

Spatial Analysis on Psychodynamic Influences on Dwelling Spaces of Vernacular Architecture –Tamilnadu

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ABSTRACT

In process of human Evolution and burgeoning housing became a basic need. More ever ar- chitecture enhanced the living spaces with innovative designs and separates housing spaces. The connection between the realm of Vernacular Architecture and Psychological processes such as needs, drives, and emotions and desirable behavior of the occupants in a selected place in context. Behavior aspects in general and desirable emotional behavior of the in- habitants, in particular, is investigated to arrive at an experiential relationship between a range of physical feature variables of the vernacular residential settings like House front sit-out (Thinnai), Central courtyard (Mutram), space around the courtyard(Sutrukattu), Backyard (Kollaipuram) with material differences, form variations and a range of overt behaviors like positive thinking, affection, empathy, comforting, composure, control, efficacy at work, identity, order, connectedness and warmth among the occupants of the selected vernacular settings in Tamil Nadu. Subsequently, the hypothesis was formulated and tested by using the statistical tool; henry garret method and Pearson's correlation investigation to figure out the level of connection between Vernacular elements of the setting and the way of behaving of the inhabitants. Furthermore, to demonstrate the effects of the physical setting in provoking emotions and need-based behavior of the inhabitants. The results exhibit that there is a gigantic association between explicit assortments between express real component variables of vernacular plan settings and energetic direct like appearance warmth and stress for others, taking discernment of the social climate, and keeping up with congruity in their social environment. It is gathered that this study can be reached out to different other vernacular settings in Tamilnadu to get aggregate and significant proof on this bearing.

Keywords— Vernacular Settings, Pearson Correlations, Henry Garret, Psychodynamics, Dwelling spaces.

I. INTRODUCTION

Human evolution is an incredible process. In process of evolution includes both physical and physiological improvement. Dwelling, Food, and clothing have the highest impact on this evolution. Regardless, Housing is especially critical as it saves checking people from climatic conditions and environments. more ever with the headway of the expansion in necessities of individuals the style and spaces of the Housing arouse. In light of the physical and mental need, various spaces were committed for various motivations behind life. These spaces give both the passionate holding and mental joy face to face and their everyday' s life.

II. BACKGROUND STUDY

2.1 Housing

Housing habitats consistently connect the people to the nature and environment however each space in the house has its significance and uses. This significance makes the components of the house more unique and usable. Given occupation and the solaces of individuals over that these parts are focused on. As referenced lodging connects with the mental variables of the individual the pecking order of these parts is dynamic from one individual to another and here and there. Mohammad Taghi Nazarpour inspected the level of Responsiveness of Vernacular Architecture to the Needs of Citizens in Sari, Iran. It states that Any person who builds always tends to show his thoughts and ideas on things that he is going to build. The vernacular architecture consists of every house, space, and building constructed for mankind and man living. Buildings constructed will be based on available sources and benefit from all the traditional technologies. All vernacular structures are made for reacting to specific necessities, characterized living characteristics, and societies' ways of life made by them. Authors invested had given the inference that 62% of the people told housing is different from person to person [1]. Vernacular architecture can be upgraded to cutting-edge innovation and requirements without upsetting the way of life and customs. Guiding the architects anthropologically enhance projects of vernacular architecture that they handle can be customize to cover both culture and modern human goal. Novel approaches in the design process to tackle the cultural transformation aim to bring back the vernacular architecture and create affordable

architecture in modern society without losing the people's culture [2]. Vernacular houses were arranged with explicit key thoughts that were passed from one age and the accompanying. These engineering articulations will add to the passionate prosperity of the occupants [3]

2.2 Habitant Spaces:

Maria Cristina Bittencourta et al, describe the convenience of compositional spaces, characteristics of assembled climate as multidisciplinary Enhancement Environmental psychology studies about the impact of the architecture on the mindset of different people with their perceptions while Interior plan includes advancing the space, ecological solace which helps for simplicity of living. Ecological solace expresses that warm circumstances, ventilation, protection, acoustic and visual are essential to give the solace and these will be generally satisfied by House sit-outs [4]. Plan of compositional spaces by and large and exhibit their cozy relationship with the client's necessities and their capacities to arrive at their objectives as agreeably as could be expected.

Huaizu Cui et.al, Briefs about People's Behavior Psychological Demand in Private Court- yard Space and connection between the human mind, built structure and open area (Court- yard). The author's assessment helps in understanding people lead who stay in open space and stay in encased space. Extensive research concludes that people must incorporate the court space in their house to avoid negativity and mental stress. However, it is not the same for all people [5]. The open areas in the center of buildings such as central courtyards, orangery and the pit are not only sustainable but also sustainable principles. The architecture and useful features of the central courtyard have no unfriendly ecological effect and are viable with it in an astounding way [6]

The place's emotion and memory always drive the citizen to decide on the residential environment. esam Kamalipour et al portray individuals and connections towards the spot they have a real sense of reassurance, agreeable, and the debilitating place attachment in metropolitan and cosmopolitan regions. Furthermore, actual highlights can build the degree of individual connection. In any case, the length of living in homes likewise plays a significant job in setting up the connection. The author states physical and psychological conditions of dwelling, neighborhood, or city affect the significance of each place for inhabitants' attachment [7]. It demonstrates that sound surrounding spaces generally rules individuals to get joined to respective spots.

Quality of residence is a predominant factor that people always identify the indicators of the residents to measure the quality of the Residential Environment. That quality of the life is mainly related to the environment. Based on the survey conducted various environments impact people psychologically in various ways. However, the housing spaces creates a positive environment in the home which leads to a healthy and peaceful lifestyle. The author addresses that preferably certain variables by taking karaikudi as reference and this overviews will assist us with understanding the philosophy of individual's changes from one spot to another and environment to environment [8].

