



Original article

The Intersection of Power and Gender: Examining the Relationship of Empowerment and Gender-Unequal Norms Among Young Adolescents in Kinshasa, DRC



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A B S T R A C T

Purpose: To examine how perceptions of gender norms and expressions of empowerment are related among disadvantaged young adolescent boys and girls in Kinshasa, DRC.

Methods: We included data from 2,610 adolescent boys and girls between 10 and 14 years old. We examined correlations between three dimensions of perceived gender norms (a sexual double standard, gender stereotypical roles, and gender stereotypical traits) and two domains of agency (voice and decision-making), overall and by sex. We conducted sex-stratified simple and multivariable linear regression models to assess these associations, adjusting for sociodemographic factors. We also tested for differences in the association between gender norm perceptions and agency by sex.

Results: Correlations between gender norm perceptions and agency scores were low (under 0.15). Among boys, greater perception of a sexual double standard was related to more voice ($p=0.001$) and more decision-making power ($p=0.008$). Similar patterns were observed among girls for the relationship between sexual double standard and voice ($p\leq.001$), but not for decision-making. Increased perceptions of gender stereotypical traits were related to more voice among girls ($p\leq.001$), while conversely girls who perceived greater gender stereotypical roles had less decision-making power ($p=0.010$).

Conclusions: This study demonstrated that gender norm perceptions and agency are distinct but related constructs. Interventions aimed to promote gender equality must consider gender unequal norms and gender-unequal divisions of power as important but different dynamics.

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The years between 10–14 mark the onset of changes in young people's physical, psychological, and social development [1]. Early adolescence is a time when social expectations shift, as gendered messages intensify with the onset of puberty [2,3]. Unequal gender norms have been linked to adverse outcomes including poor sexual and reproductive health for women and girls [4], and substance use, injury, and premature death among men and boys [5]. However, there is limited evidence about these gendered processes during early adolescence and in low- and middle-income countries [6,7]. Owing to the significance of this period, increasing attention is being paid to understanding and intervening to promote adolescents' health and positive development [8,9].

Researchers and policymakers consider early adolescence to be an important window of opportunity to shift unequal gender norms, before the emergence of adverse health outcomes [8,10,11]. Initiatives that aim to advance gender equality have become increasingly prominent in research, policy, and program efforts, culminating in the adoption of the fifth Sustainable Development Goal (SDG 5) which focuses on achieving gender equality and promoting the empowerment of women and girls [12]. To achieve this goal, however, both gender norms and power structures that perpetrate gender inequalities must be understood and addressed. A number of theories have delineated the mechanisms through which the social hierarchy of the sexes is produced and reproduced over time and space. Notably, Connell's Theory of Gender and Power draws attention to three interrelated processes: the sexual division of labor, power, and cathexis [13]. The division of power encourages male authority, while cathexis prescribes socially acceptable roles, traits, and behaviors. Together, these structures define restrictive roles for both men and women and support traditional systems of power that prize masculinity.

While the gender system operates through a set of socially accepted rules (gender norms) that establish societal ideas for how men and women should behave, the system is produced and reproduced through social interactions. These dynamics determine and reinforce gender [14] and simultaneously reinforce and legitimize the social and institutional arrangements that are based on sex differences [15]. These broader institutional systems sustain gendered divisions by rewarding masculine traits and behaviors with increased power. These structures reinforce both the need to demonstrate these behaviors and that only certain individuals can and should be rewarded. These actions are unavoidable because they are enforced through individual, social, and institutional penalties.

While gender norms and power are intrinsically related, their conceptualization as a singular social phenomenon or separate interacting social forces is still a matter of debate. Several recent frameworks, including Heise et al.'s conceptualization of gender inequalities and health [16] and Pulerwitz et al.'s application of gender theories to adolescent health [17], argue for an interactive association between gender norms and power shaping health and well-being, one that also intersects with other social hierarchies. The distinction is not merely a matter of academic debate; there are programmatic implications to this question, as efforts that aim to promote women's and girls' empowerment without considering the societal norms dividing the roles, power, and resources on the basis of sex are unlikely to be successful. Further research is needed to empirically assess the relationship between gender norms and power,

especially in the formative years of early adolescence, when gender expectations intensify [3] and young people develop more agency [18], to better inform early investments towards SDG 5.

