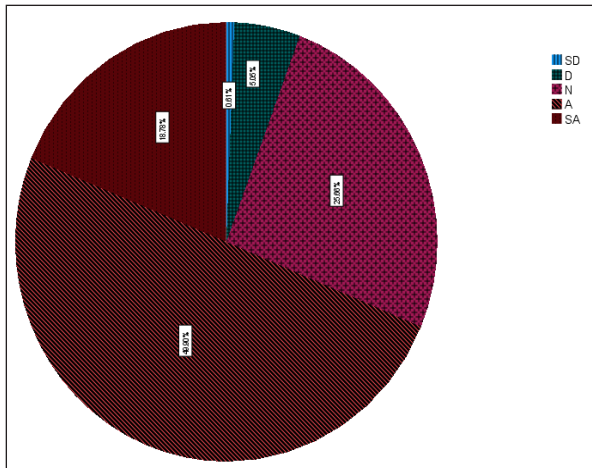


Fig. 7: Frequency of RBL and Student Involvement

The positive effect of involvement in practical learning sessions on students' skill development was evaluated, with the five options ranging from strongly disagree to strongly agree. The pie chart illustrates the frequencies in percentage is presented in Fig. 8. It indicates that, 238 participants strongly agreeing that the involvement of practical learning sessions positively affects the student skill development and its frequency in percentage is 31.54%. The number of participants agreeing with the statement is 342 out of 760. The least number of participants i.e., 19 strongly disagree to the statement.

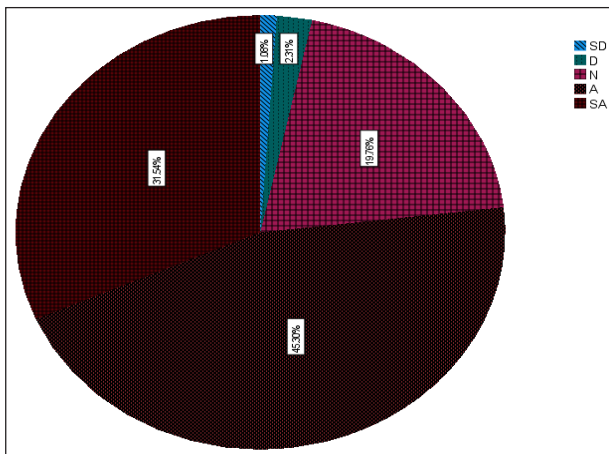


Fig. 8: Frequency of Involvement of PLS Affects Student Development Skill

The nineteenth question aimed to gather views on the statement that, the preference of academic support system changed during the pandemic with three options such as yes, no, and not sure. The graphical representation of the

frequencies in percentage is shown in Fig. 9. From the figure, it is evident that 42.76 % have accepted that the preference of academic support system changed during the pandemic. Additionally, 35.80% of participants were unsure about this. The least percentage, i.e., 21.44% of participants, did not accept the statement.

The comfortability of the online mode of academic support system was assessed in twentieth question with five options. The frequency distribution of these options is illustrated in Fig. 10. The majority of participants, i.e., 291 agreed to have the online classes and 75 participants were against the statement. The corresponding frequencies are 39.3% and 10.53% respectively. The number of participants who preferred to go back to the face-to-face interaction was 165. This shows the efficiency of the traditional teaching method followed by the higher educational institutions. The need for a full-time office for academic support was checked in the twenty-first question of the survey. The options such as yes, no, and not sure were given. The frequency of these options in percentage is shown in Fig. 11.

