

RESEARCH ARTICLE

Determinants of students' satisfaction in GCC universities: review and theoretical synthesis

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ABSTRACT

This paper critically analyzes the multiple factors influencing student satisfaction in universities around the GCC region. Utilizing a systematic narrative review method, this study uses a qualitative synthesis of literature from 2021-2025 to extract important variables influencing student satisfaction such as academic staff quality, physical and digital infrastructure, degree program design, administrative services, institutional location, and university image. Based on well-known theoretical models - SERVQUAL model, Expectation-Confirmation Theory (ECT), Herzberg's Two-Factor Theory, and Brand Equity Theory - they provide different lenses through which to understand students' perceptions of their higher education experiences. Although SERVQUAL describes service quality dimensions in terms of assurance, empathy, tangibility, and reliability, ECT explains the role of satisfaction, based on the degree to which service performance is perceived to meet expectations; ECT relates satisfaction to both expectations and perceived performance ratio. The research also identifies geographical specificity at regional levels, e.g., cultural values, family influence, public policy-based education reforms, which require context-based adoption of these models in GCC settings. The above points suggest potential research gaps in long-term and cross-national research, a lack of attention to student well-being, and lack of inclusion of employability outcomes. The paper draws on actionable recommendations to academic practitioners, university administrators and policymakers, emphasizing the need to employ student-directed, research-based strategies to improve institutional performance, be competitive internationally, and develop curricular relevance to national development goals throughout the GCC. Our research takes a multilevel and explicitly integrated multi-theoretical perspective by considering service quality perceptions (SERVQUAL); expectation-performance alignment (Expectation-Confirmation Theory); motivational and hygiene dynamics (Herzberg's Two-Factor Theory); and symbolic value creation (Brand Equity Theory) as complementary explanatory mechanisms rather than independent models. This framework coalesces into a coherent analytical framework that recognizes and evaluates the cognitive, affective, functional, and symbolic dimensions of student satisfaction in higher education systems in the GCC.

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1. Introduction

The issue of students' satisfaction has emerged on the global academic hierarchy as a strategic concern among higher educational organizations and tertiary academia worldwide and is considered as an important factor that determines the quality of the education system, student retention, or institution's reputation among the international institutions (Al-Harbi & Al-Qahtani, 2024; Fernandes, Ross, & Merhi, 2024). This has

increased in the Gulf Cooperation Council (GCC) region—where Saudi Arabia, United Arab Emirates (UAE), Qatar, Kuwait, Oman and Bahrain, make their home—as it relates to ambitious national agendas such as Saudi Arabia’s Vision 2030 and UAE’s Centennial Plan 2071, to facilitate a transformation of education systems to promote diversified and knowledge-based economies (Alotaibi, Almalki, & Alnasser, 2024; Madi & Al Shamsi, 2024). Against this dynamic backdrop of development, universities are no longer merely conceived of as academic entities but also as core elements of innovation and talent development ecosystems (Zaman & Al Suwaidi, 2024). Student satisfaction then reflects the quality of service as well as a weapon to leverage, both for national development and global competitiveness (Wilkins, Butt, & Mokhtar, 2023; Kassab, Abu-Hijleh, & Al-Taneiji, 2024). The rapid expansion of global branch campuses, enhanced student mobility, and higher requirements for quality assurance also support the significance of student satisfaction as a key performance indicator (Fernandes et al., 2024; Haza, Khalid & Ibrahim, 2022). Notwithstanding the rise in institutional awareness, the empirical literature on student satisfaction in the GCC remains a patchwork. The present research has been primarily based on different constructs and does not have unified theoretical basis and thus is inconsistent not only in its measurement and application (Al Wardi, Al-Maskari, & Al Busaidi, 2024; Alzahrani & Alghamdi, 2024). This paper aims to fill the literature gap through the integration of empirical evidence of six central dimensions that affect student satisfaction: quality of academic staff, university facilities, degree program design, administrative services, institutional location and university image.

In this work, these dimensions are examined via reliable theoretical perspectives like SERVQUAL (Parasuraman et al., 1988), Expectation-Confirmation Theory (Oliver, 1980), Herzberg’s Two-Factor Theory (1966), Brand Equity Theory (Aaker, 1991), which provide useful tools for interpretation of the student sentiment in the GCC socio-cultural scene. Rather than using these theories in isolation, this research combines them with a consistent-analysis framework and enables them to measure the multifaceted and stratified issue that is student satisfaction in the GCC universities. SERVQUAL provides an overview of how students evaluate the quality of functional and inter-personal service and Expectation-Confirmation Theory explains the cognitive mechanism by which perceived performance is compared with pre-enrollment expectations. Herzberg’s Two-Factor Theory supports this view by differentiating between academic and administrative elements that make a person more likely rather than fewer ones. Brand Equity Theory takes this work one step deeper by considering the symbolic and reputational significance that contributes to the student’s emotive attachment with institutions. Overall, these points of view represent a comprehensive, multi-dimensional account of student satisfaction that represents an interaction with both service and more abstract forms of institutional meaning in the GCC region.

