



Published in final edited form as:

Nurs Res. 2016 ; 65(5): 415–420. doi:10.1097/NNR.000000000000173.

Evaluating Mailed Motivational, Individually Tailored Postcard Boosters for Promoting Girls' Postintervention Moderate-to-Vigorous Physical Activity

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Abstract

Background—Ways to optimize boosters to assist girls to attain adequate moderate-to-vigorous physical activity following an intervention are unknown.

Objective—This study's purpose was to: (a) determine whether girls receiving mailed motivational, individually tailored postcard boosters following a 17-week physical activity intervention would have greater moderate-to-vigorous physical activity at 9-month follow up, as compared to girls not receiving them and those in a control group; and (b) evaluate girls' perceptions of the booster intervention.

Methods—Sixth to 7th grade girls ($n = 117$) from two urban, Midwest schools with similar demographic characteristics participated in a 17-week physical activity intervention, and girls from a third school served as controls ($n = 64$). One ($n = 54$) of the two intervention schools was randomly assigned to receive 13 motivational, individually tailored postcards containing messages to encourage them to attain adequate physical activity during the postintervention period. Girls from the other intervention school ($n = 63$) did not receive postcards, and those in the control school did not receive any intervention. Moderate-to-vigorous physical activity was measured with accelerometers at postintervention and 9-month follow up. Girls completed a postcard evaluation survey at 9-month follow up.

Results—Moderate-to-vigorous physical activity decreased significantly from postintervention to 9-month follow up with no between-group differences or group-by-time interaction effect. Based

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The parent randomized trial is registered at ClinicalTrials.gov: identifier NCT01503333.

The authors do not have any conflicts of interest to report.

Supplemental Digital Content 1. Table. Detailed information about the complete statistical model is provided. .doc

on the survey, 27 (64.3%) girls received all postcards. Only 15 (35.7%) read all that they had received. Evaluations of postcards tended to be favorable.

Discussion—Mailed booster postcards to promote physical activity among girls postintervention were not effective. Strategies to achieve this objective warrant investigation.

Keywords

adolescents; behavior; children; exercise; female; intervention

The lack of sufficient physical activity (PA), coupled with the high prevalence of obesity among adolescent girls (Kann et al., 2014) highlights the urgency to intervene with this age group to prevent the notable decline in PA that occurs with advancing age across adolescence (Bradley, McRitchie, Houts, Nader, & O'Brien, 2011). Research indicating that low-income and racial/ethnic minority populations have a higher prevalence of obesity (Frederick, Snellman, & Putnam, 2014) and physical inactivity (Gortmaker et al., 2012) than their high-income, White counterparts, identifies another critical need to reduce existing disparities. Only one study with girls was noted that included a follow-up measure involving accelerometers to collect physical activity data 12 months after the intervention had ended (Dewar et al., 2013). Findings indicated that both the intervention and control groups decreased their PA over time with no between-group differences in the behavior at 12-month follow up (F/U; Dewar et al., 2013).

Promoting enactment of moderate-to-vigorous PA (MVPA) long-term after an intervention ends is a challenge, and effective strategies to do so remain elusive. One approach for promoting MVPA after an intervention ends involves boosters (Stuart, 1967) delivered via telephone calls (Wu, Forbes, & While, 2010), print-media (Dijkstra, Mesters, De Vries, van Breukelen, & Parcel, 1999), and interactive technology (Svetkey et al., 2008). Although promising, evidence is lacking on ways to optimize their use in assisting adolescent girls to attain adequate MVPA. Only one study with girls was found that included a postintervention maintenance phase to prevent weight-related problems. The maintenance phase included weekly lunch get-togethers to discuss intervention topics and eat healthy food, plus a parent-daughter retreat day to emphasize intervention messages. At F/U, intervention girls decreased their sedentary behavior more than control girls, but no group differences in PA occurred. The study was limited by self-report of the behaviors (Neumark-Sztainer et al., 2010). Thus, continuing investigation of the effect of postintervention approaches on girls' PA is warranted.

The parent study, "Girls on the Move" (GOTM)—a group randomized controlled trial (RCT) to increase MVPA among urban girls (Robbins et al., 2013)—involved eight schools per year for three years (2012-2015)—with half being randomly assigned to receive a 17-week intervention and the other half to serve as controls. The parent study contained a total of 24 schools (12 intervention, 12 control). In May 2013, immediately following postintervention data collection, girls in one of the intervention schools in the parent study were mailed motivational, individually tailored postcard boosters. The small-scale, ancillary study was introduced after the first intervention year to explore the effects of postcard boosters on maintaining girls' MVPA during 9-month F/U. The delivery of postcards to girls in only one

intervention school in the ancillary booster study is expected to have minimal impact on the pending analysis and results of the large-scale parent study.

