The Impact of Educational Environment on the Architectural Design Process of Students

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Abstract

In architecture education, beyond the curriculum itself, knowledge is also transmitted through the physical surroundings. This article aims to explore the influence of the educational environment on the design development of architecture students in leading Iranian architecture schools. The sample population is from the top three undergraduate students out of ten selected institutions. The research methodology involves a survey conducted through interviews, on-site observations, and library research. the outcomes were subsequently reviewed by a panel of five experts utilizing the Delphi method. The findings were categorized into objective and subjective characteristics. In the objective analysis, the study sought to identify the prominent elements within educational environments that affect students. In the subjective analysis, the focus shifted to understanding students' responses to their experiential learning during the design process. Through an analysis of students' sketches, three factors emerged as significant in their design approach: "public spaces", "distinctive architectural geometry of the school building", and "symbols". Furthermore, the results indicate that, apart from cultural and identity considerations, the configuration of the educational environment should facilitate the creation of communal activities and a dynamic setting to enhance outcomes in the design process.

Keywords

Architecture Students, Iranian Architecture Schools, Design Process, Architecture Education, Spatial Identity.

Introduction

Design Thinking is a University education is a multifaceted phenomenon, evolving under the sway of numerous factors. During its development, university education grapples with a range of challenges, encompassing issues such as deteriorating accessibility, declining quality, unequal distribution, and disruptions to the learning processes (Milton, 2021). It has been demonstrated that the enhancement of education is closely linked to the improvement of learning outcomes (Hein & van Dooren, 2020). Learning is an intricate process that is influenced by students' motivation and physical conditions (Eaimery & Bagherpour, 2022). The physical conditions of the educational environment can either impact or impede the enhancement of individuals' performance (Ivanova & Minaeva, 2015). Every action or exposure a person encounters within the educational environment contributes to shaping their experiences (Lara, 2020). Experiences, habits, and behavioral patterns within architectural educational spaces collectively shape the culture of this environment (Adams et al., 2018). Understanding the culture of the environment engenders varied meanings and images within the human mind, thereby bestowing identity upon the place (Harrop & Turpin, 2013).

According to research conducted by environmental behaviorists, *place identity exerts an influence on the quality of the human-place relationship and the development of individual identity* (Eaimery & Bagherpour, 2022). This underscores the importance of reevaluating the concept of place for designers to comprehend the factors that shape identity. Research reveals that in Iran, the qualitative aspect of the educational environment and its impact on users, both physically and psychologically, has received limited exploration, with greater emphasis placed on quantitative approaches. This is noteworthy, considering that contemporary learning spaces must provide the essential triggers to facilitate the potential for dynamic activities. This is essential because the fundamental requisites of modern educational systems encompass physical and mental flexibility, as well as the fostering of social interactions (Zaballos et al., 2020). To achieve this objective, the research outcomes were categorized into objective and subjective attributes within this study. In the objective analysis, the investigation aimed to identify the prominent components within educational environments that impact students. On the other hand, the subjective analysis focused primarily on understanding how students respond to the acquired experiences during the design process.

Problem Statement

The educational environment significantly influences individuals' perceptions and identities. These experiences, coupled with habits and behavioral patterns, collectively shape the cultural identity of architectural educational spaces. A crucial aspect within this context is the concept of *place identity*, which holds the power to impact the quality of the human-place relationship and the formation of individual identity, as highlighted by research conducted by environmental behaviorists. However, despite the significance of these concepts, in the Iranian context, qualitative exploration of the educational environment's impact on users remains less explored, while quantitative approaches dominate the discourse. Considering the contemporary requirements of dynamic learning environments that foster physical and mental mobility and facilitate social interactions, there arises a pressing need to investigate and understand the subjective and objective aspects of the educational environment. The primary research question is framed as follows: *What impact does the educational environment exert on students' cognitive processes during the design phase?* In addressing this query, it becomes evident that distinct architectural faculties possess unique identity prerequisites, which can be categorized into objective and subjective factors. This article delves into this gap by categorizing findings, aiming to uncover both the eminent components in educational environments and students' reactions to their experiences in the design process.

Research Method

The research methodology involves an extensive literature review focused on place identity and its manifestation in individuals.

The independent variable is *place identity*, while the dependent variables are *architecture education* and *acquisition of knowledge by users* assessing knowledge integration in design. The study starts by defining identity and then examines factors shaping place identity through field observations. It further investigates how these factors affect students in the community. This involves interviews and analysis of architectural design courses using qualitative content analysis.

A cohesive team of five experts classified findings during brainstorming sessions using the Delphi method. Notably, appealing environments enhance assimilation, while shortcomings prompt problem-solving. Students' cognitive processes use familiar elements to establish an independent identity or alter the existing nature. This was studied in ten architectural schools with varying identity approaches: historical, technological, combined, natural, and social. Two sample cases for each approach were explored through on-site observations. The research engaged a team of five experts to formulate the conceptual model and guide the process. Design processes were identified by analyzing sketches from 30 top-performing student volunteers. Analyzing the results employed evidence-based methods and systematic data classification with Access 2022 software.

Spatial Identity and Understanding Influential Formation Factors

The environment, seen as an amalgamation of potential influences, aids users in cultivating and extending their feelings of belonging and identity. In line with Lynch's perspective, spaces ought to possess a distinct and memorable identity, one that is perceivable and recognizable (Karakas & Yildiz, 2020). Rappaport views identity as a quality of the environment that remains consistent across diverse conditions or as a feature enabling organisms to differentiate and distinguish between various urban elements (Zamanzadedarban, 2016). Hence, a place's identity can be truly comprehended by rendering it distinct and unique (Sariri et al., 2020). Place identity, being a form of communication, places greater emphasis on catering to the mental and emotional requirements of individuals. Carl Gustav Jung introduced the *Principle of Opposites* to elucidate the role of mental needs. In the realm of architecture, this principle can be reflected in the existence of contradictions or polarities within spatial energy, such as the interplay between heat and cold, as well as the contrast between height and depth (Salama, 2012). Consequently, generating a distinct sensation in environmental perception can involve visibly introducing its opposite. This approach relies on leveraging individuals' pre-existing knowledge or incorporating elements that contrast with their expectations, thereby imparting a fresh identity to the surroundings. Table 1 offers a concise overview of the key viewpoints presented in scientific research pertaining to architectural identity.

In the analysis of the literature, two overarching divisions emerge. Firstly, architecture symbolizes societal identity on a macro scale and signifies individual identity on a micro scale. Secondly, place identity has the potential to either foster a new identity or initiate profound transformations through the introduction of novel meanings, conceptual presentations, and acceptance. Given the diversity of viewpoints presented, place identity can be scrutinized through two categories:

- Objective characteristics (pertaining to environmental physics)
- Subjective characteristics (encompassing environmental quality).

Data assessment within each category is approached with a foundation in Carl Gustav Jung's theory of the *psychological functioning*. According to Jung's perspective, human understanding of the world is composed of four elements: sensing, intuition, thinking, and feeling. Sensing and intuition form the non-rational functions, bypassing the process of reason.

They absorb experiences without active evaluation. Conversely, thinking and feeling represent the rational functions, entailing judgment and evaluation of our experiences (Mert, 2019). These functions stand in contrast, yet both share a common purpose of structuring and categorizing experiences. Each individual possesses the capacity for all four functions, but typically, one function takes precedence and shapes their personality. The remaining functions reside in the realm of the personal unconscious (Mateescu et al., 2015).

