

Making Assistive Technology and Rehabilitation Engineering a Sure Bet

## **Negative Effects of Technology: Predisposing Older Adults to Falling**

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### **Abstract**

Studies have shown multifocal eyeglasses to correlate highly with falls in the elderly. The shortfall of this research is that the role of eyewear is not clearly defined. Our BIFOCAL Project examined the effect of new multifocal lenses on middle-aged individuals. Functional mobility and vision measurements were taken over six months to determine the effects of multifocal lenses. This study replicated Lord et al. (2002) (1) to identify the effects of glasses prior to the known effects of aging. Participants had significant decreases in the visual measures and mobility, as seen in Lord et al.'s study with an older population. However, the study did not find an increased rate of falls; perhaps due to the younger population being better able to compensate for impaired vision. This has significant implication for people with disabilities.

### **Keywords:**

Multifocal lenses, aging, falls, functional mobility, depth perception

### **ACKNOWLEDGEMENTS**

This work is supported in part by the National Institute on Disability and Rehabilitation Research, grant number H133G050340. The opinions contained in this paper are those of the grantee and do not necessarily reflect those of the NIDRR and U.S. Department of Education.

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