Purpose

The purpose of this ancillary booster study was to: (a) determine whether girls receiving mailed motivational, individually tailored postcard boosters following the 17-week physical activity intervention would have greater MVPA at 9-month F/U, as compared to girls in another intervention group who did not receive postcard boosters and a control group; and (b) evaluate girls' perceptions of postcard boosters.

Methods

Design and Setting

For this prospective study, one control and two intervention schools with similar demographics were selected from eight (four intervention, four control) urban schools involved in the group RCT during academic year 2012-2013. The two intervention schools were randomly assigned to receive either postcard boosters during months two through eight postintervention (Booster Intervention; see Figure), or no postcard boosters postintervention (GOTM Intervention). The third school served as a control condition in the group RCT and this study.

Sample

A total 181 6th-7th grade girls participated. Of 64 eligible girls for the Booster Intervention, 54 (84%) actually participated. The 10 girls who declined participation did not differ in demographics or PA from those involved. The GOTM Intervention and control groups included 63 and 64 girls, respectively.

Intervention

The Booster Intervention included 13 motivational, individually tailored postcards, enclosed in bright pink envelopes mailed to each girl's home during the postintervention period. The colorful postcards were created by university graphic designers. Each postcard included a fun activity about PA on one side for girls to complete and a motivational, individually tailored message to encourage PA on the other. Messages were tailored based on each girl's personal responses to iPad survey instruments completed at the midpoint of the GOTM Intervention.

Measures

Physical activity—The ActiGraph GT3X-plus accelerometer measured minutes of PA per hour based on recorded acceleration counts (Trost, McIver, & Pate, 2005; Hänggi, Philips, & Rowlands, 2013). Accelerometers were initialized prior to data collection and issued to participants with instructions to wear the monitor attached to a belt on the right hip for seven days. To be included in analyses, girls had to wear the monitor for at least 8 hours/day on at least three weekdays and one weekend day (Matthews, Hagströmer, Poer, & Bowles, 2012; Jago et al., 2013). Count cut-points (15-second epoch) were used to categorize PA into

sedentary activity, light PA (LPA), and MVPA (Evenson, Catellier, Gill, Ondrak, & McMurray, 2008).

Evaluation survey—At 9-month F/U, a 10-item postcard evaluation survey developed by two of the authors was given to girls who received the postcard intervention. To evaluate the dose received, one question asked, “You were mailed 13 postcards. How many did you receive?” and another asked, “How many did you read?” Response choices included: *none*, *some*, *most*, or *all*. To evaluate acceptability and perceptions of the effect on PA of the Booster Intervention, girls responded to an additional eight questions. Choices ranged from “disagree a lot” to “agree a lot.”

Procedures

The University Institutional Review Board approved the study. Girls and parents/guardians signed assent and consent forms, respectively. Details regarding the procedure used in the group RCT are reported elsewhere.

Data Analysis

Data analyses were performed using SAS 9.4. Descriptive statistics were calculated. Univariate statistics were used to compare group and time differences on minutes/hour of sedentary activity, LPA, and MVPA. Mixed-effects models were used to examine the main effects of group (Booster Intervention, GOTM Intervention, and Control) and time (baseline, postintervention, and 9-month F/U), and the interaction effects of group \times time on outcome variables after adjusting for baseline demographic characteristics including age, ethnicity, race, and school lunch program enrollment status.

Results

Participant Characteristics

Girls were 11-14-year-olds ($M = 11.97$, $SD = 0.70$). About 71.3% were Black ($n = 129$) and 88.8% were enrolled in the free or reduced-price lunch programs ($n = 150$). Table 1 presents the demographics of the three groups. The GOTM Intervention group had higher proportions of Hispanic girls and girls enrolled in free or reduced-price lunch programs than the Booster and Control groups, respectively. The Control group had a higher proportion of White girls, while the GOTM Intervention group had a higher proportion of girls of mixed/other races.

