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SECOND PRIZE

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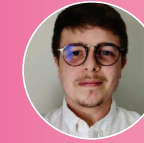
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# V.AIR

The fear of flying is described as a common anxiety disorder, physiological and psychological symptoms may include panic attacks, fear, sweating, dizziness, muscle tension, heart palpitations, shortness of breath and nausea. Several psychological and pharmacological treatments already exist for fear of flying, focusing on learning strategies such as Cognitive Behavioural Therapy, or in pharmacologically reducing the arousal. The project focuses on positive distraction through virtual reality in-vivo exposure to reduce the arousal through performing cognitive tasks and/or experiencing relaxing scenarios as coping strategies directly while flying. Integrating these techniques in virtual reality could offer a more interactive and immersive experience, thus helping the user feel engaged in a non-phobia-related context. First, restorative effects of virtual natural settings have been demonstrated. Second, immersive, and interactive virtual reality experiences allow participants to learn and apply several strategies to cope with stress. Third, in healthy subjects, stress deriving from the performance of cognitive tasks induces an increased activation in left dorsolateral prefrontal cortex, critical region for cognitive control, and a decreased activation in the right ventromedial prefrontal cortex, area associated with anxiety. The project aims to test the feasibility, usability, and effectiveness of a protocol of immersive experiences stimulating a positive distraction effect to reduce stress and anxiety levels experienced during flight.

