Factors affecting university image among undergraduate students: the case study of qatar university

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Abstract: Worldwide there is an increase in competition between higher education institutions seeking to ascertain their position in the world ranking, resulting in universities introspectively reflecting on their image and student satisfaction. This is especially the case in the Gulf Cooperation Countries, where there has been significant growth in higher education institutions. This study examines the factors that influence Qatar University’s image among undergraduate students and predicts factors impacting students’ satisfaction, influencing the university’s image. Results from 2,618 students’ responses to a 57-item student satisfaction questionnaire indicate that the university’s services are factors that influence students’ view of QU, and the students’ satisfaction directly contributes to a positive perception of Qatar University. The impact of university services on students’ perception of QU is further discussed based on gender, nationality, student classification, and major.
1. Introduction

Competition among higher education institutions, especially universities, is rapidly increasing, forcing universities to compete to attract the brightest applicants internationally and locally. In effect, universities strive to create engaging academic environments through favorable rules and cultural setups for faculty and students to improve their brand images (Bunzel, 2007; Mazzarol et al., 2000; Melewar & Akel, 2005; Williams & Omar, 2014). This indicates that higher education institutions portray characteristics similar to corporate, creates a need for universities to know their key stakeholders’ perceptions of the university.

Various factors influence the perception of higher education institutions. In particular, critical determinants of any universities’ brand include service quality, university facilities and the direct student satisfaction with services therein (Helgesen & Nesset, 2007). Service quality is the perceived quality of campus functions such as teaching, tolerance to diversity and connections to industry (El Alfy & Abukari, 2020). The university facilities such as classrooms, laboratories and student residences also affect universities’ image. Moreover, other concurrent factors are at play influencing a university’s vision, hence marking it as a complex construct that ought to be measured using several concomitant factors (Duarte et al., 2010). Alves and Raposo (2010) assert that the image construct’s complexity is because individuals perceive organizations through different factors. Therefore, studying the factors influencing a university’s image requires a comprehensive approach.

The image or brand of a university is important. Therefore, it is essential for education leaders and planners, university professors, and administrators to understand students’ views of the university and behavior to develop and implement strategies that develop student satisfaction and, in turn, can positively affect the university’s image (Alves & Raposo, 2010; Elsharnouby, 2015). Since few studies examine the factors that affect Qatar University’s image among undergraduate students, this research explores the relationship between marketing and higher education by examining the various factors that affect Qatar University’s (QU) image among undergraduate students.

The structure of the article is as follows. A comprehensive literature review is provided that addresses essential areas related to university image. Next, the context of the study is explained through the research methodology, including the objectives, questions, and hypothesis. This is followed by elaboration on the research model, questionnaire description, sample characteristics, and data collection. The partial least squares path model (PLS-PM) is then addressed, followed by discussing the results.

2. Literature review

2.1. Corporation brand image: the university context

Organizations acknowledge that benefits emanating from reputation and image are critical for survival, which means that a good reputation among stakeholders is seen as reputational capital (Luoma-Aho, 2007). Corporate images dictate how the external and internal public perceive organizations and determines the level of satisfaction (Luque-Martinez & Del Barrio-Garcia, 2009). Sung and Yang (2008) found that corporate image is essential for attracting the potential public, enhancing satisfaction, and developing loyalty.

Currently, universities adopt models of marketing parallel to those of corporate entities. However, universities’ methodological approaches in public image branding are unique from
business organizations because they incorporate service-oriented features (Patián Pérez & Martínez Torres, 2017). Universities have recently adopted new models of branding that amplify their academic position and describe the ideological foundations that guide the organization. The multidimensionality of the public image complicates the scholarly discussions on the relevance of the new paradigms, mainly as they apply to the university marketing strategies.

University’s image has been defined by Duarte et al. (Duarte et al., 2010, p. 23) as “the sum of all beliefs an individual has towards the university.” While Arpan et al. (Arpan et al., 2003, p. 100) defined it as “various beliefs about a university that contribute to an overall evaluation of the university.” According to Del-Castillo-Feito et al. (2019), “university reputation” and “university image” are related constructs that come with differences. Reputation results from maintaining a consistent behavior/image, whereas the image results from communication campaigns modified and managed in a more effortless manner and in a shorter period of time. This leads to the conclusion that image can affect reputation, and reputation will result from maintaining a positive image over time.

Image development and management have become a critical element in higher education institutions (Brown & Mazzarol, 2009; Duarte et al., 2010). The public image also emerged as an instrumental medium to offer the students insight into the university, what it stands for, and what it can offer the applicants. Accordingly, the need to differentiate themselves from other institutions amid the increasing competitiveness of higher learning institutions and an emerging desire for universities to create an impression on potential applicants has driven this new interest in public image. Thus, brand imaging is fundamental to the institution's overall performance to attract the best scholars worldwide and achieve optimum student enrollment. This has triggered a shift in the universities' organizational strategic marketing approaches.

The university’s position in the modern learning environment is heavily dependent on the reputation that the image creates. Foroudi et al. (2019) note that public image forms a core part of its priority areas of marketing to help build a competitive advantage. The new paradigm is driven by various factors, including the competition for high-value applicants and high student turnover rates (Baturino et al., 2019; Plungpongpan et al., 2016).

2.2. Factors influencing university image

Many factors impact a university’s image. Kazoleas et al. (2001) and Arpan et al. (2003) reported seven factors that significantly affect university image. These include the overall image, education quality, program image, teaching and research emphasis, financial aims, environmental factors, and sports programs. Luque-Martínez and Del Barrio-Garcia (2009) reported that the factors that held the most substantial impact on the formation of university image are the university’s presence on the internet and society’s enhancement of administrative processes. Gutman and Miaoulis (2003) provided guidelines and classified the influences into four categories: academic, institutional, social, and personal.

This research identifies the impact of service quality as perceived by university students through the Student Satisfaction Survey. Alves and Raposo (2010) declared that students’ satisfaction could be viewed as a process investigating how university image impacts cognitive or emotional satisfaction. Their study demonstrated that student satisfaction in higher education is directly and significantly affected by the university image. This result is also proved in multiple other studies where the university image is one of the variables that have a significant impact on the formation of students’ satisfaction (Beerli Palacio et al., 2002). In another study by Manzoor and Mahmud (Manzoor et al., 2020), a successful university image can lead to students’ satisfaction and loyalty. Students' perspective and satisfaction can be determined as an evaluation and effective response that is resulted from their experience of educational and other services over time.

Therefore, this study is concerned with analyzing students’ perception and satisfaction toward the significant factors that influence the overall image of QU. The current research addresses five
areas: academic services, student services, university environment, administrative services, information technology (IT) services, and student characteristics and demographics.

