The existence of a shortcut as an urban space system to support physical and mental health

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Abstract. This paper investigates the role of shortcuts as a system in urban space to support the creation of a healthy city. In general, shortcuts can be understood as a form of connectivity in urban spatial systems. However, in particular, this paper explores the presence of shortcuts as part of a system that can improve physical and mental health. Health is one of the factors that are considered in today's urban design. It is believed that the development of walkability in urban spaces can improve the community's physical health. Previous studies have developed several forms of walkable urban spaces and physical activity benefits in urban spaces. Meanwhile, Indonesia's shortcut character has its peculiarities because it includes social activities that present a sense of security, intimacy, and belonging. It also affects the mental health of the local community. This paper shows another perspective that everyday life in micro-urban environments can be developed to support macro-healthy city design. Further, this paper reveals that tracing micro-spatial practices created by shortcuts in the urban space system can positively influence mental and physical health.

1. Introduction
This paper will explore the urban environment that can support health. The environment has long been recognized as a significant determinant of health [1]. Discussion of a healthy environment is increasingly developing, usually focusing on specific health outcomes (e.g., mental well-being), environmental features (e.g., green spaces), population groups (e.g., healthy adults), and timing [2]. The development of walkability in urban spaces is believed to improve the community [2-6]. Obesity is a significant problem for people in developed countries, so this is an opportunity for city designers to find the concept of a healthy city based on human movement in urban spaces that can support health. As stated by Pont et al. (2013) "efforts to tackle obesity and related conditions through embedding" Active Travel "in daily activities" [7].

The healthy city movement promoted by WHO is proof that health is an essential indicator in the urban environment. Health is considered one of the main economic growth factors and sustainable development on a city scale [8]. Meanwhile, urban health is generally measured by providing green open spaces and environmental quality indicators such as air pollution, traffic congestion, and access to health services [9-11]. This discussion discusses more the description of a healthy urban environment that can support the health of its citizens. From a different perspective, we argue that looking at a micro-
level how everyday life occurs in an urban environment can be developed to support macro-healthy urban design.

This paper investigates the existence of a shortcut to broaden the understanding of a healthy city in the context of everyday life in the kampong environment of Semarang, Indonesia. This paper mainly investigates the importance of shortcuts as an urban space system that can support health. In this paper, we understand that shortcuts are a form of the urban environment, while healthy cities are urban spatial design goals. This paper aims to reveal how the relationships between users and the environment in urban areas can impact users' health so that it supports the concept of a healthy city.

Shortcuts are understood as a form of connectivity between places and are used mostly by pedestrians. On the other hand, Ford (2001) states that shortcuts are ideal places for informal activities to help create a community [12]. The shortcut character in the Kampong Bustaman Semarang Indonesia has its uniqueness because it includes social activities that present a sense of security, intimacy, and belonging. This also affects the mental health of the local community. In this paper, we investigate the potential for shortcuts in which there are daily activities as a form of connectivity between places and the connectivity/relationships created between users and their environment that can affect health in urban environments.

In his writing, Ford argues that most people like shortcuts and use them often, so they are useful in planning and designing neotraditional communities. From a negative perception of shortcuts as dirty and dirty places to believe as places to commit the crime, Ford (2001) tried to see it from a different perspective. "I have observed that alleys are also ideal places for informal activities that can help create a sense of community" [12].

Furthermore, Ford (2001) states that very high density defines shortcuts as access and places to walk, play, and as neutral, open spaces between properties [12]. So, the activities that occur in these shortcuts can be developed and significantly impact the level of use and the type of activity [13]. That way, seeing shortcuts as more than just connectivity from one place to another will provide a different understanding. These shortcuts will highlight the environment's character according to what is in it [12].

Seeing the activities that occur on these shortcuts can reflect the environment's characteristics, so tracing daily activities in it is crucial to do. In this case, the connection between the user and the environment significantly affects the shortcut's role in the urban environment. This paper explores the relationship between users and their environment in daily activities that occur on shortcuts, especially those related to their role as a system in urban spaces.

