

Effectiveness of Community Health Screenings on Intention to Improve

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ABSTRACT

Health fairs and associated screenings are a widely-utilized method to get the community involved in health awareness and health risk, in hopes of motivating the improvement of healthy behaviors and referral to healthcare support to prevent and treat chronic diseases. However, there is little research on their effectiveness and influence on behavioral intention, behavior, and health outcomes of participants.

PURPOSE: To provide preliminary investigation of the effectiveness of self-selected health screenings on intention to improve risk in a rural, adult population in Texas. **METHODS:** Data were collected as a part of a statewide project, *Community Conversations on Health*, in partnership with the Texas Department of State Health Services (DSHS). Family health expos were hosted in 21 rural communities across 20 counties offering the following lifestyle-related health screenings: blood pressure/heart rate, handgrip strength, waist circumference, frequency of physical activity, and fruit/vegetable intake. Expo attendees were allowed to self-select screenings of their preference, so as to maintain autonomy support—a theoretical foundation of the project. After each screening, participants were asked, “Based on this screening result, I intend to improve my [screening] in the near future,” provided with a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The main outcomes analyzed in this study were: (1) frequency of screening self-selection, (2) mean differences in intention to improve result between each screening via repeated-measures ANOVA, and (3) intention by risk classification groups via ANOVA or independent t-tests. **RESULTS:** 170 adults (59.93 ± 16.15 years of age; 73% women) participated in at least one screening: blood pressure (95%), handgrip strength (83%), heart rate (79%), fruit/vegetable intake (72%), physical activity level (68%), waist circumference (35%). Overall mean intention to improve ranged from 3.92 ± 0.84 (handgrip strength) to 4.21 ± 0.59 (waist circumference), with no statistically significant differences between means (*Wilks' Lambda* = 0.82, $F(4, 16) = 0.88$, $p = 0.50$). The only statistically significant mean difference in intention between risk classification groups ($t = -4.67$, $p < 0.001$) was in waist circumference, with those classified as *very low/low risk* (3.79 ± 0.43 , $n = 14$) being statistically significantly lower than those classified as *high/very high risk* (4.60 ± 0.51 , $n = 15$).

CONCLUSION: These findings provide preliminary support that self-selected, community health screenings can positively impact intention to improve upon the risk/results of those screenings, while highlighting variation in frequency of screenings chosen. On average, intention remained moderate-high following all screenings irregardless of risk classification, with the exception of waist circumference. Future research should confirm findings with a larger sample and pre-post assessment of intention, as well as examine why certain screenings are preferred and self-selected over others, the uniqueness of waist circumference screenings, and the potential impact on health behavior change.