2.3. Academic services
Students have expectations and desires associated with the academic services provided by institutions. Thus, one can infer that students will be satisfied and perceive the institute's overall right image if their expectations are met (Mattah et al., 2018). Academic services are vital to the overall image of the university. The availability of academic resources like libraries, laboratories, relevant IT facilities, lectures, and seminar halls (Prasad & Jha, 2013) all impact a university's image. For example, academic library facilities have been shown to impact the students' success and learning behavior in higher educational institutes (Scoulas & De Groote, 2019). Several studies explore the impact that the quality of library services has on student satisfaction, retention, and student academic performance (Einston, 2016, 2017; Trivedi & Bhatt, 2020). Results demonstrate that the library services are vital to the university image and the success of the student.

Yang et al. (2013) discussed that the classrooms' attributes and qualities of the lecture halls impact student satisfaction and the institute's image as a whole. Moreover, other academics related facilities like accurate financing, scholarships, and resolution of administrative issues are essential for maintaining a good image for the institute (Alemu & Cordier, 2017).

The academic reputation of college and university faculty members, such as professors and tutors, determines students' educational choices (Gafoor & Ashraf, 2012; Paden & Stell, 2006). Researchers report that the teachers are a vital resource for the universities, and their efficacy and effectiveness impact student satisfaction and university image (Malinen & Savolainen, 2016). Students hold high expectations for teacher expertise (Butt & Rehman, 2010). The students' perceived image is also affected by university directors' attitudes and behavior (Alessandri, 2001; Duarte et al., 2010). Paden and Stell (2006) highlight that the nature of the relationship between students and the academic staff affects their perception of the university image.

2.4. Student services and university environment
Scholarly studies reveal that university environments' physical and psychological factors actively influence students' perception of their image because they determine the student services' delivery quality. The physical environment can be defined as the university size (Arpan et al., 2003; Duarte et al., 2010), while others define it in terms of appearance and wealth of student facilities (Belanger et al., 2002; Khanna et al., 2014). According to Arpan et al. (2003), Duarte et al. (2010), and Soutar and Turner (2002), the psychological environment means the pleasant university climate that impacts students' perception of the university's image.

Furthermore, academic and career advisors are appointed in universities to help in students' intellectual and social development (Uddin & Johnson, 2019). These advisors facilitate the students in decision-making regarding their academic and career-related choices, solve problems and issues faced on campus, and identify and set goals in their academic and professional lives (Hatch & Garcia, 2017; Johnson et al., 2019; Swecker et al., 2013). Studies report that such advising services are essential for increasing the satisfaction levels in higher education institutes (Miller, 2018; Zhang et al., 2019) and improving the university's overall image.

The recreational and sports facilities available on campus offer the students an opportunity to participate in activities that can keep them fit or some other form of activities that they may prefer (Mokoena & Dhurup, 2017). These facilities play an essential role in students' overall satisfaction with the higher educational institute experience and the campus life experience (Schmidt et al., 2017), which is why higher education institutions today are striving to increase recreational and sports activities for the students. A consistent finding in the literature regarding recreational services is that the active participation of a university in the provision of services that are linked to recreation and sports can influence the retention of students and the overall experience that is
associated with the institute, improving its brand image in the market (Kim et al., 2016; Powers et al., 2019).

2.5. Administrative services
Because of competition in higher education, universities and colleges strive to provide the best possible administrative services to improve the institute's image, gain a market advantage, maintain a loyal and satisfied customer base, and improve the institute's image. University administrative services are a single term used to cover a wide variety of services offered to the end-users (Soares et al., 2017).

An essential administrative service provided to students in universities is the foodservice. Saglik et al. (2014) report that food services should be high quality to survive in today's competitive market. The quality of food services has been shown to impact campus life's overall quality (Klassen et al., 2005; Serhan & Serhan, 2019). El-Said and Fathy (2015) suggest that if the students are not satisfied with the on-campus food services, they will naturally opt to go to off-campus sites to meet their needs and negatively impact the university's image as well as earnings. Studies have shown that foodservice quality is an essential and effective tool in improving student satisfaction with on-campus life and improving the university image (Raman & Chinniah, 2011).

Regarding transportation, universities try to reduce their carbon footprint and are opting to use sustainable mobility and transport services (Azzali & Sabour, 2018). These services improve the perception of student satisfaction and can lead to improving the university's image while at the same time conserving the environment. In terms of healthcare facilities, Houtz (2018) reports that university students lead busy campus lives with a multitude of academic, social, and extracurricular activities, and despite having healthcare facilities at their disposal, students tend to ignore them and are not likely to use them and seek preventive care. However, the availability of such services on campus increases the overall quality of life and the institute's image.

Colleges and universities work to provide equal opportunity and a haven for all students. Recent history shows that school shootings and other criminal activities need strict campus security (Carrico, 2016). Dass et al. (2017) explored the impact of reported crime on university enrollments and found a positive correlation among the two variables showing that the perceived campus security can impact the university's image.

The formation of the university image among students is influenced by the university's administrative services delivery plan. A vital administrative service is academic planning, defined as courses and curricula (Duarte et al., 2010; Gafoor & Ashraf, 2012; Kazoleas et al., 2001). More specifically, the authors explain these courses as a pool of academic minor and major courses (Alessandri, 2001; Arpan et al., 2003; Belanger et al., 2002), which are also likely to influence the university image.

2.6. Information technology (IT) services
Worldwide, information technology is vital for the growth of sectors like higher education by making brand-related information accessible to customers to improve the brand's image (Farzin & Fattahi, 2018). IT services are essential for all universities' dimensions since these services support quality teaching, admissions, curriculum-related material, training and workshops, research-oriented information, and the examination and evaluation processes. IT services enable sharing this information between students and service providers through websites, electronic boards, and intranet services (Ikpotokin & Imiefoh, 2017, 2018). Thus, it can be inferred that the IT services in colleges and universities are beneficial for all the involved stakeholders (Aithal & Kumar, 2016) as these services enable the organization to adapt to the changing needs and wants of the students following the latest market trends.

Mahakalkar et al. (2014) concluded that universally. Students’ feelings and perceptions of IT facilities are that IT can be helpful in their learning. IT-enabled learning and teaching
environments have many advantages, such as facilitating better communication and connection between teachers and their students (Bhat & Beri, 2016), leading to increased satisfaction and overall improvement in students' perception of the university's image.