Booster Intervention Effects

Overall, sedentary activity increased significantly, while LPA and MVPA decreased significantly from baseline to 9-month F/U (see Table 2). For girls in the Booster Intervention group, after controlling for demographics, there was only a significant main effect of time on sedentary activity ($F_{1,118} = 90.67$, $p < .001$), LPA ($F_{1,118} = 71.00$, $p < .001$), and MVPA ($F_{1,118} = 78.80$, $p < .001$). No significant group main effect and interaction effect of group-by-time was found. The booster intervention effect did not differ according to number of postcards received or read.

Postcard Evaluation

At 9-month F/U, 42 of 54 girls (77.8%) completed the 10-item postcard evaluation survey. Twelve girls were not present. Over half reported receiving all ($n = 27$; 64.3%) postcards, with others receiving most ($n = 6$; 14.3%), some ($n = 8$; 19.0%), or none ($n = 1$; 2.4%). The majority reported they either read all ($n = 15$; 35.7%) or most ($n = 13$; 31.0%) of the postcards. As noted for the remaining postcard evaluation survey items presented in Table 3, the majority agreed that the postcards were easy to understand ($n = 39$; 92.9%) and exciting to receive in the mail ($n = 25$; 59.5%), and at least 50.0% ($n = 21$) agreed with all remaining items indicating that the postcards positively influenced their PA, except for the item “I talked about the ideas on the postcards with others.” Although 64.3% ($n = 27$) of the girls reported that they became more physically active after getting the postcards, their claim was not supported by accelerometer data.

Discussion

Despite health benefits of PA, researchers have largely neglected to examine long-term maintenance or the possibility of a delayed response following a PA intervention. Limited literature was found involving adolescents, but studies including adults have showed inconsistent results related to the booster effects. Marcus and colleagues (2007) found that both print- and Internet-based boosters increased PA; however, the study included mostly college-educated, high socioeconomic status, sedentary women. In a recent study with low-active, adult Latinas to determine whether individually-tailored booster materials mailed at 8, 10, and 12 months following a six-month intervention period increased PA at 12 months, Marcus et al. (2015) noted that the booster intervention group had greater minutes/week of MVPA than the control group at 12-month F/U. Although the findings were promising, one study limitation involved self-reported MVPA, which may be biased with the intervention group overestimating MVPA (Marcus et al., 2015). In contrast, a two-month-long RCT involving adults showed no differences in exercise behavior between the control, intervention only, and intervention plus booster groups—the latter of which received postcard boosters for one month after the intervention had ended (Levy & Cardinal, 2004). Low compliance with completing intervention worksheets was reported. Unfortunately, this current study did not assess whether or not girls completed activities on the postcards beyond reading the messages. Results from these studies in adults may indicate a need to achieve between-group differences immediately postintervention before initiating boosters to maintain PA.

Although the data collected from these young adolescent girls do not specifically capture definitive contributing factors for the unexpected findings, the possibility exists that the loss of interpersonal interaction and support for PA that occurred immediately after the 17-week intervention, may at least partially underlie the negative results. Perhaps, important resources offered through the intervention could not be replaced solely by postcards mailed during the postintervention period. In a 12-week, in-home, symptom-focused diabetes intervention, Black women participated in four counseling sessions with a nurse; and three months after completing the intervention, they received telephone boosters from the same nurse who delivered their counseling sessions. Participants who received booster telephone calls

showed significant improvements in HbA1c at 9-month F/U. The success of the telephone booster was attributed to the pre-existing interpersonal relationship that each participant had with the nurse (Skelly, Carlson, Leeman, Soward, & Burns, 2009). This finding suggests that, in order to elicit improvement in habitual compliance to a program when boosters are used, researchers conducting future studies may need to initially strengthen interpersonal bonds by including face-to-face sessions involving the interventionist and participant prior to using telephone or mailed boosters from the same interventionist. Determining whether this approach results in increased PA among healthy, racially diverse, urban adolescent girls of low SES warrants investigation.

Despite the lack of group differences in behavior, the postcard booster intervention was well received by the girls in the ancillary study. Nearly all girls agreed that the postcards were easy to understand, indicating that low literacy was not problematic—as noted in other booster studies (Wilson, Brown, & Stephens-Ferris, 2006). Evaluations were favorable even though the intervention did not change girls' behaviors, indicating possible social acceptability bias. The finding that the intervention effects did not differ based on number of postcards received or read suggests that the boosters may not have been potent enough, even if read, to increase PA. Although the vast majority of girls agreed the postcards provided them with good ideas to help them attain PA and made them think about increasing their PA, enthusiasm for receiving the postcards in the mail and perceptions that the postcards helped them stay physically active were not as evident from the girls' survey responses. The findings indicate that continued research is needed to identify other approaches that may be more appealing to adolescent girls and successful in helping them to increase their PA.

