

Stephen F. Austin State University

SFA ScholarWorks

Faculty Publications

School of Human Sciences

3-2021

Ugandan Adolescents' Attitudes Toward, and Shared Activities with, Same and Other-Gender Peers and Friends

Flora Farago

Stephen F Austin State University, faragof@sfasu.edu

Natalie D. Eggum-Wilkens

Linlin Zhang

Danming An

Eunjung Kim

See next page for additional authors

Follow this and additional works at: https://scholarworks.sfasu.edu/humansci_facultypubs



Part of the [Development Studies Commons](#)

[Tell us](#) how this article helped you.

Recommended Citation

Faragó, F., Xu, J., Eggum-Wilkens, N. D., Zhang, L., An, D., Kim, E., & Adams, E. (2021). Ugandan Adolescents' Attitudes Toward, and Shared Activities with, Same- and Other-Gender Peers and Friends. *Youth & Society*. <https://doi.org/10.1177/0044118X21998717>

This Article is brought to you for free and open access by the School of Human Sciences at SFA ScholarWorks. It has been accepted for inclusion in Faculty Publications by an authorized administrator of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

Authors

Flora Farago, Natalie D. Eggum-Wilkens, Linlin Zhang, Danming An, Eunjung Kim, and Emily Adams

Ugandan Adolescents' Attitudes Toward, and Shared Activities with, Same- and Other-Gender
Peers and Friends

NOTE TO READERS: This manuscript is an unproofed draft which may have typos, reference errors, missing tables/figures, and other content that differs from the final, published version. To access the final, published version please use the reference below or contact Dr. Flora Farago at florafarago300@gmail.com.

Faragó, F., Xu, J., Eggum-Wilkens, N. D., Zhang, L., An, D., Kim, E., & Adams, E. (2021). Ugandan adolescents' attitudes toward, and shared activities with, same- and other-gender peers and friends. *Youth & Society*, 1-32. <https://doi.org/10.1177/0044118X21998717>

Flora Farago¹, Jingyi Xu², Natalie D. Eggum-Wilkens², Linlin Zhang², Danming An², Eunjung Kim², Emily Adams³

¹ School of Human Sciences, Stephen F. Austin State University, P. O. Box 13014, SFA Station, Nacogdoches, TX, 75962

² T. Denny Sanford School of Social and Family Dynamics, Arizona State University, P.O. Box 873701, Tempe, AZ 85287-3701

³ Human Services and Educational Leadership, Stephen F. Austin State University, P. O. Box 13019, SFA Station, Nacogdoches, TX, 75962

Linlin Zhang is now at the School of Psychology, Capital Normal University. Danming An is now at the Department of Psychological & Brain Sciences, University of Iowa.

We are grateful for funding from the Challenged Child Project and the Gulliot Endowment. We would like to thank Wanjala Joseph Masinde, Mulejju Dick, and Rebeca Awahy Nandudu. We express gratitude to all the student participants, to Ikibo Robert for assisting with school recruitment and data collection, and to Hope 4 Kids International for assistance with logistics. We thank our research assistants: Abbey Pellino, Aubrey Utter, Bianca Finocchiaro, Brittany Walton, Casiana Pascariu, Derek Pezzella, Hafsa Ibrahim, Kari Eckert, and Mrwah Ahmad. Portions of this work were presented at the Association for Psychological Science annual convention, San Francisco, CA, May, 2018. Correspondence concerning this article should be addressed to Flora Farago, School of Human Sciences, Stephen F. Austin State

University, P.O. Box 13014, Nacogdoches, TX 75964, Telephone: 469.261.4051, Email:

florafarago300@gmail.com.

Unproofed draft

Abstract

Ugandan adolescents ($n = 202$, 54% girls; $Mage = 14.26$) answered closed- and open-ended questions about the gender composition of friends and attitudes about, and activities with, same- and other-gender peers and friends. Adolescents' friendships were somewhat gender segregated, although other-gender friendships were present. Positive attitudes about same- and other-gender peers and friends were prevalent. Girls and boys displayed similar attitudes about same- and other-gender peers, with the exception of boys reporting more positive attitudes toward boys. Adolescents enjoyed the following aspects of same- and other-gender friendships: talking about problems, receiving help, sharing items and activities, receiving advice about romance and puberty, and receiving help with schoolwork. Adolescents engaged with mixed-gender peers for most shared activities, although gender segregation was present for certain activities (e.g., playing sports). Results may inform programs that support positive peer interactions among youth in sub-Saharan Africa.

Keywords: friendships, gender, activities, gender segregation, Uganda

Ugandan Adolescents' Attitudes Toward, and Shared Activities with, Same- and Other-Gender Peers and Friends

Gender is a powerful social category that plays a significant role in adolescents' peer relationships, including friendships (for a review, see Leaper, 2011; Rose & Smith, 2018). Children's tendency to segregate by gender and predominantly interact with and befriend same-gender peers is referred to as *gender segregation* or *gender homophily*. Gender segregation occurs consistently across the lifespan (for a review, see Mehta & Strough, 2009). It begins in preschool (Bohn-Gettler et al., 2010; Fabes et al., 2003; Martin & Fabes, 2001; Martin et al., 2013; Pellegrini et al., 2007) and continues, but to a lesser extent, into high school (Keener et al., 2013; Mehta & Strough, 2010; Pellegrini & Long, 2003).

One factor contributing to gender segregation is shared activities. Sharing similar activities with peers perpetuates gender segregation and increases engagement in gender-typed activities over time (Martin et al., 2013). For instance, playing dress-up is an activity that many preschool-aged girls enjoy; this shared interest may result in play groups that are comprised mainly of girls, contributing to gender segregation and to girls' future participation in feminine-stereotyped activities (Martin et al., 2013). Children and adolescents deem activities as an important factor in the differences and similarities between same- and other-gender friendships (McDougall & Hymel, 2007). Therefore, determining what activities adolescents do with their friends who are boys and girls may be informative for understanding gender dynamics in peer relationships.

Interactions and activities with primarily same-gender peers are theorized to contribute to the development of different interests, behaviors, and interaction styles over time between boys and girls (Leaper, 1994; Maccoby, 1998). It appears that the more time children spend in gender-

stereotyped activities and with same-gender peers, the more stereotyped their attitudes and behaviors become (Martin & Fabes, 2001; Martin et al., 2013; McHale et al., 2004). In essence, when gender segregation is prevalent, boys and girls are socialized in different cultures (Block, 1983; Maccoby, 1998), which can have long-lasting implications for peer relationships, stereotyping, and other domains of development.

Most studies examining gender segregation, peer relationships, and activity engagement have been conducted in the Global North, primarily in North America and Europe (e.g., Martin et al., 2013; McHale et al., 2004; see Mehta & Strough, 2009; Poulin & Pedersen, 2007; Zosuls et al., 2011). Additionally, few studies have specifically examined a special kind of peer relationship, friendships, in the context of adolescents' attitudes about same- and other-gender friends and activity engagement. The present study extends this body of work to the sub-Saharan African context of Uganda by investigating the gender composition of friends of adolescents, as well as adolescents' attitudes about, and activities with, same- and other-gender peers and friends.

The Importance of Peers and Friends

Peers and friends provide crucial contexts for adolescents' development. Peers and friends are resources of emotional support and function as important socialization agents, and this might be especially true during adolescence when youth spend a significant amount of time outside the family setting (Rubin et al., 2013; Sullivan, 1953). However, peers and friends are correlated yet distinct concepts in children's peer networks. Although both peer groups and friends are bonded by shared attitudes or characteristics among group members, friends refer to pairs of people who share a close, voluntary, and mutually affective relationship with each other (Bagwell & Schmidt, 2011; Rubin et al., 2006). Thus, friendship is viewed as a special type of

peer relationship, which is more exclusive and intimate, and often has a smaller group size, compared with peer groups (Rubin et al., 2013). The present study examines attitudes about both peers and friends.

Gender Composition of Adolescents' Friendships

During adolescence, gender segregation is still present but loosens with the emergence of other- and mixed-gender friendships and romantic relationships (Connolly et al., 2004; Connolly et al., 2000; Lam et al., 2014; McDougall & Hymel, 2007; Molloy et al., 2014; Pellegrini & Long, 2003; Poulin & Pedersen, 2007; Strough & Covatto, 2002). The transition from a same-gender to a mixed-gender friendship network characterizes the experience of most adolescents, although there are individual differences in the age of other-gender friendship initiation (Poulin & Pedersen, 2007). Most adolescents report having at least one other-gender friend (McDougall & Hymel, 2007; Mehta & Strough, 2010). Despite a growing interest in other-gender friendships, in North America, over 75% of adolescents' friends tend to be same-gender peers (Poulin & Pedersen, 2007). The present study extends research on the gender composition of adolescents' friendships to Uganda.

