• **Project Title:** Effects of Hue & Artificial Light Sources on Visual Contrast by the Aging Eye  
**Investigator:** Asha Hedge  
**Department:** Family and Consumer Sciences

**Project Summary:**  
The study examined the effects of two commonly used light sources, within 4 hue ranges and three levels of saturation on visual contrast for the older subjects with normal vision. Experiment: Sixty elderly subjects (65-90 years) participated in the experiment during summer ‘07. Individuals were assigned to either incandescent lighting or fluorescent lighting condition, and were presented individually with the twelve color pallets—Red, Green, Blue and Purple in each of the saturation levels (low, medium, and high). Subjects rated each of the hue’s clarity using a seven point Likert scale as presented in an impression scale. Results: Regardless of the hue, the elderly rated the high saturation colors as most acceptable with regard to contrast/clarity. However, within each saturation levels, results varied. In high saturation, the blues received the highest rating followed by green. When hues were presented in low saturation, purple and red received high acceptability while blue received the lowest rating. This study clearly indicates that the color discrimination is affected negatively mainly in the lower saturation and not in the higher saturation. Implications: Practitioners can consider the results of this study and help them make informed decisions about appropriate color specifications for elderly clients in interior environments such as health care, nursing homes, adult daycare and retirement homes. The findings of this study will enable elderly negotiate the interior environments and make visually informed choices about objects and scenes in the environment with confidence.

**Publication:**  

**Presentations:**  
Services Supervisors: “Why They Stay.”


6.) Family Preservation Institute, San Antonio, TX, September 5-7, 2007. “Spiritually Effective Practice: Caring for Families and for Ourselves.” (with C. Hawkins)


8.) Baccalaureate Program Directors Conference, Austin, TX, November 3-6, 2005. “The Cultural Diversity Initiative.” (with, D. Freeman and S. Hill-Jones)

9.) National Family Preservation Conference, San Antonio, TX, September 7-9, 2005. “Surviving Graduate School While Working Full-Time.” (with R. Smith)


**Student number:** 30