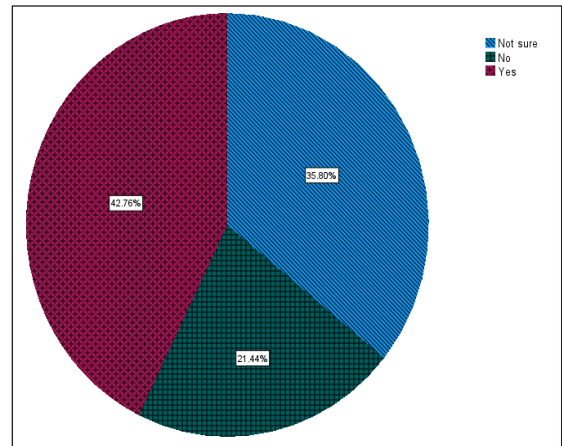


Fig. 9: Frequency of Preference for ASS Changed during Pandemic

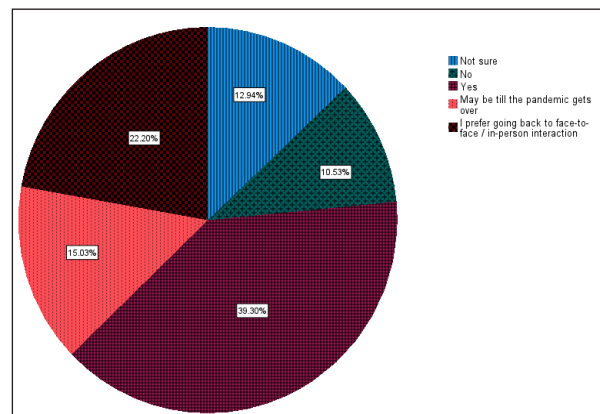


Fig. 10: Frequency of Comfortable with Online Mode of ASS

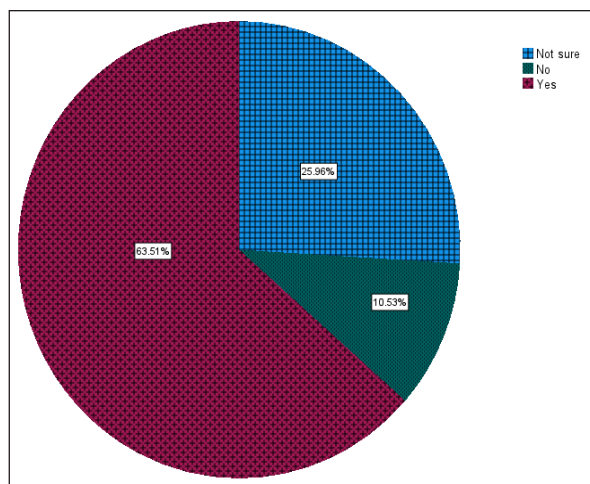


Fig. 11: Frequency of Setting an Office for Academic Support

CONCLUSION

Academic support plays a vital role in higher educational institutions and in students' academic performances. The key drivers of academic support systems in the higher educational institutions were identified through the survey given to the academic students both in public and private institutions. The responses received from the students were categorised into three sections namely: student demographic information, pre-academic support system utilisation responses and post-academic support system utilisation responses. From the demographical information, it is noted that 67.6% of female Omani students in the age group of 19-21 with Business studies (43.3%) as their major area of interest had the highest percentage of responses. These students are mainly from the private (60.9%) institutions in the Muscat region (56.7%).

The pre-academic support system utilisation responses were collected from the survey, which has the initial question as which institution and department the students have enrolled in. The assignments were mainly used as an educational resource in the higher educational institution. This indicates the students' involvement with their academic performance as independent learners. The next highest level of educational resource was assigned for the combination of case studies and assignments. Online teaching was used wherever there was a need to connect with the student beyond their college hours. The next priority was given to the combination of technological devices such as projectors, computers, online resources, and online teaching used by the teachers since the face-to-face education system was not possible due to the pandemic situation. This indicates the need for effective use of technological devices for the improvement of academic performance of students.

