

# YOUTH WELL-BEING INDEX IN THE NEIGHBOURHOOD SPACE: OUTDOOR VS INDOOR SPACE

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## ABSTRACT

This paper examines both indoor and outdoor spaces that highly influence the quality index and well-being of youth in a marginalized community neighbourhood. The well-being of youth has been measured using quantitative data on the standard of living, physical activity, emotion, safety, youth participation in community activity, space quality and life satisfaction. A total of 530 young people aged between 15 and 25 years old were selected in two different study areas. The highest well-being score indicates the most influence space between outdoor and indoor upon youth quality lifestyle. The male score is slightly higher compared to the female score as the correlation matrix of factor analysis shows that standard of living is suggestively associated with health, physical activity, youth participation and future hope. Thus, the community and stakeholders should take more action and effort to increase youth well-being and quality index in the neighbourhood environmental space.

*Keywords: well-being index, neighbourhood, outdoor space, indoor space, youth.*

## 1 INTRODUCTION

The built environment that provides the location for human activity is one of the key contributors to human well-being to both urban and rural neighbourhood environment space [1]. Elements of the built environment, such as housing, transportation, recreational parks and green spaces, have increasingly been linked to gaps in health behaviours and outcomes. These have been recognized as essential components of creating healthier communities by promoting healthy behaviours, reducing neighbourhood stressors, and nurturing worldly possessions [2].

Human beings spend most of their leisure time with indoors environment space, and the mainstream of the world's population lives in the urban areas and work in an office environment [3]. Hence, it is becoming important to understand the indoor environment in neighbourhood space (housing space) and the effect it has on quality of life [4]. A house environment has a high level of influence on its social interaction development through the outdoor environment. Past studies on sustainable buildings hypothesize that green design strategies and technologies enhance the indoor environment. Thus, there is a need to investigate the quality of the indoor and outdoor environment and its relationship to well-being index on adolescence.

The influence of both spaces on human beings include aspects of physical activities, safety, community participation and can even affect cognitive processes [5]. The quality of life is limited by the level of physical, psychological and social health, all three influencing one another [6]. Studies on social indicators or development indicators addressed that the dimension of indicators exists in two ways [7]. If we consider quality of life as general well-being of an individual or society; we must try to analyse the benefits of sport practicing in a person's life or the life of a community/society, it is evident the direct relationship between sport and the level of quality of life [8].

The concept of quality of life includes both the subjective and objective aspects of human life. The quality of life refers to the personal satisfaction of people's living conditions, activities, opportunities and results [9]. This paper aims to examine both indoor and outdoor



spaces that highly influence the quality of life and well-being index of youth living in the neighbourhood space of the marginalized community. Both spaces are considered as the assembly point for human interaction, especially youth.

Therefore, the objectives of this study are; indicating the variables on well-being index for quality of life; examine the youth well-being and quality of life upon both indoor and outdoor spaces, and analyse the correlation between both spaces that highly impact the quality of life and youth well-being index.

## 2 LITERATURE REVIEWS

### 2.1 Neighbourhood space

Neighbourhood is an idea of studying the difference of the people, living and sharing the same environment for the purpose a quality living environment. Neighbourhood zone demands a set of community that can interact, care, and cooperate with each other continuously. The participation in the communities is a variable of indicating overall human interaction in the neighbourhood unit [10]. Community involvement is an action for the people in making better urbanization process. The improvising of the quality of life and wellbeing seem too indistinct without any input from the public, stakeholders, and government agencies [11]. Therefore, all the people should highly integrate to participate and open their social connection widely to take up this challenge and to look forward in creating a healthier living environment.

### 2.2 Quality of life based on interaction with space

People's relationship with the open spaces is different based on some factors such as socio-economic, gender, type of activities and park facilities. According to Villanueva et al. [12] people's involvement and interaction in the open spaces can enhance the sense of belonging to people and at the same time increase the degree of neighbourhood attachment. According to Tomy and Cummins [13], they provide valuable insights into how human interact with outdoor urban environments, which included open spaces itself. Thus, they come out with major themes that are directly linked to the public spaces that are the human-nature interaction and human-human interaction. As for the human needs, the variables to be measured are social interaction, citizen participation, and a sense of community

## 3 METHODOLOGY

### 3.1 Study area

The study was conducted at public housing areas (apartment) in Lembah Pantai and FELDA Jenka. The study areas were selected based on the urban area which is Lembah Pantai; a public housing chosen was the Kerinchi People Public Housing (PPH) and the FELDA Jenka settlement area in Pahang has been selected for the rural neighbourhood area.

