

How Self-Objectification Impacts Physical Activity Among Adolescent Girls in Costa Rica

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Background: In Latin America, more than 80% of adolescent girls are physically inactive. Inactivity may be reinforced by female stereotypes and objectification in the Latin American sociocultural context. **Methods:** We examined the influence of objectification on the adoption of an active lifestyle among 192 adolescents (14 and 17 years old) from urban and rural areas in Costa Rica. Analyses of 48 focus-groups sessions were grounded in Objectification Theory. **Results:** Vigorous exercises were gender-typed as masculine while girls had to maintain an aesthetic appearance at all times. Adolescents described how girls were anxious around the prospect of being shamed and sexually objectified during exercises. This contributed to a decrease in girls' desire to engage in physical activities. Among males, there is also a budding tolerance of female participation in vigorous sports, as long as girls maintained a feminine stereotype outside their participation. **Conclusion:** Self-objectification influenced Costa Rican adolescent girls' decisions to participate in physical activities. Interventions may include: procuring safe environments for physical activity where girls are protected from fear of ridicule and objectification; sensitizing boys about girl objectification and fostering the adoption of a modern positive masculine and female identities to encourage girls' participation in sports.

Keywords: Latin America, female identity, machismo, sexual harassment

Physical activity levels tend to decrease during adolescent years, and decrease more rapidly among girls than boys. 4 In Latin American countries, more than 80% of adolescent girls do not achieve the recommended 60 minutes per day of moderate to vigorous physical activity. A review of findings from studies conducted in developed countries suggests that culture and socialization related to gender stereotypes, role expectations or sexual objectification, contribute to the attrition rates from physical activity among girls. Unambiguously, studies highlight a robust contribution of self-objectification on reduced participation of adolescent girls in physical activities.

According to the Objectification Theory,⁹ when an individual is repeatedly treated as an object, s/he gradually internalizes the observer's perspective of their own body. This makes individuals more prone to being self-conscious about, and monitor regularly, their physical and outward appearance. The objectification theory may apply to girls, especially during adolescence when they are forming a self-identity. Young¹⁰ has argued that when girls align with a feminine identity, they consider themselves to be fragile and immobile. This behavior may be a strategy to cope with how others see and treat them and may limit their participation in physical activities.⁹ Girls have been shown to decrease physical activities

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when they anticipate negative comments about their appearance. Self-objectification of the female body may also reinforce masculine heterosexuality and identity. This may be especially relevant in the Latin American sociocultural context, where masculine pride or *machismo* could further induce self-objectification among females, with visible consequences on the practice of physical activity among girls. ¹³

Various policy documents have called for the development of effective strategies to increase physical activity among youth to improve overall health and wellness. 14,15 To design effective intervention programs and policies, we first need a deep understanding of sociocultural aspects that influence physical activity, especially in a Latin American context, where machismo is culturally and socially legitimated. 13 Understanding the relationship between self-objectification and adolescent girls' physical activity in this context is critical for the promotion of an active lifestyle that can be sustained throughout life.

The aim of the current study was to understand and describe the mediating role that self-objectification may play on the physical activity practice among Costa Rican adolescents girls.

Methods

Study Design

Qualitative descriptive data from focus group discussions among adolescents (girls and boys) were collected during 2015. The objective of the focus group was to examine the group dynamics between adolescents and opinions as they discussed their perspective on their physical self and physical activity practices. The design and analyses were grounded on the objectification theory, which provides a framework for understanding the experiential consequences of being female in a culture where the body is constantly objectivized, while offering a parsimonious explanation for the negative emotions that

women experience as a consequence self-objectification. Slater and Tiggemann have shown that objectification theory may be equally applicable to adolescent girls as it is to adult women.¹⁶

Participants

One hundred ninety-two male and female adolescents (14 and 17 years old) were recruited from 8th and 10th grades (the highest proportion of those age groups is found in each of these grades). Adolescents were enrolled from 6 high schools (4 private and public schools from urban areas, 2 public schools from rural areas) located in urban and rural areas of San José, Costa Rica. A research team member invited 1 class from each grade to participate in the study. Consent forms were distributed in the classrooms, and students were asked to return them with parental signatures. Out of all the students that returned signed consent forms, 10 males and 10 females were randomly selected from each class to participate in the focus groups. In total, 40 adolescents were selected in each 1 of the 6 schools. However, in each school, 25% to 30% of the selected adolescents decided not to participate in the study at the time of initiating the focus group sessions, so the study sample was comprised of 192 male and female adolescents.