The outcomes of the academic support system in the institution are highly observed for the Instructional modules. The next level of outcome is assigned to the learning-based resources. The method in which the academic support system helps the students was indicated by the highest range for all the options such as revisiting the concepts, theories, problems, etc. The next priority is given to the creation of a supportive learning environment. The important factors behind the adoption of academic support system are identified with the highest percentage for all the options, from amplifying students' academic success to learning improves students' confidence level and made them more efficient. The post-academic support system utilisation responses were analysed using the Likert scale. The given ordinal variables were converted to scaled variables and the descriptive measures were calculated. The academic support system in terms of instructional modules can increase effectiveness among students, which was identified with the descriptive measures such as Mean 2.78, Median 2.80, Variance 0.32, Standard deviation 0.57, Minimum 1.30, and Maximum 4.00. RBL can increase the student's efficiency and involvement within the organisation was indicated with the Mean 2.92, Median 3.00, Variance 0.41, Standard deviation 0.64, Minimum 1.00, and Maximum 4.00. The involvement of practical learning sessions in higher educational institutions affects the student skill development positively was noticed with the Mean 2.86, Median 2.90, Variance 0.34, Standard deviation 0.59, Minimum 0.9, and Maximum 4.00. These descriptive measures indicate the importance of using the instructional modules, resource-based learning, and the practical learning sessions in the higher educational institutions and the positive effects on student academic performances. The normality test among these three scaled variables was tested, and the positive results were identified. This illustrates the strong relationships between these variables.

The face-to-face education system was highly preferred as the mode of academic support system. The college web portal is also chosen for the mode of education in some educational institutions. The preference for academic support system had changed during COVID-19 pandemic was mainly agreed by the participants. The comfortability with online mode of academic support system was also agreed by majority of participants. The next higher priority provided for going back to the face to face or in-person interaction. This shows the importance of traditional academic support systems. The involvement of a separate office for academic support at full time was agreed to by the participants. The training opportunities were mainly expected as the main academic support from the student side. The cross-table between the independent variables and Chi-square tests between these variables were conducted to indicate the strong association between the variables. The statistical measures of the

independent variables were calculated and tabulated. The positive correlation coefficient between the variables of 2 x 2 table specified the significant relationships between the variables.

RECOMMENDATIONS

The kind of academic support expected from students' side has very less percentage for the extracurricular activities, clubs, and private tutoring. From this we can infer that the introduction of a student support center and a student welfare committee through which improved communication and discussion about the services for student success in their education can be achieved. The mode of support i.e., distance education was chosen by 0.5% of participants, from this we can infer that the implementation of an online support system with latest artificial intelligence concepts can be attempted in order to make the distance education more interactive. It is recommended to implement extended service hours to understand student difficulties in education and provide remedies, to allow re-entry students with proper communication system since it was given with the percentage of 0.7%. The majority of the students were not aware about the academic support system in their institution and hence it is important to conduct student development centre programs connected with academic support services by the trained faculty which will make the students aware about the academic support system.

For effective support services, it is advised to implement peer tutoring, peer mentoring, and peer study groups. The formation of cooperative learning groups in the higher educational institution support centers will develop positive effects on multiple student outcomes, academic achievement, and social development among students. The social responsibility among students can be achieved by conducting internship projects, workshops, and seminars in the organisations. This may also increase their communication skills and their language ability. The academic performance of students can be achieved with a strong relationship with academic staff. From the survey, we can infer that more attention is needed for all the students without any exception. Training, and technical support must be provided on the latest job trends and the introduction of a mechanism to understand the student's educational challenges will help to provide a remedial solution. Also, it is important to introduce tutorial classes and additional coaching classes as part of the support centers' services.

REFERENCES

Academic Support Services Committee | Oman College of Management & Technology. (n.d.). Retrieved August 9, 2023, from <https://www.omancollege.edu.om/>