### 3.2 Participants

Participants were determined by the following procedure; the PPH respondents were selected based on their housing blocks and represented by each floor of 20 storey block. For the FELDA Jenka residents, they were chosen based on the small neighbourhood sub-division



in that cluster. The total number of participants are different because of the population size. For Kerinchi PPH, they were 400 respondents as FELDA Jengka were 130 respondents. Together, 530 respondents have participated in this study.

### 3.3 Questionnaire

The questionnaire is divided into four sections. The Section A is on the demographic information embraces the location of the respondents' houses, their age, ethnic group, religion, and level of education, the status of employment, and monthly income. The outdoor and indoor spaces are asked in Section B which are more related to the level of satisfaction on physical development and social interaction upon youth lifestyle. Based on the literature review; the indicators for well-being questionnaire in Section C aimed to identify the standard of living, health, physical activity, emotion, security, youth participation in the community, future hope and moral values. According to Tomy and Cummins [13], items were rated from 1 to 5; the similar scale has been used by other researchers (see [14]–[17]).

The scale data then is converted into the percentage. Assessment of 80% and above is considered as high ranking, 51 to 79 as intermediate, whereas 50 and below as weak. All data were analysed by SPSS tools. The alpha coefficient for the eight items is .874, suggesting that the elements have relatively high internal consistency because a reliability coefficient of 0.70 or higher is considered acceptable in most social science research situations [18], [19].

### 3.4 Variables measured

This study explored youth well-being index in neighbourhood spaces and the apparent of both outdoor and indoor spaces toward the index value. The unit of analysis is the index percentage in correlation with respondents' satisfaction level for both outdoor and indoor space. The approach of dividing the variables into two general categories was for a systematical data collection and to evaluate how both spaces influence mostly on the adolescence well-being in the neighbourhood space.

## 4 RESULT FINDINGS

### 4.1 Statistical analysis and reliability test

All cases were examined from the response of questionnaires set. Participants that consistently scored minimum (1) or maximum (5) for all eight domains considered unreliable and were removed from the analysis. In the end, the number of reliably answered questionnaire set was 400 (224 male and 176 female).

### 4.2 Respondents' background information

Table 1 shows the number the respondents and demographic analysis. From the total of 530 participants involved in the study, 289 (54.5%) were male, and 241 (45.5%) were female. Age group of 15–17 and 21–23 years old 31.5% and 32.75% compared to the age group of 18–20 (18.5%) and 24–25 (14.75%).

A high percentage of the participants has low education level, and only 25% of them have the opportunity to go the higher level of education (12.5% Diploma, and 13.7% university graduate) (Table 1). Most families have their source of income and although only 14.5% (77) earned more than RM 3501 per month.



Table 1: Respondents' demographic data.

<i>Respondent's demography</i>	<i>Details</i>	<i>N=530</i>	<i>%</i>
Gender	Male	289	54.5
	Female	241	45.5
Age group	15–17	125	31.5
	18–20	84	18.5
	21–23	131	32.75
	24–25	59	14.75
Education level	Primary school (Standard 6) – UPSR	31	3.5
	Lower secondary (form 3) – PMR	107	18.2
	Upper secondary (form 5) - SPM	222	40.4
	Upper secondary (form 6) – STPM	41	9.2
	Certificate	14	2.5
	Diploma	57	12.5
Monthly household income	Degree	58	13.7
	< 500	30	5.7
	501–1000	56	10.6
	1001–1500	76	14.3
	1501–2000	93	17.5
	2001–2500	82	15.5
	2501–3000	73	13.8
	3001–3500	43	8.1
	3501–4000	27	5.1
>4000	50	9.4	

### 4.3 Well-being assessment

Results of the study focus on the well-being score of youth in the marginalized community of the urban and rural area. Based on the location, this study required both descriptive and inferential statistics. Table 2 shows well-being evaluation for the all respondents from two different sites of Lembah Pantai and FELDA Jengka. The majority of the respondents' level of satisfaction is at the average scale and none in the high rating. This suggested that youth in both neighbourhood areas perceived moderate well-being category. They were satisfied with their moral values which is shown by the highest percentage. The lowest score of well-being rating is the youth participation in the community activity, suggesting that they are not well adapted to the community or choose to stay away from the activity as they prefer indoor environment more than outdoor environment.

The well-being rating between the urban and rural youth do not differ much, but the percentage for the urban adolescence is slightly higher compared to rural young people. Analysis of location showed that Lembah Pantai significantly has a positive perception of a standard of living, future hope, and moral value because of their urbanised environment and socialization development. While for the rural area the understanding on health is slightly higher, this may be due to the young people in rural areas are living in fresh and harmonious environment which is close to the nature compared to the urban adolescence (Table 2).