Studies also show that social media presence dramatically enhances the university image (Rutter et al., 2016). Rueda et al. (2017) suggested that social media allows for better connectivity between students, increases collaborative efficiency, and enables teachers to monitor students' activities better. Other advantages of IT services include a speedy exchange of information, availability of services at any time and any place due to internet connectivity, and efficient communication between all stakeholders. Sidrat (2019) conducted a study that concluded that IT services usage contributes to increasing student satisfaction and improving the university's reputation. Studies also link the ease and efficiency of IT services in an institute to the University's IT services (Bhat & Bashir, 2018; Bhat & Beri, 2016). Thus universities should dedicate resources towards establishing IT facilities that are easy to use and freely accessible to students. If students are aware of the benefits that the services bring them and can use them effectively, they are more confident while using these services, which increases the ratio of service usage and improves the perceived image of the University (Kuo et al., 2013).

Suitably designed websites are essential for prompt and transparent dissemination of information in universities. Ahmi and Mohamad (2016) maintain that websites are considerably crucial in disseminating pertinent information to stakeholders. Verkijika and De Wet (2020) note that it is vital for universities to operate highly accessible websites to ensure that all stakeholders can use them effectively. When usability is a priority in university websites' design, the satisfaction of users' expectations and needs is more comfortable (Caglar & Mentes, 2012). Gordon and Berhow (2009) argue that university websites with good interactivity offer novel opportunities for building beneficial rapport with the audience; in other words, universities with dialogic communication features may have more sustainable success in maintaining “positive relationship with students.”

2.7. Student characteristics and demographics
Current research reports that students focus on the university image of their university selection (Osman & Saputra, 2019; Shahsavar & Sudzina, 2017). Reputation and academic quality are considered by students while selecting prospective universities (Lafuente-Ruiz-de-Sabando et al., 2018). The selection mechanism of the university also changes with the discipline or significance of the study. Because STEM courses demand a high level of academic engagement, which affects the university brand image, STEM students tend to examine the level of academic engagement that a university environment has. (Gosiewski et al., 2012).

Upon entering the university, students' satisfaction greatly affects the image. Weerasinghe and Fernando (2017) concluded that the students' satisfaction with the quality of education and other services impacts the university's image. Student satisfaction has also been linked with creating positive brand equity that can lead to increased involvement from the students in the university image creation (Dennis et al., 2016). Researchers have shown that student satisfaction is improved by the quality of services available to them and can further enhance the institute's image (Makanyeza & Chikazhe, 2017).

Moreover, gender and ethnic diversity levels in a university impact its overall brand image and reputation in society. Ethnic minorities face many issues like unequal opportunities, and they tend to balance it out by gaining an adequate level of education (Khattab, 2018). Ethnic diversity in a university can improve its image as it can lead the minorities to feel represented, and the institute gains an image of being culturally and socially responsible. Maestri (2017) found that ethnic diversity in an institute positively impacts the performance of minorities and can lead to improving the overall language proficiency in the university, improving its image due to the improved performance of students.
Finally, performance outcomes of the student body such as GPA, student employability, and the overall career trajectories of the past students lead to impacting the university image, i.e., the student body’s achievements leads to improving the brand equity and the brand image of an institute (Polat, 2011). Student retention and attrition rates also impact the institute’s image (Angulo-Ruiz & Pergelova, 2013; Chandra et al., 2019).

3. Context of this study
Qatar hosts both homegrown and overseas higher education institutions. Some famous homegrown educational institutions in Qatar include Qatar University (QU), Community College of Qatar (CCQ), and Hamad bin Khalifa University (HBKU). Besides, for the 2019–2020 academic year, there were 290 educational programs offered in Qatari higher education institutions (Qatar Ministry of Education and Higher Education, 2020). QU is the most renowned institution among homegrown universities. It was founded in 1973, starting with the education college (Qatar University Timeline, 2020). Currently, the university has ten colleges, 86 programs, about 20,000 students, and 50,000 alumni over its lifetime (Qatar University, 2020a). According to Times Higher Education (2020), QU falls between 301 and 350 in the 2021 World University Rankings and sits 73rd in the 2020 Young University Rankings (Times Higher Education, 2020).

QU’s award-winning campus offers an abundance of student resources to ensure success and stimulating student life. These include academic services such as advising, career development, a student learning support center, and an inclusion and special needs center (Qatar University, 2021a). The Student Affairs Sector and other units and departments offer additional services that include food services, financial aid, a medical clinic, transportation services, a student helpdesk, and others to aid in student success (Qatar University, 2021b). QU also offers numerous student clubs and associations, sports activities, volunteerism and community service, and events and campus activities (Qatar University, 2021c). Finally, to include parents in their students’ education, QU offers various parents support services, including parent online workshops (Qatar University, 2021d).

QU places great emphasis on research and has fourteen research centers hosting over 400 collaborative projects with international research institutions (Qatar University, 2020b). Not to mention, the university’s graduate and research studies department has an ultra-modern research complex that focuses on serving the country and the community through research. This research complex houses international scholars drawn from diverse scientific fields to drive disruptive innovations. QU faces competition from Education City. Established in 1997 and officially inaugurated in 2003, Education City was established as “an elite higher-education center” (Bollag, 2006, p.447). Education City is a multi-university campus that houses top-tier universities from the US and UK (Khodr, 2011). Education city offers numerous resources for students’ social and academic needs. Hence, QU, like other universities and colleges in Qatar, must focus on developing its image.

Given that QU is at the homegrown universities’ pinnacle, it would be essential to understand how undergraduate students perceive the institution and the factors contributing to its image. The image is an aggregative concept of multi-dimensional constructs that result from a combination of different possible image source elements. Therefore, this image requires a simultaneous test that assesses the quality of the measurements and judges the relationship between the several factors at once to obtain meaningful information. The Structural Equation Modelling (SEM) is a multi-item scale that preserves the internal consistency when a set of variables define a specific construct and how these constructs are related to each other (Schumacker & Lomax, 2016). In light of this, the critical aims of this study are as follows.

1. To identify the factors influencing the creation of QU image and their significance.
2. To determine how the Structural Equation Modelling is useful for analyzing the degree to which each factor predicts the student satisfaction, which influences the QU image.
4. Hypotheses development and research model

In the context of Qatar, limited research focused on QU image; El-Kassem (2020) addressed the students’ perception, Shurair and Pokharel (2019) investigated the stakeholders’ point of view, and El-Kassem et al. (2018) examined the parents view toward Qatar University (QU) image. As a result, the intention is to employ the students (effective consumers) insights as they perform different roles (i.e., students, student employees, student club members, volunteers, and representatives in the college boards) in QU to construct a more developed image for attracting more potential students and preserving the optimal percentage of current student retention. They are building positive perceptions of students toward their university yield an increase in the university image, as prospective students heavily rely on the information shared by the current or former students. Wilkins and Huisman (2014) proved that the most significant effect on the university image is the interpersonal sources of information.