2.3 Psychodynamics:

Architectural Psychology is the relation between human emotion and their built environment. Architectural Element impacts immensely on Human Psychology and Behavior. Living climate impacts on Person conduct given Irwin Altman Diagram spaces of the lodging influence different mental elements like Privacy, Functionality, flexibility, Health and Safety, Accessibility, Open Spaces, and aesthetics. Nonetheless, these necessities and the variables are elements it shifts from one individual to another and all around [9]. The experience of individual space was considered by contrasting objective relational distance and the subject's view of interpersonal distance. Research in private space is established on the perceptions of naturalists that creatures show consistencies in the inter-individual distance. Subsequently, when human individual space was first Concentra on estimating it as the genuine relational distance was sensible [10]. Opting to the vernacular architecture will help us to enhance this relationship and enlighten the human emotions Habitation is a basic need of the human and mental sentiments on a structure different starting with one then onto the next. Furthermore, engineers should accept these mental sentiments as vital in planning them and building houses [11]. Considering the overview led among individuals of various urban communities to investigate critical necessities in the viewpoint of their private climate to raise personal satisfaction it was observed that given areas and the climate the conduct of occupants will change starting with one spot and then onto the next [12]. It gave a surmising that though various housing spaces have their unique benefits certain people opt or give more priority to certain spaces and opting for these spaces is extensively different from person to person as psychologically humans are un similar to each other. As all these spaces are connected to certain emotions. Observing the progressive system of room involving the dominating feeling as the connection is the most effective way. Social therapists are discussing the individual climate, the undetectable air pocket, the region around the body in a split-second, and its impact on the activities of a person. I expect that ecological planners append incredible significance to information and comprehension of these subjects. An architect ought to have the option to survey the requirements of his clients and not just by providing the space required by the client. Louis Kahn depicted space as two sorts of spaces, space, and architecture in discussion with architects [13]. Janghoon Yang characterized emotion as a given feeling space from centrality measures. And compared key feelings with physiological

pointers. Along these lines, one may all the more equitably check key feelings. The author also proposed measure relies upon just the construction of feeling space referred to distance measures like hood measure and entropy measure with various mathematical models. This helps us to use the Henry Garret ranking method to measure the hierarchy of different spaces [14]

2.4 Henry Garret method

Henry Garret's method has predominated application in a wide spectrum of industries Sripathi Kalvakolanu had applied Henry Garrett's positioning technique is applied to break down the significance given by the clients to the elements present in the cell phones. The outcomes have shown that specific highlights in mobiles, for example, camera, RAM and battery limit are the most affecting variables to buy a cell phone and clients have graded the phone as the best versatile [15]. Applying this theory significant factors impacting the dwelling spaces of the vernacular architecture can be extracted.

2.5 Correlation Method:

Correlation includes the estimation of affiliation or relationship, or relationship between two factors to discover whether they are emphatically or contrarily related, or not related at all. Two factors are connected if the progressions in a single variable affect or impact the progressions in the other variable. To gauge affiliation or Correlation between factors we use Correlation coefficients to communicate the level of affiliation or relationship. As such, Correlation coefficients measure the strength (course and size) of affiliation or Correlation between two factors [16].

III. METHODOLOGY

The study, Analysis, and inference of the people's psychological emotions and their im- pacts in the different spaces of vernacular housing either in excusing the particular space or tolerating a specific space were finished by both expressive and measurable investigation. As descriptive analysis involves interaction with the people. Interviews, associations individual Discussions, and questionnaires are taken as needed to accumulate the information and data.

3.1 Vernacular Architecture

Home is perceived as central in reflecting a variety of social and cultural values consider- ing individual and family identities. People always tend to attach psychological, social, and cultural significance to objects and physical spaces that support living in a specific context. However, the home is seen as an essential repository within which the processes induced by the cultural components and dimensions of the home get assimilated and acquire different meanings and memory among the occupants. As housing represents the culture and ideology of the society the housing spaces changes are highly dynamic on a geographic basis. This gave immense significance to vernacular Architecture to enhance the cultural and traditional architecture. Aside from as referenced lodging changes topographically this huge number of vernacular homes are planned and built-in various ways given the social and climatical prerequisites. Spaces of housing place a crucial role in accomplishing these necessities. Since the experience of home is the outcome of the inseparable phenomena of home dimensions and cultural components, it is inevitable to study the correspondence between the compo- nents of home and culture in the specific context to understand the relationship between the components of culture and Home. All over the world, there is a strong need in studying the vernacular home features to decipher the relationship between the identity, culture, social dimensions, and emotional components of the occupants. Since vernacular architecture is evolved over different periods to people's needs and cultural demands of the place.it is im- possible to determine by commonality in terms of spatial form and spatial layout. The usage of locally available materials and construction techniques that are practiced and hereditary passed over to the next generations makes it more complex to enquire into the development of the vernacular architecture, especially its socio-physical environmental outcomes.