While student satisfaction has been investigated widely in the literature on higher education, recent reviews have highlighted challenges in this construct – inconsistent definitions of constructs, heterogeneous measurement models, and limited comparability across institutional and national contexts – that could be exacerbated in swiftly reforming systems like those in the GCC (Xiao & Wilkins, 2015). Furthermore, post-pandemic disruptions to service delivery and support provision and rapid digitalization of teaching and administrative services indicate that traditional aspects of satisfaction may be shifting, although there is inconsistent evidence across GCC countries and types of institutions (Marinoni & Land, 2020; OECD, 2023). Utilizing these, empirically based across the six mentioned dimensions and anchored within existing theoretical lenses, the study offers a more coherent basis for regional benchmarking and determining areas where improvements

in academic, administrative and institutional brand-related factors are most likely to lead to stronger student outcomes on satisfaction in the GCC context (Bernacki et al., 2021). Through the integration of empirical findings and their complementary theoretical perspectives, the study offers a stronger framework for analyzing student satisfaction in higher education in the GCC and clearer directions for further institutional benchmarking, public policy as well as student-centred improvement efforts in the region.

2. Literature review

Student satisfaction in higher education is a multidimensional construct that is influenced by not only academic variables but also non-academic variables. In the GCC context, studies carried out recently pinpoint six key determinants of satisfaction: the quality of academic staff, university facilities, degree program structure, administrative service quality, university location, and the institutional image. Furthermore, the emerging literature underlines the increasing relevance of student support services, technology-enabled learning systems, and graduate employability outcomes as complementary determinants of satisfaction in the current higher education contexts. This section summarizes these themes using appropriate theoretical frameworks – SERVQUAL, Expectation-Confirmation Theory (ECT), Herzberg’s Two-Factor Theory, Brand Equity Theory, Service-Dominant Logic – while embedding the discussion in prior empirical studies from 2020 to 2025.

2.1. Quality of academic staff

Several studies have proven that faculty quality is a strong predictor of student satisfaction in the GCC. In SERVQUAL’s assurance and empathy domains, instructors’ competencies, interaction, and responsiveness to student demands are more salient. Al Wardi et al. (2024) reported that the pedagogical clarity and availability of faculty members in Omani universities had a pronounced effect on student satisfaction. Similarly, Alotaibi et al. (2024) found that postgraduate students in Saudi Arabia highly rated their academic satisfaction when their instructors had mentoring ability, subject knowledge, and engagement levels. These results confirm that satisfaction occurs when the performance is perceived as in agreement with or surpasses their expectations (Oliver, 1980), which is consistent with Expectation-Confirmation Theory (ECT).

As they enter university, students frequently presume that faculty will play the roles of both knowledge dispensers and mentors. Satisfaction is heightened when these expectations are confirmed (Fernandes et al., 2024). Beyond providing intellectual engagement, quality faculty can act as a “motivator” within Herzberg’s Two-Factor Theory framework; here, intrinsic factors such as intellectual stimulation and recognition contribute directly to higher levels of satisfaction (Fernandes et al., 2024; Elliott & Shin, 2002).

Apart from quality in teaching, a considerable number of studies emphasize that educational advising and mentoring are an important layer on top of faculty support. Successful advising relationships have a dramatic impact on students’ perceptions of academic support and institutional nurturance (Elliott and Shin 2002). Similarly, Douglas et al. (2006) mention easy access to faculty consultation, structured academic advising, and students’ reports of satisfaction were high.

2.2 University facilities

According to the SERVQUAL framework (Parasuraman et al., 1988), campus facilities—from libraries, IT labs to recreational and social spaces—are significant indicators of service quality in terms of tangible assets. In the GCC, the quality of the university facilities and accessibility have been reported to affect the students' sense of belonging and engagement. Kassab et al. (2024) studied medical students in the UAE and found that well-kept laboratories, study spaces, and cafeterias led to a heightened emotional connection to the university. Wilkins et al. (2023) likewise discovered that UAE international branch campuses students valued modern, clean and technologically integrated facilities. In theory, Herzberg's Two-Factor Theory posits that physical infrastructure is a hygiene factor: its absence causes dissatisfaction, but its presence does not necessarily create satisfaction unless it is accompanied by motivators such as academic support or personal development opportunities (Herzberg, 1966). In other words, while facilities are a necessity, they are not a substitute solution for factors contributing to overall satisfaction and must be reinforced through several others.

