Is African-American girls' perception of their mother-daughter relationship associated to psychosocial and physical activity variables?

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Maternal influence has been reported to play a significant role in the health behaviors of children. In Caucasian girls, it has been reported that mother-daughter relationship can influence psychosocial variables such as physical activity (PA) self-efficacy. Currently, there is very little data on the impact of African-American girls' perception of their relationship with their mother and psychosocial variables. **PURPOSE:** To examine the association between mother-daughter relationship, PA self-efficacy (PA-SE) and PA levels in African-American girls.

METHODS: Baseline data from mothers ($n=28$; age= 37.0 ± 6.7 years; BMI= 33.5 ± 10.6 kg/m²) and daughters ($n=32$; age= 9.0 ± 1.2 years; BMI= 20.4 ± 5.7 kg/m², 90th percentile) participating in an afterschool mother-daughter PA study was used in this analysis. PA was measured for 7 continuous days using accelerometers. Parental Responsiveness (PR) and Adolescent Openness to Parental Socialization scales were used to assess mother-daughter relationship. Daughters' self-esteem and depressive symptoms were assessed with the Rosenberg Self-Esteem (RSE) scale and the Child Depression Inventory (CDI), respectively. Participants' PA-SE was assessed with validated questionnaires. Spearman correlations were used to examine associations between mother-daughter relationship, psychosocial variables, and PA levels. Daughters' scores for the PR scale were divided into tertiles. Between group (high versus low perception of mother-daughter relationship) differences in psychosocial variables and PA were assessed with *t*-tests. **RESULTS:** Daughters' perception of their mother-daughter relationship was positively correlated with RSE ($r=0.36$, $p=0.04$). Daughters' percent time spent in MVPA was negatively correlated with CDI ($r=-0.42$, $p=0.03$) and positively correlated with mothers' PA-SE ($r=0.44$, $p=0.04$). With respect to daughters' PR scale, significant differences in RSE score (HIGH= 23.82 ± 4.33 ; LOW= 18.20 ± 4.87 , $p=0.01$) and percent time spent in sedentary activity (HIGH= 27.83 ± 32.31 ; LOW= 57.41 ± 20.93 , $p=0.02$) were observed between tertiles.

CONCLUSION: African-American girls' perception of their relationship with their mother seems to be associated with self-esteem, depressive symptoms and sedentary pursuits. Future studies should target interventions that improve mother-daughter relationship.

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