Table 1: *Summary of opinions in the field of place identity.*

Theorist	Publications	Deduction of Principles	Year	Citation
Christian Norberg-Schulz	Existence, Space, and Architecture	Events, readability, form, personalization, adaptation to human needs, unity	1971	Norberg-Schulz, 1974
Kevin Lynch	A Theory of Good City Form	Transparency, readability, compatibility, personalization, adaptation to human needs, visibility, unity	1981	Cullen, 1994
Charles Correa	The New Landscape	Continuity, adaptation to human needs, technology, climate, culture, the spirit of the time	1985	Correa, 1989
Chris Abel	Architecture and Identity	Adaptation to context, climate, culture, human needs, the spirit of the time, technology, and materials	2000	Abel, 2000
Sigmund Freud	Complete Psychological Works	Self-awareness, cognitive development, the purposefulness of biological needs, psychological and sexual needs	2001	Strachey et al., 2001
Amos Rapaport	Culture, Architecture, and Design	Adaptation to human needs, culture, personalization, readability	2003	Pederson, 2014
Kamran Afshar Naderi	Organizational Design and Identity	Creativity, technology, according to human needs, spatial qualities, culture, formal features	2007	Ilka et al, 2019
Jeffrey Brad Bennett	Emerging Concepts in urban design	Adapting to culture, climate, form and function, technology and materials, and human needs	2009	Day, 2021
Carl Gustav Jung	The Red Book: Liber Novus	Individual and collective unconscious, symbolism, archetypes, human will, memories	2009	Shamdasani, 2010
Gordon Cullen	The Twentieth Century Society	Adaptability to culture, customization, creativity, innovation, texture	2011	Cullen, 1994
John Lang	Creation of architectural theory	Adapting to human needs, culture, creativity, innovation, the spirit of time, personalization	2011	Lang, 1987
Hossein Lerzadeh	Revival of forgotten arts	Culture, identity, traditional architectural teachings, new forms of symbolism, climate	2015	Ahmadi & Sohrab, 2019
Nader Ardalan	Sense of unity		2017	Ilka et al, 2019

Given the pivotal role of thinking in conceptual construction and profound aesthetic encounters, this aspect holds significance within architecture. Despite semantic variations within this category, all instances contribute to the recognition of a distinct layer of unique environmental attributes (Finkelstein et al., 2016). This understanding imparts uniqueness to an environment and conveys a distinct significance. In this context, the notion of identity can be likened to the *meaning of the environment*, and the divergence in perspectives can be articulated through varying levels of meaning (Ebrahimzadeh et al., 2021). In the initial stage, humans comprehend external attributes via environmental qualities (primary meaning and form) and construct a fundamental mental model of the architectural structure. As time progresses, repetitive use of space illuminates the external impacts within the context of environmental qualities (prioritizing function). These influences, stemming from environment use, can either bolster or diminish initial experiences. Consequently, the architectural space's qualities, though more susceptible to environmental influence, are quantitatively lower than visual effects. Moreover, the time required to develop these qualities is lengthier. These influences, contributing to a more distinct environmental identity, vary in their scope and magnitude. Once a favorable rapport with the environment is established, an emotional significance emerges for individuals. This emotional meaning arises from interpersonal communication, fostering satisfaction, and attributing value to phenomena within a group setting.
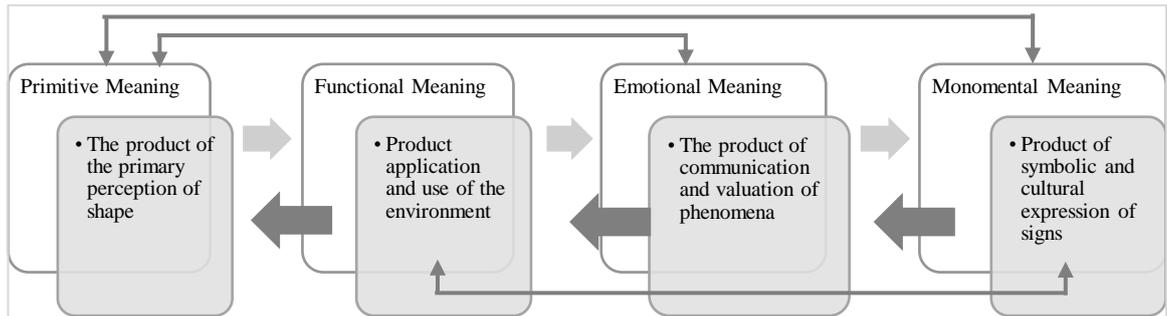
Figure 1: *level of meaning based on Soleimani et al. (2016).*

Lastly, the symbolic meaning, arising from the utilization of symbols and cultural patterns specific to the region, comes into play. A succinct summary of this explanation is depicted in Figure 1. The significance inherent to a place contributes to its livability, and when this significance is absent, the recollection of that place fades. In cases where the physical environment bears structural weaknesses, this translates into semantic frailty, disrupting the individual's capacity to establish meaningful and emotional ties. Consequently, an absence of place identity ensues. However, when a place is tailored for human use, it fosters a seamless alignment between the individual's mental perception and the physical environment. This harmonious spatial and personal continuity engenders feelings of contentment and ease, ultimately giving rise to what is termed as *spatial identity* (Trif, 2015).

A serene environment during learning and a physically diverse setting during the exploration can stimulate creative ideas that harmonize with the ambiance of the place (Polak, 2016). Students' perception of a place leads them to generate spaces that mirror or contrast with the influences garnered from the surrounding environment throughout the design process. The assimilation of experiences significantly contributes to shaping both social life and spatial identity. As soon as an individual establishes an emotional and sensory bond with a place, the foundation of that place's identity begins to take shape (Geropanta & Papamanolis, 2017). The identity of places is shaped by three primary factors: physical elements, activities, and meanings (Ellis & Goodyear, 2016).
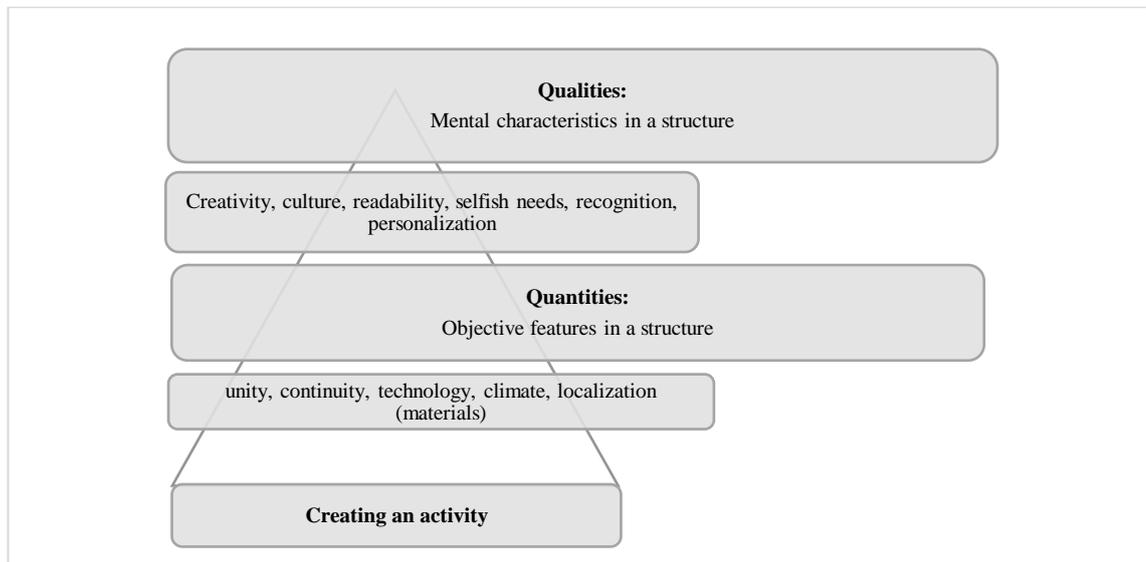