Strengths and Limitations

The study had both strengths and limitations. Strengths include use of accelerometers and a novel booster intervention that has never been tested with adolescent girls. One limitation is the small sample size that limits generalizability. The other limitation is the study design of randomizing two schools into two conditions, which limits the analyses at the individual level without considering the cluster effect of school.

Conclusions

Research is needed to identify approaches capable of preventing the decline in girls' PA across adolescence and after an intervention ends. Continued testing is warranted in future research to determine the effects on PA of booster interventions that vary in dose (number and length), type of messaging (generic vs. tailored), and modality (text messages, e-mails, telephone calls vs. print mailings). Consideration should be given to involving nurses and other health professionals in the implementation of interventions in schools and healthcare settings.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

The authors acknowledge that the study is funded by a National Heart, Lung, and Blood Institute (NHLBI) supplement related to a five-year grant (R01HL109101, \$3,657,706) from the National Institutes of Health (NIH); PI: L. B. Robbins, Michigan State University College of Nursing. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of NIH. The authors appreciate the support received from school administrators and staff regarding the study. The authors want to acknowledge Stacey Wesolek, former Project Manager; and Kelly Bourne, former Measurement Coordinator and current Project Manager, for their tireless efforts to manage their respective areas. The authors are also grateful to Michigan State University undergraduate and graduate nursing and kinesiology students who have assisted in various ways with the conduct of the study. Lastly, they thank the young female participants and their parents/guardians for their interest.

References

- Bradley RH, McRitchie S, Houts RM, Nader P, O'Brien M, the NICHD Early Child Care Research Network. Parenting and the decline of physical activity from age 9 to 15. *International Journal of Behavioral Nutrition and Physical Activity*. 2011; 8:33.doi: 10.1186/1479-5868-8-33 [PubMed: 21492482]
- Dewar DL, Morgan PJ, Plotnikoff RC, Okely AD, Collins CE, Batterham M, Lubans DR. The nutrition and enjoyable activity for teen girls study: A cluster randomized controlled trial. *American Journal of Preventive Medicine*. 2013; 45:313–317. DOI: 10.1016/j.amepre.2013.04.014 [PubMed: 23953358]
- Dijkstra M, Mesters I, De Vries H, van Breukelen G, Parcel GS. Effectiveness of a social influence approach and boosters to smoking prevention. *Health Education Research*. 1999; 14:791–802. DOI: 10.1093/her/14.6.791 [PubMed: 10585386]
- Evenson KR, Catellier DJ, Gill K, Ondrak KS, McMurray RG. Calibration of two objective measures of physical activity for children. *Journal of Sports Sciences*. 2008; 26:1557–1565. DOI: 10.1080/02640410802334196 [PubMed: 18949660]
- Frederick CB, Snellman K, Putnam RD. Increasing socioeconomic disparities in adolescent obesity. *Proceedings of the National Academy of Sciences of the United States of America*. 2014; 111:1338–1342. DOI: 10.1073/pnas.1321355110 [PubMed: 24474757]
- Gortmaker SL, Lee R, Cradock AL, Sobol AM, Duncan DT, Wang YC. Disparities in youth physical activity in the United States: 2003–2006. *Medicine & Science in Sports & Exercise*. 2012; 44:888–893. DOI: 10.1249/MSS.0b013e31823fb254 [PubMed: 22089478]
- Hänggi JM, Philips LRS, Rowlands AV. Validation of the GT3X ActiGraph in children and comparison with the GT1M ActiGraph. *Journal of Science and Medicine in Sport*. 2013; 16:40–44. DOI: 10.1016/j.jsams.2012.05.012 [PubMed: 22749938]
- Jago R, Edwards MJ, Sebire SJ, Cooper AR, Powell JE, Bird EL, Blair PS. Bristol girls dance project (BGDP): Protocol for a cluster randomized controlled trial of an after-school dance programme to increase physical activity among 11-12 year old girls. *BMC Public Health*. 2013; 13:1003.doi: 10.1186/1471-2458-13-1003 [PubMed: 24152257]
- Kann L, Kinchen S, Shanklin SL, Flint KH, Kawkins J, Harris WA, Zaza S. Youth risk behavior surveillance—United States, 2013. *Morbidity and Mortality Weekly Report: Surveillance Summaries*. 2014; 63:1–168. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/ss6304a1.htm?s_.
- Levy SS, Cardinal BJ. Effects of a self-determination theory-based mail-mediated intervention on adults' exercise behavior. *American Journal of Health Promotion*. 2004; 18:345–349. DOI: 10.4278/0890-1171-18.5.345 [PubMed: 15163133]
- Marcus BH, Dunsiger SI, Pekmezi D, Larsen BA, Marquez B, Bock BC, Tilkemeier P. Twelve-month physical activity outcomes in Latinas in the *Seamos Saludables* trial. *American Journal of Preventive Medicine*. 2015; 48:179–182. DOI: 10.1016/j.amepre.2014.08.032 [PubMed: 25442225]
- Marcus BH, Lewis BA, Williams DM, Dunsiger S, Jackicic JM, Whiteley JA, Parisi AF. A comparison of Internet and print-based physical activity interventions. *Archives of Internal Medicine*. 2007; 167:944–949. DOI: 10.1001/archinte.167.9.944 [PubMed: 17502536]