As the main factor in urban space, prioritizing users has long been criticism in urban design [14]. It can be understood that the relationship between users and their environment will result in a different quality of urban space. They no longer see humans as environmental users but as a spatial constructor and even a determinant of urban space [15-17]. Understanding the reciprocal relationship between humans and the environment allows us to define space-based quality on humans' active response to their environment [18].

Meanwhile, the relationship between humans and the environment in the development of urban design theory and practice has become a significant focus on current discussions, for example, looking at the relationship between humans and the environment related to health and well-being [18-20]. So that by looking at the relationship created between humans and their environment, it is crucial to explore urban environments that can support mental health.

This paper will investigate how the relationship between humans and the environment is in the shortcut. Understanding connectivity, which was initially only about the connection between places, can be further explored by looking at the relationship between humans and their environment through daily spatial practices, primarily how the connection can provide opportunities for a healthy city.

2. Methodology
This study discusses daily practices that occur on shortcuts to support a healthy environment. The analysis was carried out based on observations of spatial planning practices on a shortcut in Urban Kampong. A shortcut in Kampong Bustaman is a unique urban environment where collective activities
are interrelated within the area, not only as connectivity between places. This paper examines the relationship between users and the environment that enables them to influence users’ mental health and support healthy cities. To reveal the relationship between the user and the kampong environment of Semarang City, especially the assessment of existing environmental health, the focus of the activity is to build mental perceptions rather than seeing it as a physical form of the environment.

![Figure 1. Characteristics of Kampong Bustaman’s shortcuts.](image)

The study's focus on Kampong Bustaman, Semarang City, is based on considering that daily practices that occur in this environment have a distinctive character. The various forms of shortcuts in the Bustaman kampong environment present different daily practices, even though it has its uniqueness as a curry production center. The diversity of forms of daily practice in the kampong can be seen from the differences in shortcuts' physical characteristics, both in terms of dimensions, length, and boundaries.

Observation techniques to reveal the relationship between the user and the shortcutSemarang’s environment were carried out using drawing and photography techniques. The documentation process through redrawing shows how everyday spatial practice takes place at a shortcut in the environment. Based on the documentation results, it can be traced to the various layers that arise from the existing spatial planning. In-depth interviews with room users were also conducted to determine perceptions that arise from the environment. All data were constructed and analyzed to obtain preliminary research findings.

Based on observations of shortcuts in Bustaman kampong, it can be seen that two main aspects arise from the relationship between the user and the environment that shapes user perceptions. The first aspect is the sense of security that forms securitization in urban environments. The second aspect is events, which make warm and intimate feelings felt in their territory. These two aspects reveal the potential for daily shortcut practices that can impact mental health and support a healthy city, not only physically.

3. Results and discussion
The width of the road has a significant role in the relationship between humans and their environment. Le Corbusier (1987) proposed urban roads as a connectivity system between places in the concept of a shining city [21]. He argued that by widening the road, the connection between one place to another could be easily accessed by vehicles. However, if we look at the existing perspective on the shortcut in the city space, in this case in Bustaman Semarang, what happens is that the narrower road width will have an impact on human relations and the increasingly intimate environment. As stated by Mr. Sugiono: “When I passed the shortcut, my feeling became one with the existing environment, because I could greet people who were doing activities on the street. I feel that the shortcuts are warmer, more comfortable to go through”.

![Diagram](image)
The daily activities that spill over into this shortcut area are due to the lack of land for housing, where some of the activities that should be indoors / indoors sometimes spill outside the house. This is a form of expansion of the interior area [22]. With this phenomenon in Bustaman kampong, shortcut users are allowed to be involved in daily activities carried out by residents of the house. Cooking activities that should be in the kitchen move to the outside terrace, which is part of the shortcut environment. As stated by Mrs. Ningsih: “I can stop while walking on a shortcut and see someone I know is cooking. What happens is that researcher is interested in talking about what dish is being cooked. The researcher rarely gets these dishes. Of course, the researcher thinks this is a form of drawback that occurs in the shortcut.”

From our observations, when meeting someone walking from one place to another, it is possible to stop at some point to engage in the daily activities that occur within the shortcut. So, the shortcut is not only a link between places but also provides other connections. There is the involvement of humans and the environment when crossing the shortcut.