Another factor in the Service-Dominant Logic (SDL) framework, the presence of facilities also concerns itself with the co-creation of value through access and utilisation of resources (Vargo & Lusch, 2004). In the GCC, in a context of growing blended and hybrid learning models, there is an imperative of provision of physical as well as virtual learning environment in the co-production of education (Al-Maktoumi et al., 2023). When academic services are developed, universities now depend more than ever on digital formats and e-learning technologies in addition to physical structures. The Technology Acceptance Model (TAM) has been proposed by Davis (1989) and suggests that the perceived usefulness and perceived ease of use have an important role in determining users' acceptance of a technological system. As regards higher education, Al-Fraihat et al. (2020) show that the quality, usability, and reliability of e-learning systems greatly influence the students of blended and online learning.

2.3 Degree program quality

Program design, including curriculum relevance, course structure, and alignment with industry standards, directly influences students' academic satisfaction. Fernandes et al. (2024) also concluded a relationship between program quality and loyalty to the institution among university students at branch campuses in the UAE. Likewise, Alotaibi and Alshahrani (2022) found that structured online engineering courses with clear learning objectives and assessment rubrics significantly increased students' engagement and satisfaction in Saudi Arabia. These findings are consistent with the ECT framework, wherein academic content results in satisfaction when a degree satisfies pre-enrollment expectations for career readiness and intellectual progress (Oliver, 1980; Wilkins et al., 2023). The degree program is also a "motivator" in Herzberg's model: Students are drawn to studies when they feel they are relevant, intellectually stimulating, and career-enhancing. Furthermore, the relevance and adaptation of the curriculum contribute to increasing the reputation of the institution, further connecting degree program quality with Brand Equity Theory. Students naturally associate rigorous, innovative programs with institutional prestige on the basis of satisfaction and future decisions about their enrollment (Madi & Al Shamsi, 2024).

In recent years, there has been a significant shift as academic programs and graduate employability come to link heavily in students' perceptions of the value of their education. According to Harvey (2000), academic institutions should integrate their curricula into relevant labour markets to ensure graduates possess relevant skills and competencies. Likewise, Tomlinson (2012) adds that students' education assessment is

influenced by career skills and job opportunities to some extent. It means, therefore, that programs that incorporate internships, industry collaborations, and professional learning experiences generally lead to higher levels of student satisfaction.

2.4 Administrative service quality

Administrative processes—frequently neglected in satisfaction literature—constitute an almost universal aspect of students' everyday life in universities. As evidenced, particularly in recent years, it is essential that administration services be effective, transparent, and appropriate to the context. Their study found that responsiveness to questions, clarity regarding policy communication, ease of registration, and the availability of financial aid (Al-Harbi & Al-Qahtani, 2024) were strongly correlated with satisfaction among Saudi undergraduate students. These are predictors of Reliability and Responsiveness on the SERVQUAL.

The administrative quality interacts with how the ECT framework works with those, as learners set themselves expectations: They understand the degree to which they will become supported and professionally managed by the institution; they forecast what level of satisfaction will they get under those expectations; and failure to meet these conditions subsequently leads to student dissatisfaction or a higher attrition rate. In Herzberg's Two Factor Theory, inefficient administrative processes serve as hygiene factors that contribute to dissatisfaction and discouragement.

In the post-pandemic world of administrative service, the use of digital tools in general and technology tools in particular has become ever more vital. Automation, mobile apps, and immediate help options are increasingly shaping the student service experience, and when implemented correctly, they will also result in increased satisfaction with it (Alotaibi et al., 2024). Broader support services for students: counseling, academic advising, and career development programs are also sources of student satisfaction beyond simple administration. Elliott and Shin (2002) argue that comprehensive support services lead to greater students' experiences of receiving care and having the possibility to make adjustments themselves. Douglas et al. (2006), in their research, also mentioned that the availability of guidance and support systems is part of an overall educational experience for students' success.

2.5 University location

Location-related factors have particularly become relevant in terms of satisfaction studies, particularly in urbanized countries such as the UAE and Qatar. Zaman and Al Suwaidi (2024) revealed that geographic accessibility significantly impacts how institutional convenience is perceived among students. University students in city centres or close to big transport centres were found to be more satisfied, due to lower stress levels during commuting and better integration with lifestyle. Location, and its significance, can thus also be theoretically positioned within the SDL paradigm, according to which experience satisfaction results from co-working between service environments through interactions between the space and culture of a service provider (Vargo & Lusch, 2008). Although location is considered as a passive attribute, it plays an instrumental role regarding perceived convenience and quality from an educational perspective.

