

Paper Session 09 4:54 PM-5:12 PM 2150

REPORTING FEASIBILITY AND ACCEPTABILITY DATA FROM ITEEN, A SOCIAL NETWORKING, WEIGHT GAIN PREVENTION STUDY FOR HEALTHY DISPARITY ADOLESCENT GIRLS

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Nationally, obesity rates are highest among African American and Hispanic youth. A pilot was conducted testing iTeen, an 8-week weight gain prevention intervention that promoted healthy eating and physical activity via an online social networking site. Health disparity adolescent girls, aged 10-14, were randomized to either an online social networking (SN) group or an online social networking site + eHealth Coaching group (SN + eCoach). Both groups received printed materials and had access to the SN site where they could view healthy eating and physical activity videos. SN + eCoach received weekly electronic chat sessions using social cognitive theory and a motivational interviewing approach to discuss healthy eating and physical activity. After 9 months of recruitment, 47 participants were randomized. Averages for the girls were 12.1 years (SD = 1.24), BMI 24.95 kg/m² (SD = 4.44), 30% Hispanic, 41% Black, 18% low income whites, and 11% were multiracial. Leon, Davis, and Kraemer (2011) have called for using pilot studies to provide feasibility and acceptability data rather than data to power for larger trials. Following Leon et al.'s recommended reporting of feasibility data, this study yielded a screening rate of 23 participants/mo, an enrollment rate of 6.4 girls/mo, a randomized from eligibles proportion of 51%, and an intervention (i.e., eCoaching sessions) attendance rate of 65%. Acceptability was derived from consumer satisfaction questionnaires completed at 8-weeks. Overall satisfaction with the iTeen program was rated on an ordinal 7-point scale (1 = not at all satisfied to 7 = very satisfied). Girls' overall satisfaction was rated positively, and was higher for the SN + eCoach group (SN = 5.4, SN + eCoach = 6.89; $F = 6.07$, $p = .03$). Parents' overall satisfaction was also rated positively, and higher for the SN + eCoach group (SN = 4.5, SN + eCoach = 5.9; $F = 6.29$; $p = .02$). Thus, iTeen, an online only program, demonstrated feasibility and acceptability with a hard to reach health disparity population of adolescent girls.

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Paper Session 09 5:12 PM-5:30 PM 2151

#READINESS: ARE PEOPLE READY TO USE TWITTER FOR HEALTH BEHAVIOR CHANGE?

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Twitter is a popular internet-based social media designed for interpersonal communication via micro-blogging. Health researchers have started using Twitter as an intervention modality given its popularity and its broad reach as a social medium. However, intervention researchers suggest that the fit between participants and intervention is an important design consideration. While there is an intuitive appeal for Twitter as an intervention tool, there is a need to 'diagnose' participants' readiness to use such a modality as an aid to behavioral strategies. For example, those who do not see the merit of twitter as an intervention modality may be less inclined to initiate or adhere to its use. Employing social-cognitive theory, expectancy-value beliefs (EV) about cognitive behavioral strategies (CBS) associated with exercise and diet change and maintenance might be indicators of people's receptivity to using Twitter as an intervention tool. The purpose of this study was to "diagnose" individuals' readiness to use Twitter as a method to deliver CBS intervention components. 80 participants (Mage = 26; 65% female; 78% Twitter users), recruited via social media and internet bulletin boards, completed an online survey regarding their EV beliefs about using Twitter as a means to aid diet/exercise change. Discriminant function analyses (DFA), revealed value and likelihood of using Twitter-based CBS significantly differentiated those open and not open to using Twitter to aid exercise change (81% correctly classified; canonical $R = .549$), and diet change (65% correctly classified; canonical $R = .363$). DFA Patterns for both health behaviors were similar; effect sizes of group differences were large ($d = 1.31$ and $.77$). EV beliefs about using CBS via Twitter sorted those interested and not interested in using Twitter after controlling demographic covariates of Twitter use and age. Use of twitter as an intervention tool is neither straightforward nor intuitive and the readiness of individuals to participate should be closely examined before intervening.