Observations and interviews highlighted that the daily activities that occur within the shortcut affect the people’s perceptions passing through it. How the environment develops spatial experiences and how humans’ interconnectedness and the environment is formed will be discussed next.

Human senses have an essential role in feeling and bringing up experiences of a space, then building knowledge to produce perceptions [23]. It is generated through perception, starting from the closest distance and movement originating from the body [24]. Perceptions that emerge can determine how we perceive environmental conditions [23].

The daily activities that occur in shortcuts as an urban environment vary widely and are influenced by various factors that can lead to individual perceptions. When phenomena penetrate our consciousness, the body and mind sink into the singularity of experience to initiate the feeling of ‘incident’, a state of feeling in inner subjectivity [25]. The feeling of an event exists as a condition that is felt visually, mentally and sensitively. User relationships and environmental conditions can be explained and experienced through sensory encounters and social interactions, where both tangible and intangible aspects of the environment can be influenced.
As stated by Smith et al. (2016), the agency plays a vital role in forming the territory so that ownership of space depends on the agency [26]. In this paper, it is defined as a form of perception that arises from gestures. The feeling of being in his area that appears to the room user due to the atmosphere created in the shortcut environment will give a feeling of calm. Like when he is in his territory, there is a feeling of nurturing, possess, and be comfortable. It can be seen from the occurrence of domestic activities, which eventually involve shortcut users. People who cross can stop at several points, as revealed by Mrs. Ningsih above because she feels he is in his area, she is involved in other people's domestic activities.

The narrow road, the limited land that causes an overflow of domestic activities, and the daily life that occurs in the shortcut can give the perspective of the human crossing it. The environmental system that lives in it makes humans actively involved in their environment. This warm, close and intimate feeling then gives the user a feeling of security. The assumption of shortcuts as places to commit crimes is not proven in this case study. What happens is securitization in shortcuts that arise due to daily activities and the relationship between humans and their environment.

Securitization (Securitization) is a form of the system implemented in Medellín [27]. "Interior space in Medellin enacts political violence and interiority behaves as a landscape of everyday scenarios that employ securitization as their dominant psychological effect, generating powerful responses to contextual conflict through the sites of real, perceived and imagined threats" [27]. In this case, the urban environment can be understood as control over security, protection, comfort [24]. The securitization system in urban environments arises from the relationship between users and the environment, where users perceive that the environment provides a sense of security. This feeling of security then forms a feeling of protection and comfort when engaging in activities or moving in the environment.

It is reflected in shortcut users' activities in the Kampong Bustaman environment because people who cross these shortcuts can interact with each other, either directly or indirectly. Daily activities on this shortcut, such as exchanging greetings between residents who pass by and pedestrians, create a sense of kinship and build friendship by the characteristics of Indonesian regions. In this case, the presence of a shortcut as an urban environment creates a familiar and warm atmosphere because the atmosphere of a place results from the totality of attributes in the environment that simultaneously stimulates the perceptual system [28].

The sense of security that comes when crossing this shortcut certainly provides a positive perception of the user's mind, which creates peace for the user of the space. Indeed, it supports one of the aspects of urban health conveyed by WHO (2016), namely urban space, which can provide peace with mechanisms that lead to health benefits, including psychological relaxation [29]. Thus, it will support a healthy city, starting with mental health that arises from the link between user perceptions and the environment.

4. Conclusion
This paper explains that shortcuts can be seen as urban space systems, apart from their primary function as urban connectivity. By investigating the daily activities that occur in it, it will reveal another potential from shortcuts in the city space system. The link between the user and the shortcut environment shows
another perspective on the urban space system based on a micro approach. A brief search in Kampong Bustaman showed that daily activities that take place on shortcuts have an impact on mental health. The securitization system determines how the daily activities that occur on shortcuts in urban environments build feelings of warmth, intimacy, and security feelings. By having daily activities collectively cut corners, the process of securitization is manifested in the construction of space. The daily practices that take place on shortcuts can also stimulate the feelings of the occupants. It can be interpreted as an urban environmental system that can support the creation of a healthy city. Daily practices that are viewed on a micro level about what happens in the everyday environment can provide a broad discourse, which can be developed for macro purposes. This search can be investigated more deeply in other research activities.

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