Figure 2: *Effective identity in creating activity.*

Physical appearance and meanings are pivotal in engendering the acceptability of an environment and fostering activities within it. These three fundamental components collectively mold the identity of places, with their dialectical interconnections constituting the primary structural relationships defining these identities. Activities encompass social interactions between individuals and their surroundings.
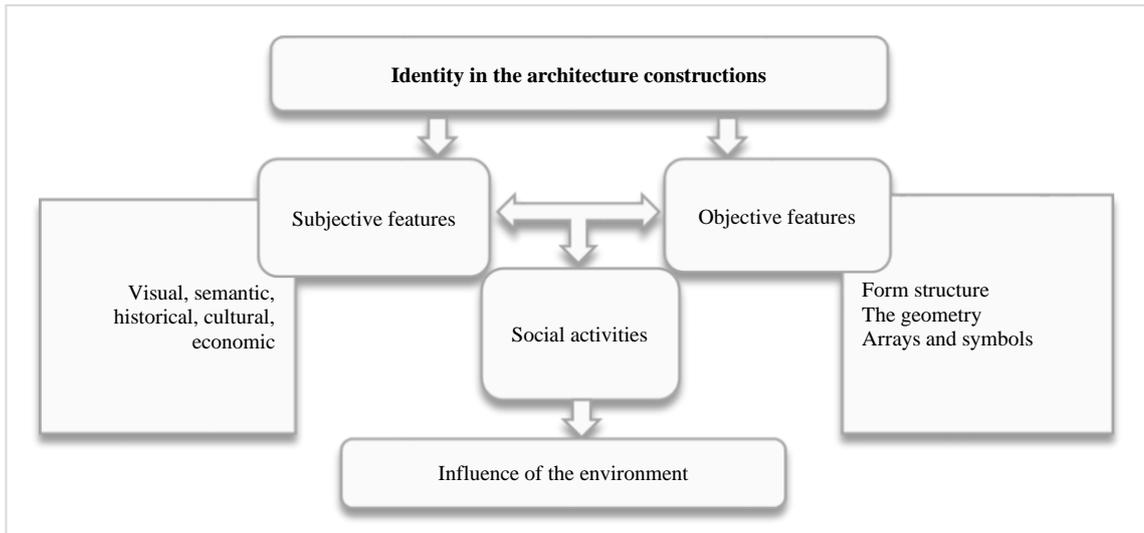
Figure 3: *A conceptual model of identity measurement criteria.*

Illustrated in Figure 2 is the proportional interplay of two key concepts: the quality of the environment contributing to vitality and the quantitative diversification of physical attributes. Vitality stands out as the distinguishing factor that sets apart successful educational environments. However, achieving an optimal educational environment involves a delicate equilibrium between vitality and diversity, complemented by the inclusion of neutral spaces that prioritize tranquility and focus. The integration of *qualities, quantities, and social activities* culminates in the spatial identity model depicted in Figure 3. This model builds upon the foundation laid by Kashi (2013) and serves as a conceptual framework to scrutinize the criteria underpinning the identity of the physical environment. Moreover, it facilitates an exploration of the influence of these criteria on the statistical population.

Table 2: *The factors that have an impact on the formation of place identity, as indicated by the literature.*

Goal	Effective factors over time	Identity criteria for the physical environment	Criteria for measuring spatial identity
Strengthening the effectiveness of spatial identity in educational environments	▪ Participation of users ▪ Correct management ▪ Basic planning	physical Continuity and continuity - form and size/ Relationships and arrangement - Furniture - Visual diversity - Symbolism - Location - Services - Nature - Decorations - Color and light an activity/ Diversity in relationships between people and places - planning for the presence of more people Semantic/The semantic structure of signs - place identity	Type of person's relationship with the body/ The type of person's relationship with the activities in the place/ The dominant identity over the place/ Type of relationship between people/ Individual characteristics/ cultural factors Attendance at the location Management and planning/ Participation of users

Investigating the Spatial Identity of Architecture Schools within the Sampled Community and its Influence on Students

To assess spatial identity, architecture schools are classified into five categories:

1. historical identity

2. natural identity

3. technological identity

4. hybrid identity

5. social identity.

In order to achieve comprehensive results, ten architecture schools in Iran were selected for the study. Consequently, the statistical population consists of ten architectural faculties from Iranian universities.

The first category, summarized in Table 3, pertains to the prevalent historical identity observed in faculties housed within renovated historical buildings. These spaces create a familiar ambiance and hold greater value for users, examples of which include Yazd University and the Islamic Art University of Tabriz.

The second category, as outlined in Table 4, represents the natural identity where the college's environment takes precedence over the physical space, evident in institutions like Tabriz and Qazvin universities.

The third category (Table 5) encompasses modern buildings, characterized by a technological emphasis, showcasing distinctive structural elements as visual features. Noteworthy examples include the Architecture Faculties at Ferdowsi University in Mashhad and Bahonar University in Kerman.

In the fourth category (Table 6), titled hybrid identity, more than one facet of identity holds sway, exemplified by the Faculty of Art and Architecture at Isfahan and Shiraz Universities.

Lastly, the fifth category (Table 7) consists of environments with social identities that effectively engage users. These spaces are defined by their multi-purpose nature, ample access to light and nature, and their success in facilitating diverse behavioral activities. Prominent examples encompass the Faculty of Architecture at Tehran University and Shahid Beheshti University.

1. Faculty of Architecture, Islamic art university of Tabriz.	2. Faculty of Architecture, Yazd University.	3. Effective factors in the formation of identity.