The study was approved by the Costa Rican Institute for Research and Education on Nutrition and Health (INCIENSA) Ethics Committee and the school principals. An invitation letter to participate in the study was sent home. All participants received a complimentary copy of the Costa Rican guidelines for a healthy lifestyle at the end of the study. No monetary incentives or reimbursements were provided.

Data Collection

The research team developed a discussion guide to explore in detail the influence of self-objectification on physical activity in adolescent girls. The guide included 3 topic areas: 1) categorization of physical activities as masculine or feminine, 2) relationship between physical activity and femininity, and 3) physical activities in public environments.

Focus groups were conducted during school hours—adolescents were released from class with the school principal's permission, to participate in the study. In each school, the adolescents who participated in the study were divided into 4 groups by age and gender (males 14 and 17 years old, and females 14 and 17 years old). Each group consisted of 6 to 8 adolescents. To allow for extra time and deeper understanding of the discussion of topics, 2 focusgroup discussion sessions were held with each of the adolescent groups. These were conducted the same day with 15-minute breaks between. Trained moderators were matched by sex to each of the focus groups, and facilitated the 45 to 60 minute discussions. A total of 48 sessions were conducted. All sessions were audio-recorded; The moderators were psychologists—a man for the male focus groups and a woman for the female focus groups—with extensive experience in conducting focus groups with adolescents. A comoderator took notes.

Coders Training

Before data analysis, 1 of the authors (TF-B) trained 2 researchers to analyze excerpts from a focus group using preestablished codes and the Atlas.ti software. Researchers coded the excerpts independently, and discussed disagreements in coding with the trainer. Finally, each researcher was given 20 excerpts of transcribed text to perform the

coding separately, using the entire codebook. The resulting codes and representative excerpts for each code were compared with the codes that resulted from when the trainer coded the same excerpts. Intercoder reliability was calculated using Cohen's kappa coefficient. Both coders reached a Kappa value higher than 0.85 (very good agreement).

Analytic Strategies

Audiotapes were transcribed verbatim. Transcriptions were coded manually by 3 independent coders. During the analyses, coders categorized texts according to recurring themes, concepts, and terms identified a priori in the self-objectification theory, and inductively, whereby coders noted additional themes that emerged from the data. A draft-coding scheme incorporated themes that emerged inductively, as well as themes from the objectification theory. Final codes and subcodes were defined in a coding dictionary. All analyses were conducted in Atlas.ti version 5.0 (Scientific Software Development, Berlin, Germany). Analyses were originally stratified by the characteristics of the focus group discussants (area of residence (urban/rural), school type (public/private), gender, and age. Quotations that best described each relevant code were selected to illustrate how adolescents responded to specific questions. Final codes and subcodes were defined in a coding dictionary and final coding of all transcripts was conducted independently by 3 previously trained independent coders.

Results

Five overarching themes emerged from the analyses across all age and gender groups. These themes are related to description of physical activity and objectification of the female body. The themes and quotations that are included in this manuscript illustrate particularly salient points that emerged from the group discussions. Unless otherwise noted, themes emerged among both urban and rural, and male and female adolescents.

Theme 1: Gender-typing of Physical Activities

From house chores to competitive sports, physical activities were aligned with gender-typing in Costa Rica. Female-related activities were perceived by all adolescents, as nonviolent nonvigorous activities exempt from body contact: "Women prefer competitive sports, but contact, not so much . . ." (male, 17 yr, urban area, public school); "women would never play baseball . . ." (female, 14 yr, urban area, public school). The expressive ("sensitive") nature of ballet versus the instrumental ("winning") nature of sports, as well as their different strategies (aesthetic movements in ballet, violent contact in soccer) led the adolescents to classify activities as male or female.

"Normal guys play soccer or other rough sports; but if a guy does ballet, we know he's lost already." (male, 17 yr, urban area, private school)

"Soccer is for men, ballet is for women, this is like saying strength and delicacy" (female, 14 yr, urban area, public school)

Girls who played vigorous sports, such as soccer or other contact sports, and girls who followed these sports were stigmatized as masculine: "Girls that play soccer are tomboy . . ." (male, 14 yr, rural area, public school).

