



اَوْنُوْزِ سَيِّتِي تِي كُونُو لُو كِي مَارَا  
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**RELATIONSHIP ON RESIDENTS  
PERCEPTION BETWEEN QUALITY  
OF AIR AND PERCEIVED HEALTH  
AT PPR DESA TUN RAZAK**

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## ABSTRACT

Air is one of the most important components and is naturally available for humans. However, most of us seem to take it for granted by carelessly polluting the air. Multiple human activities have badly influenced the environment. Deteriorating air quality has affected people's health caused by the widespread of air pollution. The main question is whether the people aware of the poor air quality in their residential areas. Is the quality of air capable to affect the perceived health, especially in low-cost high-rise residences? Therefore, assessment and measurements should be carried out in the area of high-rise and low-cost houses. Thus, this study aims to analyze the relationship between the residents' perception of air quality and perceived health in PPR Desa Tun Razak. There are four (4) research objectives in this study including 1) to determine the outdoor quality of air at PPR Desa Tun Razak; 2) to observe the current quality of air issues at PPR Desa Tun Razak; 3) to identify the resident's perception towards the quality of air at PPR Desa Tun Razak; 4) to analyze the relationship between the quality of air and perceived health at PPR Desa Tun Razak. All the objectives were achieved through the fieldwork measurement, observation, and set of questionnaires distributed to the residents of PPR Desa Tun Razak, Kuala Lumpur. The fieldwork measurement consists of five (5) air quality parameters which are; carbon monoxide, carbon dioxide, air temperature, relative humidity, and air velocity which focus on outdoor areas (near the residence). Observation is also carried out simultaneously with the fieldwork covering the buildings surrounding. A five-point of Likert Scale was used in this study and distributed to n=317 residents of PPR Desa Tun Razak. However, only 155 (48%) were successfully returned. The data collected through the fieldwork measurement, observation, and the questionnaires had been analyzed, graphed, and tabulated using Microsoft Excel and Statistical Package of Social Science (SPSS) version 23. The results of the fieldwork measurement found that the monoxide gas did not affect the PPR Desa Tun Razak's residents as the readings stated did not exceed the safe range, yet it differed from the dioxide gas readings that exceeded the range reading. On the other hand, the observation found that the traffic congestion and cleanliness gave an impact on the resident's perception on the second research objective. The findings for the next objective revealed that the residents were less aware of the air quality awareness surrounding them. The last objective which is the relationship between the quality of air and perceived health shown a positive correlation. Nevertheless, this research still lacks certain data and it is hoped that more studies will be carried out in order to have a more beneficial effect, especially in low-cost housing areas.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

Sustainable construction is a building practice that aims to reduce (negative) health and environmental impacts caused by the building process or structure or built-up environment (Yılmaz & Bakış, 2015; Mensah, 2019). Air pollution and its impact on health become one of the hot topics that has been discussed by the researcher about two (2) decades ago (Grossberndt et al., 2020). Studies have found evidence that the health effects felt by humans such as shortness of breath, cough, fever, stroke, heart disease, and chronic diseases including lung cancers and asthma are a result of being too often exposed to diverse air pollution (World Health Organization, 2018a).

Therefore, to maintain good air quality for both societies and the environment, in-depth studies on the particular topic could provide some suggestions to solve the problems. Various countries have laid out ways to solve air quality problems in their homelands, including Malaysia itself. Malaysia has formed seventeen (17) sustainable development goals in September 2015, through a United Nations General Meeting (UN). Through these meetings, many objectives have been highlighted that need to be achieved by the year 2030. This agenda is for the development and well-being of the people on earth (United Nations, 2015b; World Health Organization, 2018a).

Besides, this is a continuation of the Millennial Development Goals that acted in 2015 and it is part of the UN General Assembly Resolution 70/1, Agenda 2030. Among the 17 goals discussed, the third (3rd) objective is good health and well-being. In addition, this objective is to ensure a safe lifestyle or guidelines and promote well-being for all ages (United Nations, 2015a). Furthermore, this objective is closely related to the present research based on the stated objective of achieving commendable results.

#### 1.1.1 Malaysia Plan

Malaysia has very comprehensive government development policy guidelines and strategies. This is referred as Malaysia's plan for five (5) years. Malaysia's first plan was introduced in 1965, covering the development agenda from 1966 to 1970. However,