Left to right: 1 & 2. Sketches of Yazd Faculty of Art and Architecture students. 3 & 4. Sketches of Islamic art the University of Tabriz students.
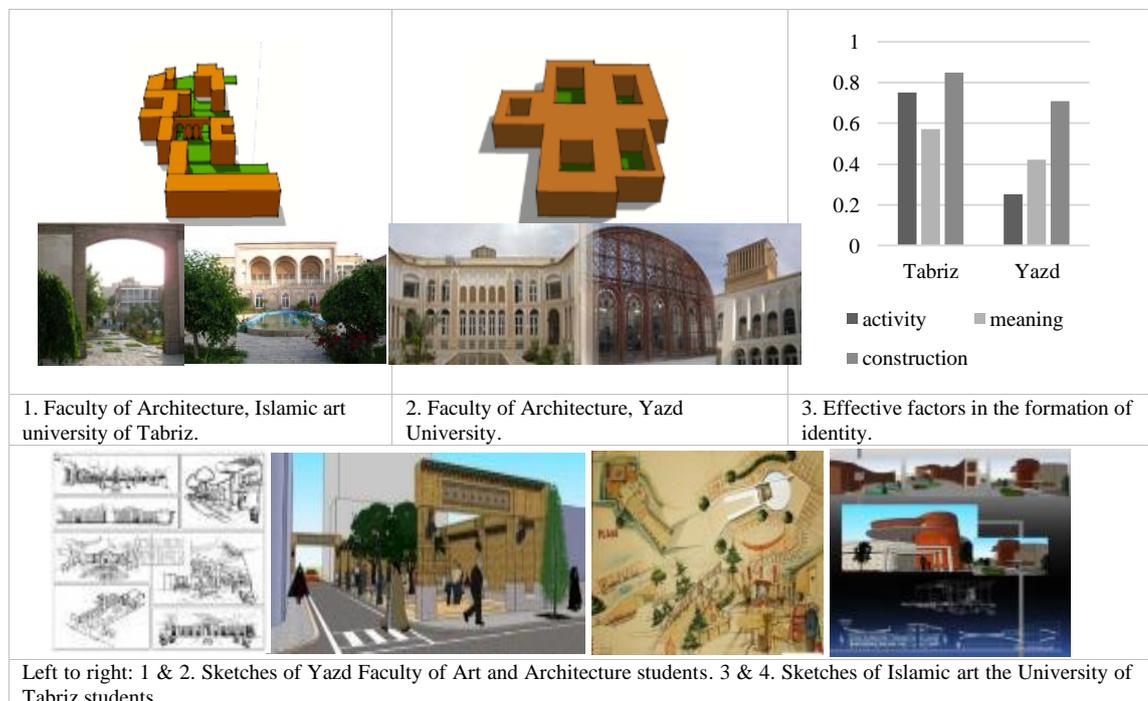
Figure 4: *Islamic art university of Tabriz, Yazd University, identity chart, student sketches.*
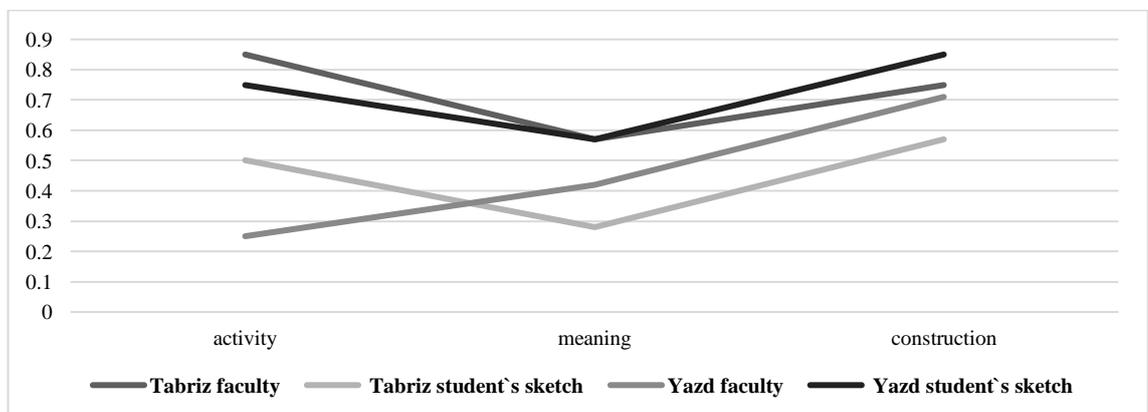

Figure 5: *The revelation of identity criteria in students design process.*

Table 3: *Effective factors in the formation of the historical identity in selected educational environments.*

Environmental Activities				Semantic criteria of the environment (Subjective Evaluation)							Physical measures of the environment (Visual Effects)							Elements
A sense of belonging to a place	The spirit of participation	Social interaction	Environmental vitality	Quality of materials	Personalization	Cognition	Human needs	Readability of the environment	Cultural and traditional symbols	Creativity	Climate measures	Localization	Symbolic decorations	The geometry	Using new technology	Visual continuity	Spatial unity	The components that make up the elements of identity
⊗		⊗	⊗	⊗		⊗	⊗	⊗	⊗		⊗	⊗	⊗	⊗		⊗	⊗	1
⊗				⊗			⊗		⊗		⊗	⊗	⊗	⊗			⊗	2
		⊗	⊗					⊗		⊗				⊗	⊗	⊗	⊗	1
⊗		⊗	⊗	⊗		⊗	⊗	⊗	⊗		⊗	⊗	⊗	⊗		⊗	⊗	2

1. Faculty of Architecture, Tabriz University.	2. Faculty of Architecture, Gazvin University.	3. Effective factors in the formation of identity.

Left to right: 1 & 2. Sketches of Tabriz Faculty of Art and Architecture students. 3 & 4. Sketches of Qazvin art university of Tabriz students.
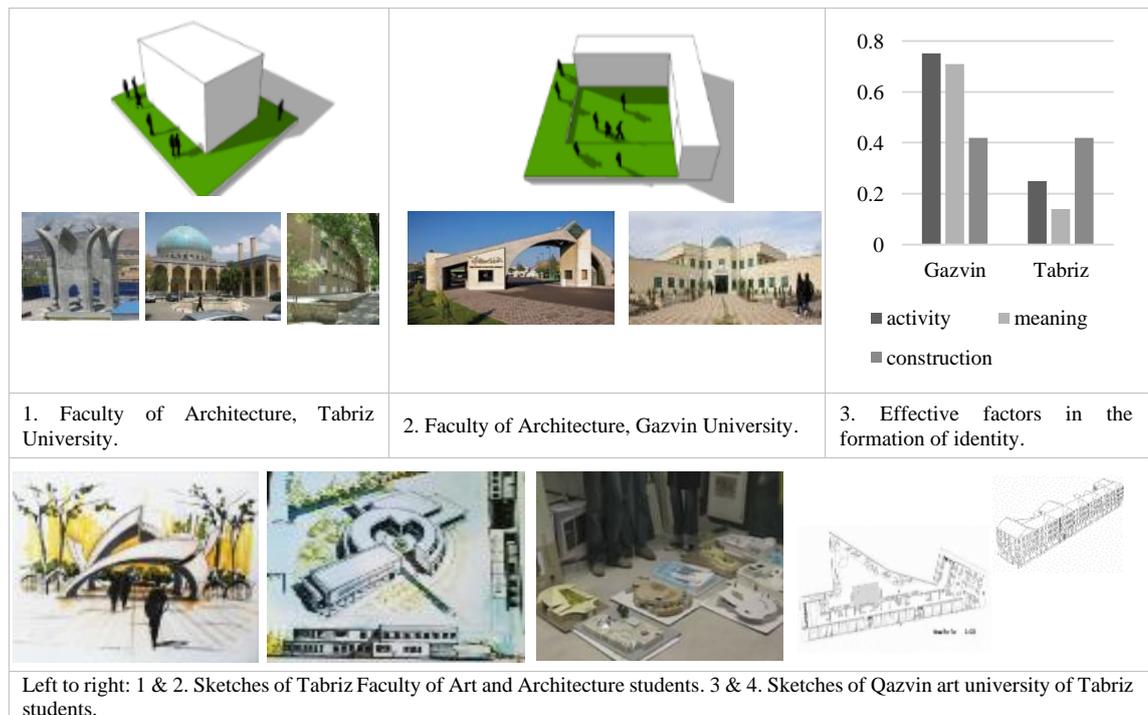
Figure 6: *Tabriz University, Gazvin University, identity chart, student sketches.*
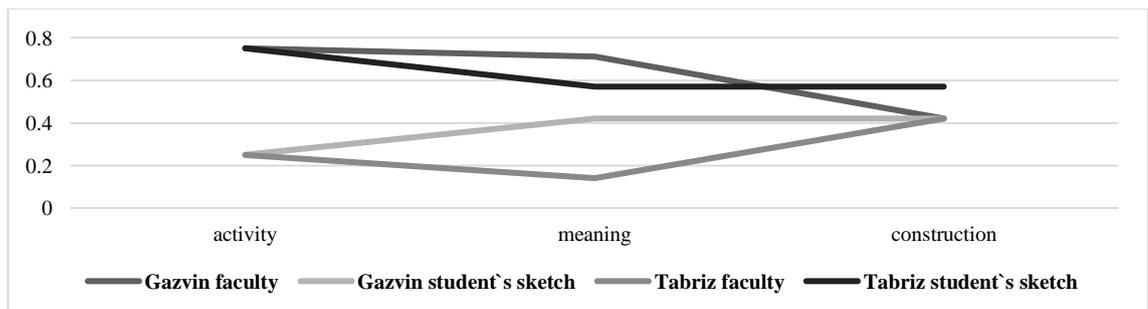