This research study also contributes to the existing literature concerning the higher education sector in Qatar from different aspects. Comparing the student satisfaction using demographic factors (gender, nationality, major, student classification, and GPA) and receiving responses from a larger sample size across all colleges/majors to overcome the limitations addressed in the research done by El-Kassem (2020) and El-Kassem et al. (2018). Items in the questionnaire considered the tuition fees and financial aid services/scholarships, which extends the research accomplished by Shurair and Pokharel (2019). The students were asked about the factors that contribute to each of the academic services, students service, career services, support and learning services, academic advising services, counseling services, registration and enrollment services,
technology services, facilities and university environment, security services, food services, health care, and transportation.

Based on the discussion of the factors that generate students' positive perception towards the university image in the existing literature (as illustrated in Figure 1), this research formulated multiple hypotheses as below:

$H_1$: There is a relationship between active administrative feedback and the university image.

$H_2$: There is a relationship between good academic services and the university image.

$H_3$: There is a relationship between quality student services and the university image.

$H_4$: There is a relationship between university administrative services and the university image.

$H_5$: There is a relationship between effective IT services and the university image.
Table 1. Student characteristics

| Gender      |          |
|-------------|----------|
| Female      | 73.6% (1,928) |
| Male        | 26.4% (690)  |
| Nationality |          |
| Nationals   | 41.8% (1,094) |
| Non-Nationals| 58.2% (1,524) |
| Major       |          |
| STEM        | 36.3% (950)  |
| Non-STEM    | 63.7% (1,668) |
| Student Classification | |
| Freshman    | 35.1% (920)  |
| Sophomore   | 25.4% (665)  |
| Junior      | 20.7% (542)  |
| Senior      | 18.8% (491)  |
| Student GPA<sup>o</sup> | M = 2.9  
|             | SD = 0.7     |

<sup>o</sup> Continuous variable.

$H_0$: There is a relationship between student characteristics and the university image.

A conceptual Structural model, Figure 2, was designed to summarize the hypotheses formulated to understand the effect of several factors on the university's image. This model also used several students' characteristic variables, including gender, nationality, student classification, major, and GPA.

5. Methods

As this study explores the factors that determine and measure the university image, the Structural Equation Modeling technique is selected. First, factor analysis is performed to discover how the survey items are grouped into factors. Subsequently, Structural equations with SmartPLS 3 is used to explain the image the students have towards QU.

5.1. Instrument and data collection

The first and possibly most crucial step in reducing non-response bias is to create a properly designed survey. Whether it is conducted online or by phone, the survey design can significantly impact whether a respondent chooses to partake in the survey and to what extent they complete the survey. There are several dimensions of a survey that reduce the non-response rate. The survey should include a personable yet professional introduction, interesting survey content, short survey length, clear and concise wording, practical and appealing incentives, placing multiple follow-ups calls or email reminders on non-respondents, and being mindful of the time, day, or season.

Even after designing a great survey, both item and unit non-response are likely to exist (Hasan, 2018).

As previously mentioned, students are often considered customers as higher education is a business. Therefore, the authors used the data collected by the Student Satisfaction Survey developed and designed by the Institutional Research and Analytics (IRA) Department at QU, which ensured the content validity of the survey. The sampling frame is designed to be the enumeration of undergraduate students in QU through 2017–2018 (excluding students in the foundation program). The data was collected through two stages using the Two-Phase Post-stratified Sampling design created by Hasan (2018) to reduce the non-response bias.
Table 2. Analysis and results tables relative importance index results

| Factors                      | Code | Items                                                                 | RII | Rank |
|------------------------------|------|----------------------------------------------------------------------|-----|------|
| Teaching Support             |      |                                                                      |     |      |
| TS1                          | The level of interaction with faculty members | 0.80 | 32   |
| TS2                          | Availability of faculty during office hours | 0.82 | 30   |
| TS3                          | Consideration of academic individual differences among students by faculty members | 0.75 | 45   |
| TS4                          | Support from Teacher Assistants | 0.78 | 37   |
| Clarity of Supplemental Learning Tools |      |                                                                      |     |      |
| CSLT1                        | Clarity of your study plan | 0.84 | 27   |
| CSLT2                        | Clarity of academic policies and procedures | 0.86 | 21   |
| CSLT3                        | Clarity of course syllabus | 0.83 | 28   |
| CSLT4                        | Clarity and variety of student performance measurements | 0.79 | 34   |
| Library Services             |      |                                                                      |     |      |
| LS1                          | Availability of Library services | 0.95 | 4    |
| LS2                          | Printed resources available in the Library (books, journals, reference books) | 0.94 | 6    |
| LS3                          | Online resources (databases, e-journals, e-books) | 0.92 | 9    |
| LS4                          | Library facilities (e.g., Reading areas, study rooms, computer labs) | 0.95 | 2    |
| LS5                          | Cooperation of Library staff | 0.94 | 7    |
| LS6                          | The Library web site | 0.91 | 11   |
| Administrative Feedback      |      |                                                                      |     |      |
| AF1                          | Usefulness of services provided by Student Call Centre | 0.85 | 25   |
| AF2                          | Effectiveness of social media (Twitter, ….) in responding to the students’ queries | 0.85 | 23   |
| Students’ Activity           |      |                                                                      |     |      |
| AC1                          | Availability of campus activities and events | 0.85 | 22   |
| AC2                          | Participation opportunities in campus activities and events | 0.84 | 26   |
| AC3                          | Quality of recreational activities and events | 0.80 | 33   |
| AC4                          | Participation in extra-curricular activities | 0.77 | 40   |
| Employment Services          |      |                                                                      |     |      |
| EM1                          | Opportunity for leadership training and development | 0.81 | 31   |
| EM2                          | Student Employment services help students to acquire employment skills for the future | 0.90 | 12   |
| EM3                          | Availability of professional development programs at the Career Services Center | 0.89 | 14   |
| EM4                          | Quality of professional development programs at the Career Services Center | 0.82 | 29   |
| Student Support Services     |      |                                                                      |     |      |
| SSS1                         | Availability of Student Learning Support Center services | 0.92 | 10   |
| SSS3                         | The Student Counseling Center—Availability of psychological counseling services in the Student Counseling Center | 0.92 | 8    |
| Registration Services        |      |                                                                      |     |      |
| RG1                          | Registration processes and procedures | 0.79 | 35   |
| RG2                          | The process of internal transfer (changing major within QU and/or from college to another) | 0.76 | 43   |
| RG3                          | Process and procedures of requesting records (ex. Transcripts) | 0.89 | 13   |
| RG4                          | Class change (drop/add) policies | 0.77 | 41   |
Regarding ethical considerations, the researchers received the university’s Internal Review Board (IRB) approval. In phase one, data was collected from the population by sending the survey through email to all undergraduate students. For example, in the 2017 Cycle, the survey was sent to the whole population (roughly 18,000 students). The surveys included consent forms that provide the purpose of the project and all other information required by IRB (QU-IRB 1454-E/21) such as participation in the study is voluntary, individuals may decline answering any question and that names and identities will always remain confidential.