Participants, mainly female adolescents, very often expressed that activities performed inside the house, such as domestic chores, were considered as female activities: "I think women do physical activity because they're cleaning the house all the time . . ." (female, 14 yr, urban area, public school). This could be either because they were being performed inside the home or because they were being performed in service to others (or both).

"They [men] come home, get changed and go play soccer, and when they're back, they ask 'Honey, is dinner ready?'; it's never the other way around." (girl, 17 yr, rural area, public school)

"Women have been taught to have other priorities [domestic chores]... they are like slaves to the house...." (male, 14 yr, urban area, public schools)

"Moms do chores; dads play soccer" (female, 14 yr, urban area public school)

Despite the gender-typing, our data also suggest an emerging tolerance toward female participation in competitive sports among males. As long as a girl returned to her standards of femininity after the game, the men were able to tolerate her participation in sports. This was a theme that emerged widely in the adolescents' discourse.

"The truth is that nowadays women can play even soccer if they want to. It isn't like before when they used to say that it was only for tomboys—now it doesn't look bad, but when they're out and about, they have to look pretty and well put together, like all the other women." (female, 17 yr, rural area, public school)

"At a soccer or basketball match, a girl can be quite rough and fight and everything like me, but as long as she is feminine again after the game, that wouldn't bother me at all. What matters to me is that she is normal, feminine like that in real life." (male, 17 yr, urban area private school)

Theme 2: Female Appearance Discourages Physical Activity

Participants explicitly expressed that while the male physical ideal was tall and muscular, the female beauty ideal was thin and lean.

"We like men fit, muscular (but not overly muscular), strong and taller than us, because those who have much tummy or are very thin and shorter than us are unattractive." (female, 17 yr, rural public school)

Women exercised to lose weight, refine their figures, and tone up their muscles without achieving a noticeable development of muscle mass. As a consequence, maintaining a feminine appearance was prioritized over the practice of physical activity.

"To stay thin, women rather starve than exercise, but when they do it, it's just for appearance's sake, to not look saggy . . . they like to look tight, but not well-defined like guys." (male, 17 yr, urban private school)

"We are mor e interested in having a nice figure than in being fit, unlike guys" (female, 14 yr, urban public school)

There was a consensus among urban and rural adolescents that women also refrained from physical activities associated with developing muscle mass because they wanted to attract male admiration.

When a women showed muscle development, she was considered as less feminine and, therefore, less attractive

"Can you imagine making out with one of those muscular girls? It's like making out with a guy! Forget it, so gay" (male, 14 yr, rural public school)

Theme 3: Anxiety Related to Shame and Sexual Objectifying Gazes

According to the group discourse, some girls did not exercise because they did not wish to expose their bodies to criticism if they felt that they did not conform to beauty ideals.

"Sometimes we are shy about doing physical activities for all kinds of reasons: [...] maybe her fat rolls are showing or maybe she is too pale" (female, 17 yr, urban area, private school)

In addition, some girls did not wear shorts during gym class to avoid taunts and sexual objectifying gazes from classmates.

"Some girls are kind of ugly or overweight, and they're embarrassed when others make fun of them so they prefer not doing anything, even they are not using the sporting uniform during gym class." (female, 14 yr, urban area, public school)

"If they're pretty they feel harassed; if a girl is beautiful and voluptuous, all the guys gather around to watch and stand there like slobbering idiots." (male, 17 yr, urban area, public school)

When boys gazed at girls at school and objectified them, girls considered this to be sexual harassment. They were therefore more averse to work out in public. Athletic or active wear contributed to the perception of vulnerability. Girls repeatedly mentioned that they felt that their bodies were on display and that they were the target of objectifying gazes.

"In order to participate in gym class we have to wear shorts and a t-shirt, but although it is comfortable, it is not pleasant to use, because as the in gym classes are mixed, the guys turn up to ogle and who knows what stupid things they say among them." (female, 14 yr, urban public school)

A widespread perception among urban and rural adolescent girls was that when women exposed their bodies during physical activity, they felt that they also exposed themselves to harassment.