Additionally, location has emotional and social connotations. For example, students from conservative backgrounds, who place high importance on safe culturally aligned campuses, underline the importance of a contextual sensitivity to GCC student satisfaction models (Al-Maktoumi et al., 2023). Previous studies also indicate that students' perceptions of satisfaction and loyalty can be influenced by the location of their

institution. Helgesen and Nettet (2007) concluded that accessible and surrounding environments enhance positive student experiences and institutional attachment. Likewise, Clemes et al. (2011) show that location-dependent convenience impacts perceptions of service quality and behavioral intentions within service-based settings.

2.6 Institutional image and reputation

University brand image (encompassing reputation, prestige, and social trust) has a significant effect on student satisfaction. Brand Equity Theory argues that a good sense of one’s institutions, emotional attachments, and advocacy are developed by a solid institutional image. Haza et al. (2022) concluded that the institutional reputation impacts student loyalty considerably at Qatar University. Madi and Al Shamsi (2024) built on this further by pointing out that brand equity indirectly influences student retention through satisfaction mechanisms. When it comes to students’ perception of brand strength, they tend to think of academic quality, employability, and global recognition. Image in the GCC, where international branch campuses exist across borders and competitive scholarship programs abound, is a key factor in recruitment and retention of students (Wilkins et al., 2023). There is also brand-related influence of cultural expectations where family recommendations and social expectations exert a lot of impact on students’ choices, and this is even more significant in the Gulf countries (Alotaibi et al., 2024).

In theory, brand perception may strengthen or weaken the effects from the other dimensions of satisfaction. For example, a strong institutional image can smooth out even minor service disturbances or enhance positive feelings, thereby serving as a satisfaction buffer (Madi & Al Shamsi, 2024). Moreover, Clemes et al. (2011) identified the importance of institutional reputation on student satisfaction and behavioral intentions. Students link university image to their education quality, employability, and the credibility of the university. This means that a strong institutional brand will not only add value for a student's satisfaction but also create brand loyalty and word of mouth towards a university.

Table 1. Summary of literature review

Author(s)	Year	Key findings	Context
Al Wardi et al.	2024	Faculty quality and assurance significantly predict student satisfaction	Oman
Alotaibi et al.	2024	Academic support services enhance satisfaction among postgraduate students	Saudi Arabia
Kassab et al.	2024	Campus facilities impact satisfaction indirectly through a sense of belonging	UAE
Wilkins et al.	2023	Facilities and geographic location shape satisfaction at international branches	UAE
Fernandes et al.	2024	Program structure and academic quality correlate with satisfaction and loyalty	UAE

Alotaibi & Alshahrani	2022	System quality, information quality, and service quality significantly influence student satisfaction with e-learning platforms based on the DeLone and McLean IS success model	Saudi Arabia
Al-Harbi & Al-Qahtani	2024	Administrative service quality improves overall student experience	Saudi Arabia
Alzahrani & Alghamdi	2024	Effective administration is crucial for public health student satisfaction	Saudi Arabia
Zaman & Al Suwaidi	2024	Accessibility and proximity to urban centers enhance satisfaction	UAE
Haza et al.	2022	University image strongly influences satisfaction and institutional loyalty	Qatar
Madi & Al Shamsi	2024	Institutional brand image impacts retention and satisfaction across the GCC	GCC-wide
Elliott & Shin	2002	Student support services such as advising and counseling significantly influence student satisfaction and institutional service quality perceptions	United States (Higher Education)
Douglas et al.	2006	Comprehensive student support services and academic guidance contribute strongly to students' overall satisfaction with universities	United Kingdom (Higher Education)
Davis	1989	Technology Acceptance Model shows that perceived usefulness and ease of use of digital systems affect user satisfaction and adoption	Information Systems / Education Technology
Al-Fraihat et al.	2020	Quality of e-learning systems, system usability, and information quality significantly influence student satisfaction in online learning environments	Global / Online Learning Context
Harvey	2000	Graduate employability and career outcomes shape students' perceived value of higher education	Higher Education (Global)
Tomlinson	2012	Students increasingly evaluate universities based on employability prospects and career readiness	United Kingdom / Graduate Employment

Helgesen & Nettet	2007	Institutional image, service quality, and environmental factors influence student satisfaction and loyalty	Norway (Higher Education)
Clemes, Gan & Ren	2011	Service quality, value perception, and convenience factors affect satisfaction and behavioral intentions in service environments	Service Industry / Applied to Education Research

Source: Author research

3. Methodology

3.1 Research design

The current study uses a systematic narrative review approach to explore the determinants of student satisfaction in higher education institutions in the Gulf Cooperation Council (GCC) region. The systematic narrative review aimed to clearly and systematically ascertain, screen, and synthesize literature of interest and to integrate them theoretically across different strands of theorisation. This is more appropriate to the study's intent of a synthesis of empirical findings and integrative theoretical approach as opposed to a statistical meta-analysis.