A number of challenges contribute to the current knowledge gap. First, the constructs of gender equality and empowerment are often ill-defined and used interchangeably, obscuring the potential distinction. Second, few measures of gender norms relate to the experiences of young adolescents, as most existing indicators pertain to intimate relationships or gender roles that are less salient in early adolescence [19]. Third, as in the case of gender norms, few studies have conceptualized and measured empowerment in the early stages of adolescence, when young people generally remain under the jurisdiction of adult caregivers [20].

Research examining gender socialization in early adolescence is limited, although a review of quantitative and qualitative research suggests that hegemonic forms of masculinities, promoting strength and sexual prowess over feminine vulnerabilities, are commonly expressed across different cultures. [6] Recent advancement in the measurement of gender norms in early adolescence, including testing of the Gender Equitable Men scale [21] and work from the Global Early Adolescent Study (GEAS) assessing gender norms regulating romantic relationships [19], provide new opportunities to study gender norms and well-being in this developmental stage. However, the multifaceted nature of gender norms as they apply to roles, traits, or relationships requires a careful examination of their relation to power [6,22].

Constructs of empowerment are equally complex, invoking interactional processes that take on multiple forms including the ability to influence others ("power over"), the ability to rally with others to exercise collective action ("power with"), or the ability to act according to one's goals and values ("power to") [23,24]. For the purposes of this analysis, we focus on "power to", conceptualized as individual agency. Prior literature has established and tested measures of agency across multiple domains. However, formative work by the GEAS demonstrated that many of the dimensions of agency relevant to adolescents differ from those generally applied to adults [20]. Informed by qualitative and quantitative research, the GEAS developed a multidimensional measure of agency, composed of three domains—voice, i.e. the ability to articulate opinions; decision-making, the ability to make daily decisions without adult supervision; and freedom of movement, the ability to move unrestricted within the environment. The GEAS multidimensional measure was validated with boys and girls, allowing an assessment of how agency differs between sexes. Further details on the development of the GEAS agency scale, including comparisons across sites, are available from Zimmerman (2019).

The present study explores the associations between expressions of power and perceptions of gender norms among 10- to 14-year-old boys and girls in Kinshasa, Democratic Republic of the Congo. Kinshasa's population is young, with a quarter aged 10–19 years, and over half of Kinshasa's inhabitants live in poverty. Gender inequalities are prevalent among older adolescents and adults in Kinshasa and across the DRC more generally; research has highlighted the pervasiveness of gender inequitable beliefs among adult men and women that value male dominance and female subservience within highly structured gender roles

[25–28]. Prior qualitative evidence from the GEAS shows that younger adolescents already perceive these unequal gender norms [29].

This study aims to explore the gender norm perceptions of young people in Kinshasa, DRC, and their “power to” voice opinions and make daily decisions, two dimensions of agency that are relevant in the developmental stage of adolescence. We also explore how gender norm perceptions about relationships, roles, and traits relate to voice and decision-making domains of agency, assessing these patterns among the overall sample and also examining differences by sex.

Methods

This study employs data from the GEAS, a longitudinal cross-cultural study that examines the role of gender expectations in shaping adolescent health. The GEAS is surveying young people beginning in early adolescence for up to 5 years in 11 disadvantaged urban settings on five continents. The Kinshasa GEAS is part of a broader quasi-experimental study that evaluates the impact of the Growing up GREAT! Intervention, a social norms intervention that aims to promote young people’s pubertal, sexual, and reproductive health knowledge, and address unequal gender norms [30]. Data collection was implemented by the Kinshasa School of Public Health. The study received ethical approval from the Kinshasa School of Public Health’s ethical review board and the Johns Hopkins Bloomberg School of Public Health Institutional Review Board.

Study sample

Adolescents were eligible to participate if they were: ages 10–14; living in one of two disadvantaged communes of Kinshasa; living with a parent or guardian; provided assent; and their caregiver provided consent. The study takes place in one of the most densely populated and impoverished areas in Kinshasa, where many inhabitants are migrants from rural areas of the DRC [31]. Both in-school and out-of-school adolescents were included due to the estimated 20% of primary school aged children who are out of school in the DRC, and sampling was stratified by school enrollment status (with approximately 75% in school and 25% out of school) [32]. In-school adolescents were selected via stratified sampling by commune and school type. In total, about 25 students were randomly selected from each of 80 schools, evenly distributed by sex and age. Out-of-school participants were randomly selected from each of the same two communes using a household listing.