Attitudes and Feelings about Same- and Other-Gender Peers

Overall, relatively little is known about adolescents' feelings about same- and other-gender peers and friends. Feelings about same- and other-gender peers have been examined in a few studies with preschool and pre-adolescent children in the U.S. and U.K. (Halim et al., 2017; Powlishta, 1995; Yee & Brown, 1994; Zosuls et al., 2011; Xiao et al., 2020). Studies suggested that White pre-adolescent children in the U.S. and U.K. viewed their own gender and own-gender peers more favorably than the other gender and other-gender peers (Powlishta, 1995; Yee & Brown, 1994). However, these studies did not distinguish between in-group positivity, or

attributing positive characteristics to one's own group (e.g., a girl believing that girls are nice or nicer compared to boys) and out-group negativity, or actively attributing negative characteristics to the other group (e.g., a girl believing that boys are mean). It is important to distinguish between in-group positivity and out-group negativity to better understand the origins of prejudice and bias. Extending work on gender attitudes, Halim et al. (2017) found that 4- to 5-year-old racially diverse children in the U.S. displayed positive same-gender and negative other-gender attitudes. In contrast, Zosuls and colleagues (2011) found that 10-year-old, racially diverse children in the U.S. felt positively about their own gender and felt little to no negativity for the other gender. Zosuls and colleagues (2011) were the first researchers, to our knowledge, to ask children how they specifically felt about peers of same- and other-genders, potentially accounting for their findings that diverge from previous work demonstrating outgroup derogation. Other researchers (e.g., Halim et al., 2017; Yee & Brown, 1994) assessed children's gender-related inter-group attitudes with more general questions about liking boys and girls rather than asking children how boys and girls made them feel (i.e., assessing the affective component of gender relations).

Gender development theories have proposed that youth may behave differently toward peers and friends of the same- and other-gender, depending on youth's gender attitudes. Specifically, children might anticipate enjoyable peer interactions if they hold positive attitudes toward the gender of a peer. On the contrary, when children's gender attitudes toward a same- or other-gender are negative, children might be less motivated to participate in peer activities with the same- or other-gender peers (Halim et al., 2017; Martin & Ruble, 2010; Zosuls et al., 2011). Thus, understanding youths' attitudes and feelings toward same- and other-gender peers has the potential to provide important information about activities and peer relationships of adolescents.

The present study builds on Zosuls and colleagues' (2011) research by assessing gender-related attitudes about same- and other-gender peers and friends among adolescents. We assessed adolescents' feelings about same- and other-gender peers and friends via closed- and open-ended questions, allowing for a nuanced understanding of adolescents' perceptions in Uganda.

Engagement with Same- and Other-Gender Friends

Children and adolescents engage in a variety of activities with their friends. For example, a quantitative study with predominantly White 10- and 14-year-old children in the U.S. showed that friends engaged in socializing (e.g., talking, spending time together), working on schoolwork, maintenance (e.g., eating, walking), playing games (e.g., tag, drawing, jumping on a trampoline), media (e.g., watch TV, play video games), and sports (e.g., football, swimming, riding bikes, soccer, fishing; Mathur & Berndt, 2006).

Activities with Same-Gender Friends

Children and adolescents engage in a wide range of activities with same-gender friends (e.g., Al-Attar et al., 2017; McHale et al., 2004), perhaps unsurprisingly as same-gender friendships are the most prevalent type of friendship (Al-Attar et al., 2017; McHale et al., 2004; Poulin & Pedersen, 2007). However, it is important to distinguish between same-gender friendship among boys and same-gender friendship among girls, as boys and girls may engage in different activities with friends (Rubin et al., 2006). Some studies indicate that children and adolescents tend to engage in gender stereotypical activities with their same-gender peers (Martin et al., 2013; McHale et al., 2004).

In a quantitative study with 200 White 10- to-12-year-olds in the U.S., researchers found that early adolescents engaged in gender-typed activities primarily with same-gender peers (e.g., boys played sports, fished, and built; girls did handicrafts, danced, and gardened); time spent in

gender-typed activities with same-gender peers was more common for boys than for girls and was associated with academic interests, grades, and personality traits (McHale et al., 2004).

Adolescents also engaged in some non-stereotypical activities with same-gender friends, such as discussing problems and socializing (Kao & Joyner, 2004; Mathur & Berndt, 2006).

Cultural context may impact shared activities in same- and other-gender friendships. In a qualitative study with 10-to-14-year-old adolescents in Egypt and Belgium, researchers found that adolescents in both countries enjoyed spending time with their predominantly same-gender friends and talking about various issues, including their problems (Al-Attar et al., 2017).

Adolescents' stereotypical gender norms across both cultural contexts influenced their choice of friends and activities shared, namely girls preferred shared activities that were more intimate and quiet, whereas boys preferred shared activities that were more active (Al-Attar et al., 2017).

Girls' activities with other girls centered on conversations about school, romance, movies, fashion, menstruation, and problems at home; other activities included gossiping, studying, sharing food, playing cards or other games, and listening to music. Boys' activities with other boys included playing sports, playing with marbles, sharing material possessions (e.g., money, books), and roaming around the city center; other activities included praying, going to the movies, and discussing stories. Both girls and boys shared secrets with their friends and characterized their friendships as exhibiting mutual trust, self-disclosure, and shared values (Al-Attar et al., 2017). Although findings were similar across cultural contexts, there were some differences. For instance, gender differences in activities were more pronounced in Egypt than in Belgium, perhaps because Egypt has more rigid gender stereotypes than Belgium. Also, adolescents engaged in a wider variety of activities in Belgium compared to Egypt. It is evident that research on adolescents' friendships and shared activities across diverse cultural contexts is

needed to better understand how gender socialization and development converges and diverges across unique contexts.

Activities (and Lack Thereof) with Other-Gender Friends

Studies across North America and Europe have demonstrated that most adolescents have at least one other-gender friend (McDougall & Hymel, 2007; Mehta & Strough, 2010). However, in Al-Attar's (2017) qualitative study, 10-to-14-year-old adolescents in Egypt and Belgium reported few other-gender friends. Some adolescents expressed avoidance of other-gender friends due to different interests or personality styles and were concerned that their cross-gender friendships would be misconstrued as romantic by family and friends and hurt their reputation or lead to teasing (Al-Attar et al., 2017). When other-gender friendships were present, shared activities were sometimes identical to those done with same-gender friends, such as playing games together (e.g., tag, football, pretend-play) and doing schoolwork (Al-Attar et al., 2017).

In contrast to Al-Attar et al.'s (2017) findings, McDougall and Hymel (2007) found, via quantitative inquiry, that 8-17 year-old White, Canadian children and adolescents enjoyed having other-gender (and same-gender) friends with common activities and admirable personality traits (e.g., courageous, nice, sensitive, encouraging, helpful). Although adolescents expected more similarity, mutual liking, intimacy, and loyalty from same- relative to other-gender friends, other-gender friendships were also characterized by some of these themes. Adolescents reported some unique benefits of other-gender friendships, such as the opportunity to see others' perspectives and to learn about other-gender relationship expectations (McDougall & Hymel, 2007). However, similar to Al-Attar et al.'s (2017) findings, adolescents reported some challenges with other-gender friendships, such as peer teasing and discomfort when one party

was interested in pursuing romance. Overall, little research exists on adolescents' attitudes about, and activities with, other-gender friends. The present study aims to fill this gap.

Research (or Lack Thereof) on Friendships and Gender in sub-Saharan Africa

Most studies on gender segregation, friendships and peer relationships, and activities in children and adolescents have been conducted in the Global North, predominantly in the U.S., Canada, and Europe. Out of the studies we reviewed, only Al-Attar et al.'s (2017) research included adolescents from countries outside of North America and Europe, namely Egypt. To our knowledge, research on gender and friendships with adolescents is almost non-existent in the sub-Saharan African context. The present study took place in the East African country of Uganda. As others have noted (i.e., Dent & Goodman, 2020), Uganda has one of the world's highest population growth rates coupled with having one of the youngest population in the world (United Nations Population Fund, 2017). Nearly half of Ugandans are under the age of 14 and 68% are under the age of 24 (UNPF, 2017). Thus, issues surrounding child and adolescent development, including how gender and peer relationships intersect, are of particular significance.

Overall, few studies of friendship have been conducted in Africa, and virtually no studies exist in sub-Saharan Africa, on gender segregation, gender attitudes, and shared activities in the context of friendships. One study in the Central African Republic examined gender segregation in early childhood (Fouts et al., 2013), however, this work did not examine friendships or include adolescents. Two studies, that included the same participants from South Africa, reported that 13- to 20-year-old females were mainly friends with same-gender peers (Fearon et al., 2017; Fearon et al., 2019). However, the sample did not include boys, did not assess attitudes about same- and other-gender friends, and only one of the studies included information about shared activities

among friends. Specifically, Fearon and colleagues (2019) found that about half of the participants engaged in the activity of discussing sex, condom use, and HIV with their friends. No study, to our knowledge, has examined Ugandan adolescents' gender segregation, gender-related attitudes, or shared activities in the context of friendships.

