GEORGIA SOUTHERN UNIVERSITY

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Abstract

The VERBTM Summer Scorecard (VSS) program was designed with the purpose of promoting physical activity among 'tweens' (8-13 year olds). A unique aspect of the VSS program is the scorecard which serves multiple purposes. The scorecard primarily serves as a behavioral reinforcer for physical activity. The scorecard also tracks physical activity for each participant. A community-based prevention marketing (CBPM) approach was taken to adapt the VSS to meet the needs of a rural, diverse population in the southeastern United States. Formative research was conducted with the target audience. Focus group interviews were conducted with parents and their children. Content analysis showed significant changes were needed for program. Previous versions of the Scorecard did not test well with the target audience, who suggested the use of smaller Scorecards and fobs as a secondary reinforcer. These changes offer many potential benefits to participation reinforcement and physical activity participation tracking.

Introduction

Background

A lack of physical activity is not only associated with increased rates of obesity, body fat composition, and mortality among young people (Koezuka et al., 2006), but is also contributing factor to increases in certain types of cancer (Eheman et al., 2012). Although the Centers for Disease Control (CDC) recommend 60 minutes or more of physical activity per day, only 18.4% of public school students reach this goal (CDC, 2010). Many schools fail to implement physical activity promotion programs for young people due to a lack of parental and student involvement (Cardon et al., 2012). Even with the added resources of university, physical activity promotion efforts still face many challenges (McDermott et al., 2009). The challenges of promoting physical among schoolaged youth are exacerbated as students become older. Nader, Bradley, Houts, McRitchie, and O'Brien (2008) tracked youth from ages 9 to 15 and found that moderate-to-vigorous physical activity significantly declined each year. School-aged youth in rural areas suffer from poor health outcomes due to disparities in resources such as access to community and recreational facilities (Cornwell, Hawley, & St. Romain, 2007). **VERB**TM Summer Scorecard

The VERBTM Summer Scorecard (VSS) program is the community arm of the national VERBTM- It's What You Do! Campaign (Bryant et. al., 2008). The development was guided by the community-based prevention marketing (CBPM) process (Bryant et al., 2009). The process is a community-directed social change process that applies marketing theories and techniques to design, translate, implement, and evaluate health promotion and disease prevention programs. A unique aspect of the VSS program is the scorecard which serves multiple purposes. The scorecard primarily serves as a behavioral reinforcer for physical activity. The scorecard also tracks physical activity for each participant. Previous school- and community-based interventions have consistently relied on accelerometry to as a measure of physical activity (De Meij et al., 2011; Dzewaltowski et al., 2010; Okely et al., 2011; Zahner et al., 2006). Accelerometry offers clear measurement benefits, but is costly and limited to a smaller subsample of the target population. Additionally, previous studies have only used accelerometry to obtain baseline and post-intervention physical activity measurements (De Meij et al., 2011; Dzewaltowski et al., 2010; Okely et al., 2011; Zahner et al., 2006). The VSS scorecard and its integration into the CBPM process are essential in the implementation of the VSS program. Self-reported measures can serve as valid, reliable instruments for measuring physical activity (Biddle, Gorely, Pearson, & Bull, 2011). Similar to the VSS, single-item physical activity measures have been developed and tested (Milton, Bull, & Bauman, 2011). The use of the scorecard to track physical activity throughout the length of intervention allows for program developers to make key decisions and possible changes during the implementation, a key component of the CBPM process. Additionally, the design and adaption of the scorecard by the target audience increases the likelihood of program adoption.

The purpose of this study was to use the CBPM process to tailor the scorecard, for a rural area. This poster presents the formative research from the first systematic attempt to adapt the VSS to fit within a primarily rural, African American community in southeast Georgia.

Tailoring a Physical Activity Promotion Program for a Rural Area Gavin Colquitt, EdD, CAPE, CSCS, Moya Alfonso, PhD, MSPH, Ashley Walker, PhD, CHES, Vanessa Dunmore, MPH

METHODS

Sample and Data Collection

Two parent focus groups (N = 14) and two child focus groups (N = 12) were conducted by trained focus group facilitators in April 2012. The parent and child focus groups included a diverse sample of participants. Twelve African-American parents and two Caucasian parents participated in the parent focus groups and 10 African-American and two Caucasian children participated in the child focus groups. Both groups of participants were recruited through the local Boys and Girls Club, the lead community partner in the VSS program development. Each focus group facilitator used a focus group guide to conduct the focus groups with parents and children. The guides covered aspects of VSS that might need adapting to work for the target population. The guides also included items specific to social marketing constructs, including Price, Product, Place, and Promotion **Data Analysis**

One of the VSS representatives listened to the audio-recorded focus groups and transcribed each recording verbatim. The transcriptions were then sent to other VSS representatives and focus group facilitators to check for accuracy. Content analysis was used to analyze the data. The transcripts were analyzed using the social marketing framework constructs. The four constructs of social marketing include the four P's of marketing: price, product, place, and promotion. The transcripts were coded specifically to reflect the constructs.