- Matthews CE, Hagströmer M, Pober DM, Bowles HR. Best practices for using physical activity monitors in population-based research. *Medicine and Science in Sports and Exercise*. 2012; 44:S68–S76. DOI: 10.1249/MSS.0b013e3182399e5b [PubMed: 22157777]
- Neumark-Sztainer DR, Friend SE, Flattum CF, Hannan PJ, Story MT, Bauer KW, Petrich CA. New moves—Preventing weight-related problems in adolescent girls: A group-randomized study. *American Journal of Preventive Medicine*. 2010; 39:421–432. DOI: 10.1016/j.amepre.2010.07.017 [PubMed: 20965379]
- Robbins LB, Pfeiffer KA, Vermeesch A, Resnicow K, You Z, An L, Wesolek SM. “Girls on the Move” intervention protocol for increasing physical activity among low-active underserved urban girls: A group randomized trial. *BMC Public Health*. 2013; 13:474.doi: 10.1186/1471-2458-13-474 [PubMed: 23672272]
- Skelly AH, Carlson J, Leeman J, Soward A, Burns D. Controlled trial of nursing intervention to improve health outcomes of older African American women with type 2 diabetes. *Nursing Research*. 2009; 58:410–418. DOI: 10.1097/NNR.0b013e3181bee597 [PubMed: 19851122]
- Stuart RB. Behavioral control of overeating. *Behavior Research and Therapy*. 1967; 5:357–365. DOI: 10.1016/0005-7967(67)90027-7
- Svetkey LP, Stevens VJ, Brantley PJ, Appel LJ, Hollis JF, Loria CM, Samuel-Hodge C. Comparison of strategies for sustaining weight loss: The weight loss maintenance randomized controlled trial. *JAMA*. 2008; 299:1139–1148. DOI: 10.1001/jama.299.10.1139 [PubMed: 18334689]
- Trost SG, McIver KL, Pate RR. Conducting accelerometer-based activity assessments in field-based research. *Medicine & Science in Sports & Exercise*. 2005; 37(Suppl. 11):S531–S543. DOI: 10.1249/01.mss.0000185657.86065.98 [PubMed: 16294116]
- Wilson FL, Brown DL, Stephens-Ferris M. Can easy-to-read immunization information increase knowledge in urban low-income mothers? *Journal of Pediatric Nursing*. 2006; 21:4–12. DOI: 10.1016/j.pedn.2005.06.003 [PubMed: 16428009]
- Wu L, Forbes A, While A. Patients’ experience of a telephone booster intervention to support weight management in Type 2 diabetes and its acceptability. *Journal of Telemedicine and Telecare*. 2010; 16:221–223. DOI: 10.1258/jtt.2010.004016 [PubMed: 20511580]

| Month postintervention | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------------|---|-----------|---|---------|---|-----------|---|---|
| Postcards received (number) | 0 | 2 | 2 | 2 | 1 | 2 | 2 | 2 |
| Mailing frequency | n/a | Bimonthly | | Monthly | | Bimonthly | | |
| Postcard booster themes | Benefits; Social support; Barriers; Enjoyable (fun) physical activities, including cold weather options | | | | | | | |

Figure 1.
Timeline for postcard booster mailings.