Figure 7: *The revelation of identity criteria in students' design process.*

Table 4: *Effective factors in the formation of the natural identity in selected educational environments.*

Environmental Activities				Semantic criteria of the environment (Subjective Evaluation)							Physical measures of the environment (Visual Effects)							Elements
A sense of belonging to a place	The spirit of participation	Social interaction	Environmental vitality	Quality of materials	Personalization	Cognition	Human needs	Readability of the environment	Cultural and traditional symbols	Creativity	Climate measures	Localization	Symbolic decorations	The geometry	Using new technology	Visual continuity	Spatial unity	The components that make up the elements of identity
		X	X	X		X	X	X	X					X	X		X	1
							X				X	X				X		2
		X				X		X		X				X		X	X	1
X		X	X			X	X		X	X			X	X	X	X		2

1. Faculty of Architecture, Ferdowsi Mashhad University.	2. Faculty of Architecture, Bahonar Kerman University.	3. Effective factors in the formation of identity.

Left to right: 1 & 2. Sketches of Mashhad Faculty of Architecture students. 3 & 4. Sketches of Kerman University students.

Figure 8: *Ferdowsi University of Mashhad, Bahonar University of Kerman, identity chart, student sketches.*
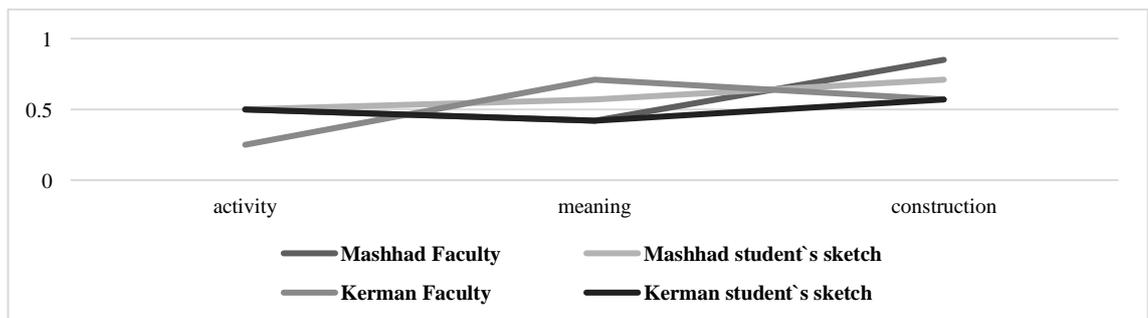

Figure 9: *The revelation of identity criteria in students' design process.*

Table 5: *Effective factors in the formation of the natural identity in selected educational environments.*

Environmental Activities				Semantic criteria of the environment (Subjective Evaluation)							Physical measures of the environment (Visual Effects)							Elements
A sense of belonging to a place	The spirit of participation	Social interaction	Environmental vitality	Quality of materials	Personalization	Cognition	Human needs	Readability of the environment	Cultural and traditional symbols	Creativity	Climate measures	Localization	Symbolic decorations	The geometry	Using new technology	Visual continuity	Spatial unity	The components that make up the elements of identity
	✖	✖		✖			✖			✖	✖	✖	✖		✖		✖	1
	✖			✖		✖	✖	✖		✖	✖				✖	✖	✖	2
✖	✖			✖	✖		✖			✖	✖			✖	✖	✖	✖	1
	✖	✖					✖	✖		✖	✖	✖		✖		✖		2

1. Faculty of Architecture Esfahan University	2. Faculty of Architecture, Shiraz University	3. Effective factors in the formation of identity

Left to right: 1 & 2. Sketches of Esfahan Faculty of Architecture students. 3 & 4. Sketches of Shiraz University students.
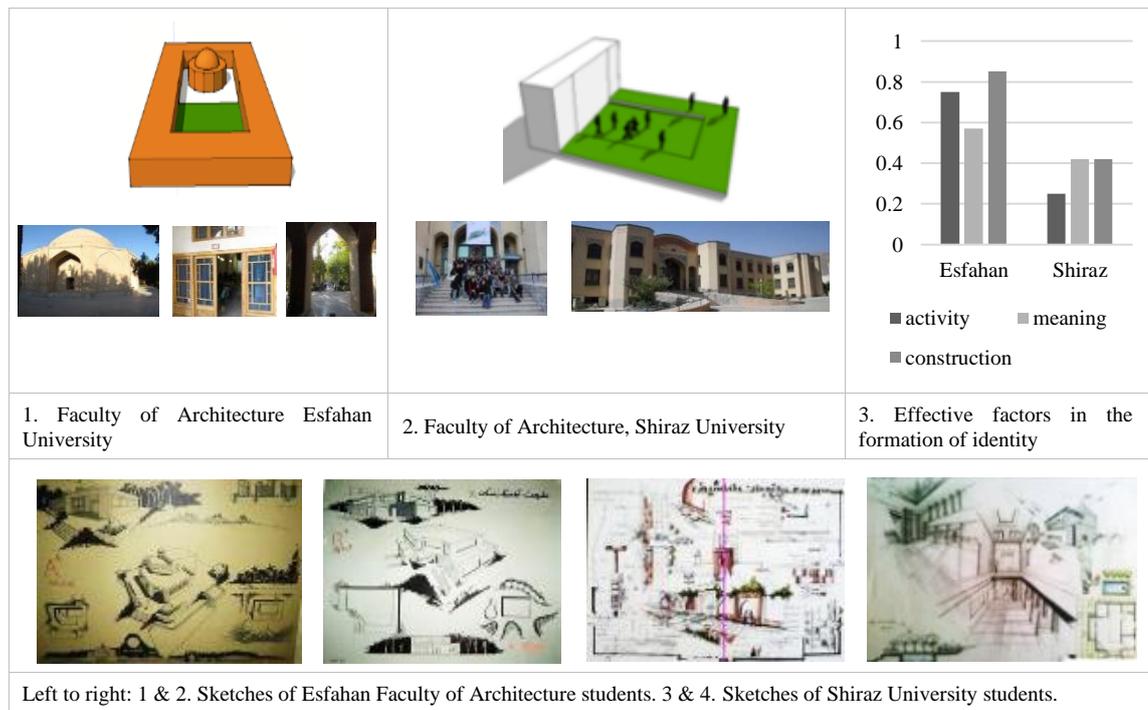
Figure 10: *Art university of Esfahan, art university of shiraz, identity chart, student sketches.*
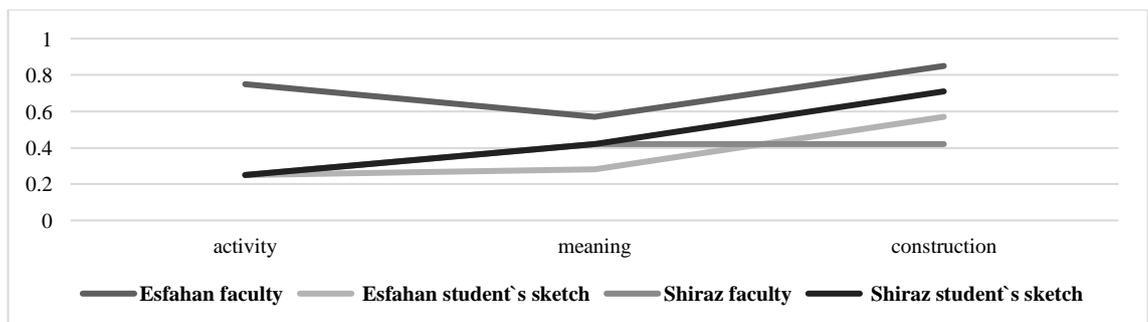