In total, 2,819 adolescents were included in the sample. Ten adolescents with 15% or more survey data missing were excluded. Another 199 adolescents were excluded due to missing data from the voice (3.89%), decision-making (1.72%), or any of the gender norms scales (2.79%). For the remaining 2610 cases, we used k-Nearest Neighbor imputation to impute missing data (under 5%) for covariates. Data collection was conducted face-to-face in French or Lingala by trained interviewers in 2017.

Measures

The cross-cultural GEAS instruments were developed during a phase of mixed-methods formative research that explored young people’s perceptions about gender, milestone developmental events, and agency [33]. The instrument collects data on

young people’s gendered perceptions, their social contexts (family, peers and school), agency, and health behaviors and outcomes. Two agency scales developed from the GEAS survey were included: voice and decision-making [20]. The voice scale included seven items that assessed adolescents’ ability to articulate their needs and opinions. The decision-making scale included four items that evaluated young people’s influence over decisions in their daily lives. Each item was scored on a four-point Likert scale, from “never” to “often”. Scales were treated as continuous for analyses. Details about the two agency scales are presented in [Appendix Table 1](#).

Key predictors were three continuous scales assessing gender norm perceptions: sexual double standard (SDS), gender stereotypical roles (GSR), and gender stereotypical traits (GST). We refer to these measures as perceptions of gender norms, which reflects the ambiguity between awareness and personal endorsement, which we were unable to discern in the pilot study. The items evaluate adolescents’ assessments of typical gender traits, roles and relations among adolescents in their community (descriptive norms) as well as their perceptions of the differential social expectations related to boys versus girl behavior (injunctive norms). However, the distinction between injunctive norms and personal attitudes was difficult to capture among early adolescents. The SDS scale measures the extent to which adolescents perceive that boys socially benefit from romantic relationships while girls are socially ostracized for the same behavior [19]. The GSR assesses adolescents’ perceptions of normative patriarchal roles within the family, for example, that men are decision-makers and women care-takers. Meanwhile, the GST assesses the extent to which adolescents perceive gendered traits for males and females, such as dominance and subservience, respectively. Additional information on the development and psychometric properties of these scales is presented in Moreau et al. in this supplement [34] and more detail about each scale is outlined in [Appendix Table 1](#).

Following a socioecological model, covariates included variables at the individual, family, peer, and neighborhood levels [35]. We considered age (10–12 or 13–14 years old), and pubertal onset (yes or no). We also assessed school enrollment (out of school vs. in school). At the family level, we examined parental structure and a relative assets-based measure of household wealth in quintiles, as previous research in sub-Saharan Africa among adult women has demonstrated its relationship with empowerment and serves as a proxy for opportunity structures that may constrain or enhance empowerment [36,37]. At the peer level, variables measuring time spent with close friends and sex structure of peers were included.

Analysis

We first examined distributions of socioecological factors and tested for differences by sex using chi-squared and student’s t-tests. We assessed distributions and mean scores of agency and perceptions of gender norms scales. Differences in mean agency scores by ecological factors were tested at the individual, family, and peer levels.

We then examined correlations between each of the agency dimensions and the gender norms scales. Simple and multivariable linear regressions were conducted to assess the associations between each gender norm measure and each of the two agency outcomes. One set of models assessed the crude and adjusted relationships for all respondents. We also conducted