3.2 Data sources and search strategy

A wide range of publications, including Scopus, Web of Science, ScienceDirect, Emerald Insight, and Google Scholar were reviewed in a systematic literature search. The search was limited to peer-reviewed academic journal articles published in English from 2021 to 2025, as this represents the latest advancements in research on student satisfaction in the context of fast transforming GCC higher education sector. Search terms were implemented utilizing Boolean operators and composed of the following keywords:

- student satisfaction
- higher education
- university service quality
- GCC universities
- Middle East higher education
- SERVQUAL, Expectation Confirmation Theory, academic quality, administrative services, institutional image
- Other relevant studies were obtained manually by the review of reference lists of relevant literature.

Reference lists of key articles were also manually reviewed to identify additional relevant studies.

3.3 Inclusion and exclusion criteria

Studies were selected based on predefined inclusion and exclusion criteria to ensure relevance and methodological rigor.

Inclusion criteria:

- Peer reviewed journal articles
- Studies focusing on higher education institutions
- Empirical or conceptual research examining determinants of student satisfaction
- Research conducted in GCC countries or studies with clear relevance to the GCC context
- Publications within the defined timeframe
- Exclusion criteria:
 - Conference papers, dissertations, reports, and non-peer reviewed sources
 - Studies unrelated to higher education or student satisfaction
 - Articles lacking sufficient methodological or theoretical clarity

Duplicates were removed prior to screening.

3.4 Study selection process

Study selection was done according to PRISMA process based on the identification, screening, eligibility, and inclusion step. First, records that had been recovered via database searches were collected and duplicate files were removed. From that stage on, titles and abstracts were screened for relevance regarding student satisfaction within the higher education context of the GCC region. In this stage, all studies that met this process underwent full text review to ensure their adherence to all inclusion criteria. Qualitative synthesis and theoretical incorporation were subsequently devised on the last collection of retained studies. While review followed the PRISMA style screening logic, only the narrative and theory building focus of the study meant that no flow diagram was included.

3.5 Data extraction and synthesis

Detailed abstracts highlighting key structural elements—such as the research context, country, theoretical framework, methodology, and primary drivers of student satisfaction—were systematically extracted for each study. Data was thematically synthesised and analysed by thematic synthesis method. Determinants coded were grouped into six thematic domain themes on the order of quality of academic staff, university facilities, degree program quality, administrative service quality, university location and institutional image. These themes were then aligned with existing theoretical insights, such as SERVQUAL, Expectation Confirmation Theory, Herzberg's Two Factor Theory, Brand Equity Theory to serve as cross-theoretical comparators and integrators of these topics.

4. Theoretical integration and conceptual framework development

Unlike individual theoretical framework building, the study adopts a multi theoretical integrative perspective. It integrates utility of service quality, satisfaction with cognitive expectations, motivation, institutional branding and value co creation to analyze their impact on student satisfaction in GCC universities. The thematic synthesis supported

the development of insights to create a conceptual framework for exploring the linkage between the main determinants and the overarching outcomes of student satisfaction. In other words, this multi-theoretical framework implies that student satisfaction is a layered outcome derived from the interaction of service quality aspects, expectation fulfilment, motivational conditions, and institutional significance and not derived from a purely theoretical mechanism.