3.2 Housing spaces

Each space was associated with Habitual, Cultural, Religious, Social & Economic ac- tivities connected to Episodic Memory from Chatting, Socializing, Ritualistic, Festivals, Personal and Gender-based. Individuals are associated with their homes full of feelings and enthusiastic bonds. Social and individual connections are displayed in spatial, psychological terms whenever people use objects and the physical space in the home to have social in- teraction, mutual succoring. It is inferred from previous studies that the home can qualify as a symbolic representation of certain relationships, associated with memories of the past transactions and bonds between people. Nevertheless, all these interactions that take place at home happen within a cultural framework of that place people, and time. The cultural components like Arts, science, technology, values, signs, symbols, social customs, rituals traditions, and language play an important role in propelling the interaction, transaction, and daily activities that happen at Home. In pursuit of this, the

home environment in the context of various Tamil Nadu residences was identified and the home dimension; Haven, order, identity, connectedness, warmth, and physically suitable were correlated with the cultural components like Traditional values, signs, symbols, social values, rituals, cosmological belief systems, habits, and language. In particular, the correlational study attempts to investigate whether the experiential relationship as a synthesis of cultural components and home dimension is mediated by a range of physical feature variables of the home settings like House front sit-out (Thinnai), Central courtyard (Mutram), space around the courtyard (Sutrukattu), Backyard (Kollaipuram) with materials of construction, form variations and a range of overt behaviors like positive thinking, affection, empathy, comforting, composure, and control, among the occupants of the selected traditional Home settings.

House sit front out: Thinnai has immense significance out of all spaces in the house. As House sit front out is the first space that anyone will interact with in-home it will invite us into the home. It is also called a house front sit-out. As shown in Figures 1 and 2 Most of the time house sit-outs are geometrically Latitudinally linear. However, based on the necessities the size and shape of the space is customized below pictures showcases some type of house front sit-outs.



Figure 1: House sit front out at Traditional Tamilnadu House (Source - Author)



Figure 2: House sit front out at Traditional Tamilnadu House (Source - Author)

Courtyard: Courtyard refers to open space that we can see after entering the dwelling unit. It gives a certain pleasant feel as it has the functionality of allowing sunlight, fresh air, and rain into the home. It makes housing airier. Out of giving more ventilation and great dispersing yards are planned in rectangular shapes which referred Figure 3 underneath pictures grandstands different types of courtyards



Figure 3: Courtyard of Tamilnadu House (Source - Author)

Surrounding spaces: Surrounding spaces consume the most extreme space in entire housing. Surrounding space is a passage that goes around the yard that permits individuals to get to the remainder of the housing rooms, bedrooms, and kitchens. As shown in Figure 4 Encompassing space affects individuals as most of the daily activities and exercises will be done here.



Figure 4: Surrounding Spaces of Tamilnadu House (Source - Author)

Back Yard: Backyard is eminent for Indian vernacular plan and culture. It additionally has more importance in lady's ways of life and exercises. As more often than not ladies invest energy around there. The backyard collaborates with the kitchen which is shown in Figure 5. From certain perspectives, normal or shared backyards for two houses were seen at certain spots.



Figure 5: Back yard of Tamilnadu House (Source - Author)

3.3 Psychodynamic Factors

Generally, a built environment is perceived by the occupants through the sensory inputs of all the senses received from the physical features of the built environment as an organized whole which is known as spatial experience. Though the present volume of research has provided certain evidence showing the link between the built environment and different emotional states. In this study, it is meant to appreciate how one can assess to impact those specific actual elements of assembled climate have on feelings and assuming it very well may be feasible to improve the good feelings by articulating the actual highlights of the structure plan to advance the prosperity of individuals at large. The comprehension of the effect of constructed climate on tenants' inclination is not seen intricately. In the prevailing pandemic context, for our work and lifestyle, we spent most of the time within a built environment, especially at home. Therefore, it is inevitable to empirically investigate whether sensory stimulations from the built environment influence, affect our emotional states or not, and lead to accepting or dismissing certain spaces.

The positive and negative affect schedule (PANAS) is administered to access the positive effect of the selective population since PANAS has been a validated assessment tool that has shown excellent psychometric properties in a variety of samples and populations, this has been employed to arrive at our findings in the study. As each space of the housing is linked to certain activities and to fulfill particular necessities all these spaces significantly differ from each other. Each space will produce or generate certain positive emotions which will have an immense influence on either liking or unliking certain spaces below table refers to corresponding emotions that a housing space can tend to produce.

As mentioned above Table 1 certain emotion will be triggered for respective space. And there is a significant relationship between certain variations between specific physical feature variables of vernacular architectural settings and emotional behavior like showing affection and concern for others, taking cognition of the social environment, and maintaining harmony in their social climate.

Table 1: Housing Spaces and their Traditional Name

Housing space	Traditional name	Psychological effects
House front sit-out	Thinnai	attentive
Courtyard	Mutram	sturdy
surrounding spaces	Sutrukattu	enliven
Back yard	Kollaipuram	stimulate

3.4 House front sit-out:

Behavior aspects in general and desirable emotional behavior of the inhabitants are investigated to arrive at an experiential relationship between a range of physical feature variables of the vernacular residential settings like Thinnai (house front sit-outs). The experience of positive affect like the enthusiastic behavior of the occupants depends on the identity which is created by the Thinnai of their home. The relationship between Thinnai (house front sit-out) and identity induces the experience of positive effects like alert/enthusiastic effect among the occupants and impact of physical setting in either rejecting or accepting the place.

3.5 Courtyard:

The experience of positive affect like the determined action of the occupants depends on the warmth which is created by the central courtyard of their home. It was created due to the restricted privacy that was given by the space. This develops people's psychological feelings of activeness and strongness. This feeling of the network and personality incites the experience of good influences like solid and liveliness among the inhabitants and the effect of actual setting in either dismissing or tolerating the spot.