RESULTS

Based on the common themes identified in the formative research, major adaptations were needed to implement VSS in the rural community. The major program adaptation highlighted changes needed to the use of the Scorecard within the community.

Two versions of Scorecards that had been used in other states were tested with youth and parents (see Figure 1). Neither version tested well. Parents believed that youth would not be able to read or understand them and would ultimately lose them. Youth participants also discussed the difficulty of reading and understanding the previously used Scorecards. One option for the Scorecard discussed by parents was a chain with fobs (dog tags). This option tested well with both parents and youth. The use of fobs is a familiar practice within this community. One of the local elementary schools uses 'dog tags' as a child incentive and according to the focus group responses are very popular among the local youth.

Parent 3:

Yea, they used to do the tags at [a local school] as well,... for everything you did they would add a tag to the chain and they were proud of that thing [dog tag]. Parent 4:

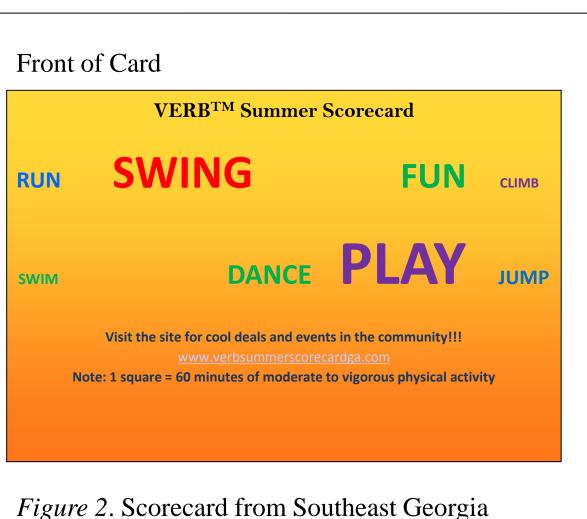
Yea my kids were about [sic] to fight over a bear tag, "I (got to) [sic] do such and such so I can get my bear tag."

Parent 4:

.... Nine times out of 10 the reading [of the Scorecard], they're not going be able to read it. So you want something that they can actually read and actually relate with. Parent participants also agreed that if a paper Scorecard were to be used, the Scorecard needed to be smaller and something 'tweens' could carry with them such as "wallet size" or "pocket guide" (see Figure 2). During both of the children's focus groups, the participants were asked about the 'dog tag' tracking system. All child participants supported the idea. When asked why the 'dog tag' was preferred, the child participants agreed it was because "you get to wear it."



Figure 1. Scorecard from Sarasota County, Florida



Results suggested the previously used Scorecards would not work with African-American youth and families in rural Georgia. Results of the formative research posed benefits and challenges that were not evident in previous implementations of VSS. The use of dog tags and index-sized Scorecards offered the immediate benefit of reduced-cost. Previous versions of the VSS have been large, pamphlet style Scorecards. The new, simple version of the Scorecard costs less to implement, making it easier for smaller communities to implement a VSS program. Using physical activity outlet sites as places to disseminate dog tags to give to youth for tracking their physical activity requires additional support from community partners. The findings of this study provide a framework for tailoring an effective program-VSS- for different contexts. These results may also help physical educators in other communities create programs similar to VSS to involve youth in physical activity and tailor these programs to meet the needs of their communities.



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Biddle, S. J. H., Gorely, T., Pearson, N., & Bull, F. C. (2011). An assessment of self-reported physical activity instruments in young people for population surveillance: Project ALPHA. The International Journal of Behavioral Nutrition and Physical Activity, 8(1). doi:10.1186/1479-5868-8-1

- Publications.
- 331–358). San Francisco, CA: Jossey-Bass.
- doi:10.1093/her/cys043

- *6*(1), A15.