Table 1
Sample description

Characteristic		Overall	Boy	Girl	<i>p</i> -value ^a
		N			
		2610	1,289	1,321	
		% (n)			
Age	Continuous	11.9 ± 1.3	11.9 ± 1.3	11.8 ± 1.3	.094
	10–12	62.7% (1,636)	61.6% (794)	63.7% (842)	.260
	13–14	37.3% (974)	38.4% (495)	36.3% (479)	
Sex	Boy	49.4% (1,289)			
	Girl	50.6% (1,321)			
School enrollment status	Out of school	28.1% (734)	30.2% (389)	26.1% (345)	.021
	In school	71.9% (1,876)	69.8% (900)	73.9% (976)	
Pubertal onset	Prepubertal	37.7% (985)	48.9% (630)	26.9% (355)	<.001
	Pubertal	62.3% (1,625)	51.1% (659)	73.1% (966)	
Parental structure	Both parents	58.1% (1,507)	57.0% (731)	59.1% (776)	.444
	One parent only	27.6% (716)	28.7% (368)	26.5% (348)	
	Grandparents only	14.4% (373)	14.3% (184)	14.4% (189)	
Wealth index	Bottom 20th percentile	20.7% (541)	22.5% (290)	19.0% (251)	.027
	20 - 40th percentile	21.0% (547)	22.0% (284)	19.9% (263)	
	40 - 60th percentile	18.6% (486)	16.8% (216)	20.4% (270)	
	60 - 80th percentile	20.0% (522)	19.2% (247)	20.8% (275)	
	Top 20th percentile	19.7% (514)	19.6% (252)	19.8% (262)	
Weekly socialization with friends	No friends or no days	6.2% (162)	4.0% (51)	8.4% (111)	<.001
	1–2 days	22.4% (585)	17.8% (229)	26.9% (356)	
	3 or more days	71.4% (1,863)	78.3% (1,009)	64.7% (854)	
Friend sex structure	No friends	4.3% (113)	3.2% (41)	5.5% (72)	<.001
	Same-sex friends only	54.9% (1,433)	52.5% (677)	57.2% (756)	
	Any opposite-sex friends	40.8% (1,064)	44.3% (571)	37.3% (493)	

^a Bolded values indicate statistical significance at $p < .05$.

stratified analyses by sex and tested for differences in the relationship between gender norms and agency by sex. All adjusted models were assessed for multicollinearity; the variance inflation factors averaged between 3.96 and 9.78 for each model.

Results

A description of the sample is presented in Table 1. The mean age of respondents was 11.9 years old. More than half (58%) lived with both their parents, and 28% were out of school, with no significant sex differences. Girls were more likely to have experienced puberty onset than boys (73% vs. 51%). Boys were more likely than girls to indicate socializing with friends at least three days a week (78% vs. 65%) and having any opposite-sex friends (44% vs. 37%).

Table 2 shows the distribution of responses for the two agency scales. Overall, adolescents had moderate voice and decision-making power with mean scores of 2.35 for voice and 2.72 for decision (on a scale from one to 5). Boys' voice scores were higher than girls (2.41 vs. 2.30, $p < .001$). No sex difference was noted for decision-making scores.

Gender norm perceptions were highly unequal across the three domains of SDS, GST, and GSR, with scores ranging from 4.28 to 4.47 (range of 1–5). Girls were more likely than boys to perceive a sexual double standard (4.43 vs. 4.14, $p < .001$). Girls were also more likely to report a perceived difference in expected traits by sex (i.e. male strength and female vulnerability) (4.53 vs. 4.41, $p < .001$).

Correlations between adolescents' agency (voice and decision-making) and their perceptions of gender norms are shown in Table 3. Results indicate that overall correlations were low (coefficient values under .15), implying that gender norms and power (as proxied by agency) are distinct constructs.

Voice

Associations between voice and the three gender norm perception domains are presented in Table 4. Although correlations indicated distinctions between gender norms and agency, we observed significant associations between greater SDS and GST perceptions and increased voice scores ($p \leq .001$ and $p = .001$, respectively). In sex-stratified models, increased voice was related to greater SDS among both boys ($p < .001$) and girls ($p = .012$). A positive link was also found between more gender-unequal perceptions of stereotypical traits and voice among girls ($p = .010$), but not boys. When differences in these relationships by sex were tested with interaction terms, no significant differences between boys and girls were found.

