

Use of Text Message to Promote Adolescent Health and Beyond

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Background

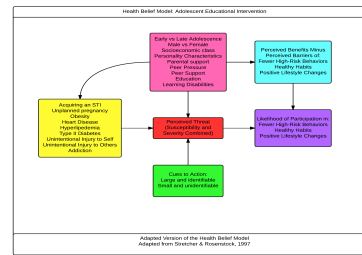
- Adolescence is a time when health habits are being developed and a time when establishing lifelong healthy habits is crucial
- According to the 2013 Youth Risk Behavior Surveillance report, adolescents are engaging in many high-risk behaviors that may negatively affect their short term and long term mental and physical well being
- Adolescents are at risk for making poor health choices if not adequately educated on risks associated with poor choices
- Primary care providers face many challenges in adequately educating adolescents on age appropriate health topics and high risk behaviors including time constraints in a busy office setting, comfort level of the provider, lack of training on how to address high risk behaviors, discomfort of the adolescent in disclosing high risk behaviors
- Early intervention to prevent long term consequences of poor choices is pivotal for the health of any population

Literature Review

- Several studies indicate a text message intervention was useful in increasing knowledge of high risk behaviors in adolescents and young adults
- Several other studies indicate a text message intervention was beneficial in promoting positive behavioral changes such as increasing condom use, increasing sexual transmitted infection testing, and increasing smoking abstinence in adolescents and young adults
- Three studies involving adolescent and young adult focus groups found text message interventions were an acceptable way to provide health education to the adolescent and young adult population
- The limitation of most published studies is the narrow focus of the intervention
- The use of a theoretical framework has demonstrated effectiveness in promoting behavioral change in individuals
- The health belief model has been effectively used in promoting healthy behaviors and behavioral changes

References:
Froh, C., Knapik, B., Robinson, S., Whitaker, B., Edwards, P., Zhou, W., Roberts, L. (2011). Sending concise support delivered via mobile phone text messaging (txt2help): a single blind, randomized trial. *The Lancet*, 378(9770), 80-85. doi: 10.1016/S0140-6736(10)62074-6
Gohil, J., Liu, M. S., Huhua, M. E., Hocking, J. R., & Knapik, L. (2010). What's in a message? Delivering sexual health promotion to young people in Australia via text messaging. *BMC Public Health*, 10, 792. doi: 10.1186/1471-2458-10-792
Gohil, J., Liu, M. S., Hocking, J. R., Knapik, L., & Huhua, M. E. (2011). Determining the impact of text messaging for sexual health promotion in young people. *Sexually Transmitted Diseases*, 82(1), 24-29. doi: 10.1097/01.0de.0b3e3183400000000000000000000000
Knapik, L., Roberts, L., Huhua, M. E., & Liu, M. S. (2010). A peer program using portable phones for HIV prevention. *Journal of Adolescent Health*, 47(1), 106-113. doi: 10.1016/j.jadohealth.2010.09.007
Liu, M. S., Hocking, J. R., Anderson, C. R., Farizo, C. R., Janda, L., Lewis, J. A., & Huhua, M. E. (2011). Impact of text messaging on the sexual health of young people: A randomized controlled trial. *Journal of Epidemiology and Community Health*, 65(1), 60-65. doi: 10.1136/jech.2009.100909
Sofianos, B., Alimi, A., McGowan, K. A., Callahan, C., Wamond, H. C., & Clark, D. H. (2013). A text risk reduction text message program for young adult females discharged from the emergency department. *Journal of Adolescent Health*, 53(1), 27-31. doi: 10.1016/j.jadohealth.2012.04.004
Woodward, S. J., Diaz, K. L., Denny, H. A., James, C. M., Clark, S. J., Stoeberl, V. J., & Ranslow, K. (2011). SMS do not say I/O: Online adolescents' perspectives on the content of text messages to enhance weight loss efforts. *Obesity*, 19(2), 249-255. doi: 10.1038/sj.oby.2010.2146
Woodward, S. J., Clark, S. J., Stoeberl, V. J., & Ranslow, K. (2010). Tailored mobile phone text message as an adjunct to obesity treatment for adolescents. *Journal of Adolescent Health*, 46(3), 478-481. doi: 10.1016/j.jadohealth.2009.10.027

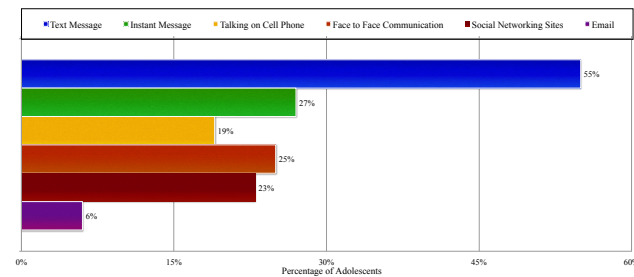
Theoretical Framework



Adolescent Population



Methods Adolescents Use to Interact on a Daily Basis



Leubner, A. (2015). Teens, technology and friendships. Retrieved from PeerResearch Internet Project website: <http://www.peerresearch.org/2015/08/06/teens-technology-and-friendships/>

Program Development

- Development of a text message education program is simple
- Secure a text message service to send text messages: site should offer confidentiality and auto enrollment via use of texting a keyword
- Determine topics relevant to the target population: age appropriate anticipatory guidance covering broad topics promoting the development of healthy habits and positive lifestyle choices
- Develop short educational messages to be distributed via text message
- Consider including a link to a professionally supported website in the text message for participants to gain additional age appropriate health related information on the text message topic
- Many text message services limit the number of characters allowed per text message, consider using an online service such as goo.gl to shorten the website
- Market to the target audience

Implications for Practice

- Easy to use text messaging system to deliver anticipatory guidance or other health related information
- Increase in patient knowledge and awareness of health behaviors
- Decrease in high risk behaviors such as unprotected sexual encounters, smoking, drug and alcohol use, or sedentary lifestyle
- Increase in healthy lifestyle choices such as using condoms, eating five or more servings of fruits or vegetables daily, consuming three or more servings of dairy daily, exercising 60 minutes five or more days per week
- Improvement in the mental and physical health of adolescents or other populations which have the potential to improve health over the course of the lifespan
- Long term affects of decreasing high risk behaviors and increasing healthy lifestyle choices are numerous: reduction in unintended pregnancy, sexually transmitted infections, obesity, hypertension, type II diabetes, and other complications of an unhealthy lifestyle