Youth in the rural area scored the lowest rating upon their future hope compared to the urban youth. This may be due to lack of opportunity to better education and they are unable to leave the village. Even though it is the favourable environment and healthy lifestyle practices however, youth from the rural area should explore the benefit of urbanism and adapted it to the rural environment (Table 2).



Table 2: Well-being assessment by youth according to two study areas.

<i>Well-being domains</i>	<i>All samples (N=530)</i>		<i>Lembah Pantai (n=400)</i>		<i>FELDA Jengka (n=130)</i>	
	M1	SD	M2	SD	M3	SD
Standard of living	70.94	21.96	73.50	21.20	62.31	22.07
Health	74.67	21.98	73.81	22.11	77.31	21.44
Physical activity	72.69	22.45	73.50	22.20	70.19	23.11
Emotion	72.50	22.48	71.75	23.12	74.81	20.29
Safety	71.46	23.97	70.69	24.70	73.85	21.54
Participation in community	66.93	23.26	68.88	23.15	60.96	22.66
Future hope	70.09	24.39	74.38	23.21	56.92	23.30
Moral values	72.88	24.14	75.69	23.17	64.23	25.09
<i>Average mean</i>	<i>71.52</i>	<i>23.079</i>	<i>72.78</i>	<i>22.86</i>	<i>67.57</i>	<i>22.44</i>

M: average mean; SD: standard deviation.

The result from the Table 2 can be concluded that youth in the urban area achieve better well-being index rather than the rural adolescence in many ways. The rating produced different values which indicated that this study has succeeded to indicate the well-being index of both areas. This is also to verify the quality of life among adolescents requires for further analysis especially on the space assessment.

#### 4.4 Outdoor and indoor spaces assessment

Based on Table 3, it shows the average mean of respondents' satisfaction upon the outdoor and indoor spaces. The mean has been clarified from the questionnaire (Section B) with several variables to measure the satisfaction level; availability, comfortable, safety, ease, range and accessibility for the spaces assessment. The average mean of each space then multiplied by the tendency of well-being index (0.72, 0.73, and 0.68) and the value is converted into percentage. The highest percentage showed the most influenced space category on the youth well-being index. The outdoor and indoor space were represented by four types of space which are the significant spaces for young people to create physical activities, social interaction (participation with the community), expressing the emotion and safety, develop their moral value and future hope, and increasing their health and standard of living.

This result has shown that the development of outdoor space with the average mean value (3.69) in youth satisfaction evaluation whereas the indoor space stated the average of 4.09 mean value over 5 (Table 3). Lembah Pantai remains as the highest mean value over FELDA Jengka in both outdoor and indoor space category. This is because the rural area not fully utilize with outdoor facilities. This supports the low index upon well-being assessment that stated FELDA Jengka by 67.57%, below the average index of 80% and above.

Table 3 also showed the value of indoor space average mean that significantly different from the perception of People Project Housing (PPH) well-being index. The value indicates 59% (2.95\*20) of well-being achievement upon indoor space at Lembah Pantai compared to FELDA Jengka (57.8% [2.89\*20]). Even though the young people live in the low-income housing scheme, they manage to adapt to the environment for the better standard of living yet cannot reach the 80% of minimum well-being Index.



Table 3: Respondents' satisfaction on 'spaces' through well-being index.

Type of spaces	Overall area			Lembah Pantai			FELDA Jengka		
	<i>x</i>	<i>fx</i>	<i>WBi</i>	<i>x</i>	<i>fx</i>	<i>WBi</i>	<i>x</i>	<i>fx</i>	<i>WBi</i>
Futsal court	3.67	2.64	52.8	3.72	2.72	54.4	3.43	2.33	46.6
Badminton court	3.69	2.66	53.2	3.74	2.73	54.6	3.54	2.41	48.2
Soccer Field	3.55	2.56	51.2	3.53	2.58	51.6	3.54	2.41	48.2
Recreational park	3.74	2.69	53.8	3.77	2.75	55	3.65	2.48	49.6
<i>M1</i>	3.66	2.63	52.75	3.69	2.7	53.9	3.54	2.41	48.15
Housing design	4.17	3	60	4.09	2.99	59.8	4.41	2.99	59.8
Living room	4.08	2.94	58.8	4.05	2.96	59.2	4.19	2.85	57
Dining room	4.02	2.89	57.8	3.99	2.91	58.2	4.12	2.8	56
Bed room	4.11	2.96	59.2	4.03	2.94	58.8	4.34	2.95	59
<i>M2</i>	4.09	2.95	58.95	4.4	2.95	59	4.27	2.89	57.95

\*Well-being tendency  $f = (0.72 - \text{overall area}, 0.73 - \text{Lembah Pantai}, 0.68 - \text{Felda Jengka})$ , (M1) outdoor space average mean; (M2) indoor space average mean.