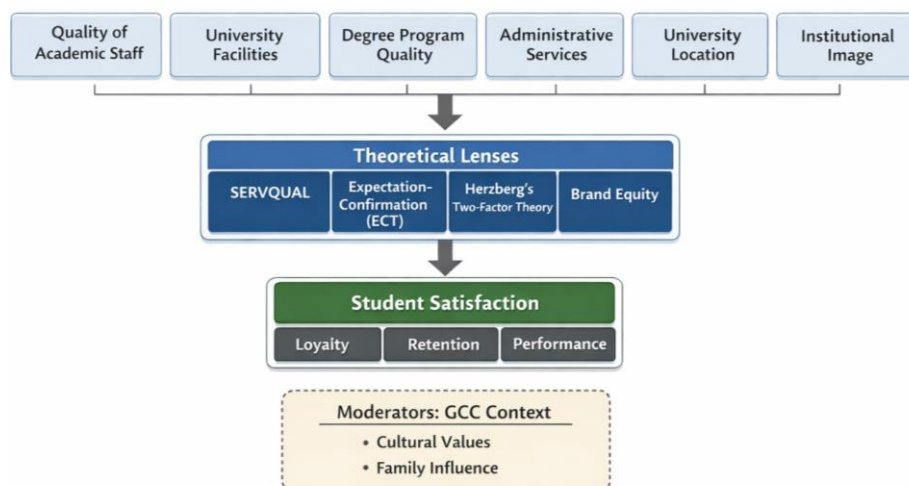
4.1 Methodological rigor

In a strengthened process of development and transparency in the review, a clearly stated search strategy, defined inclusion and exclusion criteria, a structured approach to screening and thematic synthesis based on theory were employed. This is important since this approach minimized publication bias through the identification of multiple databases and triangulation across theoretical models added layers of insight and conceptual coherence to the analysis process.

4.2 Theoretical implications

This study proposes a theoretical model to consider six determinants that affect student satisfaction in GCC universities, including quality of academic staff, university facilities, degree program quality, administrative service quality, university location, and institutional image (Kassab et al., 2024; Wilkins et al., 2023; Fernandes et al., 2024). Their relationship is described in an integrated theoretical overview based on the SERVQUAL framework (Parasuraman et al., 1988), Expectation Confirmation Theory (Oliver, 1980), Herzberg’s Two Factor Theory (Herzberg, 1966) and Brand Equity Theory (Aaker, 1991). Additionally, GCC-specific contextual factors (for example cultural values, family influence) offer moderation over these variables in determining student satisfaction (Hofstede, 1980; Al-Maktoumi et al., 2023).

Figure 1. Conceptual framework



Source: Authors’ creation

5. Discussion with theoretical justifications

The results of recent studies in the GCC region were consistent with established theoretical models of service quality and student satisfaction, but caution about the need to adapt them to the local context. The interrelationship between factors such as quality of faculty, institutional resources, curriculum quality, administrative quality, institutional image and geographic location shows that university students' satisfaction is a multidimensional construct embedded in different cultural contexts. Several widely recognized theories—SERVQUAL, Expectation-Confirmation Theory (ECT), Herzberg's Two-Factor Theory, Brand Equity Theory and Service-Dominant Logic (SDL)—provide valuable insights into these dynamics, but its application must be nuanced in alignment with the sociocultural and institutional characteristics of the GCC. According to Parasuraman et al.'s (1988) SERVQUAL model, service quality is organized into five main dimensions: tangibles, reliability, responsiveness, assurance, and empathy.

This structure of student satisfaction in GCC universities corresponds well with the components of student satisfaction. Campus infrastructure and learning environments represent the tangibles dimension, faculty competence and professionalism correspond with assurance, efficient administrative services are reliable and responsive, and staff-student interpersonal dynamics correspond to empathy. Studies such as Kassab et al. (2024) and Al Wardi et al. (2024) confirm empirically that the tangible and assurance aspects should be especially relevant for students in Oman, UAE and Saudi Arabia. Nevertheless, SERVQUAL's generic methodology requires cultural adaptation in the context of the GCC. For example, the relationship among academic and administrative staff in these societies is often personalized and seen as more respectful on a social level than the original "empathy" conceptualized by Western service paradigms (e.g. Smith & Ryan, 2020).

Oliver's (1980) Expectation-Confirmation Theory (ECT) conceptualizes satisfaction as a cognitive process in which expectations are compared to actual service delivery. In GCC higher education, the theory has application, given that in some degree higher education students come into university with high expectations concerning globalised standards, technological uptake and employability-focused education. Satisfaction increases considerably when students' expectations of instructional quality, curriculum relevance and career preparedness are met or surpassed (e.g., Fernandes et al., 2024; Wilkins et al., 2023). On the other hand, dissatisfaction is heightened when expectations – particularly with regard to administration or quality of teaching – are not met. This is an indication that expectations can be managed in ways that are open and transparent, orientation programs, and feedback, all of which can be adjusted to the multicultural student population of the GCC. Herzberg's Two-Factor Theory (1966): Herzberg distinguishes between motivators and hygiene factors (in its absence, dissatisfaction). Applied to GCC higher education, academic components as the quality of course materials and faculty engagement become motivators that promote intrinsic satisfaction. In contrast, elements such as inefficient internal procedures or subpar physical infrastructure serve as hygiene factors that, if insufficient, will contribute to discontent; when sufficient, however, they merely neutralize dissatisfaction. Al-Harbi & Al-Qahtani (2024) and Wilkins et al. (2023) further emphasize that although academic quality is high, weak administrative assistance or disorganized services reduce student satisfaction overall. So, institutions need to be aware that investing in academic excellence is not enough, parallel improvements in basics of service delivery and infrastructure are also necessary to minimize dissatisfaction.