"If a woman is walking or exercising outdoors in shorts and a t-shirt, men whistle and say gross things" (female, 14 yr, urban area, public school)

Adolescent males oftentimes expressed explicitly that girls preferred to do physical activities in seclusion in order to avoid the male sexual objectifying gazes and related feelings of shame and harassment.

"Sometimes they lock themselves in an empty classroom to dance that thing, what is it called, zumba? And if anyone of us takes a peek, they get very upset and curse at us and stop doing it." (male, 17 yr, urban area, public school)

"Girls exercise at home where no one can see them; they turn the music on and dance in the bedroom or the living room" (male, 14 yr, rural area, public school) Women also refrained from physical activities associated with developing muscle mass for fear of being shamed as masculine. This was a key issue that frequently arose in all girls' discussion groups.

"Women should not be muscular A muscular woman is unpleasant, [she would] just need to turn green to look like The Hulk." (female, 14 yr, rural area, public school)

"A muscular woman looks masculine, gives the appearance of butch, but a thin woman with a toned body looks very feminine." (female, 17 yr, urban area, private school)

Theme 4: Self-conscious Body Monitoring is Reinforced in All Environments

Women described consistently how they were vigilant about their outer bodily appearance, particularly during physical activity exercises.

"If someone has large breasts, it's embarrassing that they bounce too much when running or jumping." (female, 17 yr, urban area, private school)

A topic widely discussed by adolescents was the fact that for girls, there was added expectation that their priority was to always look feminine. This priority was reinforced by their peers.

"Girls are too delicate, they won't even move so their hair and makeup won't be ruined, and if it happens, they go crazy trying to find a mirror, are you kidding? My classmate says she'd rather be dead than messy" (male, 14 yr, rural area, public school)

"They [male teens] don't care that they're sweaty, smelly, sticky, or that their shirt is wet with sweat; they think all of that is normal. but if one of us should look like that, she'd be called tomboy, filthy, messy" (female, 17 yr, urban area, public school)

"I try to exercise at home, and when my father gets home he tells me 'Go fix yourself, get washed and get changed! Don't you realize that you look almost like your brother when he comes right out of pick-up soccer games? [...] Look at your [female] cousin; she is always so well put together.")female, 14 yr, public school, urban)

Both urban and rural adolescent girls expressed that even while exercising in the neighborhood, they felt pressured to look feminine, or to exercise in a stereotyped feminine way.

"As my friend says, when one does any exercise here in school, or goes to exercise in the weekend in the recreation center, one is always taking care of oneself, because as my mom says, one must always look pretty." (female, 17 yr, rural area, public school)

This priority to meet traditional feminine appearance was also reinforced by others and by themselves during gym class at school.

"And how do they expect me look feminine during gym class if I end up looking like a disaster after? . . ." (female, 17 yr, rural public school)

"To go to gym class, guys get changed really quickly, but we take more time; I'm not about to come out looking all messy, like a witch." (female, 14 yr, urban area, private school)

"I'd rather not do anything in gym class because it is outrageous to go about looking all messy and sweaty; plus there is nowhere to fix ourselves up in school—can you imagine if the guy I like sees me like that? So embarrassing, for sure he would dump me!" (female, 14 yr, urban area, public school)

Theme 5: School Environment Contributes to Reinforcing Self-objectification

The description of the socially acceptable female role (being delicate, susceptible, weak, and timid, concerned with her looks, careful about body language and nonverbal communication) was incompatible with the role that women needed to engage in physical education at school. This was a consistent theme in all girls' discussion groups. Women had to be less concerned with their looks, resilient, expressive, indifferent and even aggressive.

"At home we have been taught that we should always be feminine, right? But participating in gym class is quite the opposite; we practically have to act like guys and that is so not like us." (female, 17 yr, urban public school)

On the other hand, from the discourse of most adolescent girls, the instruction of physical activity in schools tended to focus on getting boys active in male-typed activities (climbing, building muscle) without much emphasis on motivating the girls to move.

"Boys are told to play soccer, jog, or do some kind of sport, but we're just told to sit in any place or do whatever you want." (female, 14 yr, rural public school)

Many adolescent girls suggested that by isolating the women from the practice of physical activity, the physical education teachers perpetuated both the gendered power relations and the passive, object-oriented sense of self among girls.