3.6 Surrounding spaces:

As mentioned, surrounding space help for associating the home it has long corridors which occupy maximum space in the home. The experience of positive affect like the attentiveness of the occupants was induced by the connectedness which is created by the Surrounding space of their home. This house set has a special ability as it connected the whole housing. It enhances the generation of certain emotions like connection interrelation out of memories that space picture in the human mind which is variable for different human beings.

3.7 Backyard

The backyard is an open space that is one best parts of vernacular housing. It benefits both utility space and gardening space. Nature in the backyard generates certain emotions like joy, well-being and creativity. In addition, it also creates proudly secured feelings and heavenly feelings. This physical setting induces the experience of positive effects like inspired/proud/interested affect among the occupants. These positive changes from one individual to another drove certain individuals to reject, and certain individuals to acknowledge the space.

This study shall determine the potential of the built environment in stimulating the desirable emotions of the people. Since there is only very little study available to evaluate, how built environment features influence occupants’ emotional state. This study device affects the index to measure the emotional impact of the physical feature variables among the occupants experiencing the residential spaces.

3.8 Research Data caboodle

Psychology and human emotions are strongly emphasized based on culture place and geography. However, data-driven analyses will strong factors or evidence to conclude or understand certain things. This can be utilized for factual investigation and multivariant examination. Data gives the purest and finest information which will help filter out uncertainties in the field of study. As mentioned, Various methods are adopted to verify and understand the impact of psychological factors on the different spaces of vernacular architecture.

- As part of the analysis, the data gathering is done in various forms Personal Interaction / Interview
- Collection of grading on basis of the Likert scale
- Questionnaires

Personal Interaction or interviews give us the feasibility of interacting with occupants directly though it does help in getting the numerical and statistical data. It assists to understand the emotion and physical experiences of people. It helps to comprehend the inclination and experience of individuals However data gotten in this won’t access us to study statistical variation.

Observing the demerits of the personal interviews and iterations. Grading methods were pulled up to know the severity of the impact that a person has psychologically in accepting or rejecting a housing space. The grading was referred to in Table 2.

Table 2: Grading for Statements

S.no	Statement	Grading
1	Strongly Acknowledge	1
2	Acknowledge	2
3	More or less Acknowledge	3
4	unsure	4
5	More or less contradict	5
6	Contradict	6
7	Strongly Contradict	7

All these responses are different from each other and reflect the indication that psychologically everyone is different from each other. And certain psychological feelings are having a huge impact in showcasing this variation. Using the hierarchy method, we would like to figure out which housing has high credibility and acceptance rate when compared to the rest of them. As referred in Table 2

3.9 Henry Garret Grading Method

Garrett’s Grading Technique was applied to focus on the tendency, difference in solicitations of necessities, and advantages into numerical scores. The fantastic advantage of this system over clear repeat scattering is that the restrictions are coordinated considering their reality as per the point of view of respondents.

3.10 Pearson’s correlation coefficient

Pearson’s correlation coefficient is the test insights that action the statistical relationship, or relationship, between two persistent factors. It is known as the best technique for estimating the relationship between factors of interest since it

depends on the strategy for co variance. It gives data about the greatness of the affiliation, or connection, as well as the course of the relationship

IV. INVESTIGATION AND ASSESSMENT

To figure out the effects of psychodynamic elements that are influencing the excuse of dwelling spaces.3 areas are selected i.e., Erode, Thiruvarur, and Sivaganga as implied in Table 3

Though the area of study is gigantic it was seen that a tremendous piece of the spots have indistinct culture and empowered hood. The collection of the occupation is a basic part of getting individuals of various district occupations and Outlooks.

Table 3: Scope of study

Region -1	Region -2	Region -3
Erode	Thiruvarur	Sivaganga

Psychologically people are incompatible with each other however certain features habits and live hoods have a dominating impact on the psychological development of the people and people from these masses have homogenous attributes. This as credentials in certain places are filtered out with contracting occupations like farming, self-employment, and house holdings. Erode, Thiruvarur & Sivaganga are selected on these bases only.

Erode: Disintegrate remains as eleventh greatest state in India with a region inclusion of 1,30,058 sq. km Geographically. Erode is being driven by farming disintegrate remains in the first setup underway of turmeric. These individuals favor natural arrangements which are plausible for agribusiness both socially and practically.

Thiruvarur: It is an ancient place in Tamilnadu Thiruvarur is referenced as the capital town of an amazing Chola lord, Manu Needhi Cholan, who killed his child to give equity to a cow. Thiruvarur was one of the five ordinary capitals of the Chola domain and the authentic scenery of the town twirls around the Thyagarajaswamy asylum. Having the Majority of the people involved in self-employment most of them are inclined to design their houses customized to support their live hood.

Sivaganga: Housing plays a huge part in supporting the occupation and its capacities. These components made ancient vernacular design still dynamic in some spots of disinte- grating. With this multitude of references and key elements dissolve was picked as the extent of exploration and study job of character and enthusiastic experience among the occupants of housing spaces

Information was assembled up close and personal by eye-to-eye joint effort. Consid- ering the psychological audit explicit studies are made and mentioned people around the recently referenced places. The assumption was to keep the responses moderate accounts and photographs were assembled.

Key Aspects got from different partners for building Questionnaire:

- Covering the energetic capacity with moderate framework and frailty impart to bias
- Impact of social dynamics eliminates
- Assuming the Insignificance of the spaces without clear knowledge
- 20% problem prompted fear to show with certain real factors

By examining the reaction given by the respondents it was observed that individuals in total in every one of the locales have not many variables that are affecting the acceptance and prioritizing of different housing spaces.

To audit a mind-boggling course of action with this as a benchmark frame has been finished. As a piece of this, people from the division have given their rating on a solicitation for the parts that are affecting them for certification and focusing on various dwelling unit spaces.