Some research has explored adolescents' gender-role attitudes in Uganda, outside the context of friendships (Adams et al., 2013; Farago et al., 2019, 2020; Lundgren et al., 2019; Ninsiima et al., 2018; Vu et al., 2017). Although women in Uganda have more social power and status than in the past, and some adolescents actively resist unequal gender norms, many adolescents still view women and girls as subordinate to men and boys, especially in domestic and marital roles (e.g., Adams et al., 2013; Farago et al., 2019; Lundgren et al., 2019; Vu et al., 2017). Using the same dataset as the present paper, we found that Ugandan adolescents were fairly egalitarian in domains such as leisure, recreation, and job occupations, but were non-egalitarian in other domains (e.g., marital and domestic roles; Farago et al., 2019; Farago et al., 2020). Although we examined adolescents' stereotypes about domestic and recreational activities and attitudes about women's rights (Farago et al., 2019), as well as gender stereotypes about occupations (Farago et al., 2020), we did not assess gender-related attitudes in the context of friendships.

A Note about the Gender Binary

Scholars are increasingly arguing for the need to expand the binary conceptualization and measurement of gender (e.g., Cameron & Stinson, 2019; Hyde et al., 2019; Morgenroth & Ryan, 2020; Oleszki et al., 2020). The gender binary implies that people neatly fit into the male or female category, which misrepresents gender and sex by implying that gender/sex is less fluid and complex than what science and the lived experiences of binary and non-binary people reflect

(Hyde et al., 2019). Further, there are serious costs associated with the gender binary that range from hindering scientific progress to misrepresenting and denigrating individuals who are non-binary or trans, including gender diverse, genderqueer, gender non-conforming, gender variant, and gender fluid people (Cameron & Stinson, 2020; Hyde et al., 2019; Morgenroth & Ryan, 2020).

Despite reasons to move beyond the gender binary, we used the binary framework in this study for a number of reasons. As Hyde and colleagues (2019) acknowledge, the gender binary continues to shape individuals' thinking and behavior and this might be the case for youth in Uganda. This binary lens may be partly a result of oral stories and proverbs that children are exposed to which often reflect gender stereotypes and a binary view of gender (Kiyimba, 2005). We also agree with Hyde and colleagues (2019) that many children are unfamiliar with nonbinary terms, including youth in Uganda, which necessitates assessing youths' gender identities and beliefs with a gender binary framework. Further, our decision to use a gender binary framing is sensitive to the cultural context of Uganda, as publicly acknowledging a non-binary identity can pose significant risks to youth (Support Initiative for People with Congenital Disorders, 2016). In Uganda and other parts of East Africa (and the world), intersex people and others who do not fit the gender binary may be treated with stigma, discrimination, and violence (Human Rights Awareness and Promotion Forum, 2019; SIPD, 2016). In some cases, intersex infants and children in Uganda are abandoned or killed (SIPD, 2016). Intersex youth in Uganda face stigma at home, in their communities, and in school, leading to very high rates of school drop-out (SIPD, 2016). Thus, we did not ask adolescents to disclose their identification with or attitudes about non-gender binary constructs.

The Present Study

Overall, more research is warranted to better understand gender segregation and same- and cross-gender friendships, and peer relationships, in sub-Saharan Africa. Hence, we examined Ugandan adolescents' gender composition of friends, as well as attitudes about, and activities with, same- and other-gender peers and friends. We utilized quantitative and qualitative analyses to explore these topics. We believe this study will aid the field's understanding of the role of gender in adolescents' attitudes and activities with peers and will begin to fill the related research gap in sub-Saharan Africa. The present study answers the following research questions:

1) What is the gender composition of friendships of Ugandan adolescents?

We expected gender segregation and same-gender friendships to be more common than gender integration and other- or mixed-gender friendships, based on results of previous studies conducted outside of sub-Saharan Africa (e.g., Poulin & Pedersen, 2007).

2) How do Ugandan adolescent girls and boys feel about same- and other-gender peers?

Based on work with children and pre-adolescents (Halim et al., 2017; Zosuls et al., 2011), we expected positive feelings and attitudes to prevail about same-gender peer relationships and friendships and negative or neutral feelings and attitudes to prevail about other-gender peer relationships and friendships.

3) What type of activities do Ugandan adolescents do in the context of same- and other-gender friendships?

We expected that there would be more differences than similarities in the types of shared activities adolescents engage in with same- versus other-gender friends, and that activities that boys engaged in with same-gender friends would differ from activities that girls engaged in with same-gender friends. These predictions were based on studies indicating that the gender of peers

was related to the type of activities in which children and adolescents engaged (Martin et al., 2013; McHale et al., 2004).

Method

Participants

Participants were recruited from a government primary ($n = 37$), a private primary ($n = 49$), and a private secondary ($n = 81$; 35 missing school information) school in Eastern Uganda (participation rates $> 90\%$). Originally, 252 participants took part in the study but 50 were excluded due to low comprehension, leaving 202 participants (99 girls, 84 boys, 19 missing gender information). Participants were on average 14.26 years-old ($SD = 1.65$, range = 11 to 17; 15 missing age information) and from over 20 tribes, most commonly Iteso ($n = 59$), Jopadhola ($n = 30$), and Luhya ($n = 24$).

Procedures

Study protocols are identical to those outlined by Farago et al. 2019, 2020. Protocols were approved by the Arizona State University Institutional Review Board and consent was obtained from parents/guardians or from head teachers, whereas adolescents provided oral assent. The third author and a Ugandan research assistant group-administered the survey, containing a battery of closed- and open-ended questions in English, the language of instruction at the participating schools. English reading skills were lower than expected at the government school; thus, survey items were read aloud. Schools received a monetary donation and participants received pencils and notebooks.

Measures

Measures were adapted from existing measures and refined based on conversations with Ugandan adults working in education and community settings. Measures were piloted with 6

adolescents.

Gender Composition of Friends

Adolescents answered two questions about the gender composition of their friends: "How would you describe your friends at school?" and "How would you describe your friends outside of school?" Answer choices ranged from (1) *my friends are all girls*, (2) *my friends are mostly girls and some boys*, (3) *my friends are half girls and half boys*, (4) *my friends are mostly boys and some girls*, and (5) *my friends are all boys*.

Gender-Related Affective Attitudes

Closed-Ended Questions. Adolescents answered 14 questions regarding their attitudes about same- and other-gender peers (e.g., "Do boys generally make you feel happy?," "Do girls generally make you feel happy?," "Do boys generally make you feel sad?," "Do girls generally make you feel sad?," "Do boys generally make you feel like you want to be their friend?," "Do girls generally make you feel like you want to be their friend?," "Do boys generally make you feel like you want to get away from them?," "Do girls generally make you feel like you want to get away from them?"). Answer choices included (1) *always*, (2) *most of the time*, (3) *sometimes*, (4) *rarely*, and (5) *never*. The items were adapted from the gender-related affective attitudes measure used by Zosuls and colleagues (2011). All items were reverse coded so higher scores represented higher frequency. Items measuring positive and negative attitudes showed significant correlations, thus four composite scores were calculated by averaging item scores: positive attitudes toward girls, negative attitudes toward girls, positive attitudes toward boys, and negative attitudes toward boys. The reliabilities of three composites (positive attitudes toward girls, negative attitudes toward girls, positive attitudes toward boys) were acceptable ($\alpha = .65-.72$). However, the reliability of adolescents' negative attitudes toward boys was lower than

desired ($\alpha = .56$).

Open-Ended Questions. Adolescents answered two questions about their attitudes about being friends with same- and other-gender peers. The same-gender questions stated, "If you are a girl, write your feelings and thoughts about being friends with other girls" and "If you are a boy, write your feelings and thoughts about being friends with boys." The other-gender questions stated, "If you are a girl, write your feelings and thoughts about being friends with boys" and "If you are a boy, write your feelings and thoughts about being friends with girls."

Participants could list more than one answer. The third author [N.E.] read over all responses and identified coding themes. The fourth [L.Z.] and fifth [D.A.] authors coded 100% of the open-ended data according to the identified themes by grouping synonymous words or phrases together, comparing their coding (72.9% agreement), and resolving discrepancies by consulting the third author [N.E.].

Activities with Same- and Other-Gender Friends

Closed-Ended Questions. Adolescents completed the *Gender and Activities with Friends Survey (GAFS)* that was created for this study in consultation with local adults (e.g., teachers) familiar with children and adolescents. The questionnaire assessed various activities in which adolescents may engage with same- and other-gender friends. The GAFS included 25 closed-ended activity items that friends may engage in across the domains of recreation, talking, chores, academics, and miscellaneous activities. Answer choices included doing the activity with friends who are (1) *boys*, (2) *girls*, (3) *boys and girls*, and (4) *neither (if you do not do the action with your friends)*.

Open-Ended Questions. Adolescents could list any additional activities (i.e., activities not listed in the closed-ended survey) they only do with friends who are boys, friends who are girls, and with both boys and girls. The third author [N.E.] read over all responses and identified

coding themes. The fourth [L.Z.] and fifth [D.A.] authors coded 100% of the open-ended data according the identified themes by grouping synonymous words or phrases together, comparing their coding (91.1% agreement), and resolving discrepancies by consulting the third author [N.E.].

Other Measures

The current project was part of a larger study. Findings about stereotyping of domestic and recreational activities and attitudes about women's roles and rights are published in Farago et al., 2019; findings about stereotyping of jobs are published in Farago et al., 2020; and, findings about social withdrawal are published in Eggum-Wilkens et al., 2018.

