

## **Difference between Riding a Bicycle on a Sidewalk or in the Street by Usual Traveling Means**

**Authors :** Ai Fujii, Kan Shimazaki

**Abstract :** Bicycle users must ride on the street according the law in Japan, but in practice, many bicycle users ride on the sidewalk. Drivers generally feel that bicycles riding in the street are in the way. In contrast, pedestrians generally feel that bicycles riding on the sidewalk are in the way. That seems to make sense. What, then, is the difference between riding a bicycle on the sidewalk or in the street by usual traveling means. We made 3D computer graphics models of pedestrians, a car, and a bicycle at an intersection. The bicycle was positioned to choose between advancing to the sidewalk or the street after a few seconds. We then made a 2D stimulus picture by changing the point of view of the 3DCG model pictures. Attitudes were surveyed using this 2D stimulus picture, and we compared attitudes between three groups, people traveling by car, on foot, or by bicycle. Here we report the survey result.

**Keywords :** bicycle, sidewalk, pedestrians, driver, intersection, safety

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020