"The gym teacher doesn't include us, but the guys are always checking out what we're doing." (female, 14 yr, urban public school)

Discussion

During adolescence, other investigators have noted that girls tend to place importance on body image and have described how their self-esteem and identity emerges in part from this. 9,17-19 Unlike boys, girls are socialized to use their bodies to please others and to compare their appearance to that of the dominant feminine ideal.²⁰ Our study findings confirm this objectification theory in a Latin American context. Our qualitative results suggest that in Costa Rica, both urban and rural girls refrain from doing physical activities because they don't think they can attain the beauty ideal while they exercise, or because they don't want to be subjected to criticism. Both barriers are products of social exposure to shaming and to negative self-evaluation. Girls' perceptions of how their peers see their bodies, especially male peers, influence their willingness to exercise. In addition, any exercise that requires girls to expose their bodies might threaten their self-esteem, especially if they perceive that their bodies do not conform to beauty ideals. This behavior, as evidenced in both rural and urban women, suggests that there is a social pressure present in all sociocultural contexts of Costa Rica and linked to a machismo that is culturally and socially legitimated.

In line with objectification theory tenets and with findings from other studies, our results describe how physical activities that

are considered suitable for women in this Latin American context tend to present the female body as an object of beauty and visual pleasure.²⁰ When girls fail to meet those feminine appearance standards, they are at risk for peer sanctions (eg, being labeled "tomboy") and social exclusion. Similarly to Engel's findings in adolescent girls in Northern England, 21 our results indicate that any physical activity is incompatible with the commonly held notion of femininity. Anxiety around body appearance has been proposed as a psychological and experimental consequence of sexual objectification. Girls may tend to view themselves as objects to be appreciated by others, and specifically in Costa Rica, this stereotyped view prevents adolescent girls from engaging in contact sports or vigorous physical activities that do not present their bodies in an aesthetic way. Our results suggest that Costa Rican girls in urban and rural areas have developed an almost chronic vigilance of their physical appearance, to the point where it is detrimental the actual practice of physical activities. As a contrast, and reinforcing gender stereotypes, males look forward to contact and vigorous physical activity as a way to construct their masculinity. For example, competitive sports and physical contact provide opportunities for boys to position themselves as strong, muscular and competitive, and thereby validate their masculinity.²²

Male social behaviors can also contribute to a decrease in girls' desire to engage in physical activities. Males' objectifying gazes could be a mechanism to reinforce dominance and aggression, to create peer group loyalty among boys, and to solidify their hegemonic masculinity.²² The behavioral similarities among urban and rural adolescents may be the result of the collective association: female-sedentary-feminine vs. male-active-masculine. This association may reinforce the gender disparities in physical activity. In addition, because both urban and rural youth are exposed to similar educational system (in Costa Rica the disparities to access to formal education between rural and urban areas are less than in other Central American countries),²³ exposure to life experiences within the formal schooling environment could also reinforce similar construction of gender identities related to physical activities across sociocultural contexts of the country.

Although notable progress in gender equality has been seen in recent years in Latin American countries, ²⁴ our results suggest that it is necessary to deconstruct the inequitable attitudes and norms that many Latin American girls and boys continue to internalize related to gender roles. A promising strategy to improve dynamics around the decision to do physical activity is to engage socialization agents (parents, peers, and teachers) to break down the stereotypes of gender appropriateness. In a narrative systematic review of the interventions to promote physical activity among adolescent girls, Camacho-Miñano et al²⁵ suggest that promoting positive peer relationships and social support of friendship groups in physical activity setting may be an effective strategy to increase physical activity among girls.

The results of this study also suggest a fissure in sex-typing of physical activities and a budding tolerance for female engagement in vigorous sports. Males perceived that Costa Rican girls should feel free to engage in activities that are not traditionally associated with their gender, as long as they show feminine behaviors outside of the sports arena. This could be interpreted as a manifestation of hegemonic power, but it might be more appropriately viewed as a step toward the social transformation of gender-typing in the urban and rural areas of Costa Rica. According to Lorber, ²⁶ gender norms are resilient to change and the processes involved in the definition of gender tend to be sometimes contradictory to maintain the status quo. Socialization agents are keys to definition of gender norms,

and should be carefully considered and engaged in health promotion efforts to increase girls' physical activities.

