

# The Effects of Auditory Latency on Game Experience and Player Performance

Thema:

The effects of auditory latency on game experience and player performance

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BA

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## Hintergrund

Generally speaking, latency is the difference in time between cause and effect. In human-computer interaction (HCI), latency is the time that passes before a user perceives the reactions to a actions. Perception and thus latency is not limited to one channel but can be auditory, visual or haptic in nature [1].

Visual latency leads to poor performance and user experience in HCI[2,3]. Video games are also affected by the negative effects of visual latency. Players score fewer points, need more time to work on certain tasks, or can not solve certain tasks at all [4, 5]. While high visual latency is known to negatively influence game experience and player performance, it is unclear how auditory latency affects the player.

However, the sound of a game is assumed to be important to how users feel while playing and how well they perform in-game. Therefore, developers have placed a steadily increasing focus on audio and sounds in games[6].

This work investigates if and how auditory latency impacts user experience and performance.

## Zielsetzung der Arbeit

To investigate if and how auditory latency impacts game experience and player performance by conducting a user study.

## Konkrete Aufgaben

- Literature research
- Implementing sound to an existing video game
- Conduct a user study
- Evaluate the data
- Write the scientific paper

## Erwartete Vorkenntnisse

- Programming in unity and c#
- Data analysis

## Weiterführende Quellen

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