Figure 11: *The revelation of identity criteria in students' design process.*

Table 6: *Effective factors in the formation of the hybrid identity in selected educational environments.*

Environmental Activities				Semantic criteria of the environment (Subjective Evaluation)							Physical measures of the environment (Visual Effects)							Elements
A sense of belonging to a place	The spirit of participation	Social interaction	Environmental vitality	Quality of materials	Personalization	Cognition	Human needs	Readability of the environment	Cultural and traditional symbols	Creativity	Climate measures	Localization	Symbolic decorations	The geometry	Using new technology	Visual continuity	Spatial unity	The components that make up the elements of identity
	✕	✕	✕	✕		✕	✕	✕	✕		✕	✕	✕	✕		✕	✕	1
		✕		✕		✕	✕		✕				✕		✕	✕		2
✕						✕		✕			✕	✕	✕				✕	1
✕						✕	✕		✕		✕	✕	✕	✕		✕		2

1. Faculty of Architecture, Tehran University	2. Faculty of Architecture, Shahid Beheshti University	3. Effective factors in the formation of identity

Left to right: 1.2. Sketches of Tehran Faculty of Architecture students / 2.3. Sketches of Beheshti University students.
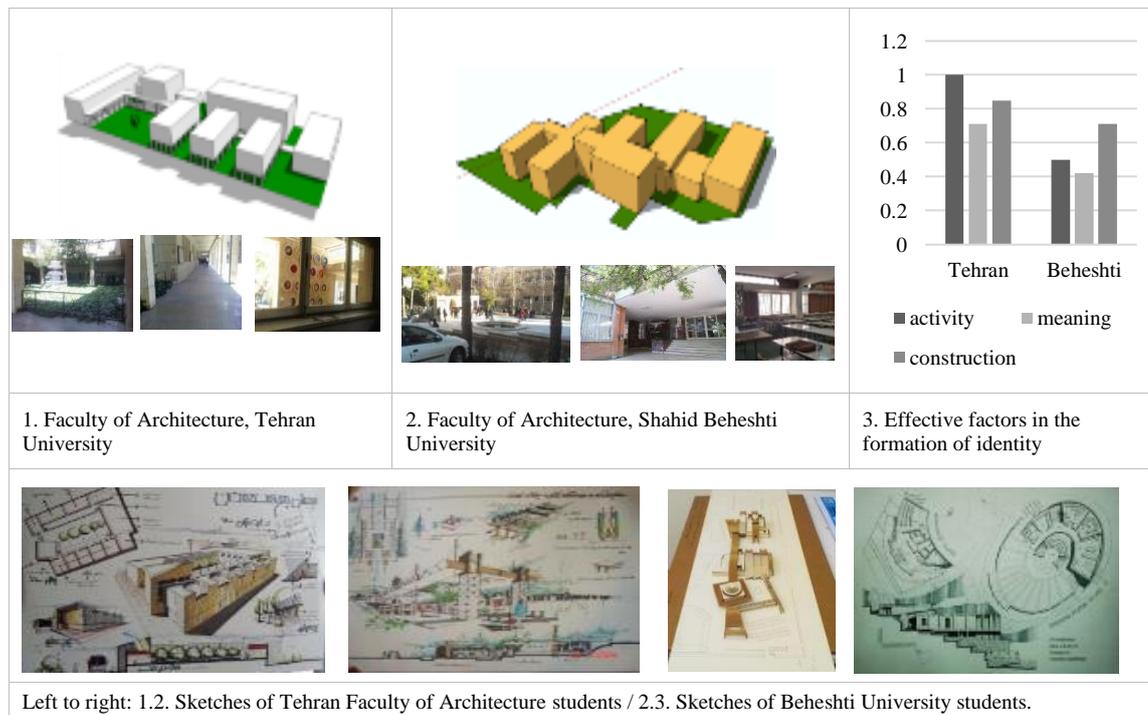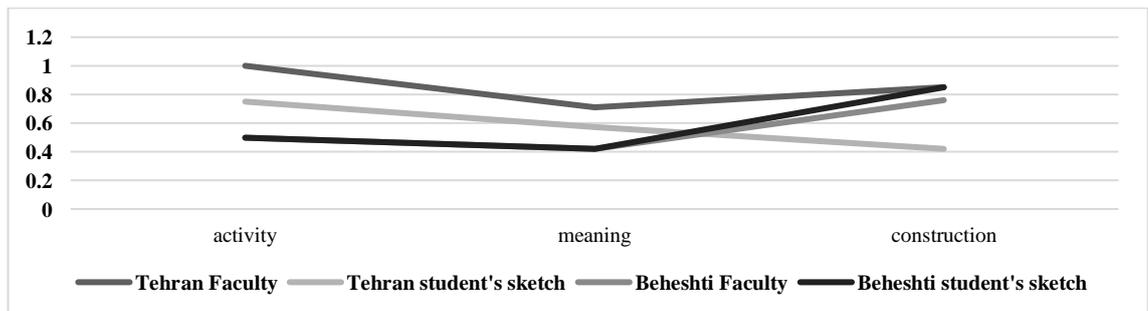
Figure 12: *Tehran University, Shahid Beheshti University, identity chart, student sketches.*

Figure 13: *The revelation of identity criteria in students' design process.*

Table 7: *Effective factors in the formation of the social identity in selected educational environments.*

Environmental Activities				Semantic criteria of the environment (Subjective Evaluation)							Physical measures of the environment (Visual Effects)							Elements
A sense of belonging to a place	The spirit of participation	Social interaction	Environmental vitality	Quality of materials	Personalization	Cognition	Human needs	Readability of the environment	Cultural and traditional symbols	Creativity	Climate measures	Localization	Symbolic decorations	The geometry	Using new technology	Visual continuity	Spatial unity	The components that make up the elements of identity
⊠	⊠	⊠	⊠		⊠	⊠	⊠	⊠		⊠		⊠	⊠	⊠	⊠	⊠	⊠	1
	⊠	⊠			⊠	⊠	⊠				⊠		⊠		⊠	⊠	⊠	2
⊠		⊠	⊠		⊠	⊠		⊠		⊠			⊠	⊠		⊠		1
⊠		⊠		⊠		⊠	⊠				⊠	⊠		⊠	⊠	⊠	⊠	2

Result and Discussion

Based on the findings, students tend to recollect experiences that evoked distinct emotions and endeavor to incorporate these effects into their design process. The educational environment's atmosphere influences them, even if they are dissatisfied. This influence manifests itself during the design process, although it remains uncertain whether it is manifested consciously or unconsciously. Several university indicators have notably influenced students' design approaches. For instance, the middle atrium's geometry at the International University of Qazvin, functioning as a successful symbol for architectural activities, profoundly impacted the fourth design project of undergraduate students. Nature's dominance at the Islamic Art University of Tabriz is evident in collected sketches, making it a significant influential factor. Meanwhile, the modern structural construction of the building at the Mashhad Faculty of Architecture has engaged students in the design process.