The mean value also showed that recreational park remained as the chosen outdoor space for youth (3.77) in both urban and rural area as the mean value indicated the lowest respondents' satisfaction on futsal court (3.43) for FELDA Jengka and Soccer Field (3.53) at Lembah Pantai.

There is a different value between futsal court and badminton court for both areas. Lembah Pantai showed 3.67 and 3.69 mean value whereas FELDA Jengka 3.43 and 3.54. This result concludes that youth in the urban area, mostly having leisure and outdoor activities at the multipurpose court. While the rural young people preferred the recreational park for outdoor space.

For indoor spaces, the dining room (3.99) get the bottom rate of Lembah Pantai's youth same as FELDA Jengka (4.12). This result demonstrated the current scenario of the family life which did not consider seriously that the dining room as social interaction space at home.

There is a gap between the urban and rural adolescence upon their preferred area of indoor spaces; Lembah Pantai forms 2.96 mean value on living room as FELDA Jengka (2.95) upon bedroom. This concludes that youth in the rural area spend more time in their room rather than other spaces in the house. However, adolescence in Lembah Pantai preferred living room because of the PPH limited floor design of a bedroom.

As the conclusion, the well-being of youth in both areas impacted by the indoor space factor rather than outdoor space. The value shows adolescence is satisfied through their home environment in many aspects. Due to this reason, the objective of this studies has been answered in which, indoor space is the high factor demanding the youth well-being index in the neighbourhood space for both urban and rural area. In conjunction with that, the outdoor spaces should be more integrated and well-planned to attract young people and increase the quality of life.

A sustainable planning and development should be addressed with the participation of youth in the community as the assessment showed the low ranking upon this domains for well-being assessment (66.93%). Furthermore, the involvement of young people in the rural area has been the lowest (60.96%) index, and this stated they do not interact with the community though they live in the so-called 'village' community.

## 5 DISCUSSION AND CONCLUSION

There are numerous studies on well-being assessment have been piloted in Malaysia especially on youth well-being index in neighbourhood environment; family conflict and genders [20]; report on young people in Malaysia [21]. However, not many studies on the well-being of youth in the marginalized community. This study focuses on young people in the marginalized community neighbourhood space in Lembah Pantai, Kuala Lumpur, and FELDA Jengka, Pahang, Malaysia.

The cost of living is usually higher in major cities such as Kuala Lumpur. The emerging adult (adolescence) need a decent job to gross the good standard living, and it may cost an extensive amount of bread. To get a good job, these young people need an upright educational qualification.

The well-being index of youth in this marginalized community do not reveal their demography [22]. Most of the well-being index scored transitional, signifying they are satisfied with their normal live either in the urban neither rural neighbourhood. Nevertheless, well-being index of participation of youth in the community activity shows the lowest score for both areas. Consideration for adolescence is an important process to encompass and emerging them in the community event as they are preparing to become an adult. An understanding of young people enthusiasms and value are essential so that an addition commitment from the communities and other development experts can exploit these valuable resources [23].

Although the adolescence live in the marginalized community, Lembah Pantai has the accessibility of public transportation, recreational options, social dealings, healthcare, and leisure. These factors influenced the perception of life and gave an average percentage score of well-being index score.

Nevertheless, the young people in FELDA Jengka who are free from urbanization and away from severe behavioural environment seem much mirroring the adolescence well-being index of urban youth. They felt the same scenario on well-being quality of life.

Well-being index for security and future hope make the urban youth worry which discussed during the Focus Group Discussion with the group of youth. Security around the lift, stairs, and pavements around the community area has been identified to be vulnerable especially at night. The insecurity for them to use the lift affects their participation in the community and makes these adolescents stay at home more often, with indoor activities as their daily standard of living.

The young people in the rural area faced less challenges upon their future hope and moral values. They felt that somehow, the education level made them lost the confidence in future and it is better to stay in the village doing their family jobs. This may be one of the reasons why they are very satisfied with their standard of living index.

The majority of respondents from both groups of adolescence stated that indoor spaces play a major role in making their well-being happy and conducive in every domain. The current youth are lacking with real social interaction as they prefer to communicate using cyberspace rather than outdoor space. The community and stakeholder need to identify this issue and solve it quickly to prevent the extinction of the real meaning of human social interaction.

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