- academic-support-services-committee
- Al Ghanboosi, S. A., & Al Qahtani, A. A. (2013). Student drop-out trends at Sultan Qaboos University and Kuwait University: 2000-2011. *College Student Journal*, 47(3).
- Al-Humaidi, S. (2015). Student-Centered Learning at Sultan Qaboos University: EFL Students' Perceptions. *International Journal of Education*, 7(3), 194. doi:<https://doi.org/10.5296/ije.v7i3.8403>
- Allen, I. E., & Seaman, J. (2008). *Staying the course: Online education in the United States*. Needham: The Sloan Consortium.
- Audin, K., Davy, J., & Barkham, M. (2003). University quality of life and learning (UNIQLL): An approach to student well-being, satisfaction, and institutional change. *Journal of Further and Higher Education*, 27(4), 365-382. doi:<https://doi.org/10.1080/0309877032000128073>
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623-638. doi:<https://doi.org/10.1037/abn0000362>
- Ballester, L., Alayo, I., Vilagut, G., Almenara, J., Cebrià, A. I., Echeburúa, E., Gabilondo, A., Gili, M., Lagares, C., Piqueras, J. A., Roca, M., Soto-Sanz, V., Blasco, M. J., Castellví, P., Mortier, P., Bruffaerts, R., Auerbach, R. P., Nock, M. K., Kessler, R. C., & Jordi, A. (2020). Mental disorders in Spanish university students: Prevalence, age-of-onset, severe role impairment and mental health treatment. *Journal of Affective Disorders*, 273, 604-613. doi:<https://doi.org/10.1016/j.jad.2020.04.050>
- Baporikar, N. (2013) '21st century higher education trends in Sultanate of Oman' in P. O. de Pablos & R. D. Tennyson (Eds.), *Strategic Role of Tertiary Education and Technologies for Sustainable Competitive Advantage*, Information Science Reference, Hershey USA, viewed 06 November 2019. doi:<https://doi.org/10.4018/978-1-4666-4233-1.ch006>
- Borsato, F. P., & Alves, J. de M. (2015). Student assistance in higher education in Brazil. *Procedia - Social and Behavioral Sciences*, 174, 1542-1549. doi:<https://doi.org/10.1016/j.sbspro.2015.01.786>
- Carney-Crompton, S., & Tan, J. (2002). Support systems, psychological functioning, and academic performance of nontraditional female students. *Adult Education Quarterly*, 52(2), 140-154. doi:<https://doi.org/10.1177/0741713602052002005>
- Carney-Crompton, S., & Tan, J. (2002). Support systems, psychological functioning, and academic