Results

Missing Data

Missing data for closed-ended items ranged from 10.5% to 26.9% per item and for open-ended items ranged from 32.4% to 77.6% depending on the questions. Primary reasons for missing data on open-ended items included choosing to skip open-ended answers, not understanding a portion of the open-ended instructions, and providing open-ended responses that were inconsistent or redundant with closed-ended responses.

Gender Composition of Friends

For boys' friendships at school, the most frequent gender composition of friendships was mostly boys and some girls ($n = 39, 50.0\%$). Nineteen (24.4%) boys reported their friends were half boys and half girls, and 14 (17.9%) boys reported their friends were mostly girls and some boys. Five (6.4%) boys reported their friends were all boys, and one boy (1.3%) reported his friends were all girls.

For boys' friendships outside of school, the most frequent gender composition of

friendships was mostly boys and some girls ($n = 41, 50.6\%$). Seventeen (21.0%) boys reported their friends were half boys and half girls, and 13 (16.0%) boys reported their friends were mostly girls and some boys. Only a few boys reported having all boy friends ($n = 8, 9.9\%$), or having all girl friends ($n = 2, 2.5\%$).

For girls' friendships at school, the most frequent gender composition was mostly girls and some boys ($n = 47, 50.5\%$). Girls also reported their friends were all girls ($n = 17, 18.3\%$), their friends were half boys and half girls ($n = 17, 18.3\%$), and their friends were mostly boys and some girls ($n = 12, 12.9\%$). No girl reported that all their friends were boys at school.

For girls' friendships outside of school, the most frequent gender composition of friendships was mostly girls and some boys ($n = 31, 34.1\%$). Girls also reported having all girl friends ($n = 25, 27.5\%$), friends who were half girls and half boys ($n = 21, 23.1\%$), friends who were mostly boys and some girls ($n = 12, 13.2\%$), and friends who were all boys ($n = 2, 2.2\%$).

When participants were split by age (e.g., 11-14 years old, $n = 97$ vs. 15-17 years old, $n = 89$, $n = 16$ missing age), the results were very similar to the results when analyzing all participants together.

Gender-Related Affective Attitudes

Closed-Ended Questions about Peers

Compared with girls, boys reported stronger positive attitudes towards boys on average ($M_s = 3.92$ and 3.30 , $SD = 0.67$ and 0.88 , for boys and girls, respectively; $t(167.33) = -5.19$, $p < .01$). However, girls and boys did not significantly differ on negative attitudes toward boys ($M_s = 2.71$ and 2.70 , $SD = 0.80$ and 0.92 , for boys and girls, respectively; $t(171) = -.08$, $p = .94$), positive attitudes toward girls ($M_s = 3.65$ and 3.71 , $SD = 0.83$ and 0.74 , for boys and girls, respectively; $t(173) = .52$, $p = .61$), or negative attitudes toward girls ($M_s = 2.91$ and 2.67 , $SD =$

0.92 and 0.91, for boys and girls, respectively; $t(163) = -1.65, p = .10$). Results splitting participants by age were similar to results for all participants analyzed together, except that older adolescents did not show gender differences on positive attitudes towards boys ($M_s = 3.82$ and $3.68, SD = 0.75$ and 0.70 , for boys and girls, respectively; $t[75] = -.89, p = .38$) whereas there were differences for younger adolescents ($M_s = 3.95$ and $3.02, SD = 0.58$ and 0.90 , for boys and girls, respectively; $t[77] = -5.36, p < .01$).

Open-Ended Questions about Friends

Adolescents reported 157 responses (recall that participants could list more than one response) about *same-gender* friends. Generally, 84% of the comments were positive, 13% were negative, and 3% were mixed. Various themes emerged, such as *talking about problems and receiving help, sharing material items, sharing activities and chores, receiving advice about romance, helping with schoolwork, ingroup preference, good influence or encouragement, and negative interactions* (see Table 1). Adolescents reported 232 responses about *other-gender* friends (again, participants could list more than one response). Generally, 87% of comments were positive, 12% were negative, and 1% were mixed. Various themes emerged that were similar to themes reported for *same-gender* friends, such as *talking about problems and receiving help, sharing material items, sharing activities and chores, receiving advice about romance, helping with schoolwork, outgroup preference, good influence or encouragement, negative interactions including sexual coercion* (see Table 1).

Activities with Same- and Other-Gender Friends

Closed-Ended Questions

For the vast majority of activities, boys and girls indicated that they engaged in each activity with mixed-gender peers (i.e., with both boys and girls; see Table 2). There was some

variability in same-gender, other-gender, and mixed-gender activity partners by type of activity. For instance, for some activities (e.g., talking about school, doing schoolwork, eating food, talking about religion), two-thirds (over 67%) of both boys and girls indicated having mixed-gender activity partners. For other activities (e.g., playing sports, telling secrets) there was less consensus about the most likely activity partners. For instance, 38% ($n = 29$) of boys indicated that they play sports with other boys whereas 41% ($n = 31$) of boys indicated that they play sports with both boys and girls. For girls, telling secrets was split between female ($n = 34$, 39%) and mixed-gender activity partners ($n = 32$, 37%). For fetching water, although the most common response from both boys ($n = 41$, 53%) and girls ($n = 45$, 51%) was engaging in this activity with mixed-gender peers, just below half of adolescents reported otherwise. Collecting firewood was the only activity for which both boys ($n = 34$, 44%) and girls ($n = 52$, 59%) were more likely to indicate a female activity partner relative to mixed-gender partners.

Choosing partners of both genders was the modal response for most activities (see Table 2). Nonetheless, chi-square analyses suggested that boys engaged with male partners more often than expected when eating food, playing games, playing sports, having fun, fetching water, collecting firewood, sharing belongings, telling secrets, and talking about families, problems, and romance (see Table 2). Girls engaged with female partners more often than expected when playing games, exploring nature, sharing belongings, telling secrets, and talking about school, families, problems, and life experiences. Girls also engaged with mixed-gender groups (i.e., both males and females) more often than expected when playing sports.

To compare whether different same-gender activity partner compositions (i.e., boys-boys and girls-girls) were selected more than expected from other-gender compositions (i.e., boys-girls or girls-boys), we recoded responses as *same-gender* and as *other-gender* (see Table 3).

Same-gender was coded when a male participant chose the “boys” response or when a female participant chose the “girls” response. Other-gender was coded if a male participant chose the “girls” response or when a female participant chose the “boys” response. Chi-square analyses suggested that boys engaged with male partners more often than expected when playing sports, having fun, and teasing each other. Girls engaged with female partners more often than expected when singing, fetching water, and collecting firewood. Boys engaged with female partners more often than expected when singing, fetching water, telling secrets, gossiping, and collecting firewood. Girls did not engage with male partners more often than expected for any activity. For the majority of activities, there were no significant differences when comparing same- and other-gender engagement to expected results. There were only minimal differences in activity engagement between early adolescents and older adolescents. These differences primarily appeared for the “neither” response option. Due to low cell counts, gender differences in activity partners’ genders by age groups could not be assessed.

Open-Ended Questions

Adolescents listed the following activities they do with boys: playing football, playing sports such as basketball and volleyball, engaging in entertainment, attending school, tending to animals, bathing, and sitting or sleeping (see Table 4). Adolescents listed the following activities they do with girls: playing netball, engaging in romance, helping each other, cooking, washing, bathing, and going to church. Adolescents listed the following activities they do with both boys and girls: playing sports such as hand ball, touring, reading, attending school, doing a variety of domestic chores, working together, and going to church. Some responses, such as playing football, playing sports, engaging in entertainment, bathing with boys, and engaging in romance with girls were primarily reported by boys. Other responses, such as washing, bathing with girls,

and doing domestic chores with boys and girls were primarily reported by girls.

Discussion

We examined the gender composition of adolescents' friends, as well as adolescents' attitudes about, and activities with, same- and other-gender peers and friends. The present study extends research on adolescent friendships with same- and other-gender peers to the context of Uganda.

Gender Composition of Adolescents' Friendships (Gender Segregation)

Findings supported our expectations that adolescents' friendship groups are somewhat gender segregated, with boys reporting that most of their friends were boys and some girls, and girls reporting that most of their friends were girls and some boys. However, our findings show that mixed- and other-gender friendships were present and that having *solely* same-gender friends was generally rare, similar to results from other studies (e.g., Poulin & Pedersen, 2007). However, about one in four girls reported that their friends outside of school were all girls. Approximately, one in five adolescents reported that their friends were half boys and half girls inside and outside of school. There were seemingly no differences in the gender composition of friendships of boys and girls. It is plausible that the gender composition of adolescents' friend groups, or gender segregation, is less influenced by cultural contexts than other aspects of gender development.