As mentioned above 4 housing spaces are filtered out for the scope of this research and study these housing spaces. Based on the study and usages these 4 are selected and survey for these spaces was done in different areas mentioned below in Table 4

Table 4: Various Housing spaces of Vernacular Architecture

Various Spaces
S 1 - House frontsit-out S
2 - Courtyard
S 3 - Surroundingspaces S
4 - Back Yard

Data for a different set of people and genders and ages were collected to find out the holistic behavior and opinion of various people on housing spaces. However, this data is filtered out and analyzed using analytical tools further moving.

Table 5: No of people participated in the survey

Erode Dist.	Thiruvavarur Dist.	Sivaganga Dist.
195	230	200

Referring Below to Table 5 data on interaction will help us to get the information that supports providing judgment. To attain this assorted questionnaire are given to answers which will understand the behavior and ideology of the occupants As referred in the above table Around 195 people gave their responses however these people involve different genders and age groups. In addition, largely 230 people and 200 people responded from Thiruvavarur and Sivaganga respectively. The below table gives the glance of the professions of people that took part in this study as mentioned this profession is dynamic by geographic conditions.

Table 6: Summary of People who participated in Survey

Profession	Erode Dist.	Thiruvavarur Dist.	Sivaganga Dist.
Architect	12	31	18
Farmer	77	21	-
Homemaker	16	27	23
professor	28	38	38
Self-Employee	10	64	28
Student	52	49	33
Accountant	-	-	60

As referred to in Table 6 greater part of individuals in disintegrating has a place with cultivating local area which infers great arrangement of individuals to gather the data and proceed with the survey. In any case, to sort out the outcomes

V. ANALYSIS AND RESULTS

5.1 Region – 1 Erode

Data of grading was collected from the people of erode huge variation was observed in the grades polled which are referring to the psychological difference from person to person. But to find the predominant space holistic data reviewing was needed. Below Table 7 gives the distribution of the grading across different spaces.

No reactions for each grade were figured out to figure out the philosophy of individuals and to figure out the way individuals are giving the reactions. The above Figure 6 plainly addresses that individual picking grade 1 is higher trailed by grade 6,7 which shows that individuals are either stringently denying specific spaces or tolerating specific spaces.

As indicated in Figure 7 and Table 8 people from erode are opting more for houses with House sit-out as a major space. It indicates that people are more inclined to customize the usage of the house sit-out. It was sensible that the emotion of attentiveness is a crucial

Table 7: Results of Erode

Housing Spaces	Grades by the Respondents of Region - 1						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
S 1 - House front sit out	80	17	18	33	10	24	13
S 2 - Courtyard	9	23	31	35	26	53	18
S 3 - Surrounding spaces	54	13	17	16	23	18	54
S 4 - Back Yard	30	62	15	16	9	19	44

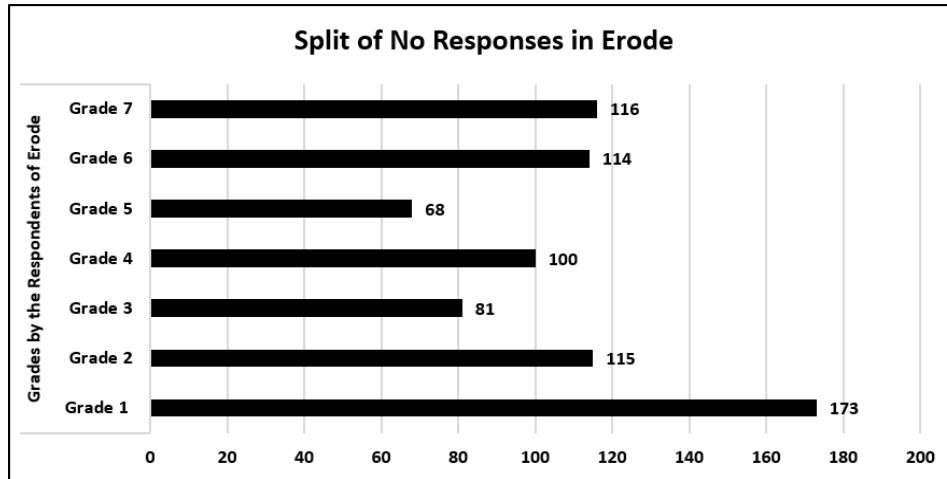


Figure 6: Summary of grades from Erode

Table 8: Hierarchy of housing Spaces at Erode

Hierarchy of factors affecting the option of housing spaces in Erode	Factors	Hierarchy
	S 1 - House front sit out	1
	S 2 - Courtyard	4
	S 3 - Surrounding spaces	3
	S 4 - Back Yard	2

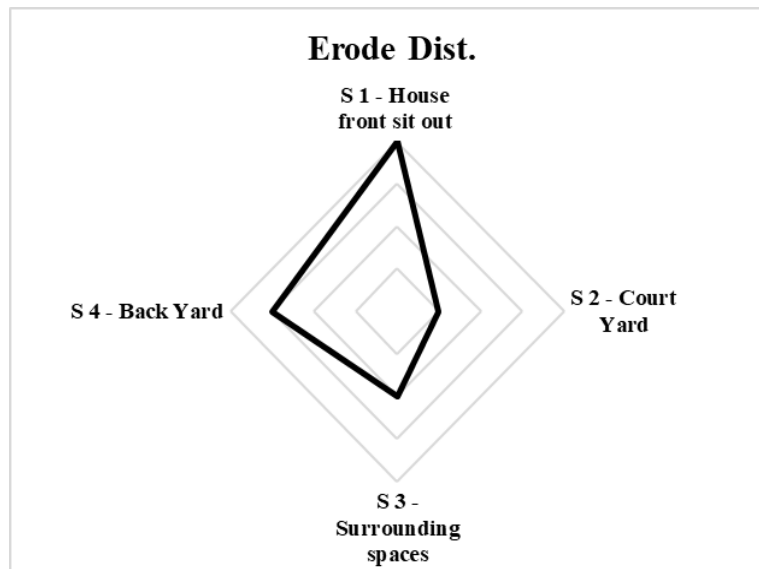


Figure 7: Spider Chart - Hierarchy of housing Spaces at Erode (Source - Author)