A recent systematic update showed that school is an ideal setting to increase physical activity among girls.²⁷ Schools are also an important social arena where gender relations occur and they are an ideal environment to promote group activities in a safe environment with positive interaction among boys and girls. However, our results suggest that in schools gender relations become problematic, because they promoted power imbalances, exclusions, oppression, and inequality. Physical activity instructors might contribute to perpetuating the gender-typing of physical activities. The school could instead offer a protective environment in which women feel a sense of protection and freedom to exercise without objectifying gazes, with the active promotion of group activities, positive interaction and mutual care among adolescent boys and girls. As indicated by Fisette, ²⁸ the voices of adolescent girls need to be listened and responded to, so that they elect strategies to thrive instead of just surviving in physical education lessons. This could contribute to establishing an active lifestyle from adolescence as several authors have indicated that the decision to engage in physical activities is strongly influenced by the experiences in gym class during these formational years. 6,29,30

Finally, health promotion initiatives should also concentrate on the creation of community spaces where girls can feel safe working out. Our results suggest that working out in public spaces also increases a woman's potential for objectification. For example, it is not unusual for male strangers to direct comments that can be considered sexist and offensive to women. This street harassment directly invades a woman's personal space and is a way to exert control and superiority over women as men publicly exhibit gender-based power differences.³¹ Creating safe spaces for women and girls to exercise in Costa Rica may reduce exposure to objectifying gaze and eventually to self-objectification feelings.

Interventions that include both community involvement and environmental changes have the potential to impact physical activity among adolescents. For example, the creation of safe spaces for women to work out has allowed for an increase in physical activity of adolescent girls.^{32–34} Also the inclusion of physical activities that enhance femininity, as well as sharing fun in the company of others (eg., aerobics, dance, self-defense, martial arts), are promising strategies to attract women to do more physical activity.^{35,36} These activities can be offered in the absence of, or in conjunction with, competitive sports and other traditional physical activities.^{37–39} Involvement of various stakeholders and settings in the community (faculty, school nurse, and school staff, parental organizations, church) have led to significant increases in physical activities, 35,37,38 improvement of self-efficacy, 37,40 the intention toward physical activities, ^{37,41} and strengthening of functional body image among girls.⁴²

The findings from this study should be considered in the context of its limitations. First, the sample only included adolescents enrolled in school, and does not represent the views of youth who do not participate in the educational system. Around 29% of Costa Rican adolescents are not enrolled in the educational system for various social and economic reasons. Second, although the study includes both rural and urban settings, our samples only included adolescents from only 1 of the 7 provinces in Costa Rica. However, this was the province with the highest density of adolescent population, providing a deep understanding of how self-objectification impacts physical activity among adolescent girls in Costa Rica. Third, the study is solely based on the adolescents' opinions and did not take into consideration the perception of the socialization

agents (parents and teachers) who interact with them. This group represents an important secondary group to involve in the design of interventions aimed to reduce the negative attitudes and practices that reinforce the self-objectification in girls.

Conclusion

Self-objectification influences girls' participation in physical activities in Costa Rica. The home, community and school environments enable and reinforce this self-objectification. Interventions with intensive multilevel and multicomponent approach focused both school and family or community must be used to encourage adolescent girls to engage in physical activities to reduce their levels of self-objectification. Among other issues, interventions should offer to boys an alternative view of the traditional male identity and fostering the adoption of a modern positive masculinity, to reduce their negative attitudes and practices that reinforce the self-objectification in girls.