Given the broad spectrum of influential factors, quantifying the extent to which physical or spatial perceptions align with the original sample is not feasible on a specific scale. To gauge the influence of prevailing spatial identity on students, an expert team conducted an analytical assessment of components. Initially, based on existing literature, levels of place identity were classified as *construction, meaning, and activity*. Subsequent observations revealed that users prioritize environments fostering social vitality and encouraging participation in activities. Referencing Figure 14, a comparison foundation is established. According to the outcomes, it was ascertained that the University of Tehran, with its dominant hybrid identity, exerts the most substantial impact on users, augmenting the number of activities. In the other category, colleges with prevalent historical and social identities, such as Tabriz and Isfahan, exhibited more analogous factors as reported by users.

In the Yazd Faculty of Architecture (Figure15), courtyards are scattered in separate units and connected by corridors. In Isfahan (Figure15), a single expansive courtyard stretches between walls, while in Tabriz, the courtyards are composed of various segments, yet united as one. At Yazd College, students exhibit robust communication but less interaction among themselves. Conversely, in the courtyards of the Islamic Art University (Figure15), a lively atmosphere is perpetually infused with activities despite a small population. The buildings ensure an unobstructed visual connection while preserving privacy. The Faculty of Fine Arts (Figure15) features a central columned corridor that is shared among all buildings. The varying heights or separation of courtyards effectively safeguard each group's privacy. This approach also reinforces the collective spirit and enhances the social perception of space.
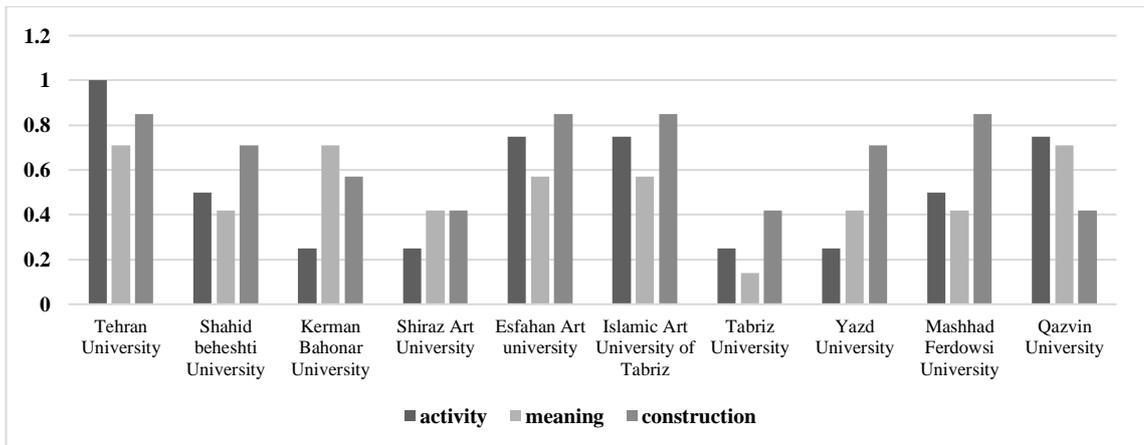
Figure 14: *The number of effective factors in the formation of the identity of the educational environments.*
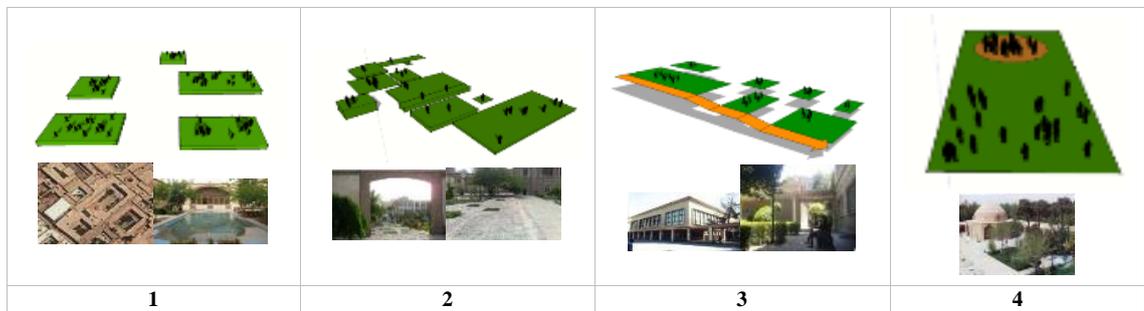

Figure 15: *1. Modeling the courtyard of Yazd College, 2. Tabriz Islamic Art, 3. Fine Arts and, 4. Isfahan.*

The layout of the faculties significantly influences enhanced student communication through features like skylights and communal gathering areas, as evidenced in institutions such as Bahonar, Ferdowsi, Shahid Beheshti, and Qazvin Figure 16. At Ferdowsi University in Mashhad, skylights are skillfully integrated with space frame structural elements and suspended trusses, showcasing an architectural and structural statement. This innovative approach likely influenced students to a certain degree. Remarkably, approximately 30% of undergraduate students at this faculty express interest in pursuing further education in architectural technology, particularly with a focus on structures.

Figure 16: *The skylights of the Ferdowsi University of Mashhad, Faculty of Architecture.*

Hall's research in 2002 revealed that classrooms equipped with expansive windows, abundant natural light, and well-designed skylights yield a 19% to 26% improvement in students' performance compared to their counterparts in classrooms lacking these features (Karakas & Yildiz, 2020). The dimensions and configuration of windows, as well as the extent of natural light infiltration in classrooms across the studied faculties, are depicted in Figure 17. Notably, the classrooms at the Faculty of Fine Arts and Tabriz University receive the highest levels of light figure. This abundance of natural light encourages students to spend more time in these classrooms.

In contrast, the Kerman Faculty of Architecture faces a reduction in classroom usage due to undersized windows, failing to meet the educational requirement for adequate natural lighting. Surprisingly, Isfahan College despite its limited space and one-sided illumination, fosters attachment and prolonged occupancy due to its choice of materials and recognizable geometry.

Figure 17: *from left to right: 1. Faculty of Fine Arts, 2. Isfahan College, 3. Saba Architecture Faculty, Bahnar University, Kerman, & 4. Faculty of Architecture, Tabriz University.*

Figure 18: *from left to right: 1. Tabriz University, 2. Shahid Beheshti University, 3. Ferdowsi University of Mashhad, 4. Shiraz University, & 5. Bahonar University, Kerman.*

Figure 19: *from left to right: 1. Islamic art university of Tabriz, 2. Yazd University, & 3. Isfahan Faculty.*

Observations indicate that studios benefiting from ample light and a connection with the natural environment are more popular and attract a larger crowd of users. Interior design strategies that inject diversity into workshops, thereby avoiding uniformity, were highlighted by interviewees, catering to a broad spectrum of studio activities. Additionally, spaces such as presentation galleries have been established to accommodate social interactions, noted due to their hosting of communal activities. Contrary to the design of galleries at Yazd and Qazvin Faculties Figure 20, which are separated, another approach places the gallery within passageways. This difference is perceptible. Showcasing standout projects in communal areas augments the competitive spirit and fosters a stronger sense of attachment among students to the place. An approach that underscores customization and active involvement in decoration policies contributes to creating a distinct sense of place, perpetuating the establishment's identity.