factor that people are willing to attain from the home this pushes the people over there to like house sit front outs. Though the usage and shape of the house sit-out changes from house to house majority are people are likely to show interest in setting up house sit-out rather than S-3 Surrounding spaces and S-2 courtyard Anyway, as different positions are surveyed observing the variety utilizing Pearson’s Correlation investigation will assist us with tracking down the factual variety between the reactions. It will give the embodiment of the surveys and it will also help us to compare the relations between two spaces with each. The below table gives the inference of positive or negative correlations As per Table 9 With Pearson’s correlation analysis it was seen that S-1 and S-3, S-2, and S-3 have a positive co connection the coefficients demonstrate a gentle relationship it affirms individuals deciding on those two spaces in total anyway rest of the examinations could accomplish up-sides suppositions.

Table 9: Pearson’s correlation coefficient- Erode

Sample 1	Sample 2	No of Responses	Correlation	Outcomes
S 2 - Court Yard	S 1 - House front sit out	195	-0.331	Negative correlation
S 3 - Surrounding spaces	S 1 - House front sit out	195	-0.454	Negative correlation
S 4 - Back Yard	S 1 - House front sit out	195	0.156	Positive correlation
S 3 - Surrounding spaces	S 2 - Courtyard	195	0.229	Positive correlation
S 4 - Back Yard	S 2 - Courtyard	195	-0.409	Negative correlation
S 4 - Back Yard	S 3 - Surrounding spaces	195	-0.171	Negative correlation

5.2 Region - 2 Thiruvarur

Similar to the results of Erode Identical survey was done at thiruvarur. Information from Thiruvarur information was gathered from a wide range of sources also filtered Refer to Table 10 for subtleties of the responses that were accumulated Considering the results in Figure 8 larger piece of respondents reviewed position 1 which conveys that a huge section of the people is accepting certain housing spaces in their houses. However, the reactions are straightforward likewise a huge number of individuals were additionally selected in grade 4 which alludes that equivalent pieces of individuals are additionally unclear about their inclination toward housing space.

Table 10: Results of Thiruvarur

Housing Spaces	Grades by the Respondents of Region-2						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
S 1 - House front sit out	40	20	21	139	7	1	2
S 2 - Courtyard	4	46	40	20	103	9	8
S 3 - Surrounding spaces	20	9	28	21	28	119	5
S 4 - Back Yard	144	15	9	41	6	7	8

Table 11: Hierarchy of housing Spaces at Thiruvarur

Hierarchy of factors affecting the option of housing spaces in Thiruvarur	Factors		Hierarchy
	S 1 - House front sit out		3
	S 2 - Courtyard		2
	S 3 - Surrounding spaces		1
	S 4 - Back Yard		4