References

- 1. Dumith SC, Gigante DP, Domingues MR, Kohl HW. Physical activity change during adolescence: a systematic review and a pooled analysis. *Int J Epidemiol*. 2011;40:685–698. PubMed doi:10.1093/ije/dyq272
- Telama R, Yang X, Viikari J, Välimäki I, Wanne O, Raitakari O. Physical activity from childhood to adulthood: a 21-year tracking study. Am J Prev Med. 2005;28:267–273. PubMed doi:10.1016/j. amepre.2004.12.003
- Davison KK, Schmalz DL, Downs DS. Hop, Skip... No! Explaining adolescent girls' disinclination for physical activity. *Ann Behav Med*. 2010;39:290–302. PubMed doi:10.1007/s12160-010-9180-x
- Slater A, Tiggemann M. Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. *J Adolesc*. 2011;34:455–463 doi:10.1016/j.adolescence.2010.06.007. PubMed
- Hallal PC, Andersen LB, Bull FC, et al. Global physical activity levels: surveillance progress, pitfalls, and prospects. *Lancet*. 2012;380:247– 257. PubMed doi:10.1016/S0140-6736(12)60646-1
- Chalabaev A, Sarrazin P, Fontayne P, Boiché J, Clément-Guillotin C. The influence of sex stereotypes and gender roles on participation and performance in sport and exercise: review and future directions. *Psychol Sport Exerc*. 2013;14(2):136–144. doi:10.1016/j.psychsport.2012.10.005
- Slater A, Tiggemann M. Time since menarche and sport participation as predictors of self-objectification: a longitudinal study of adolescent girls. Sex Roles. 2012;67:571–581. doi:10.1007/s11199-012-0200-0
- 8. Spencer RA, Rehman L, Kirk SF. Understanding gender norms, nutrition, and physical activity in adolescent girls: a scoping. *Int J Behav Nutr Phys Act.* 2015;12: doi:10.1186/s12966-015-0166-8. PubMed
- 9. Fredrickson BL, Roberts TA. Objectification theory. *Psychol Women Q.* 1997;21:173–206. doi:10.1111/j.1471-6402.1997.tb00108.x
- 10. Young IM. On Female Body Experience:" Throwing Like a Girl" and Other Essays. New York: Oxford University Press; 2005. doi:10.1093/0195161920.001.0001
- 11. Aitchison CC, ed. Sport and Gender Identities: Masculinities, Feminities and Sexualities. Abingdon: Routledge; 2007.
- Anderson E, McGuire R. Inclusive masculinity theory and the gendered politics of men's rugby. *J Gend Stud.* 2010;19:249–261. doi:10.1080/09589236.2010.494341
- DeSouza ER, Baldwin J, Koller SH, Narvaz MA. Latin American Perspective in the Study of Gender. Westport, Conn: Praeger Publishers; 2004.

- Heath GW, Parra DC, Sarmiento OL, et al. Evidence-based intervention in physical activity: lessons from around the world. *Lancet*. 2012;380:272–81. PubMed doi:10.1016/S0140-6736(12)60816-2
- World Health Organization (Internet). Global Strategy on Diet, Physical Activity and Health, 2004. http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf. Accessed February 21, 2017.
- Slater A, Tiggemann M. A test of objectification theory in adolescent girls. Sex Roles. 2002;46:343–349. doi:10.1023/A:1020232714705
- 17. Clay D, Vignoles VL, Dittmar H. Body image and self-esteem among adolescent girls: testing the influence of sociocultural factors. *J Res Adolesc*. 2005;15:451–477. doi:10.1111/j.1532-7795.2005.00107.x
- Morin AJ, Maïano C, Marsh HW, Janosz M, Nagengast B. The longitudinal interplay of adolescents' self-esteem and body image: a conditional autoregressive latent trajectory analysis. *Multivariate Behav Res.* 2011;46:157–201. PubMed doi:10.1080/00273171.2010 .546731
- Fuller-Tyszkiewicz M, McCabe M, Skouteris H, et al. Does body satisfaction influence self-esteem in adolescents' daily lives? An experience sampling study. *J Adolesc*. 2015;45:11–19. PubMed doi:10.1016/j. adolescence.2015.08.009
- Klomsten AT, Marsh HW, Skaalvik EM. Adolescents' perceptions of masculine and feminine values in sport and physical education: a study of gender differences. Sex Roles. 2005;52:625–636. doi:10.1007/ s11199-005-3730-x
- 21. Engel A. Sex roles and gender stereotyping in young women's participation in sports. *Fem Psychol*. 1994;4:439–448. doi:10.1177/0959353594043016
- Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. Soc Sci Med. 2000;50:1385–1401. PubMed doi:10.1016/S0277-9536(99)00390-1
- 23. Ortega M, Centeno R, Castillo M. *Masculinidad y factores socio-culturales asociados al comportamiento de los hombres frente a la paternidad en Centroamérica*. Managua: UNFPA- CEPAL; 2005.
- 24. Gwynne RN, Cristobal KA, eds. *Latin America Transformed: Globalization and Modernity*. 2nd ed. Abingdon: Routledge; 2014.
- Camacho-Miñano MJ, LaVoi NM, Barr-Anderson DJ. Interventions to promote physical activity among young and adolescent girls: a systematic review. *Health Educ Res*. 2011;26:1025–1049. PubMed doi:10.1093/her/cyr040
- Lorber J. Using gender to undo gender a feminist degendering movement. Fem Theory. 2000;1:79–95. doi:10.1177/14647000022229074
- 27. Kriemler S, Meyer U, Martin E, Van Sluijs EMF, Andersen LB, Martin BW. Effect of school-based interventions on physical activity and fitness in children and adolescents: a review of reviews and systematic update. *Br J Sports Med.* 2011;45:923–930. PubMed doi:10.1136/bjsports-2011-090186
- 28. Fisette JL. 'Are you listening?': adolescent girls voice how they negotiate self-identified barriers to their success and survival in physical education. *Phys Educ Sport Pedagogy*. 2012;18:184–203. doi:10.10 80/17408989.2011.649724
- 29. Coakley J, White A. Making decisions: gender and sport participation among British adolescents. *Soc Sport J*. 1992;9:20–35. doi:10.1123/ssj.9.1.20
- Slater A, Tiggemann M. Uncool to do sport": a focus group study of adolescent girls' reasons for withdrawing from physical activity. *Psychol Sport Exerc*. 2010;11:619–626. doi:10.1016/j.psychsport.2010.07.006
- 31. Mitchell ML. Who Controls the Streets? Piropos in Buenos Aires: Women's experiences and interpretations (dissertation), Phoenix (AZ): Arizona State University; 2015.
- 32. Fassihi S. *Empowering Girls and Women Through Sport and Physical Activity*. Amsterdam: Women Win; 2009.