TABLE 1

Characteristics of Girls by Group

| Characteristic | All (N = 181) | | BI (n = 54) | | GOTM (n = 63) | | Control (n = 64) | | p |
|-----------------|------------------|--------|-----------------|--------|-----------------|---------|------------------|--------|------|
| | n | (%) | n | (%) | n | (%) | n | (%) | |
| Grade | | | | | | | | | ns |
| 6 th | 104 | (57.5) | 31 | (57.4) | 33 | (52.4) | 40 | (62.5) | |
| 7 th | 77 | (42.5) | 23 | (42.6) | 30 | (47.6) | 24 | (37.5) | |
| Hispanic (yes) | 17 ^a | (10.1) | 2 ^b | (4.0) | 13 ^c | (21.3) | 2 ^d | (3.5) | <.01 |
| Race | | | | | | | | | <.05 |
| Black | 129 | (71.3) | 41 | (75.9) | 41 | (65.1) | 47 | (73.4) | |
| White | 23 | (12.7) | 7 | (13.0) | 5 | (7.9) | 11 | (17.2) | |
| Mixed/other | 29 | (16.0) | 6 | (11.1) | 17 | (27.0) | 6 | (9.4) | |
| FRP lunch (yes) | 150 ^e | (88.8) | 39 ^b | (78.0) | 61 ^c | (100.0) | 50 ^f | (86.2) | <.01 |

Note. BI = booster intervention; FRP = free or reduced price; GOTM = Girls on the Move intervention; ns = nonsignificant.

^a13 missing.

^b4 missing.

^c2 missing.

^d7 missing.

^e12 missing.

^f6 missing.

TABLE 2

Physical Activity Outcomes by Group Across Time

| Outcome ^a | Baseline (n = 173) | | PI (n = 142) | | FU (n = 109) | |
|----------------------|--------------------|--------|--------------|--------|--------------|--------|
| | M | (SD) | M | (SD) | M | (SD) |
| Sedentary activity | | | | | | |
| Control | 39.0 | (4.43) | 39.2 | (3.63) | 42.5 * | (3.01) |
| GOTM intervention | 38.6 | (3.82) | 38.6 | (4.31) | 42.3 * | (2.91) |
| Booster intervention | 38.6 | (4.49) | 9.6 * | (4.16) | 42.6 * | (4.10) |
| LPA | | | | | | |
| Control | 18.1 | (3.51) | 18.0 | (2.83) | 15.5 * | (2.50) |
| GOTM intervention | 18.3 | (2.89) | 18.6 | (3.50) | 15.9 * | (2.45) |
| Booster intervention | 18.4 | (3.56) | 17.7 * | (3.40) | 15.4 * | (3.36) |
| MVPA | | | | | | |
| Control | 2.9 | (1.32) | 2.8 | (1.70) | 2.0 * | (0.77) |
| GOTM intervention | 3.1 | (1.41) | 2.8 | (1.36) | 1.8 * | (0.63) |
| Booster intervention | 3.0 | (1.25) | 2.8 | (1.18) | 1.9 * | (1.02) |

Note. Detailed information about the complete statistical model is available (see Table, Supplemental Digital Content 1). FU = follow-up at 9 months; GOTM = Girls on the Move; PI = postintervention; SD = standard deviation.

* $p < .01$ when compared with baseline data.

^a Measured in minutes per hour.

TABLE 3

Responses to Postcard Evaluation Survey Items

| Item | Disagree ^a | | Agree ^a | |
|---|-----------------------|--------|--------------------|--------|
| | <i>n</i> | (%) | <i>n</i> | (%) |
| I was excited to get the postcards in the mail from Girls on the Move. | 17 | (40.5) | 25 | (59.5) |
| Reading the postcards made me think about getting more physical activity. | 7 | (16.7) | 35 | (83.3) |
| After getting the postcards, I became more physically active. | 15 | (35.7) | 27 | (64.3) |
| The postcards gave me good ideas to help me get physical activity. | 5 | (11.9) | 37 | (88.1) |
| I talked about the ideas on the postcards with others. | 24 | (57.1) | 18 | (42.9) |
| Getting the postcards helped me stay physically active. | 21 | (50.0) | 21 | (50.0) |
| I am keeping the postcards to remind me to stay active. | 20 | (47.6) | 22 | (52.4) |
| The postcards were easy to understand. | 3 | (7.1) | 39 | (92.9) |

Note. *N* = 42. Row percentages are shown.

^a A lot or a little.