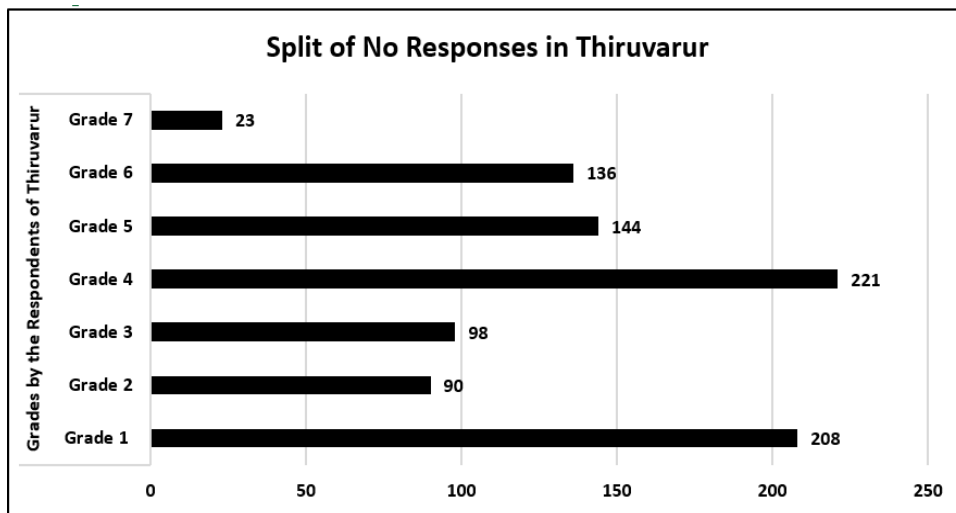


Figure 8: Summary of grades from Thiruvarur

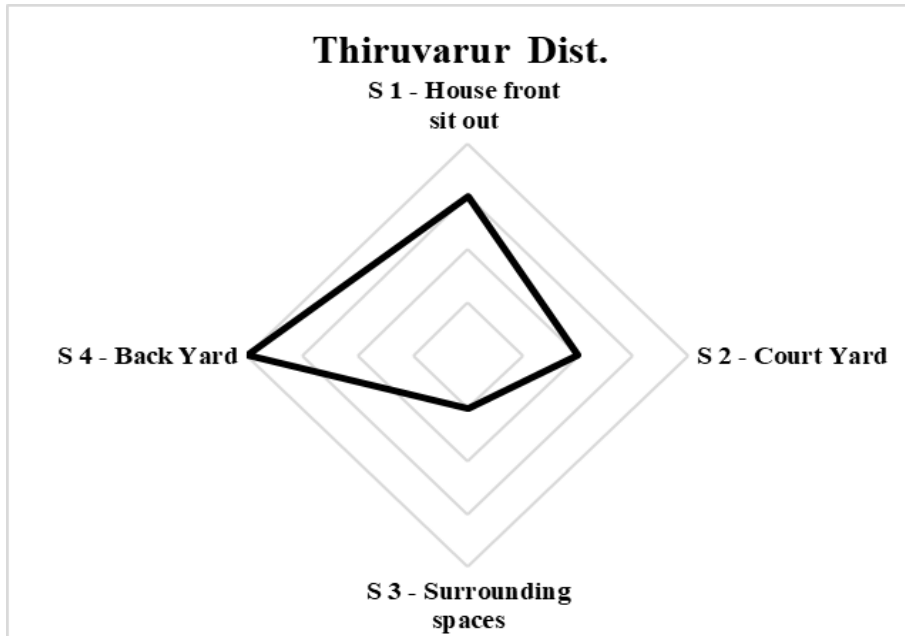


Figure 9: Spider Chart - Hierarchy of housing Spaces at Thiruvarur (Source - Author)

As addressed in Figure 9 and Table 11 people from disintegrating are picking more houses with a backyard as a critical space.

It demonstrates individuals are more disposed to tweaked utilization of the backyard. However, the utilization and state of this space changes from one house to another greater part are individuals are possible appearance interest in setting up back yard rather than S-1 House sit-outs and S-2 Courtyards.

As the data from Thiruvarur in like manner incorporates places of different components, liking to include correlation analysis in Minitab to track down the variety between the responses and ponder one on another.

Table 12: Pearson’s correlation coefficient- Thiruvarur

Sample 1	Sample 2	No of Responses	Correlation	Outcomes
S 2 - Court Yard	S 1 - House front sit out	230	0.634	Positive correlation
S 3 - Surrounding spaces	S 1 - House front sit out	230	-0.353	Negative correlation
S 4 - Back Yard	S 1 - House front sit out	230	-0.278	Negative correlation
S 3 - Surrounding spaces	S 2 - Courtyard	230	-0.625	Positive correlation
S 4 - Back Yard	S 2 - Courtyard	230	0.527	Positive correlation
S 4 - Back Yard	S 3 - Surrounding spaces	230	-0.395	Negative correlation

As the P coefficient shows in Table 12 positives effect which shows the expected correlation between S-4/S-2 and S-2/S-1. This will in general individuals are picking those different two lodgings space aggregately.

5.3 Region – 3 Sivaganga District

Sivaganga District was collected and segregated for better view and understanding this will help to look into the data more vigorously. As referred to the Table 13

The above outline, Figure 10 addresses that singular picking grade 1 is higher followed by grade 6,7 which shows that people are either severely denying explicit spaces or enduring explicit spaces.

As specified in Table 14 Results and the reason that individuals are selecting patio as their standard of choice as yard gives the inclination sensation of solidarity. It was expected that numerous individuals in the sivaganga locale design their homes so that they have great associations with their neighbor. As yard place, the key job in accomplishing this connection with individuals around there are searching for houses which transcendentally planned with the best courtyard.

Table 13: Results of sivaganga

Housing Spaces	Grades by the Respondents of Region-2						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
S 1 - House front sit out	36	26	31	12	17	74	4
S 2 - Courtyard	75	32	19	64	8	1	1
S 3 - Surrounding spaces	25	41	93	3	14	18	6
S 4 - Back Yard	9	22	13	10	25	11	110

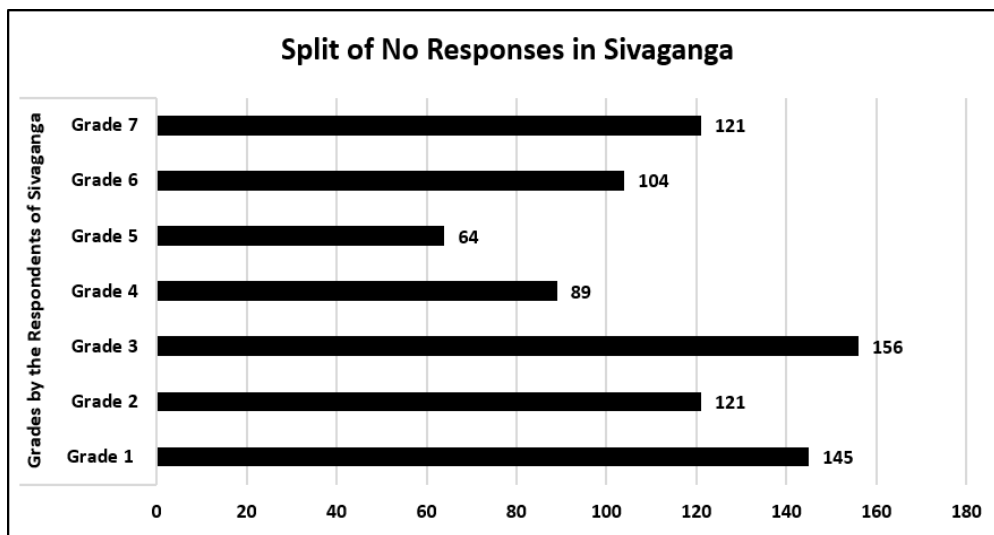


Figure 10: Summary of grades from Sivaganga

Table 14: Hierarchy of housing Spaces at sivaganga

Hierarchy of factors affecting the option of housing spaces in Sivaganga	Factors	Hierarchy
	S 1 - House front sit out	3
	S 2 - Courtyard	1
	S 3 - Surrounding spaces	2
	S 4 - Back Yard	4