Some students responded to the online survey after up to five reminders. The response rate for this stage was 13.16%. Then the population was partitioned into two subpopulations of 2,101
| Constructs                  | Code | Items                                                                 | SL  | SE  | t    | α   | CR  | AVE | VIF |
|-----------------------------|------|------------------------------------------------------------------------|-----|-----|------|-----|-----|-----|-----|
| **Students Activity**       |      |                                                                        |     |     |      |     |     |     |     |
| 1                           | AC1  | Availability of campus activities and events                         | 0.87| 0.01| 127.76| 0.85| 0.90| 0.69| 2.02|
| 2                           | AC2  | Participation opportunities in campus activities and events           | 0.87| 0.01| 136.41| 0.87| 0.90| 0.69| 2.02|
| 3                           | AC3  | Quality of recreational activities and events                        | 0.82| 0.01| 83.90 | 0.82| 0.90| 0.69| 2.02|
| 4                           | AC4  | Participation in extracurricular activities                          | 0.76| 0.01| 59.52 | 0.76| 0.90| 0.69| 2.02|
| **Students Employment Services** |      |                                                                        |     |     |      |     |     |     |     |
| 5                           | EM1  | Opportunity for leadership training and development                   | 0.75| 0.01| 64.01 | 0.82| 0.88| 0.65| 2.32|
| 6                           | EM2  | Student Employment services help students to acquire employment skills for the future | 0.79| 0.01| 70.72 | 0.82| 0.88| 0.65| 2.32|
| 7                           | EM3  | Availability of professional development programs at the Career Services Center | 0.85| 0.01| 114.84| 0.82| 0.88| 0.65| 2.32|
| 8                           | EM4  | Quality of professional development programs at the Career Services Center | 0.82| 0.01| 84.63 | 0.82| 0.88| 0.65| 2.32|
| **Students Enrollment Services** |      |                                                                        |     |     |      |     |     |     |     |
| 9                           | EN1  | Waiting time to meet the Enrollment Section specialist                | 0.85| 0.01| 78.47 | 0.87| 0.92| 0.80| 1.51|
| 10                          | EN2  | Service’s procedures offered by the Enrollment Services Section specialist | 0.93| 0.01| 177.13| 0.82| 0.88| 0.65| 2.32|
| 11                          | EN3  | Quality of services provided by the Enrollment Services Section specialist | 0.89| 0.01| 109.14| 0.82| 0.88| 0.65| 2.32|
| **Students Registration Services** |      |                                                                        |     |     |      |     |     |     |     |
| 12                          | RG1  | Registration processes and procedures                                | 0.72| 0.02| 42.04 | 0.72| 0.82| 0.54| 1.85|
| 13                          | RG2  | The process of internal transfer (changing major within QU and/or from college to another) | 0.73| 0.02| 41.20 | 0.73| 0.82| 0.54| 1.85|
| 14                          | RG3  | Process and procedures of requesting records (ex. Transcripts)        | 0.74| 0.01| 61.18 | 0.74| 0.82| 0.54| 1.85|
| 15                          | RG4  | Class change (drop/add) policies                                     | 0.74| 0.02| 45.74 | 0.74| 0.82| 0.54| 1.85|
| **Student Support Services** |      |                                                                        |     |     |      |     |     |     |     |
| 16                          | SSS1 | Availability of Student Learning Support Center services              | 0.88| 0.01| 103.76| 0.70| 0.84| 0.73| 1.66|
| 17                          | SSS3 | The Student Counseling Center—Availability of psychological counseling services in the Student Counseling Center | 0.82| 0.02| 54.96 | 0.82| 0.84| 0.73| 1.66|

(Continued)
| Constructs Code | Items | SL  | SE  | t    | α   | CR  | AVE  | VIF |
|----------------|-------|-----|-----|------|-----|-----|------|-----|
| Teaching Support |       |     |     |      |     |     |      |     |
| 18 TS1          | The level of interaction with faculty members | 0.79 | 0.01 | 57.79 | 0.83 | 0.88 | 0.66 | 1.19 |
| 19 TS2          | Availability of faculty during office hours | 0.83 | 0.01 | 96.09 |     |     |      |     |
| 20 TS3          | Consideration of academic individual differences among students by faculty members | 0.81 | 0.01 | 77.40 |     |     |      |     |
| 21 TS4          | Support from Teacher Assistants | 0.80 | 0.01 | 62.08 |     |     |      |     |
| Clarity of Supplemental Learning Tools |       |     |     |      |     |     |      |     |
| 22 CSLT1        | Clarity of your study plan | 0.80 | 0.01 | 70.63 | 0.80 | 0.87 | 0.63 | 1.27 |
| 23 CSLT2        | Clarity of academic policies and procedures | 0.82 | 0.01 | 88.94 |     |     |      |     |
| 24 CSLT3        | Clarity of course syllabus | 0.70 | 0.02 | 46.07 |     |     |      |     |
| 25 CSLT4        | Clarity and variety of student performance measurements | 0.85 | 0.01 | 106.48 |     |     |      |     |
| Library Services |       |     |     |      |     |     |      |     |
| 26 LS1          | Availability of Library services | 0.79 | 0.01 | 56.06 | 0.85 | 0.89 | 0.58 | 1.44 |
| 27 LS2          | Printed resources available in the Library (books, journals, reference books) | 0.79 | 0.01 | 58.73 |     |     |      |     |
| 28 LS3          | Online resources (databases, e-journals, e-books) | 0.77 | 0.01 | 54.94 |     |     |      |     |
| 29 LS4          | Library facilities (e.g., Reading areas, study rooms, computer labs) | 0.74 | 0.02 | 45.26 |     |     |      |     |
| 30 LS5          | Cooperation of Library staff | 0.74 | 0.02 | 42.69 |     |     |      |     |
| 31 LS6          | The Library web site | 0.72 | 0.02 | 45.09 |     |     |      |     |
| IT Services     |       |     |     |      |     |     |      |     |
| 32 IT4          | Availability of wired network bandwidth/speed of internet access | 0.93 | 0.01 | 181.66 | 0.86 | 0.93 | 0.87 | 1.58 |
| 33 IT5          | Performance of wireless network connectivity (speed from your devices i.e. laptops, smartphones, tablets) | 0.94 | 0.01 | 188.46 |     |     |      |     |
| E-Learning Resources |     |     |     |      |     |     |      |     |
| 34 EL1          | Email Services | 0.84 | 0.01 | 76.21 | 0.84 | 0.90 | 0.76 | 1.15 |
| 35 EL2          | Performance of the my Banner service | 0.86 | 0.01 | 73.95 |     |     |      |     |
| 36 EL3          | Performance of the Blackboard System | 0.85 | 0.01 | 66.70 |     |     |      |     |
| Administrative Feedback |     |     |     |      |     |     |      |     |
| 37 AF1          | Usefulness of services provided by Student Call Centre | 0.86 | 0.01 | 93.33 | 0.72 | 0.87 | 0.76 | 2.16 |
| 38 AF2          | Effectiveness of social media (Twitter, ...) in responding to the students’ queries | 0.88 | 0.01 | 130.06 |     |     |      |     |
responses and 13,861 non-responses. Information about response subpopulation was found, and an attempt was made to get some information about the non-response subpopulation of size.