Figure 20: *from left to right: 1. Shahid Beheshti University, 2. Ferdowsi University of Mashhad, 3. International University of Qazvin, 4. Bahnar University, Kerman, & 5. Yazd University.*

Evaluation results underscore the critical importance of considering influential components within the Faculty's environment. These components necessitate spaces that are not mere voids but instead facilitate a diverse range of activities. Such spaces should be equipped to accommodate learning activities and basic student needs. For instance, a bench placed within a green environment can encourage conversations, chess games, or reading. The presence of such features is instrumental in enabling these activities. Consequently, each environment must be equipped with specialized facilities that cater to user needs. Upon evaluating the educational environments of the sample community, the extent to which identity criteria are effective was assessed. The analysis was guided by three identity levels: physical, meaning, and activities. A dominant sense of place identity is most influential when it translates into a vibrant space or optimal functional utilization. While historical identity impacts the physical environment's recognition, its influence on students' design processes appears less pronounced. Comparatively, natural environments and communal areas exert a more pronounced influence. Students frequently attempt to incorporate nature into their designs, either by reinterpreting existing formations or creating new ones. In the hybrid identity approach, both construction and activities assume great significance. Notably, spaces conducive to concentrated and silent activities, vital for the meaning category, are somewhat less emphasized in such environments. Technological identity directly affects students through construction features. In environments with a strong social identity, construction has outweighed activity, leading to users' improper utilization of space and a resultant negative impact. Despite these variations, natural identity has proven successful in fostering and encouraging activities. Due to its relatively lower significance compared to the bedrock of meaning, construction takes a back seat in this context. Comprehensive scrutiny of different Iranian universities revealed that students are consciously or unconsciously influenced by their surroundings in their design processes. Effects can be categorized into general and partial categories. In the general category, distinctive forms with notable technological elements are desirable. These visual elements are ingrained in students' minds as simplified codes and can resurface in their design processes. The overarching geometry of architecture schools often finds its way into students' designs, albeit not in an exact replica, but through form and conceptual processing. In more nuanced effects, communal areas and facilities stand out. These spaces tend to have a deep emotional impact, unconsciously leaving impressions on students' minds. Additionally, specific elements and details from the environment, such as arches, lighting, and structures, frequently manifest in students' sketches. This underscores the vital importance for educational space designers to comprehend the impacts and satisfy the primary users of these spaces, namely the students. Most architecture students commence their education with limited experience in understanding building geometry, forms, and their effects, despite encountering them daily. Architecture constructs an intellectual foundation for them, often influencing their design activities. Although students might not consciously acknowledge this influence, a compatible architectural atmosphere can bring out its effects in their work, even if unintentional.
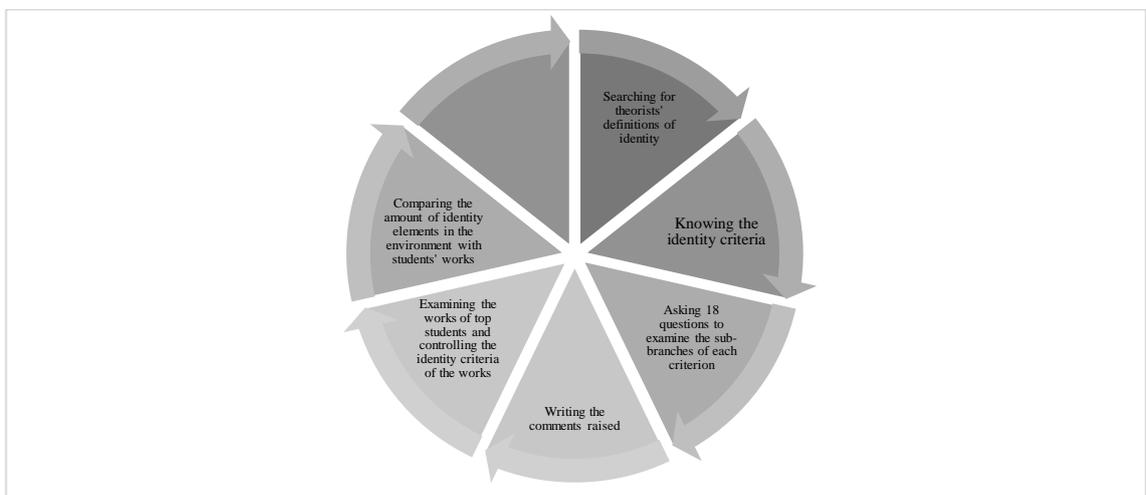

Figure 21: *Six steps for collecting and analyzing findings.*

Conclusion

In conclusion, the research has unveiled that the prevailing identity within an educational environment can be discerned by delineating the impact of three key categories: *activity, meaning, and structure*. This dominant identity profoundly influences students, catalyzing the inclusion or exclusion of certain elements in their design endeavors. The outcomes emphasize that the foremost attributes of educational spaces are *flexibility and integration with nature*. Flexibility in educational spaces resonates with findings from Hersch's 1997 study, showcasing its potential to enhance comprehension and foster creativity within academic contexts. This flexibility and functionality are further underscored in construction details. For instance, in the design of classrooms, elements such as natural brightness (daylight) and spaciousness, along with considerations like student density, emerged as significant factors. As a collective, the research demonstrates the intricate interplay between an environment's identity and the resultant impacts on students and their design processes. The pivotal role of flexibility and harmonious integration with the natural environment signifies key components in shaping successful educational spaces (Şenyiğit & Basri Memduhoğlu, 2020).

Furthermore, as educational methods evolve over time, it becomes imperative to anticipate corresponding changes in educational spaces to meet evolving needs. Traditional singular-purpose spaces are evolving into multifunctional hubs, leading to a reduction in the number of specialized areas for specific tasks. While Iran's architecture schools possess sufficient quantitative capacity, there is a need to prioritize qualitative approaches. Establishing visual connections with the natural environment can play a pivotal role in achieving this objective. The transformation of historical buildings into architectural faculties has been a recurrent solution. However, instructing within small, poorly lit rooms renders the learning environment inadequate. A college setting with an innovative design and a fresh interpretation of millennia-old architectural principles should convey its essence to students not just through texts, but by erecting well-suited structures. Only through this approach can the correct perception and enduring inspiration of the original art of architecture be ingrained in the minds of current students and future practitioners. An architecture student's design project comprises spaces wherein unique sensations are experienced. Summing up the findings, the most impactful environments for students encompass *public spaces, distinctive areas within the faculty building, and symbolic elements*. The diverse experiences in these settings can either be tangible or subconsciously crafted. The design process is a dynamic and reflective culmination of conscious and subconscious notions of the artist, crafted in response to the environmental requirements of the time's users. It's important to acknowledge that establishing fixed rules regarding how users are influenced by their environment is challenging. This complexity arises from the multitude of influential factors in the design process, and the fact that some of these factors shift over time, leading to divergent outcomes. However, this research's primary aim was to scrutinize the works and showcase the potential impacts of the environment on students. Hopefully, the contents of this study contribute a small stride towards enhancing awareness among interested parties and pinpointing avenues for future educational research. In conclusion, heartfelt gratitude is extended to all esteemed professors and students who contributed to this research through their active participation.

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