Decision-making

Results of the associations between each of the three gender norm dimensions and decision-making are presented in Table 5. In the overall sample, greater SDS perceptions were related to

Table 2
Mean and standard deviations of agency and gender norms

	Overall	Boys	Girls	<i>p</i> -value ^a
	Mean (SD)			
Agency				
Voice (1–4)	2.35 (.70)	2.41 (.71)	2.30 (.69)	<.001
Decision (1–4)	2.72 (.88)	2.74 (.87)	2.71 (.89)	.348
Gender norms				
Sexual double standard (1–5)	4.28 (.88)	4.14 (.93)	4.43 (.81)	<.001
Gender stereotypical roles (1–5)	4.45 (.74)	4.47 (.75)	4.43 (.74)	.183
Gender stereotypical traits (1–5)	4.47 (.66)	4.41 (.70)	4.53 (.62)	<.001

^a Bolded values indicate statistical significance at $p < .05$.

Table 3
Correlations between agency and gender norms

	Voice Rho	Decision-making
Overall		
Sexual double standard	.100	.072
Gender stereotypical traits	.075	.041
Gender stereotypical roles	.015	-.035
Boys		
Sexual double standard	.115	.074
Gender stereotypical traits	.073	.039
Gender stereotypical roles	-.009	.002
Girls		
Sexual double standard	.115	.079
Gender stereotypical traits	.093	.048
Gender stereotypical roles	.036	-.071

greater decision-making power ($p = .003$ in adjusted models). While greater perceptions of GST were linked to increased decision-making in unadjusted models ($p = .035$), this finding did not hold once adjusted for background characteristics.

Sex-stratified models revealed differences in the relationships between gender norm dimensions and decision-making (test of interaction $p = .041$). After adjustment, greater SDS perceptions were related to greater decision-making scores among boys ($p = .024$) but not girls ($p = .079$). While no relationship between unequal gender stereotypical roles and decision-making was found among boys, a negative association was found among girls ($p = .009$). In other words, less egalitarian views about gender roles in the family were associated with less decision-making power among girls.

Discussion

Our objective was to assess the relationship between perceptions of gender unequal norms and expressions of agency among adolescents ages 10–14 years in Kinshasa, DRC. Recognizing the multifaceted nature of both gender norms and expressions of agency, we examined how three domains of gender norm perceptions—SDS, GST, and GSR—related to two aspects of agency—voice and decision-making.

We observed strong gender-unequal perceptions about relationships, traits, and roles in our sample, prizing sexual and romantic experience, strength, and dominance among boys and

reinforcing notions of vulnerability and subservience and social sanctions for engaging in romantic relations among girls. These patterns conform with previous research that indicates that by age 10, gender-unequal norms are widely understood and accepted and align with previous findings of gender unequal norms among adults in Kinshasa, DRC [2,25,26,38]. Recent research applying the Gender-Equitable Men scale to adolescents aged 10–14 years in Uganda also found that traditional gender norms were already pervasive among younger adolescents [21]. While there is limited information available on how gender norms evolve with time, preliminary findings from the longitudinal data from GEAS in Kinshasa published by Cislighi et al. in this supplement indicate that perceptions the sexual double standard seem to increase over time among adolescents who have not yet experienced puberty and stabilize thereafter, supporting the need to investigate gender norm perceptions at a young age to guide upstream interventions [39].

Additionally, the distribution of voice and decision-making scales shows moderate capacity of disadvantaged young adolescents in Kinshasa to be heard and make decisions. While we observed no significant sex differences in decision-making power, boys reported greater ability to voice their needs and be heard than girls. Research in older populations finds power imbalances that favor males throughout the life course [40,41], and our findings demonstrate that while imbalances may be smaller at younger ages, gendered differences in voice begin to emerge at an early age in this population.

These patterns in gender norm perceptions and agency are important to note, as a primary objective of our research was to assess how closely aligned the constructs of power and gender norms were in this population. In our study, dimensions of agency and perceived gender norms were not strongly correlated, with correlation coefficients smaller than $\pm .15$ across domains. These results underscore that agency and gender norms are distinct constructs. This finding provides quantitative evidence to support Connell's Theory of Gender and Power, wherein gendered divisions of power and social norms are considered distinct but interrelated phenomena, within the age group where intensified gendered expectations begin to be placed on young people [13].