The entire population was partitioned into academic programs as strata to estimate the population mean for these programs to estimate the mean population. A more intensive data collection method was implemented to collect some information from the non-response subpopulation, changing from email to phone in phase I. A simple random sample of size 1,000 is selected from the non-response subpopulation, and then the survey was sent to them by email followed by phone calls including several incentives. Then respondents were post-stratified from this sample into programs. At this stage, the response rate was approximately 50% (517/1,000),

| Constructs Code | Code | Items | SL | SE | t   | α  | CR  | AVE | VIF |
|----------------|------|-------|----|----|-----|----|-----|-----|-----|
| Facilities and General Services | 39   | FG2   | 0.71| 0.02| 42.70| 0.80| 0.86| 0.55| 1.34|
| | 40   | FG3   | 0.73| 0.02| 45.79|    |     |     |     |
| | 41   | FG4   | 0.77| 0.01| 54.25|    |     |     |     |
| | 42   | FG5   | 0.78| 0.01| 55.01|    |     |     |     |
| | 43   | FG6   | 0.71| 0.02| 37.14|    |     |     |     |
| Catering Services | 44   | FD1   | 0.79| 0.01| 67.76| 0.86| 0.90| 0.63| 1.72|
| | 45   | FD2   | 0.85| 0.01| 113.43|    |     |     |     |
| | 46   | FD3   | 0.78| 0.01| 62.59|    |     |     |     |
| | 47   | FD4   | 0.80| 0.01| 82.19|    |     |     |     |
| | 48   | FD5   | 0.75| 0.01| 56.38|    |     |     |     |
| Medical Services | 49   | HL1   | 0.92| 0.01| 151.18| 0.93| 0.95| 0.82| 1.96|
| | 50   | HL2   | 0.93| 0.01| 197.23|    |     |     |     |
| | 51   | HL3   | 0.91| 0.01| 135.51|    |     |     |     |
| | 52   | HL4   | 0.86| 0.01| 86.34|    |     |     |     |
| In-Campus Transportation Services | 53   | TR1   | 0.88| 0.01| 100.68| 0.81| 0.89| 0.73| 1.25|
| | 54   | TR2   | 0.86| 0.01| 76.84|    |     |     |     |
| | 55   | TR3   | 0.82| 0.02| 52.48|    |     |     |     |
| University Image | 56   | JM1   | 0.92| 0.01| 180.69| 0.83| 0.92| 0.85| 1.98|
| | 57   | JM2   | 0.93| 0.00| 225.85|    |     |     |     |
which is reasonably high compared to phase I (13.16%). Grove’s (2006, p. 647) review of the literature on the response rate indicates, “A review of the published social research literature suggests that a response rate of at least 50 percent is considered adequate”.

The Student Satisfaction questionnaire comprises 57 items. Two items were directly asked about the university image, while other items measured students’ satisfaction towards the different services and facilities. All the items are in English and Arabic and are measured through a 5-point Likert scale.

5.2. Sample characteristics
The representative sample consists of 2,618 students from the target population mentioned above to study their satisfaction toward multiple aspects and services as determinants of the university image. The number of sampling units is determined by the total number of registered students that completed the 2017–2018 Student Satisfaction Survey among the four different student classifications. Table 1 illustrates that about 35.1% of the sample students are first year students, making them the majority, while 18.8% are seniors. Furthermore, 25.4% of the undergraduate students are sophomores, and 20.7% are juniors. Regarding the sample gender composition, the sample is characterized by 73.6% of female students and 26.4% male students, which represents the broad gender classification of the whole university. The sample includes students from different academic areas taught in the university where the most popular disciplines are the non-STEM majors making up 63.7%. Students in the sample are from different nationalities grouped into national (41.8%) and non-national (58.2%) students.

5.3. Relative importance index (RII)
Relative Importance Index (RII) is a descriptive statistical procedure used to discover the most important items from multivariate data complexity in a survey (Davoodi & Dağılı, 2019). After calculating each item’s relative importance index in the Student Satisfaction Survey, items were ranked based on their associated RII. Table 2 illustrates that out of the 57 items, ten items were highlighted to have very high importance levels, with RII values ranging from 0.92 to 0.95. All these items belong to three factors, “Library services,” “Students support services,” and “E-learning recourses,” where the “Performance of the Blackboard System” is the most critical item as perceived by the students who responded to the survey. On the other hand, the lowest two ranked items are “On-campus parking availability” and “Campus parking location,” with a low RII of 0.47 and 0.53, respectively.

6. Analysis and results

6.1. Statistical method
The current study uses the technique of partial least squares path modeling (PLS-PM) by Benitez et al. (2019). The use of the PLS-PM technique allows the development of a theory, and it is suited for studies focusing on prediction (Henseler, 2018). This technique provides a good way of assessing complex structural relationships besides being suitable for dealing with categorized latent variable models. Additionally, it allows the researchers to obtain latent variable scores that they can use later to analyze a two-stage methodology for developing the multidimensionality and moderating examination. The present study analyzes the PLS-PM using SmartPLS 3 software (Hair et al., 2019).

6.2. Measurement model assessment
The study uses each construct’s psychometric features of dimensionality, validity, and reliability to examine the entire first-order constructs’ measurement methodology. The following sub-sections explain these features.