In the GCC, symbolic value of higher education institutions as embodied by Brand Equity Theory is important to the institution selection process which increasingly determines

institutions in terms of local branch campuses, government scholarships and global university rankings. Aaker's (1991) building theory of brand equity posits that brand attachment, quality perception and loyalty are essential in influencing consumer(student) satisfaction. Haza et al. (2022) and Madi & Al Shamsi (2024) note that the image of a university has a strong influence on the emotional engagement, trust, and retention of students. A strong institutional brand not only increases incoming students' enrollment, but can also act psychologically as a buffer against less positive experiences, such as difficulties with learning and administration. Such importance is especially apparent in collectivist cultures such as the GCC where institutional status holds a particular social capital and family credit. Service-Dominant Logic (Vargo & Lusch, 2004) reframes service delivery as a co-created utility between provider and consumer – highlighting the impact of wider ecosystems – such as location, community engagement and digital infrastructure – on experiences for users.

Zaman & Al Suwaidi (2024) also demonstrate that university location, with a specific focus on urban hubs, contributes to the convenience and integration of students into overall service networks (transportation, housing, job markets) in the GCC. The SDL outlook also sees student participation, peer groups, and extracurricular activity as elements critical to value creating that goes beyond transactions between customers and organizations. Institutions where students play a significant part in co-creating their process of education are the ones most likely to build upon their satisfaction and commitment to it. These theoretical structures hold strong explanations, but there are cultural and socio-cultural factors unique to the GCC setting in which applications of them should be addressed. One dimension that remains underrepresented is the role of family, which helps shape the expectations of students, the selection of programmes, and their satisfaction as a whole. While Western models often stress individual choice, decisions in the GCC often rely on the collective family, family faith and tribal or regional ties (Al-Maktoumi et al., 2023). Moreover, cultural dimensions (e.g., gender-sensitive amenities, incorporation of national identity in the curriculum, compatibility with Islamic norms) may also act as covert mediators of satisfaction. These dimensions are not represented on conventional models, such as SERVQUAL or ECT, which emphasizes the requirement for regional-based satisfaction measurement frameworks.

All in all, the results indicate that we have a broad interpretation, and an integrative theoretical view is emerging wherein, the satisfaction of students at GCC universities is a result of the interplay mechanism between functional service quality, cognitive expectation testing, motivational satisfaction and symbolic institutional meaning. High-quality teaching and optimal administration lead to satisfaction if it meets expectation (ECT) and is motivating rather than hygienic (Herzberg), modern facilities and effective systems reduce dissatisfaction by ensuring basic service satisfaction (SERVQUAL). At the same time, the impact of institutional image shaping how students interpret and emotionally value their experiences is compounded by Brand Equity Theory. Seen through this integrative lens, satisfaction is not a linear output, but an accumulative judgment built up across academic, administrative, social, and reputational dimensions, situated within the cultural and policy environment of the GCC. The main contribution of this research is to consider student satisfaction as an "interactive construct" where the quality of services, fulfillment of cognitive expectations, motivational situations and symbolic institutional significance interact within distinctive GCC social, cultural and policy environments. The comparative assessment with non-GCC situations further illustrates the universality and context-sensitive character of the dimensions of student satisfaction. Although SERVQUAL and Expectation-Confirmation Theory still have overall use (Parasuraman et al., 1988; Oliver, 1980), the non-

GCC settings tend to stress individual autonomy and self-directed learning, while the GCC environment involves higher level of influence of cultural norms, family expectations and institutional esteem (Hofstede, 1980; Al-Maktoumi et al., 2023). It implies that while existing theories give a powerful base, they become increasingly effective when framed in relation to socio-cultural contexts within the GCC, supporting the advantages of cross-regional comparison when investigating student academic success.