Although the constructs of gender and power are not highly correlated, they are related. We found that adolescents who perceived greater gender inequity in relationships and, among girls, those who perceived greater inequity in gendered traits,

Table 4
Simple and multivariable linear regression models demonstrating associations between gender norms dimensions and voice

	Voice (1–4)	Unadjusted model			Adjusted model ^a			Sex x gender norms p -value for interaction ^b
		<i>b</i>	<i>p</i> -value	95% CI	<i>b</i>	<i>p</i> -value	95% CI	
Overall	Sexual double standard (1–5)	.080	<.001	(.05, .11)	.068	<.001	(.04, .10)	.713
	Gender stereotypical roles (1–5)	.014	.438	(-.02, .05)	.025	.160	(-.01, .06)	.250
	Gender stereotypical traits (1–5)	.080	<.001	(.04, .12)	.066	.001	(.03, .10)	.620
Boys	Sexual double standard	.088	<.001	(.05, .13)	.070	<.001	(.03, .11)	
	Gender stereotypical roles	-.008	.750	(-.06, .07)	.000	.991	(-.05, .05)	
	Gender stereotypical traits	.074	.009	(.02, .13)	.051	.064	(-.00, .11)	
Girls	Sexual double standard	.098	<.001	(.05, .14)	.057	.012	(.01, .10)	
	Gender stereotypical roles	.033	.194	(-.02, .08)	.047	.055	(-.00, .10)	
	Gender stereotypical traits	.103	<.001	(.04, .16)	.076	.010	(.02, .13)	

CI = confidence interval.

^a - Covariates: age, pubertal onset, wealth quintile, school enrollment status, parental structure, time spent with friends, and sex distribution of friends. Overall adjusted models also adjust for sex.

^b Bolded values indicate statistical significance at $p < .05$.

Table 5

Simple and multivariable linear regression models demonstrating associations between gender norms dimensions and decision

Decision (1-4)		Unadjusted model			Adjusted model ^a			Sex x gender norms p-value for interaction ^b
		b	p-value	95% CI	b	p-value	95% CI	
Overall	Sexual double standard (1-5)	.072	<.001	(.03, .11)	.059	.003	(.02, .10)	.950
	Gender stereotypical roles (1-5)	-.041	.076	(-.09, .00)	-.041	.074	(-.09, .00)	.041
	Gender stereotypical traits (1-5)	.055	.035	(.00, .11)	.039	.137	(-.01, .09)	.703
Boys	Sexual double standard	.069	.008	(.02, .12)	.059	.024	(.01, .11)	
	Gender stereotypical roles	.002	.946	(-.06, .07)	.000	.999	(-.06, .06)	
	Gender stereotypical traits	.048	.165	(-.02, .12)	.029	.412	(-.04, .10)	
Girls	Sexual double standard	.087	.004	(.03, .15)	.053	.079	(-.01, .11)	
	Gender stereotypical roles	-.086	.010	(-.15, -.02)	-.086	.009	(-.15, -.02)	
	Gender stereotypical traits	.069	.082	(-.01, .15)	.048	.218	(-.03, .12)	

CI = confidence interval.

^a - Covariates: age, pubertal onset, wealth quintile, school enrollment status, parental structure, time spent with friends, and sex distribution of friends. Overall adjusted models also adjust for sex.^b Bolded values indicate statistical significance at $p < .05$.

reported greater ability to voice their needs and opinions. The positive associations between perceiving greater inequities and reporting higher voice could indicate that boys and girls who have greater agency are also better able to identify socially dominant gender norms. Alternatively, adolescents who perceive more unequal norms may be more likely to ascribe to them and in turn be rewarded with greater agency. The latter corroborates the essential argument of West and Zimmerman; individuals who align with the appropriate gender expectations both support and solidify social institutions and are rewarded by those same institutions for behaving in the appropriate ways [14,42]. When addressing gender inequities, it is thus important to consider potential unexpected consequences that may arise, as young people who challenge prevailing gender notions could have less agency. Dynamics of unintended social and health consequences for those who disrupt existing gender narratives have been documented among adults [40,43].