- performance of nontraditional female students. *Adult Education Quarterly*, 52(2), 140-154. doi:https://doi.org/10.1177/0741713602052002005
- Cassidy, A., Fu, G., Valley, W., Lomas, C., Jovel, E., & Riseman, A. (2016). Flexible learning strategies in first through fourth-year courses. *Collected Essays on Learning and Teaching (CELT)*, 9, 83-94.
- Chappell, S. L., O'Connor, P., Cairen Withinton, M. A., & Stegelin, D. A. (2015). *A meta-analysis of dropout prevention outcomes and strategies*.
- Chen, J. J.-L. (2005). Relation of academic support from parents, teachers, and peers to Hong Kong adolescents' academic achievement: The mediating role of academic engagement. *Genetic, Social, and General Psychology Monographs*, 131(2), 77-127. doi:https://doi.org/10.3200/mono.131.2.77-127
- Chen, J. J.-L. (2005). Relation of academic support from parents, teachers, and peers to Hong Kong adolescents' academic achievement: The mediating role of academic engagement. *Genetic, Social, and General Psychology Monographs*, 131(2), 77-127. doi:https://doi.org/10.3200/mono.131.2.77-127
- Ciobanu, A. (2013). The role of student services in the improving of student experience in higher education. *Procedia - Social and Behavioral Sciences*, 92, 169-173. doi:https://doi.org/10.1016/j.sbspro.2013.08.654
- Das, R., & Bhattacharya, S. D. (2015). College psychotherapy at an Indian Technical Education University's Student Counseling Center. *Journal of College Student Psychotherapy*, 29(2), 90-93. doi:https://doi.org/10.1080/87568225.2015.1008359
- Deursen, C. K., & Robert V. (2000). The fight against professional obsolescence should begin in the undergraduate curriculum. *Medical Teacher*, 22(2), 160-163. doi:https://doi.org/10.1080/01421590078580
- Dhillon, J. K., McGowan, M., & Wang, H. (2008). How effective are institutional and departmental systems of student support? Insights from an investigation into the support available to students at one English university. *Research in Post-Compulsory Education*, 13(3), 281-293. doi:https://doi.org/10.1080/13596740802346472
- Ebert, D. D., Mortier, P., Kaehlke, F., Bruffaerts, R., Baumeister, H., Auerbach, R. P., Alonso, J., Vilagut, G., Martínez, K. U., Lochner, C., Cuijpers, P., Kuechler, A., Green, J., Hasking, P., Lapsley, C., Sampson, N. A., & Kessler, R. C. (2019). Barriers of mental health treatment utilization among first-year college students: First cross-national results from the WHO World Mental Health International College Student Initiative. *International Journal of Methods in Psychiatric Research*, 28(2), e1782. doi:https://doi.org/10.1002/mpr.1782
- Eshbach, B. E. (2020). Supporting and engaging students through academic library programming. *The Journal of Academic Librarianship*, 46(3), 102129. doi:https://doi.org/10.1016/j.acalib.2020.102129
- First-year student experience: HE Academy/Lancaster University/Liverpool Hope University, UK. (2007). *Education + Training*, 49(4). doi:https://doi.org/10.1108/et.2007.00449dab.004
- Friedman, P., Rodriguez, F., & McComb, J. (2001). Why students do and do not attend classes. *College Teaching*, 49(4), 124-133. doi:https://doi.org/10.1080/87567555.2001.10844593
- Ghaith, G. M. (2002). The relationship between cooperative learning, perception of social support, and academic achievement. *System*, 30(3), 263-273. doi:https://doi.org/10.1016/s0346-251x(02)00014-3
- Gresk, R., & Niehaus, E. (2019). Supporting students globally in higher education: Trends and perspectives for student affairs and services. *Journal of Student Affairs Research and Practice*, 56(3), 349-351. doi:https://doi.org/10.1080/19496591.2018.1545661
- Hill, Y., Lomas, L., & MacGregor, J. (2003). Students' perceptions of quality in higher education. *Quality Assurance in Education*, 11(1), 15-20. doi:https://doi.org/10.1108/09684880310462047
- Holden, C. L., Wright, L. E., Herring, A. M., & Sims, P. L. (2021). Imposter syndrome among first- and continuing-generation college students: The roles of perfectionism and stress. *Journal of College Student Retention: Research, Theory & Practice*, 152102512110193. doi:https://doi.org/10.1177/15210251211019379
- Huijser, H., Kek, M. Y. C. A., & Padró, F. F. (2021). Introduction: Student support services in an overall ecology for learning. *Student Support Services*, 1-8. doi:https://doi.org/10.1007/978-981-13-3364-4_49-1
- International Association of Student Affairs and Services. (2022). *The role of student affairs and services in higher education*. doi:https://unesdoc.unesco.org/ark:/48223/pf0000128118
- Janmaat, J. G. (2020). School social segregation and social inequalities in political engagement among 16 to 20 year olds in fourteen countries. *Research Papers in Education*, 1022. doi:https://doi.org/10.1080/02671522.2020.1789716
- Kariippanon, K. E., Cliff, D. P., Lancaster S. J., Okely, A. D., & Parrish, A.-M. (2019). 'Flexible learning spaces facilitate interaction, collaboration and behavioural engagement in secondary school, *PLoS ONE*, 14(10).
- Kinzie, J., & Hurtado, S. S. (2017). Taking advantage of student engagement results in student affairs. *New Directions for Student Services*, 2017(159), 35-46. doi:https://doi.org/10.1002/ss.20225