6. Conclusion

Student satisfaction in GCC universities is characterized as a complex product of various interrelated academic and non-academic influences, including academic quality, campus facilities, organizational systems, curricular relevance, and institutional reputation. These factors collectively shape the students' overall experience with and perceptions in higher education. These frameworks were established theoretically with models of SERVQUAL, Expectation-Confirmation Theory (ECT), Herzberg's Two-Factor Theory, Brand Equity Theory, and Service-Dominant Logic (SDL); however, their application should be adjusted to the socio-cultural and institutional reality of the GCC. SERVQUAL identifies tangibles, assurance, reliability and empathy as key considerations, yet these elements have to be located in collectivist cultural contexts that emphasize relational quality and institutional trust. ECT posits that fulfillment of expectations is a condition of satisfaction that, in the GCC context, comes largely under influences such as family expectations and national initiatives such as Vision 2030, at the very least where personal expectations are not the only determinants of satisfaction. Herzberg's framework helps to distinguish motivators (the quality of the teaching program and the relevance of the curricula) and hygiene factors (facilities and administrative effectiveness) that are essential for maintenance of satisfaction. Brand Equity Theory emphasizes the increasing significance of institutional reputation, world-renownedness and legitimacy, while SDL promotes co-creation of value in infrastructure, services and stakeholder engagement. Despite the benefits provided by these models, most of the present-day literature focusing on the GCC remains cross-sectional and does not take longitudinal and comparative regional characteristics into account. As students progress through the pandemic landscape, such changes in student satisfaction have been further redefined by digital learning, and increased expectations of flexibility, technology adoption, and job prospects are the factors influencing student satisfaction in the post-pandemic era have also changed. Therefore, global theories offer an important context but need to be reconceived critically, from a place of empirical analysis and culture, to address the enhancement of student well-being, institution performance, and policy congruence within the dynamic GCC higher education environment.

7. Implications

There are important implications of this review for GCC higher education stakeholders ranging from faculty, executives to policymakers. Implications: for faculty and personnel, the findings highlight the necessity of emphasizing pedagogical quality, ongoing professional development, and educational technology integration. According to Expectation-Confirmation Theory (ECT) (Oliver, 1980), students seek satisfaction with their learning experiences as they evaluate whether their academic expectations have been met. In addition, the SERVQUAL model (Parasuraman et al., 1988) identifies assurance and empathy as central service quality dimensions—faculty members are

required to demonstrate knowledge of the subject as well as to construct supportive relationships with students to establish trust and emotional connectivity. At the same time, university administrators are tasked with the task of ensuring that their physical and virtual environments are up to the current academic and social challenges. Based on Herzberg's Two-Factor Theory (1966), these are the types of infrastructural factors that would fulfil the hygiene factors—in the absence they may not be positively responsible for the satisfaction level directly but result in dissatisfaction substantially. Accurate efficient administrative structures that are both reliable and responsive, represented by SERVQUAL's reliability and responsiveness dimensions, are central to the development of the student environment. For policymakers, the review advises standardizing service quality targets at GCC establishments (local level) to provide consistency at the regional level but also to foster innovation. Brand Equity Theory (Aaker, 1991) explains that investing in institutional image and reputation is critical in both attracting and retaining students in the face of increasing regional and international competition.

According to Service-Dominant Logic (SDL) (Vargo & Lusch, 2004), student satisfaction is something that is co-constructed among a range of participants and which is linked to the resources of the institution, so the collaborative, student-centered approach is required. To sum up, by integrating theoretical approaches to theory with applied action, we may be able to promote a much more comprehensive and culturally responsive strategy for student satisfaction. With these practical insights, higher education institutions in the GCC can elevate educational quality and institutional competitiveness to a global level while fostering superior academic knowledge management.

8. Future directions

Future studies on student satisfaction in the GCC should shift away from isolated case studies toward integrative, longitudinal, and comparative cross-regional frameworks. A major limitation is the scarcity of cross-national studies in the region that will be crucial for establishing commonality, and disparities at the regional level in which satisfaction drivers are found, across Saudi Arabia, the UAE, Qatar, and Oman. The application of cultural dimensions theory (Hofstede, 1980) is likely to help us understand how social values and norms influence students' expectations and satisfaction in each nation. In the post-pandemic transition to digital and hybrid learning, it is of necessity to employ frameworks such as the Expectation-Confirmation Theory (ECT) (Oliver, 1980) and Technology Acceptance Model (TAM) (Davis, 1989) to determine how virtual learning places shape perceived academic value and satisfaction. And soft variables—personal characteristics—such as psychological safety, variety, and well-being—for example, Maslow's Hierarchy of Needs (1943) and Self-Determination Theory (Deci & Ryan, 1985)—can be explored through critical lenses as it has strong bearing on students' engagement while being underexamined in a GCC setting.

The establishment of employability and alumni satisfaction as long-term indicators would add to the understanding of effectiveness of institutions. From Service-Dominant Logic point of view (Vargo & Lusch, 2004), student satisfaction should be considered in future research as co-constructed and shaped by more than one actor at various stages of time, incorporating multiple actors and institutional interfaces. From a methodological standpoint a mixed methods and multi-theoretical approach provides more enriched and usable input. This improvement would allow the GCC universities to build adaptive policies

which are student-centred, more closely aligned to changing public expectations and global expectations in higher education.

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