Attitudes about Same- and Other-Gender Peers and Friends

Encouragingly, positive feelings and thoughts about same- and other-gender peers and friends were far more prevalent than negative feelings and thoughts across closed- and open-ended results. Positive attitudes far outweighed negative ones, both about same- and other-gender peers and friends. By and large, adolescents reported many benefits and a few detriments

of same- and other-gender friendships in the open-ended responses. Our expectations were partially supported, as we expected positive attitudes to prevail about same-gender peers and friends and negative or neutral attitudes to prevail about other-gender peers and friends. Our findings about same-gender friendships were supported and are aligned with a study showing that 8- to 17-year-old White, Canadian youth positively evaluated both same- and other-gender friendships (McDougall & Hymel, 2007). However, our expectations of negative attitudes about other-gender friendships were not supported. It is plausible that negative attitudes and outgroup biases are more prevalent when adolescents evaluate hypothetical or unknown other-gender peers, rather than known peers or friends.

Overall, girls and boys displayed similar positive and similar negative attitudes about same- vs. other-gender peers and friends across open-ended and closed-ended responses, with the exception of older (but not younger) boys reporting stronger positive attitudes toward boys on the closed-ended measure than attitudes reported by girls. Although other studies with younger children have not found gender differences in children's attitudes toward own-gender peers (Halim et al., 2017; Zosuls et al., 2011), it is plausible that the strength of these attitudes varies across cultural contexts. Specifically, in Uganda the high prestige and value placed on being a boy or a man, compared to being a girl or a woman, may contribute to a heightened sense of intra-group positivity among boys. It is also plausible that as girls become aware of sexual coercion or inter-partner violence largely perpetrated by men and boys, girls' positive attitudes become tempered about boys. Although the cultural context may explain some of the gender-related attitude difference for younger adolescents, perhaps older girls develop more positive attitudes toward boys as they develop romantic feelings toward boys.

Adolescents reported that they enjoyed the following aspects of same- and other-gender friendships: talking about problems, receiving help and advice, sharing material items (e.g., money, books), sharing activities (e.g., singing, watching movies, cleaning), receiving advice about romance (and, in the case of girls, menstruation), and receiving help with schoolwork. Adolescents also mentioned that their friends exerted a positive influence on them. Although mentioned in the context of positive aspects of same- and other-gender friendships, occasionally, the benefits of friendships were explained in ways that cast a less-than-positive light on either same- or other-gender friends. For instance, some adolescents preferred same-gender friends because other-gender friends may have ulterior romantic motives. Others preferred other-gender friends because girls were deemed jealous and quarrelsome, and boys were deemed as aggressive and less loving than girls. As for negative attitudes, they were few and far between. Examples of negative feelings about same-gender friends included describing girls as arrogant and boys as having bad manners and being aggressive. Examples of negative feelings about other-gender friends included being wary of demands for sex and romance, as well as concerns about pregnancy and HIV.

Overall, both boys and girls reported being happy and comfortable around same- and other-gender friends, discussing problems and getting advice from these friends, and sharing material things, activities, and chores with their friends. Collectively, these themes indicated that gender, per se, was not a salient determining factor in how adolescents related to one another in this study. It appears that certain traits and characteristics of friendships, such as helping and encouraging one another, intimacy, and trust, are general themes that bind friends together, regardless of gender (Al-Attar et al., 2017; McDougall & Hymel, 2007).

Activity Engagement with Same- and Other-Gender Friends

Our expectations that there would be more differences than similarities in shared activities that adolescents engage in with same- versus other-gender friends, and that activities that boys engaged in with same-gender friends would differ from activities that girls engaged in with same-gender friends, were not supported. For the vast majority of activities, both boys and girls reported that they engaged with mixed-gender peers (i.e., boys and girls). For a few activities there was variability in the gender composition of activity partners. For instance, for playing sports, boys were roughly split between having male and mixed-gender activity partners. For telling secrets, girls were roughly split between having female and mixed-gender activity partners. For fetching water, although the most common response was mixed-gender partners, female partners were more common than male partners. For collecting firewood, adolescents were most likely to report a female partner. Although mixed-gender activity partners were most frequent, adolescents were more likely to engage with only same-gender peers compared to only other-gender peers. Engaging solely with other-gender peers seems to be a rare occurrence. Other-gender friendships may be discouraged by family and peers through disapproval or teasing about potential romantic involvement (Al-Attar et al., 2017; McDougall & Hymel, 2007).

Although it may appear contradictory that adolescents simultaneously reported having primarily same-gender friends, and yet reported holding positive attitudes about other-gender peers and friends and engaging with friends of both genders across a range of activities, the explanation for this may lie in the definition of what constitutes mixed-gender groups. We asked adolescents who do they do various activities with and the mixed-gender answer choice entailed "boys and girls." However, it is possible to engage with mixed-gender peers and still have a largely gender-segregated friend group. For example, an adolescent boy could play sports with mainly other boys, however, if there is even just one girl who regularly joins one of the sports

teams, an adolescent boy may indicate that they play sports with both boys and girls. This issue reflects a larger dilemma in the friendship literature: mixed-gender friend groups are defined inconsistently across studies. Mixed-gender ranges from having at least one other-gender friend to having only other-gender friends (1-10 out of 10 friends; Poulin & Pederson, 2007) to having no more than 60% of one gender and no fewer than 40% of the other gender (Blatchford et al., 2003) to at least 20% of each gender and no more than 80% of any one gender (Molloy et al., 2014) in a friend group.

Although choosing activity partners of both genders was the most frequent response, boys engaged with male partners more often than expected for some activities (e.g., playing sports) and girls engaged with female partners more often than expected for some activities (e.g., talking about problems). In the open-ended measure, adolescents reported doing some activities with boys (e.g., playing football, tending to animals) and some activities with girls (e.g., playing netball, cooking). Certain activities were primarily reported by boys (e.g., playing football, playing sports) whereas other activities were primarily reported by girls (e.g., chores). As other studies indicate (e.g., McHale et al., 2004), some activities are more saliently gender-typed than others and therefore may lend themselves to gender segregation more so than activities that are less gender-typed.

Limitations, Future Directions, and Implications

Some of the potential shortcomings of the present study are also described in Farago et al. (2019; 2020). For instance, open-ended questions were listed after the closed-ended questions, which may have impacted adolescents' responses. Nonetheless, unique responses were generated in the open-ended portion which indicates that listing open-ended questions after the closed-ended ones was not a fatal flaw of the research. However, switching the order of questionnaires

in future studies will allow for a deeper assessment of adolescents' attitudes and engagement with same- and other-gender friends. In addition, there might be age differences in adolescents' gender composition of friends and attitudes toward same- and other-gender peers and friends, however we were unable to test for age differences given the low counts for each response. It is plausible that gender segregation becomes less prominent as Ugandan adolescents approach young adulthood and as their romantic interests emerge. Future studies could investigate potential age differences.

Further, our sample may have been somewhat biased due to involving adolescents who were enrolled in school. Primary school enrollment rates are around 80% for boys and girls, however secondary school enrollment rates are 38% for girls and 43% for boys (Uganda Bureau of Statistics, 2017). Potentially, adolescents in school have more egalitarian attitudes and activity engagement than adolescents who are not in school. This parameter of the study implies that findings may not be generalizable to youth who do not attend school. However, our confidence in our results is high, as less than 50% of our sample comprised of secondary school students. Future studies could compare attitudes about same- and other-gender peers between youth who attend school and youth who do not. Another weakness was the amount of missing data, especially for the open-ended items. Although this is a concern, we feel that the current study provides valuable, preliminary insights about peer relations and gender in Uganda. Conducting individual interviews with adolescents and placing open-ended items before other items could be incorporated into future studies.

Finally, conceptualizing gender from a binary perspective did not allow us to assess how gender segregation and attitudes about, and activities with, same- and other-gender peers and friends may vary among adolescents who do not fit in the traditional male/female gender binary.

It is plausible that trans or intersex adolescents, and other gender non-conforming teens, have unique perspectives about the impact of gender on peer dynamics. Thus, future studies could incorporate open-ended measures that allow adolescents to identify their gender (Hyde et al., 2019) so findings could be teased apart accordingly. Additionally, the current study assumed a heteronormative view of gendered friendships and peer relationships. Although applicable to a large majority of youths' lives in Uganda, future work should incorporate measures of sexual orientation that allow for the disclosure of same-sex attraction and more fluid conceptualization of gendered relationships.

Despite limitations, this study provides valuable insight into Ugandan adolescents' attitudes about, and activities with, same- and other-gender peers and friends. Although only one theme out of many, our findings indicate that romantic interests and concerns about sexuality play a role in friendships between boys and girls. Future studies could tease apart the nature of other-gender friendships such as platonic friendships versus romantic relationships in adolescents' friendships across the Global South, as De Meyer and colleagues (2017) have begun to investigate in five countries across the world, including in Ecuador and Kenya. Additionally, research is needed to better understand how the exact gender composition of friend groups, such as the various ways in which mixed-gender groups may form, impact adolescents' attitudes about, and shared activities, with friends. Relatedly, more research is needed on the quality of interactions and friendships among same-, mixed-, and other-gender friends, especially in the context of sub-Saharan Africa. Future studies may also examine how the nature and context of various recreational, academic, and domestic activities promote or hinder same- and other-gender friendships and interactions.

