

Factors affecting pedestrians' risk behavior



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Purpose

- Doing something while walking makes accident risk higher, but many people do not stop using cell phones and music players in spite of posters and public addresses informing pedestrians and railway users of such risks.
- This study examines the factors affecting cell phone operation and earphone use while walking on streets, based on the Prototype/Willingness Model (PWM; Gibbons, Gerrard, Blanton, & Russel, 1998) and a study that investigated effects of risk perception on PWM (Ohtomo & Hirose, 2007).



(Ex. poster by railway company)

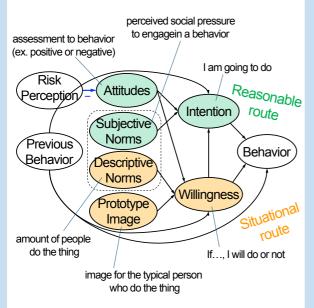


Figure 1. PWM and risk perception

Method

The questionnaires were constructed of 8 items based on the PWM and Ohtomo & Hirose (2007).

Participants Cell phone users: 41 university students. Earphone users: 34 university students.

Procedure Survey 1: We asked about the attitudes, descriptive norms, subjective norms, prototype images, intention, willingness, and risk perception. Survey 2: One month later We asked about the

Results

As for cell phone operation, we found that risk perception was negatively related to attitude and there were positive effects of attitude on willingness, of willingness on intention, and of intention on behavior.

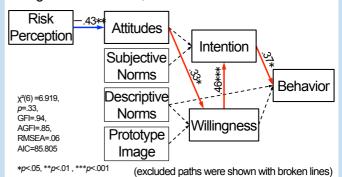


Figure 2. the model of cell phone operation

As for earphone use, the result was similar to that of cell phone operation.

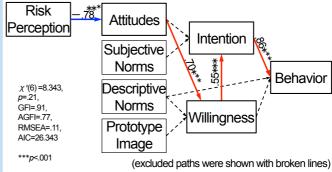


Figure 3. the model of earphone use

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- The results suggest that risk perception is likely to inhibit pedestrians from cell phone operation and earphone use, and that we should consider not only intention but also willingness when we consider psychological factors behind human behavior.
- To improve our models, we plan to investigate other factors.
- Further studies are necessary for effective means of informing people of the risk.

other factors

- Previous behavior
- Perceived behavioral control (= self efficacy)
- Value of behavior
- Knowledge about the risk

etc...