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Paper Session 10 4:00 PM-4:18 PM 2152

LATENT PROFILE ANALYSIS OF GIS-MEASURED WALKABILITY, TRANSIT AND RECREATION ENVIRONMENTS FOR PHYSICAL ACTIVITY

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Neighborhood correlates of physical activity (PA) are complex and interrelated. This study explored whether patterns of neighborhood features could be derived from GIS-measured walkability, transit, park, and private recreation factors via multilevel latent profile analysis (LPA). Participants in the Neighborhood Quality of Life Study (N = 2199, 20-65 years, 48.2% female, 26% ethnic minority) were sampled from Seattle/King County, WA and Baltimore, MD-Washington, DC and geocoded to compute net residential density, land use mix, retail floor area ratio, intersection density (walkability components), bus/rail counts (transit), park, and private facility counts (recreation access) variables using a 1 km street network buffer around participants' homes. Multilevel regression models compared derived profiles on accelerometer-measured MVPA and reported transportation and leisure PA, adjusting for nesting and socio-demographics. Seattle results—LPAs yielded 4 profiles: low walkable/transit/recreation (L-L-L); high walkable/transit/recreation (H-H-H); mean walkable/transit/recreation (M-M-M); moderately high walkable/transit/recreation (MH-MH-MH). All 3 PA variables were higher in the Seattle H-H-H profile than the L-L-L profile (17.4 min/d MVPA difference; 5.5 hrs/wk transportation PA difference; 2.3 hrs/wk leisure PA difference; all $ps < .05$). Baltimore results—LPAs yielded 4 profiles: low walkable/transit/recreation (L-L-L); moderately high walkable/high transit/high recreation (MH-H-H); high walkable/moderately high transit/moderately high recreation (H-MH-MH); moderately high walkable/transit-friendly/mean recreation (MH-MH-M). Significant differences in the Baltimore subsample were not as pronounced as Seattle, but overall, MH-H-H and H-MH-MH participants had higher PA than other profiles. Combined impacts of walkability, transit, and recreation environments may explain greater differences in PA for adults than walkability alone. Patterns of environmental attributes can suggest tailored intervention strategies.

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Paper Session 10 4:18 PM-4:36 PM 2153

DISPARITIES IN PARK AVAILABILITY AND CRIME BY NEIGHBORHOOD SOCIOECONOMIC STATUS AND RACE/ETHNICITY

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Parks are an important resource for physical activity; however, the extent to which parks are equitably distributed remains unclear. Moreover, little research has examined whether social characteristics of park environments that may affect use, such as crime occurring in or near parks, vary by neighborhood sociodemographics. We investigated associations of neighborhood socioeconomic status (SES) and racial/ethnic composition with park availability and crime across Census Tracts (CT) in Houston, TX. Data on parks and de-identified crime incidents (2007-11) were obtained from the City of Houston. Neighborhood data on 338 CTs were derived from the 2007-11 American Community Survey. A neighborhood SES index comprised of 9 commonly used CT-level variables was developed using principal components analysis. Park availability within CTs was assessed as the number of parks intersecting each CT and the proportion of CT area comprised of park space. Crime was assessed as the number of violent and nonviolent incidents in CTs that occurred within 50 f. buffers of parks. Linear regression was used to model park availability, and negative binomial regression modeled counts of crime. Results showed that neighborhood SES and race/ethnicity were not significantly associated with park availability. However, neighborhood SES was inversely associated with violent crime within 50 f. of parks ($\beta = -0.70$, $SE = 0.12$, $p < 0.001$), while increased racial/ethnic minority composition was positively associated ($\beta = 0.47$, $SE = 0.09$, $p < 0.001$). No significant associations were observed for nonviolent crime. Violent crime occurring in or near parks was more prevalent in lower-SES and higher minority neighborhoods in Houston, TX, potentially deterring park use and park-based physical activity. Additional research and policy efforts are needed to further investigate and address neighborhood disparities in access to safe opportunities for physical activity.

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