Regarding implications, the present study indicates that adolescents in Uganda have positive attitudes about other-gender friends, yet the prevalence of other-gender friendships is lower in comparison to same-gender friendships. Schools, community agencies, and professionals working with youth could be supported to facilitate positive other-gender friendships among adolescents. Young adolescents who have friends of the other-gender may be more likely to transition smoothly to heterosexual romantic relationships compared to adolescents with only same-gender friends (Feiring, 1999). The benefits of other-gender friendships also include the opportunity to learn about others' perspectives that are different from one's own (McDougall & Hymel, 2007; Poulin & Pedersen, 2007). The current research provides information about Ugandan adolescents' feelings, thoughts, and engagement with other- (and same-) gender peers, which could be used to develop programs that support positive peer interactions among youth in sub-Saharan Africa and beyond.

References

- Adams, M., Salazar, E., & Lundgren, R. (2013). Tell them you are planning for the future: Gender norms and family planning among adolescents in northern Uganda. *International Journal of Gynecology & Obstetrics*, *123*(1), e7–e10.
<https://doi.org/10.1016/j.ijgo.2013.07.004>
- Al-Attar, G., De Meyer, S., El-Gibaly, O., Michielsens, K., Animosa, L. H., & Mmari, K. (2017). “A boy would be friends with boys ... and a girl ... with girls”: Gender norms in early adolescent friendships in Egypt and Belgium. *Journal of Adolescent Health*, *61*, S30-S34.
<http://dx.doi.org/10.1016/j.jadohealth.2017.03.013>
- Bagwell, C. L., & Schmidt, M. E. (2011). *Friendships in childhood and adolescence*. Guilford Press.
- Block, J. (1983). Differential premises arising from differential socialization of the sexes: Some conjectures. *Child Development*, *54*(6), 1335–1354.
<https://doi.org/10.2307/1129799>
- Bohn-Gettler, C. M., Pellegrini, A. D., Dupuis, D., Hickey, M., Hou, Y., Roseth, C., & Solberg, D. (2010). A longitudinal study of preschool children's (homo sapiens) sex segregation. *Journal of Comparative Psychology*, *124*(2), 219-228. <https://doi:10.1037/a0018083>
- Cameron, J. J., & Stinson, D. A. (2019). Gender (mis)measurement: Guidelines for respecting gender diversity in psychological research. *Social and Personality Psychology Compass*, *13*(11), 1-14. doi:10.1111/spc3.12506
- Connolly, J., Craig, W., Goldberg, A., & Pepler, D. (2004). Mixed-gender groups, dating, and romantic relationships in early adolescence. *Journal of Research on Adolescence*, *14*(2), 185-207. <https://doi.org/10.1111/j.1532-7795.2004.01402003.x>

- Connolly, J., Furman, W., & Konarski, R. (2000). The role of peers in the emergence of heterosexual romantic relationships in adolescence. *Child Development, 71*, 1395-1408. <https://doi.org/10.1111/1467-8624.00235>
- De Meyer, S., Kagesten, A., Mmari, K., McEachran, J., Chilet-Rosell, E., Kabiru, C. W.,... Michielsen, K. (2017). Boys should have the courage to ask a girl out: Gender norms in early adolescent romantic relationships. *Journal of Adolescent Health, 61*, S42-S47. <https://doi.org/10.1016/j.jadohealth.2017.03.007>
- Dent, V., & Goodman, G. (2020). Representations of attachment security, attachment avoidance, and gender in Ugandan children. *Attachment & Human Development, 1*–30. Advance online publication. <https://doi.org/10.1080/14616734.2020.1830480>
- Eggum-Wilkens, N. D., Zhang, L., & An, D. (2018). An exploratory study of Eastern Ugandan adolescents' descriptions of social withdrawal. *Journal of Adolescence, 67*, 153-157. [doi:10.1016/j.adolescence.2018.06.011](https://doi.org/10.1016/j.adolescence.2018.06.011)
- Fabes, R. A., Martin, C. L., & Hanish, L. D. (2003). Young children's play qualities in same-, other-, and mixed-sex peer groups. *Child Development, 74*(3), 921-932. <https://doi.org/10.1111/1467-8624.00576>
- Farago, F., Eggum-Wilkens, N. D., & Zhang, L. (2019). Ugandan adolescents' descriptive gender stereotypes about domestic and recreational activities, and attitudes about women. *Youth & Society, 1*-22. <https://doi.org/10.1177/0044118X19887075>.
- Farago, F., Eggum-Wilkens, N. D., & Zhang, L. (2020). Ugandan adolescents' gender stereotype knowledge about jobs. *Vulnerable Children & Youth Studies*. <https://doi.org/10.1080/17450128.2020.1830213>
- Fearon, E., Wiggins, R. D., Pettifor, A. E., MacPhail, C., Kahn, K., Selin, A., Gómez-Olivé, F.

- X., Delany-Moretlwe, S., Piwowar-Manning, E., Laeyendecker, O., & Hargreaves, J. R. (2017). Associations between friendship characteristics and HIV and HSV-2 status amongst young South African women in HPTN-068. *Journal of International Aids Society*, 20, e25029. <https://doi:10.1002/jia2.25029>
- Fearon, E., Wiggins, R. D., Pettifor, A. E., MacPhail, C., Kahn, K., Selin, A., Gómez-Olivé, F. X., & Hargreaves, J. R. (2019). Friendships among young South African women, sexual behaviours and connections to sexual partners (HTPN 068). *AIDS and Behavior*, 23, 1471-1483. <https://doi.org/10.1007/s10461-019-02406-x>
- Feiring, C. (1999). Other-sex friendship networks and the development of romantic relationships in adolescence. *Journal of Youth and Adolescence*, 28, 495–512.
doi:10.1023/A:1021621108890
- Fouts, H. N., Hallam, R. A., & Purandare, S. (2013). Gender segregation in early-childhood social play among the Bofi foragers and Bofi farmers in Central Africa. *American Journal of Play*, 5(3), 333-356.
- Halim, M. L. D., Ruble, D. N., Tamis-LeMonda, C. S., Shrout, P. E., & Amodio, D. M. (2017). Gender attitudes in early childhood: Behavioral consequences and cognitive antecedents. *Child Development*, 88(3), 882-899. <https://doi:10.1111/cdev.12642>
- Human Rights Awareness and Promotion Forum (HRAPF). (2019). *The impact of the legal and policy framework on the human rights of intersex persons in Uganda*.
<https://hrapf.org/index.php/resources/research-reports/109-impact-of-legal-and-policy-framework-on-human-rights-of-intersex-persons-in-uganda/file>
- Hyde, J. S., Bigler, R. S., Joel, D., Tate, C. C., & van Anders, S. M. (2019). The future of sex

- and gender in psychology: Five challenges to the gender binary. *American Psychologist*, 74, 171–193. doi:10.1037/amp0000307
- Kao, G., & Joyner, K. (2004). Do race and ethnicity matter among friends? Activities among interracial, interethnic, and intraethnic adolescent friends. *The Sociological Quarterly*, 45(3), 557-573. <https://doi.org/10.1111/j.1533-8525.2004.tb02303.x>
- Keener, E., Mehta, C., & Strough, J. (2013). Should educators and parents encourage other-gender interactions? Gender segregation and sexism. *Gender and Education*, 25(7), 818-833. <https://doi:10.1080/09540253.2013.845648>
- Kiyimba, A. (2005). Gendering social destiny in the proverbs of the Baganda: Reflections on and girls becoming men and women. *Journal of African Cultural Studies*, 17(2), 253–270. <https://doi.org/10.1080/13696850500448360>
- Lam, C. B., McHale, S. M., & Crouter, A. C. (2014). Time with peers from middle childhood to late adolescence: Developmental course and adjustment correlates. *Child Development*, 85(4), 1677-1693. doi:10.1111/cdev.12235
- Leaper, C. (Ed.) (1994). *Childhood gender segregation: Causes and consequences*. Jossey-Bass.
- Leaper, C. (2011). Research in developmental psychology on gender and relationships: Reflections on the past and looking into the future. *British Journal of Developmental Psychology*, 29, 347-356. <https://doi:10.1111/j.2044-835X.2011.02035.x>
- Lundgren, R., Burgess, S., Chanteloir, H., Oregede, S., Kerner, B., & Kågesten, A. E. (2019). Processing gender: Lived experiences of reproducing and transforming gender norms over the life course of young people in Northern Uganda. *Culture, Health & Sexuality*, 21(4), 1-17. doi:10.1080/13691058.2018.1471160