6.3. Reliability
The study examined the standardized factor loadings to evaluate the reliability of each item. Studies suggest ≥0.707-factor loading even though others recommend ≥ 0.50-factor loading to be appropriate for exploratory studies (Benitez et al., 2019). The present study uses two-tailed
### Table 4. Discriminant validity results

| Factors                        | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Activity                      | 0.83| 0.76| 0.10| 0.06| 0.69| 0.43| 0.07| 0.51| 0.15| 0.70| 0.02| 0.08| 0.58| 0.50| 0.05| 0.29|
| Administration feedback       | 0.59| 0.87| 0.11| 0.04| 0.79| 0.38| 0.10| 0.58| 0.16| 0.80| 0.03| 0.07| 0.58| 0.62| 0.09| 0.30|
| Clarity of Supplemental Learning Tools | 0.09| 0.08| 0.79| 0.48| 0.08| 0.07| 0.35| 0.11| 0.45| 0.13| 0.26| 0.48| 0.07| 0.14| 0.46| 0.04|
| E-Learning                    | 0.01|−0.03| 0.39| 0.87| 0.09| 0.09| 0.34| 0.09| 0.50| 0.03| 0.42| 0.67| 0.13| 0.35| 0.26| 0.06|
| Employment                    | 0.58| 0.59| 0.07|−0.05| 0.81| 0.40| 0.11| 0.57| 0.14| 0.69| 0.06| 0.10| 0.62| 0.65| 0.07| 0.26|
| Enrollment Services           | 0.37| 0.30| 0.05| 0.08| 0.34| 0.89| 0.02| 0.37| 0.10| 0.32| 0.00| 0.11| 0.66| 0.26| 0.02| 0.39|
| Facilities                    | 0.06| 0.08| 0.28| 0.27| 0.10| 0.00| 0.74| 0.11| 0.34| 0.09| 0.42| 0.36| 0.07| 0.13| 0.33| 0.01|
| Food                          | 0.43| 0.45| 0.09|−0.02| 0.48| 0.32| 0.10| 0.80| 0.21| 0.57| 0.04| 0.11| 0.53| 0.45| 0.06| 0.39|
| Health                        | 0.13| 0.13| 0.39| 0.44| 0.13| 0.09| 0.30| 0.19| 0.90| 0.16| 0.16| 0.52| 0.13| 0.16| 0.21| 0.05|
| Image                         | 0.59| 0.61| 0.10|−0.02| 0.57| 0.27| 0.08| 0.48| 0.14| 0.92| 0.04| 0.05| 0.58| 0.50| 0.08| 0.33|
| IT                            | −0.01|−0.03| 0.22| 0.36|−0.05| 0.00| 0.34|−0.03| 0.15|−0.03| 0.94| 0.27| 0.02| 0.02| 0.28| 0.00|
| Library                       | 0.01|−0.05| 0.40| 0.57|−0.06| 0.10| 0.29| 0.01| 0.46|−0.04| 0.23| 0.76| 0.15| 0.37| 0.25| 0.06|
| Registration                  | 0.46| 0.42| 0.04| 0.02| 0.49| 0.52| 0.05| 0.43| 0.11| 0.46|−0.02| 0.03| 0.73| 0.53| 0.04| 0.44|
| Student Support               | 0.37| 0.41|−0.10|−0.25| 0.47| 0.20| 0.08| 0.33|−0.12| 0.36| 0.00|−0.26| 0.38| 0.85| 0.08| 0.26|
| Teaching                      | 0.03| 0.07| 0.37| 0.22| 0.06|−0.01| 0.27| 0.05| 0.18| 0.07| 0.23| 0.21| 0.00| 0.04| 0.81| 0.02|
| Transportation                | 0.24| 0.23| 0.01| 0.04| 0.21| 0.33| 0.00| 0.33| 0.04| 0.27| 0.00| 0.04| 0.33| 0.19| −0.01| 0.85|
p-values to confirm factor loadings’ appropriateness as proposed by Greenland et al. (2016). Table 3, step 1, shows the standardized factor loadings of all the constructs. The constructs demonstrate convergent validity at the item level as all factor loadings exceeded 0.50 or the minimum threshold and were significant ($p < .001$). The study disregarded factor loadings less than 0.50 during path analysis. The study also examined the Cronbach’s alpha and composite reliability to evaluate construct reliability, which Taber (2017) suggests should be greater than or equal to 0.70. Construct reliability was confirmed as demonstrated in Table 3 step 1 in which the Cronbach’s alpha and composite reliability scores are greater than 0.70.

### 6.4. Convergent validity

The study examined the average variance extracted (AVE) to assess the convergent validity, which should be greater than or equal to 0.50 as suggested by Henseler et al. (2014). This means that values that fall out of $\geq 0.50$ must be explained. Table 3 step 1 demonstrates adequate convergence validity for all constructs, given that the AVE values are greater than 0.50.

### 6.5. Discriminant validity

This research measured the discriminant validity by utilizing Fornell Larcker’s criterion (FLC) and the Heterotrait-Monotrait ratio of correlations (HTMT). According to Fornell and Larcker’s (Fornell & Larcker, 1981), the square root of AVE of each factor must be greater than the absolute value of their correlation coefficients (off-diagonal). Table 4 shows the square root of AVE on the diagonal for the factors and their correlation coefficients’ absolute value. AVE’s square root for all factors is greater than the correlation coefficients (off-diagonal) in the relevant rows and columns. The discriminant validity was also tested using HTMT yielding a maximum of 0.8 for values above the main diagonal, as depicted in Table 4 below. These values, which were less than 0.85, suggest that discriminant validity is accepted for this model.

### 6.6. Structural model assessment

The present study assessed the structural model and testing hypothesis suggested by Sarstedt et al. (2018). First, the study examined the variance inflation factor (VIF) value to perform the collinearity test before the structural relationship analysis. The study found the structural model to have minimal collinearity because the obtained VIF values in this study were less than 5 (Sarstedt et al., 2018).
The coefficient of determination measures the overall effect size and variance explained, which measures the model’s predictive accuracy. On the other hand, the model’s predictive relevance measures the quality of the PLS path model. In this study, the statistic is 0.53, indicating that the structural model’s overall effect size is moderate (Henseler et al., 2009). The statistic was equal to 0.45, which is greater than the threshold limit of zero and indicates that the path model’s predictive relevance is adequate.

6.7. Model fit
The standard root-mean-square residual (SRMR) computation gives a goodness of fit measure used as an index for validating models (Shi et al., 2018). Values of zero in SRMR demonstrate a perfect fit because it comprises an absolute measure of fit even though the model considers values < 0.08 to generally good fit (Cangur & Ercan, 2015). The present study’s path model fitted with the empirical data because the value obtained was 0.04 < 0.08 (Sarstedt et al., 2018).

6.8. Hypotheses testing
The sizes and significance levels of the path coefficients represent the derived hypotheses. According to Hair et al. (2019), the path coefficients’ significance levels were found using a PLS-procedure, with a resampling bootstrapping process consisting of 10,000 bootstrap samples and 2,618 bootstrap cases. The path coefficients, standard errors, significance level, t-values, and bootstrap confidence intervals at 95% are shown in Table 5.