Back of Card

Parents are allowed to sign a maximum of **TWO** squares Once all squares have been filled, cards must be turned into any of the three locations listed below to receive VERB[™] Summer Scorecard prize The Clubhouse Boys and Girls Club •Parks and Recreation Department Youth or Adult Address: Last 4 digits of phone number:

Discussion

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REFERENCES

Bryant, C. A., Courtney, A. H., Baldwin, J. A., McDermott, R. J., Peterson, M., & Koonce, D. (2008). VERBTM Summer Scorecard. In P. Kotler & N. Lee (Eds.), Social marketing: Influencing behaviors for good. Thousand Oaks, CA: Sage

Bryant, C. A., McCormack-Brown, K., McDermott, R. J., Debate, R. D., Alfonso, M. A.,

Baldwin, J. L., Monaghan, P., et al. (2009). Community-Based Prevention Marketing: A New Planning Framework for Designing and Tailoring Health Promotion Interventions. In R. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), *Emerging Theories in Health Promotion Practice and Research: Strategies for Improving Public Health* (2nd ed., pp.

Cardon, G. M., Van Acker, R., Seghers, J., De Martelaer, K., Haerens, L. L., & De Bourdeaudhuij, I. M. M. (2012). Physical activity promotion in schools: Which strategies do schools (not) implement and which socioecological factors are associated with implementation? Health education research, 27(3), 470-83.

Centers for Disease Control and Prevention. (2010). The state indicator report on physical activity. Retrieved from http://www.cdc.gov/physicalactivity/downloads/PA_State_Indicator_Report_2010_Action_Guide.pdf Cornwell, L., Hawley, S. R., & St. Romain, T. (2007). Implementation of a coordinated school health program in a rural, low-income community. *The Journal of School Health*, 77(9), 601–6. doi:10.1111/j.1746-1561.2007.00239.x De Meij, J. S. B., Chinapaw, M. J. M., van Stralen, M. M., van der Wal, M. F., van Dieren, L., & van Mechelen, W. (2011). Effectiveness of JUMP-in, a Dutch primary school-based community intervention aimed at the promotion of physical activity. British Journal Of Sports Medicine, 45(13), 1052–1057. doi:10.1136/bjsm.2010.075531

Dzewaltowski, D. A, Rosenkranz, R. R., Geller, K. S., Coleman, K. J., Welk, G. J., Hastmann, T. J., & Milliken, G. A. (2010). HOP'N after-school project: An obesity prevention randomized controlled trial. International Journal of *Behavioral Nutrition and Physical Activity*, 7(1), 90. doi:10.1186/1479-5868-7-90

Eheman, C., Henley, S. J., Ballard-Barbash, R., Jacobs, E. J., Schymura, M. J., Noone, A.-M.,... Edwards, B. K. (2012). Annual report to the nation on the status of cancer, 1975-2008, featuring cancers associated with excess weight and lack of sufficient physical activity. *Cancer*, 118(9), 2338–2366. doi:10.1002/cncr.27514

Koezuka, N., Koo, M., Adlaf, K. R., Dwyer, J. J., Faulkner, G., & Goodman, J. (2006). The relationship between sedentary activities and physical inactivity among adolescents: Results from the Canadian Community Health Survey. Journal of Adolescent Health, 39(4), 515–522. doi:http://dx.doi.org/10.1016/j.jadohealth.2006.02.005

McDermott, R. J., Nickelson, J., Baldwin, J. A, Bryant, C. A., Alfonso, M., Phillips, L. M., & DeBate, R. D. (2009). A community-school district-university partnership for assessing physical activity of tweens. Preventing Chronic Disease,

Milton, K., Bull, F. C., & Bauman, A. (2011). Reliability and validity testing of a single-item physical activity measure. British Journal of Sports Medicine, 45(3), 203–208. doi:10.1136/bjsm.2009.068395

Nader, P. R., Bradley, R. H., Houts, R. M., McRitchie, S. L., & O'Brien, M. (2008). Moderate-to-vigorous physical activity from ages 9 to 15 years. Journal of the American Medical Association, 300(3), 295–305.

Okely, A. D., Cotton, W. G., Lubans, D. R., Morgan, P. J., Puglisi, L., Miller, J., ... Perry, J. (2011). A school-based intervention to promote physical activity among adolescent girls: Rationale, design, and baseline data from the Girls in Sport group randomised controlled trial. BMC Public Health, 11(658). doi:10.1186/1471-2458-11-658

Zahner, L., Puder, J. J., Roth, R., Schmid, M., Guldimann, R., Pühse, U., ...Kriemler, S. (2006). A school-based physical activity program to improve health and fitness in children aged 6-13 years ("Kinder-Sportstudie KISS"): Study design of a randomized controlled trial [ISRCTN15360785]. BMC Public Health, 6(147). doi:10.1186/1471-2458-6-147