- Ninsiima, A. B., Leye, E., Michielsen, K., Kemigisha, E., Nyakato, V. N., & Coene, G. (2018). "Girls have more challenges; they need to be locked up": A qualitative study of gender norms and the sexuality of young adolescents in Uganda. *International Journal of Environmental Research and Public Health*, *15*, 193-208. doi:10.3390/ijerph15020193
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Belknap /Harvard University Press.
- Martin, C. L., & Fabes, R. A. (2001). The stability and consequences of young children's same-sex peer interactions. *Developmental Psychology*, *37*(3), 431-446.
<https://doi:10.1037//0012-1649.37.3.431>
- Martin, C. L., Korneinko, O., Schaefer, D. R., Hanish, L. D., Fabes, R. A., & Goble, P. (2013). The role of sex of peers and gender-typed activities in young children's peer affiliative networks: A longitudinal analysis of selection and influence. *Child Development*, *84*(3), 921-937. <https://doi:10.1111/cdev.12032>
- McDougall, P., & Hymel, S. (2007). Same-gender versus cross-gender friendship conceptions: Similar or different? *Merill-Palmer Quarterly*, *53*(3), 347-380.
<https://doi.org/10.1353/mpq.2007.0018>
- McHale, S. M., Kim, J., Whiteman, S., & Crouter, A. C. (2004). Links between sex-typed time use in middle childhood and gender development in early adolescence. *Developmental Psychology*, *40*(5), 868-881. <https://doi:10.1037/0012-1649.40.5.868>
- Mehta, C. M., & Strough, J. (2009). Sex segregation in friendships and normative contexts across the life span. *Developmental Review*, *29*, 201-220.
<https://doi:10.1016/j.dr.2009.06.001>
- Mehta, C. M., & Strough, J. (2010). Gender segregation and gender-typing in adolescence. *Sex*

- Roles*, 63, 251-263. <https://doi.org/10.1007/s11199-010-9780-8>
- Molloy, L. E., Gest, S. D., Feinberg, M. E., & Osgood, D. W. (2014). Emergence of mixed-sex friendship groups during adolescence: Developmental associations with substance use and delinquency. *Developmental Psychology*, 50(11), 2449-2461. doi:10.1037/a0037856
- Morgenroth, T., & Ryan, M. K. (2020). The effects of gender trouble: An integrative theoretical framework of the perpetuation and disruption of the gender/sex binary. *Perspectives on Psychological Science*, 1-30. doi:10.1177/1745691620902442
- Olezeski, C. L., Pariseau, E. M., Bamatter, W. P., & Tishelman, A. C. (2020). Assessing gender in young children: Constructs and considerations. *Psychology of Sexual Orientation and Gender Diversity*, 7(3), 293-303. doi:10.1037/sgd0000381
- Pellegrini, A. D., & Long, J. D. (2003). A sexual selection theory longitudinal analysis of sexual segregation and integration in early adolescence. *Journal of Experimental Child Psychology*, 85, 257-278. [https://doi.org/10.1016/s0022-0965\(03\)00060-2](https://doi.org/10.1016/s0022-0965(03)00060-2)
- Pellegrini, A. D., Long, J. D., Roseth, C. J., Bohn, C. M., & Van Ryzin, M. (2007). A short-term longitudinal study of preschoolers' (homo sapiens) sex segregation: The role of physical activity, sex, and time. *Journal of Comparative Psychology*, 121(3), 282-289. <https://doi.org/10.1037/0735-7036.121.3.282>
- Poulin, F., & Pedersen, S. (2007). Developmental changes in gender composition of friendship networks in adolescent girls and boys. *Developmental Psychology*, 43(6), 1484-1496. <https://doi.org/10.1037/0012-1649.43.6.1484>
- Powlishta, K. K. (1995). Intergroup process in childhood: Social categorization and sex role development. *Developmental Psychology*, 31, 781-788. doi:10.1037/0012-1649.31.5.781
- Rose, A. J., & Smith, R. L. (2018). Gender and peer relationships. In W. M. Bukowski, B.

- Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (p. 571–589). The Guilford Press.
- Rubin, K. H., Bowker, J. C., McDonald, K. L., & Menzer, M. (2013). Peer relationships in childhood. In P. D. Zelazo (Ed.), *The Oxford handbook of developmental psychology: Self and other* (Vol. 2, pp. 317–368). Oxford University Press.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships and groups. In D.W. Damon, (Series Ed.) & N. Eisenberg (Vol. Ed.), *The handbook of child psychology* (6th ed., pp. 571-645). Wiley.
- Strough, J., & Covatto, A. M. (2002). Context and age differences in same- and other-gender peer preferences. *Social Development, 11*(3), 346-361. <https://doi.org/10.1111/1467-9507.00204>
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. W.W. Norton & Co.
- Support Initiative for Persons with Congenital Disorders. (2016). Baseline survey on intersex realities in East Africa. <https://web.archive.org/web/20200926170248/https://sipduganda.org/baseline-survey-on-intersex-realities-in-east-africa/>
- Uganda Bureau of Statistics. (2017). *Education: A means for population transformation. The National Population and Housing Census 2014 -Education in the Thematic Report Series*. Kampala, Uganda. Retrieved from https://www.ubos.org/wp-content/uploads/publications/03_2018Education_Monograph_Report_Final_08-12-2017.pdf

United Nations Population Fund (UNPF). (2017). *Uganda population dynamics*.

<https://uganda.unfpa.org/sites/default/files/pub-pdf/Issue%20Brief%201%20-%20Population%20dynamics.%20Final.%2010.5.2017.pdf>

Vu, L., Pulerwitz, J., Burnett-Zieman, B., Banura, C., Okal, J., & Yam, E. (2017). Inequitable gender norms from early adolescence to young adulthood in Uganda: Tool validation and differences across age groups. *Journal of Adolescent Health, 60*(2), S15–S21.

<https://doi.org/10.1016/j.jadohealth.2016.09.027>

Yee, M., & Brown, R. (1994). The development of gender differentiation in young children.

British Journal of Social Psychology, 33, 183–196. <https://doi.org/10.1111/j.2044-8309.1994.tb01017.x>

Zosuls, K. M., Martin, C. L., Ruble, D. N., Miller, C. F., Gaertner, B. M., England, D. E., & Hill, A. P. (2011). 'It's not that we hate you': Understanding children's gender attitudes and expectancies about peer relationships. *British Journal of Developmental Psychology, 29*, 288-304. <https://doi.org/10.1111/j.2044-835x.2010.02023.x>

Xiao, S. X., Martin, C. L., DeLay, D., & Cook, R. E. (2020). *Intergroup attitudes and the social consequences for the beholder: A longitudinal study of preadolescents' other-gender attitudes*. Research poster accepted for the biennial meeting of Society for Research on Adolescent (SRA). San Diego, CA. <https://tinyurl.com/y22ofzf4> (Conference Cancelled)

Table 1

Themes: Feelings and Thoughts about Same-Gender and Other-Gender Friends

Themes	Feelings and Thoughts about Same-Gender Friends		Feelings and Thoughts about Other-Gender Friends	
	Girls about Girls	Boys about Boys	Girls about Boys	Boys about Girls
Positive Themes				
Talk about problems, get help or advice	...they also help you sharing for example you might land in a problem but they help you overcome it	...they can help you in time of troubles...if you already been attacked by your enemies your friends who are boys can easily ...help you	I feel and think about being friends with boys because most of them like advising me; They comfort me in time of hardship	Girls can help in sometimes of trouble and problems; Girls can help you in any problem
General positive (non-specific)	A girl makes you happy and if you are her best friend; I feel comfortable when I'm with them	I feel good [being friends with boys]; I feel comfortable [being friends with boys]	The boys make me happy; I feel friendly and comfortable being friends with boys	I get happy when girls are my friends; ...a girl make you comfortable by enjoying life with her
Share material things	...help in sharing either domestic or personal things because you might be lacking some	Boys give other boys with money...; They give me some food	They buy me food...; They give me books...	Being friends with girls you can share foods
Share activities and chores	Eating with your [girl] friends; Sitting together; ... they bring good stories and nice songs	We playing football...; I enjoy with them watching movies	Playing together; Sitting together; Singing; ...we work together like sweeping the class room...	Girls help how to play
Receive advice about puberty, romance, or sex	They told me about my body changes...;...they teach you how to use pads and...they teach you that you must use a condom...; Girls teach you how to maintain your virginity	...normally advice me about certain girls who disturb boys demanding for sex	He tells you how to abstain from sex; He tells you how to use condoms	I feel good to having friends which are girls because they normally discuss about their boy friend and I get encourage from them; I like being friends to girls because their satisfying my sexual desires

Receiving help with schoolwork, academics, or career	I feel good, I have a girl friend who tells me story about the studies and how my future will be; They help me with writing notes; I feel good because [other girls] assist in class work	...I think they can help me in future and mostly after my education because any of them can acquire a job before me so friends can help me in one way or the other	...boys can also help in other things like questions given by a teacher; If I be a friend of a boy we share ideas in class e.g. calculating, mathematics	...I think they can help me in future and mostly after my education because any of them can acquire a job before me so friends can help me in one way or the other
Ingroup/outgroup preference	...consult your friend who is a girl to help because some boys can pretend to be the heart of wanting to help you when in actual sense he might be after another thing...	-	I prefer boy friends than girl friend because sometimes girls are more quarrelsome... [boys] not as jealously as girls and they are funny ...	Girls are so loving compared to boys; Girls do not fight most times if annoyed;...if I have fallen into any problem I don't think my fellow boy can help me...he may get jealous and exploit my secrets...
Good influence/encouragement	[Girls] encourage me to read harder;... they always tell me what I have to do which I don't know... maybe being clean and smart	-	Being friends with boys is good because they encourage you do good thing like obeying your parent	...the girl helps the boy to be smart for himself; Having a girlfriend it can help not to be jailed
Make you feel good about yourself	-	-	A boy can tell me that I am beautiful; They always make me feel that I am unique	They make me feel good about myself; I think if I will be a friend to a girl I will not be lonely
Negative Themes				
Negative interactions (including sexual coercion, HIV, early pregnancy)	I feel bad when I socialize a lot with girls because girls are always arrogant they are poor in advising and comforting friends	...they often advice me to get one more girl lover which will lead me to cheating on the first one; Sometimes it is bad to be with boys only you bad manners; ...-sometime I feel bad because they always discourage me in my studies	Some boys have bad behaviors, they force to have sex intercourse and if you refuse they beat you and have someone kill; ... you can get HIV/AIDS; If I am with boys I may got pregnant	If I am friendly to many girls they can easily force me in sex which is not good... one day I was with a girl walking to town then she began telling me about sex and touching me badly demanding for sex; Being friend with a girl results to rumors that you are a boy lover and so on