- 33. Talleu C. *Access for Girls and Women to Sport Practices*. Council of Europe: Council of Europe Publishing; 2011.
- 34. Kirk D. Empowering Girls and Women Through Physical Education and Sport—Advocacy Brief. Bangkok: UNESCO; 2012.
- Pate RR, Ward DS, Saunders RP, Felton G, Dishman RK, Dowda M. Promotion of physical activity among high-school girls: a randomized controlled trial. Am J Public Health. 2005;95:1582–1587. PubMed doi:10.2105/AJPH.2004.045807
- Rees R, Kavanagh J, Harden A, et al. Young people and physical activity: a systematic review matching their views to effective interventions. Health Educ Res. 2006;21:806–825. PubMed doi:10.1093/her/cyl120
- Simon C, Wagner A, DiVita C, et al. Intervention centred on adolescents' physical activity and sedentary behaviour (ICAPS): concept and 6-month results. *Int J Obes*. 2004;28:S96–S103. PubMed doi:10.1038/sj.ijo.0802812
- 38. Lonsdale C, Rosenkranz RR, Peralta LR, Bennie A, Fahey P, Lubans DR. A systematic review and meta-analysis of interventions designed to increase moderate-to-vigorous physical activity in school

- physical education lessons. *Prev Med.* 2013;56:152–161. PubMed doi:10.1016/j.ypmed.2012.12.004
- van Sluijs EM, McMinn AM, Griffin SJ. Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. *BMJ*. 2007;335(7622):703 doi:10.1136/ bmj.39320.843947.BE. PubMed
- Cataldo R, John J, Chandran L, Pati S, Shroyer ALW. Impact of physical activity intervention programs on self-efficacy in youths: a systematic review. *ISRN Obes*. 2013:2013:586497. PubMed
- 41. Thompson WM, Berry D, Hu J. A church-based intervention to change attitudes about physical activity among Black adolescent girls: a feasibility study. *Public Health Nurs*. 2013;30:221–230. PubMed doi:10.1111/phn.12009
- 42. Abbott BD, Barber BL. Differences in functional and aesthetic body image between sedentary girls and girls involved in sports and physical activity: Does sport type make a difference? *Psychol Sport Exerc*. 2011;12:333–342. doi:10.1016/j.psychsport.2010.10.005