- Krause, K., Hartley, R., & James, R. (2005). *The first year experience in Australian universities: Findings from a decade of national studies*. Canberra: Department of Education, Science and Training.
- Lassen, S. R., Steele, M. M., & Sailor, W. (2006). The relationship of school-wide positive behavior support to academic achievement in an urban middle school. *Psychology in the Schools*, 43(6), 701-712. doi:https://doi.org/10.1002/pits.20177
- Light, R. (2001). *Making the most of college: Students speak their minds*. Cambridge: Harvard University Press.
- Madiha Al-Shaibani (2012). *Education in oman the drive for quality* (pp. 1-297). The world bank,
- Madriaga, D. M. (2012). The vision of the student engagement and experience journal. *Student Engagement and Experience Journal*, 1(2). doi:https://doi.org/10.7190/seej.v1i2.47
- McINNIS, C. (2004). Studies of student life: An overview. *European Journal of Education*, 39(4), 383-394. doi:https://doi.org/10.1111/j.1465-3435.2004.00192.x
- NASPA Foundation. (2021). *Home*. Retrieved from www.naspa.org. doi:https://www.naspa.org
- O'Connor, P., et al. (2015). *A meta-analysis of dropout prevention outcomes and strategies*. Norfolk. Retrieved from https://www.odu.edu/content/dam/odu/offices/tcep/docs/meta-analysisofdropoutcomes-strategies-chappelletal2015.pdf.
- Ofori, R., & Charlton, J. P. (2002). A path model of factors influencing the academic performance of nursing students. *Journal of Advanced Nursing*, 38(5), 507-515. doi:https://doi.org/10.1046/j.1365-2648.2002.02212.x
- Parkman, A. (2016). The imposter phenomenon in higher education: incidence and impact. *Journal of Higher Education Theory and Practice*, 16(1). doi:https://articlegateway.com/index.php/JHETP/article/view/1936/1836
- Penn-Edwards, S., & Donnison, S. (2011). Engaging with higher education academic support: A first year student teacher transition model. *European Journal of Education*, 46(4), 566-580. doi:https://doi.org/10.1111/j.1465-3435.2011.01501.x
- Ping, C. J. (1999). An expanded international role for student affairs. *New Directions for Student Services*, 1999(86), 13-21. doi:https://doi.org/10.1002/ss.8602
- Robinson, C., & Taylor, C. (2014). Ethics and student engagement: Exploring practices in higher education. *Student Engagement and Experience Journal*, 3(2). doi:https://doi.org/10.7190/seej.v3i2.107
- Reichert, S., & Tauch, C. (2005). *Publications*. Retrieved from http://www.eua.be/eua/jsp/en/upload/TrendsIV_FINAL.1117012084971.pdf
- Sangeetha, J. (2021). *Towards a synthesis of the perspectives on student dropouts in Oman*. Retrieved from https://www.saudijournals.com/media/articles/JAEP_511_350-356.pdf
- Schulze, L. N., & Ding, A. (2012). Alternative justifications for academic support III: An empirical analysis of the impact of academic support on perceived autonomy support and humanizing law schools. *SSRN Electronic Journal*. doi:https://doi.org/10.2139/ssrn.1999767
- Shaibany, S. (2016, January 23). *Higher education student dropout rate in Oman is a cause for concern*. Times of Oman. Retrieved from http://timesofoman.com/article/75995/Opinion/Highdropout-rate-of-students-from-Oman
- Stuart Hunter, M., & White, E. R. (2004). Could fixing: Academic advising: Fix higher education. *About Campus: Enriching the Student Learning Experience*, 9(1), 20-25. doi:https://doi.org/10.1177/108648220400900103
- Student Academic Support Unit | Sohar University | Oman. (n.d.). Retrieved August 9, 2023, from doi:https://www.su.edu.om/en/facilities-and-services/academic-support-service
- Taylor, L., & Parsons, J. (2011). Improving student engagement. *Education*, 14(1).
- UNESCO. (2002). *The role of student affairs and services in higher education: A practical manual for developing, implementing, and assessing student affairs programs and service*. Paris.
- UNSECO. (2009). *Student affairs and services in higher education: global foundations, issues and best practices - UNESCO Digital Library*.
- Wagenaar, T. C., & Tinto, V. (1988). Leaving college: Rethinking the causes and cures of student attrition. *Contemporary Sociology*, 17(3), 414. doi:https://doi.org/10.2307/2069700
- Wilks, S. E. (2008). Resilience amid academic stress: The moderating impact of social support among social work students. *Advances in Social Work*, 9(2), 106-125. doi:https://doi.org/10.18060/51