

Abstract:

Veteran Emotional Perceptions and Preferences for Landscape Design Elements. Alicia A. Thomas^{1*}, Muntazar Monsur², Carol S. Lindquist³, and Catherine R. Simpson¹, ¹Department of Plant and Soil Sciences, Texas Tech Univ., Lubbock, TX 79409, ²Department of Landscape Architecture, Texas Tech Univ., Lubbock, TX 79409, ³Department of Sociology, Anthropology, and Social Work, Texas Tech Univ., Lubbock, TX 79409. (alicia.thomas@ttu.edu)

Military veteran (MV) suicides have been on the rise due to their strained mental and physical health. Viewing and interacting with a garden can be a means of improving MV's overall well-being. Research in military veteran preference and emotional perceptions of landscape design elements is severely scarce. An online survey conducted through Qualtrics was released to civilians and military veterans (N=399). The survey exhibited a series of questions with pictures pertaining to preference and emotional perceptions of landscape design elements (Landscape type, utilities, features, flower color, leaf color, leaf type, and views (Natural vs. urban)). The emotional perceptions were measured using a semantic-differential scale (Four adjective pairs: Happy, Sad; Calm, Stimulating; Roomy, Claustrophobic; Relaxed, Anxious) and preference questions used a pick-one or rank the landscape design elements. The majority of participants were male, Caucasian, and in the 25-35 yr. old range while the majority of MV respondents were in the army, active duty, or honorably discharged. While there were no significant differences in the rankings of landscape type, features, or utilities between MVs and civilians, MVs ranked xeriscape landscape as 2nd in comparison to civilians who ranked country as their 2nd favorite landscape type (p-value = <0.405). MVs had a less positive emotional perception towards averaged landscape types when compared to civilians who gravitated closer to positive adjectives. For landscape views, MVs also overwhelmingly preferred prospect views (open space) instead of refuge. Compared to other preference studies, participants were similar in choosing wild and nature over urban views despite different backgrounds and cultural differences. Information from this study could help in the construction of a military veteran specific garden with prospect views increased.

References:

- Eisenman, T. S. (2013). Frederick Law Olmsted, Green Infrastructure, and the Evolving City. *Journal of Planning History*, 12(4), 287–311. <https://doi.org/10.1177/1538513212474227>
- El Sadek, M., Sayaka, S., Fujii, E., Koriesh, E., Moghazy, E., & El Fatah, Y. A. (2013). Human emotional and psycho-physiological responses to plant color stimuli. *Journal of Food, Agriculture and Environment*, 11(3–4), 1584–1591.
- Goto, S. (2012). Visual Preference for Garden Design : Appreciation of the Japanese Garden. *Journal of Therapeutic Horticulture*, 22(1), 24–37. <http://eds.b.ebscohost.com/eds/detail/detail?vid=0&sid=d4811e4c-94f0-4af9-9301-daf194f96ab8%40sessionmgr120&bdata=JnNpdGU9ZWRzLWxpdmU%3D#AN=89650316&db=aph>

Koga, K., & Iwasaki, Y. (2013). Psychological and physiological effect in humans of touching plant foliage - using the semantic differential method and cerebral activity as indicators. *Journal of Physiological Anthropology*, 32(1), 1–9. <https://doi.org/10.1186/1880-6805-32-7>

Park, B. J., Furuya, K., Kasetani, T., Takayama, N., Kagawa, T., & Miyazaki, Y. (2011). Relationship between psychological responses and physical environments in forest settings. *Landscape and Urban Planning*, 102(1), 24–32. <https://doi.org/10.1016/j.landurbplan.2011.03.005>

Rahnema, S., Sedaghatoor, S., Allahyari, M. S., Damalas, C. A., & Bilali, H. El. (2019). Preferences and emotion perceptions of ornamental plant species for green space designing among urban park users in Iran. *Urban Forestry and Urban Greening*, 39(January), 98–108. <https://doi.org/10.1016/j.ufug.2018.12.007>

Shelstein, T (2020). Garden Type Collage. Pixabay Inc. <https://pixabay.com/photos/ornamental-landscapes-leaves-frizzy-779945/>. Retrieved April 2nd, 2020.

Ulrich, R. S. (1986). Human responses to vegetation and landscapes. *Landscape and Urban Planning*, 13(C), 29–44. [https://doi.org/10.1016/0169-2046\(86\)90005-8](https://doi.org/10.1016/0169-2046(86)90005-8)

United States Department of Veterans Affairs Office of Mental Health and Suicide Prevention. (2019). 2019 National Veteran Suicide Prevention Annual Report. 32.