7. Summary of findings
An examination of path coefficients and levels of significance suggests that most of the proposed hypotheses were supported at 95% significance level. All student characteristic variables except “student’s classification”, and all factors were significant. The findings indicated that the highest significant student characteristic effect was for major variable \( \hat{\beta}_{\text{Major}} = -0.17 \) followed by nationality \( \hat{\beta}_{\text{Nationality}} = 0.08 \), gender \( \hat{\beta}_{\text{Gender}} = -0.07 \) and GPA \( \hat{\beta}_{\text{GPA}} = 0.05 \), supporting the hypothesis \( H_4 \). Moreover, in terms of factors, the effect of IT services \( \hat{\beta}_{\text{IT}} = 0.02 \), academic services \( \hat{\beta}_{\text{Academic}} = 0.06 \), administrative services \( \hat{\beta}_{\text{Admin}} = 0.12 \), administrative feedback \( \hat{\beta}_{\text{Feedback}} = 0.21 \), and student services \( \hat{\beta}_{\text{Student}} = 0.38 \) are significant. Overall, the research validated all the hypotheses \( H_1 - H_6 \) and indicated that student services \( H_4 \) are the highest influential factors affecting the university image.

8. Discussion
This study conducted an image assessment of QU based on both student characteristics and university practices. Findings demonstrate that the university’s services influence students’ view of QU, and the students’ satisfaction directly contributes to a positive perception of QU. This is supported by research worldwide that higher learning institutions’ service quality is significant and related to students’ satisfaction (Ahmed & Mehd Masud, 2014; Brown & Mazzarol, 2009; Chuah & Sri Ramalu, 2011; Poturak, 2014; Sultan & Wong, 2010).

These findings demonstrated that it is evident that most Qatari female students tend to continue their higher education than Qatari male students. Even female Qatari students who have a “low” academic-oriented mindset rate favorably compared to Qatari male students with a higher academic-oriented mindset in terms of learning (Lee, 2016). Furthermore, female students possessed a more positive attitude toward education and attained a higher degree than male students due to career preference. Most men wish to engage in military activities rather than get into academic-oriented careers.

One essential dimension of services at QU was the students’ engagement in academic and social activities, thus making adaptability to college life more manageable. The university has also improved its library services by creating an online platform where students can access reading
materials like books remotely. This act has helped students access research material remotely, thus reducing the inconvenience and difficulties in other academic aspects mentioned before.

Administrative services also played a vital role in determining student satisfaction, which is why QU strives to improve its catering services, facilities, medical services, and on-campus transportation, to mention a few (Elmoghazy, 2018). The university has a centralized administrative model that enhances coordination among different university departments, thus fostering students’ positive satisfaction ratings toward the university’s reputation. It has also focused on improving services like transportation for female students who live off campus. These female students are only required to pay a nominal fee. Such improvements are a gesture that the university cares about students’ welfare beyond academic matters (Qatar University, 2020a). Students’ attitudes toward the university will also change for the better because of the notable improvements like transport facilitation, as mentioned before. Moreover, QU has worked fervently to streamline student services like students’ enrolment and student support.

Several factors were determining why National students prefer education in Qatar compared to non-national students. Many non-national students cite the language barrier, complex foreign culture, and xenophobic attacks as an impediment to smooth learning (Bollag, 2016). The study revealed a significantly greater number of female students at Qatar University than male students. Consequently, many services, such as those offered through the health clinic, campus transportation, to name a few, cater to female students, which largely influences the university’s reputation.

Students rely on perceived institutional images to assess individual institutions rather than hard facts. Thus universities in the GCC region should consequently improve the factors mentioned above in this study to attract students. Namely, universities should improve administrative services, IT services, academic services, and student services to enhance the image amongst prospects. In response, QU has worked on streamlining its services like administrative responsiveness, student services, and academic services to ensure that student needs are met, and it is reflected in their satisfaction with the services offered.

Most students with non-STEM majors have a positive attitude toward QU. STEM students are less satisfied with the teaching experience, while non-STEM students are more likely to agree that teachers are enthusiastic and good at explaining the material (Pawson, 2012). This indicates that the university’s teaching model is conducive, inclusive, and student-friendly (Qatar University, 2018). Consequently, many aspiring university students and high school graduates prefer QU to other universities.

University approach to how they handle student feedback or queries has significantly contributed to how its primary stakeholders—namely, students—perceive the institution. Accordingly, the findings show that QU has successfully managed to respond effectively and efficiently to student feedback, thereby increasing student satisfaction in this area, positively impacting the QU image among students. QU has devised policies that govern how its staff members offer feedback to students. The university is required to maintain the confidentiality of students’ information. Questions from walk-in students at the reception desk are answered directly. Those sent via email should take no more than 48 hours to be responded to, and social media engagements from students should be answered in less than 24 hours (Student Services Department Student Helpdesk Section, 2014). Implementing these policies has increased the satisfaction rate from students at the university because their inquiries and concerns are promptly addressed. The world is shrinking fast into a global village through technological advancements. This change is affecting even schools that are required to adopt technology in offering educational programs. As shown in the findings, QU has shown that it can host remotely–based students and include them in their learning activities. For example, the university has incorporated Zoom classes for international students to attend, thus fostering interactive sessions between instructors and students. Eventually, these students are satisfied with what the university is doing to help them learn. Finally, the university should continually assess students’ changing needs and adapt to meet those needs. The better service quality provided will enhance the learning experience, then the student satisfaction increase.
9. Conclusion and future research

This study engaged in critical image assessment of QU based on both student characteristics and university practices. On the whole, students’ attitudes toward QU and its image is influenced by a diversity of factors, such as gender, nationality, major, GPA, academic services, administrative services, IT services, and student services. Since most studies on university images have been conducted in western contexts, few studies have covered the Gulf region. Therefore, research should examine the factors affecting university image among undergraduate students in the larger Gulf region.

As mentioned before, QU adopted an ambitious research roadmap prioritizing its aim in four research areas: information and communication technology, energy and environment, health and biomedical science, humanities, and social sciences. Hence, a future area of research is to repeat this study, including the research indicator to measure the image construct. Considering the quality of curriculum indicators to measure the construct may also be viable. Moreover, a longitudinal approach may be useful to capture undergraduate students’ satisfaction during their years of study.

Although this research contributes to improving the knowledge about university image with variables obtained from a satisfaction survey, it is recommended to test whether this model behaves consistently with students from other national universities. Additional studies should also consider using large sample sizes in student participants and the number of universities. This study was done from an undergraduate perspective, and the consideration of alumni and post-graduate work is recommended for future endeavors.

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