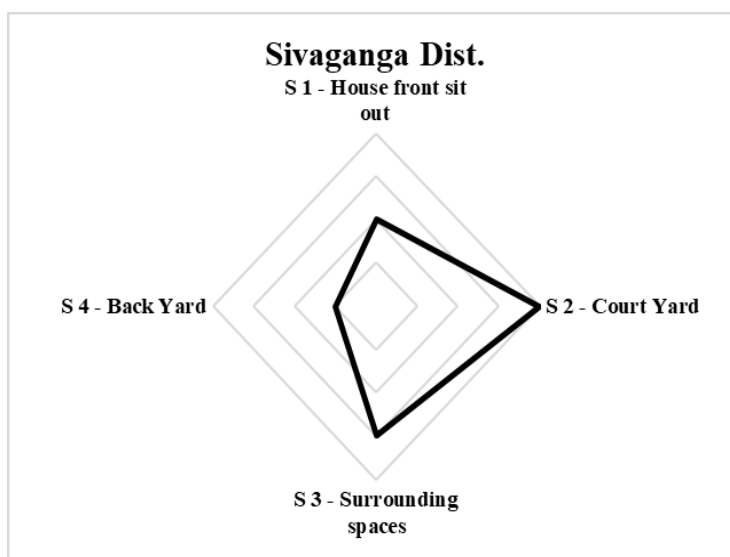


Figure 11: Spider chart - Hierarchy of housing Spaces at sivaganga (Source - Author)

At any rate, as various positions are over viewed noticing the assortment Pearson corre- lation examination will help us with finding the authentic assortment between the responses. It will give the exemplification the studies

Table 15: Pearson’s correlation coefficient- sivaganga

Sample 1	Sample 2	No of Responses	Correlation	Outcomes
S 2 - Court Yard	S 1 - House front sit out	200	-0.09	Negative correlation
S 3 - Surrounding spaces	S 1 - House front sit out	200	-0.108	Negative correlation
S 4 - Back Yard	S 1 - House front sit out	200	0.011	Positive correlation
S 3 - Surrounding spaces	S 2 - Courtyard	200	0.117	Positive correlation
S 4 - Back Yard	S 2 - Courtyard	200	-0.107	Negative correlation
S 4 - Back Yard	S 3 - Surrounding spaces	200	-0.122	Negative correlation

As mentioned in Table 15 With Pearson’s co-connection investigation it was seen that S-1 and S-4, S-2, and S-3 have positive correlations the coefficients exhibit a delicate relationship it certifies people settling on those two spaces altogether in any case rest of the assessments could achieve up-sides notions.

VI. CONCLUSION

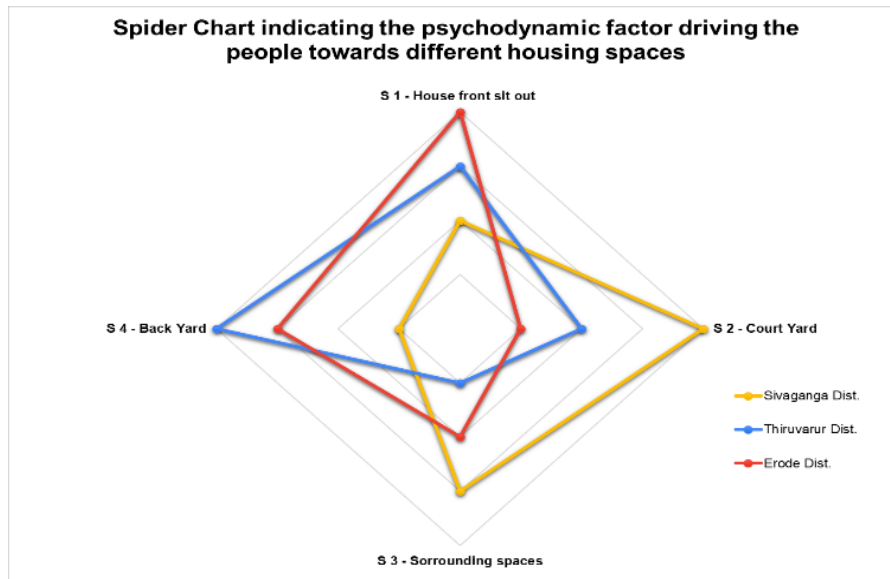


Figure 12: Hierarchy of housing Spaces at various places studied (Source - Author)

As cited in Figure 12 These incredible studies corroborated that are driven by their internal process in the selection of their housing and opting for respective housing space that was suitable for their live hood. As the study indicated psychologically people are different from each other and certain feelings are predominant and highly dynamic as these psychodynamic factors place as a key role in deciding to select housing space or rejecting housing space. This can be utilized by forthcoming designs to comprehend the phycological and enthusiastic prerequisites of individuals with the goal that the lodging space can be intended to thrive these necessities and variables. As people’s emotions and feelings are also highly dynamic considering people from a different place into the same basket might not give as good project out at long last presuming that given mental and topographical need specific spaces can be dismissed by selecting certain prevalently need spaces.

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