Generally negative (non-specific)

It is bad to be with only boys

Girls sometimes make me feel
sad

I feel bad being friends
with boys; I feel not
comfortable

Some girls abuse me; If I be with
girls I feel sad and bad

Unproofed draft

Table 2

Frequencies (n) and Chi-Squares Comparing the Gender Composition of Friends for Activities (GAFS) among Boys and Girls

Activity	Boys	Girls	Boys and Girls	Neither	$\chi^2(df = 3)$
Participant gender:	boys/girls	boys/girls	boys/girls	boys/girls	
Talk about school	2/0	1 ^b /10 ^a	60/63	18/17	9.02*
Do schoolwork together	4/4	2/6	59/63	15/17	1.67
Eat food together	6 ^a /0 ^b	3/11	49/66	15/11	12.41**
Talk about God or religion	3/1	4/9	51/66	17/14	3.80
Sing together	2/2	12/14	49/55	15/14	0.23
Hold hands together	6/5	5/19	55/55	13/15	7.15
Dance together	7/2	7/18	51/49	12/14	7.60
Play games together	20 ^a /0 ^b	3 ^b /14 ^a	38/46	11/12	27.92***
Go walking together	14/5	5/17	46/51	13/16	10.70*
Tell funny stories/jokes	18/11	10/8	37/57	9/15	5.98
Explore nature together	10/5	3 ^b /21 ^a	48/49	18/17	14.30**
Play sports together	29 ^a /5 ^b	2/12	31^c/57^d	14/15	30.97***
Discuss life experiences	12/4	6 ^b /28 ^a	45/42	14/13	17.83***
Have fun	25 ^a /9 ^b	5/8	38/47	11/20	11.65**
Fetch water together	11 ^a /0 ^b	16/34	41/45	10/9	17.18**
Talk about our families	10 ^a /0 ^b	2 ^b /19 ^a	47/43	21/28	24.44***
Share our belongings/possessions	10 ^a /2 ^b	2 ^b /20 ^a	43/43	22/22	19.52***
Pretend/make-believe play	15/7	9/23	38/46	17/15	9.12*
Talk about our problems	24 ^a /2 ^b	2 ^b /30 ^a	40/40	13/17	43.21***
Hug/embrace each other	13/7	8/18	37/40	24/22	5.71
Talk about girls/boys we like romantically	16 ^a /6 ^b	6/18	34/36	17/27	11.74**
Tease each other	23/15	7/12	33/38	19/19	3.33
Tell each other secrets	15 ^a /3 ^b	12 ^b /34 ^a	29/32	18/18	17.74***
Gossip/talk about other people	13/5	15/20	30/28	20/31	6.50
Collect firewood together	12 ^a /1 ^b	34/52	24/29	7/6	12.95**

Note. Bold indicates the most common response for a particular activity. Italics indicates responses that at least 25% of adolescents

selected. ^a Adjusted standardized residual between observed versus expected frequencies was greater than 2.58, indicating significantly more participants than expected by chance engaged with same-gender peers for the activity (expected frequencies were not shown). ^b Adjusted standardized residual between observed versus expected frequencies was less than -2.58, indicating significantly fewer participants than expected by chance engaged with other-gender peers for the activity (expected frequencies were not shown). ^c Adjusted standardized residual between observed versus expected frequencies was greater than 2.58, indicating significantly more participants than expected engaged with mixed-gender peers for the activity (expected frequencies were not shown). ^d Adjusted standardized residual between observed versus expected frequencies was less than -2.58, indicating significantly fewer participants than expected engaged with mixed-gender peers for the activity (expected frequencies were not shown).
p* < .05, *p* < .01, ****p* < .001.

Table 3

Frequencies and Chi-Squares Comparing Engagement with Same- and Other-Gender Activity Partners among Boys and Girls

Activities	Same gender	Other gender	$\chi^2(df = 3)$
	boys/girls	boys/girls	
Talk about school	10/19	2/0	7.05
Do schoolwork together	4/6	2/4	2.37
Eat food together	6/11	3/0	6.40
Talk about God or religion	3/9	4/1	5.81
Sing together	2 ^b /14 ^a	12 ^c /2 ^d	18.97**
Hold hands together	6/19	5/5	5.70
Dance together	7/18	7/2	10.50*
Play games together	20/14	3/0	9.77*
Go walking together	14/17	5/5	0.76
Tell funny stories/jokes	18/8	10/11	8.72
Explore nature together	10/21	3/5	3.62
Play sports together	29 ^a /12 ^b	2/5	15.16**
Discuss life experiences	12/28	6/4	7.22
Have fun	25 ^a /8 ^b	5/9	17.90**
Fetch water together	11 ^b /34 ^a	16 ^c /0 ^d	28.61***
Talk about our families	2/10	1/0	8.85
Share our belongings/possessions	10/20	2/2	3.59
Pretend/make-believe play	15/23	9/7	2.41
Talk about our problems	24/30	2/2	1.89
Hug/embrace each other	13/18	8/7	8.22
Talk about girls/boys we like romantically	16/18	6/6	1.26
Tease each other	23 ^a /12 ^b	7/15	16.86**
Tell each other secrets	15/34	12 ^c /3 ^d	11.95*
Gossip/talk about other people	13/20	15 ^c /5 ^d	12.03*
Collect firewood together	12 ^b /52 ^a	34 ^c /1 ^d	56.81***

Notes. ^a Adjusted standardized residual between observed versus expected frequencies was greater than 2.58, indicating significantly more participants than expected by chance engaged with same-gender peers for the activity (expected frequencies were not shown).

^b Adjusted standardized residual between observed versus expected frequencies was less than -2.58, indicating significantly fewer

participants than expected by chance engaged with same-gender peers for the activity (expected frequencies were not shown).

^c Adjusted standardized residual between observed versus expected frequencies was greater than 2.58, indicating significantly more participants than expected by chance engaged with other-gender peers for the activity (expected frequencies were not shown).

^d Adjusted standardized residuals between observed versus expected frequencies were less than -2.58, indicating significantly fewer participants than expected by chance engaged with the other-gender peers for the activity (expected frequencies were not shown).

* $p < .05$, ** $p < .01$, *** $p < .001$.

Unproofed draft

Table 4

Open-ended Activity Themes and Gender Composition of Friends

Activities with Boys	Exemplars	Activities with Girls	Exemplars	Activities with Boys and Girls	Exemplars
<i>Play football^{*b}</i>	Playing football; play soccer	<i>Play netball</i>	Playing netball	<i>Play sports (not football) Touring</i>	Swimming; hand ball; volleyball Traveling; touring places; moving & seeing new things together
<i>Play sports (not football)^b</i>	Swimming; basketball; volleyball; running	<i>Romance/sex^b</i>	Have fun romantically; have sex; make love	<i>Read</i>	Read books; reading newspapers
<i>Entertainment^b</i>	Watch movies; we go & adventure the towns	<i>Help each other</i>	Help in their work; help them with questions; help when they are sick	<i>Attend school</i>	Going to school; have class interactions
<i>Attend school</i>	Go to school; we learn together	<i>Cook</i>	Cook food; cooking together	<i>Domestic chores[§]</i>	Clean, mop, sweep; collect firewood
<i>Tend to animals</i>	Grazing cattle; looking after animals; rear animals	<i>Wash[§]</i>	Washing clothes; washing cups & plates	<i>Work together</i>	We can work together; working together
<i>Bathe^b</i>	Bathing; bathe together	<i>Bathe[§]</i>	Bathing together	<i>Go to church/pray</i>	Praying together; go to church
<i>Sit or sleep</i>	Sleep together; stay together; we sit together	<i>Go to church/pray</i>	Praising God in church; we pray together	<i>Miscellaneous</i>	Sharing ideas; watching TV; chatting; helping others
<i>Miscellaneous</i>	Hunt ^b ; conversing; reading books; help in time of problems	<i>Miscellaneous</i>	Sit together; sleep together; share ideas; cleaning together		

Note. *Football in East Africa (and other parts of the world) refers to what is soccer in the U.S., Canada, Australia, South Africa, and Ireland. ^bOver 70% of participants giving this response were boys. [§]Over 70% of participants giving this response were girls.