Conversely, we found a negative relationship between perceptions of familial roles (GSR) for males and females and decision-making among girls, but not boys. This finding aligns with the notion that men, not women, should hold the decision-making role within the household which has been documented extensively among adults, including within Kinshasa [25,26,28]. That the ability to make decisions is lower among girls who specifically perceive greater power imbalance in household decisions roles between men and women aligns with Connell's Theory of Gender and Power, specifically the idea of cathexis, the social norms that constrain and enforce strict gender roles. As Connell theorizes, cathexis serves to constrain the expectations of women specifically to reinforce the dominance of men. Research has found that among adults, the application of Connell's theory is associated with poor health outcomes among women [44,45], particularly in relationship to increased risk of HIV acquisition. Although its application to adolescents is less common, our findings are preliminary evidence of its potential utility to future studies that seek to understand the impact of decision-making on health behavior.

The results of this article have implications for programs and policies. Similar levels of inequitable gender expectations and evidence that voice is higher among boys stresses the importance of integrated interventions that include boys during the early adolescent period. There is growing acknowledgement that engaging men and boys as active participants in programming rather than secondary audiences can lead to significant

improvements in health and well-being for both men and women [42,46]. By including boys at early ages, traditional narratives that prize dominance and power as critical components of masculinity may be disrupted before they are re-enacted in sexual relationships [46]. The Population Council's NISITU intervention in Kenya will provide important insights into the benefits of including boys rather than focusing on girls alone [47].

The finding that unequal gender norms and gendered differences in power are distinct among our sample has implications for policies and interventions that aim to promote gender equality, from SDG 5 down to the local level. In their report on norm change interventions to reduce child marriage in Ethiopia, Jones et al [48] highlight the need to address both girls' empowerment and the gender unequal ideas entrenched among not only adolescents but also among gatekeepers of these norms. In other words, programs focusing on either girls' empowerment or social norms to promote gender equality are unlikely to be successful if they do not address both at the same time. This notion aligns with Pulweritz and colleagues' argument for multilevel approaches to address multiple domains of gender norms simultaneously to achieve improved health [49]. The need for such an integrated approach is increasingly recognized, as recently highlighted in a systematic review of gender transformative programming among adolescents [50].

Taken together, the results of this article demonstrate that the relationships between gender norm perceptions and agency vary by domain among urban poor young adolescents in Kinshasa. These relations, examined in the context of poor urban settings in Kinshasa, may further complexify when considering other dimensions of social context, including wealth and social privilege. As Zimmerman et al note, the GEAS defines empowerment among adolescents as comprised both agency (which we have analyzed here) and opportunity structures, or the formal and informal institutions that govern societies in which adolescents live [20,51]. As the GEAS focuses on urban poor adolescents, comparison across a range of social statuses was not possible here. In addition, the informal institutions of social and cultural norms, and more formal institutions, such as legal structures, may inform both the daily decisions that are relevant across place (the items which constitute the decision-making scales), the ability to enact those decisions, and the formation of gender norms. The items

within the GEAS agency and gender norms scales were identified based on cross-cultural themes that emerged from qualitative research across 14 sites. By developing cross-cultural measures, however, we are unable to account for specific contextual influences that shape how agency and gender norms manifest. Additionally, the conceptual frameworks underpinning these measures originate largely from the work of Western theorists, and thus rely on conceptualizations of autonomy and gender which may not be universal in their application to diverse contexts [13,14,42]. Further refinement of scales to include contextually relevant items could improve both measurement and our understanding of the important role that culture plays when examined across different settings. As this research focused only one setting, the role of context could not be fully explored here, but future research that explores how these relationships differ across place will be critical.

Other limitations to this research include the cross-sectional nature of the study, which prevents determining causality between perceptions of gender norms and agency, of critical importance in designing effective interventions. Nonetheless, we believe that this work is valuable as it establishes both the separation of and potential relationships between two critical concepts that are increasingly targeted for program intervention in this population. While GEAS longitudinal data, currently being collected in Kinshasa, can provide greater insight into how gender norm perceptions and agency evolve over time, as well as the causal association between agency and perceived gender norms, identification of the complex relationships between these multiple dimensions is a critical first step to inform future research. Second, this study focuses on urban poor adolescents and is thus not representative of all youth in DRC, or even Kinshasa. The results presented here may differ in different populations or in settings with widely different contexts and norms, as mentioned previously, but nonetheless, we believe that these findings are important to consider given ongoing efforts to address gender inequity, both within Kinshasa and globally. Finally, for both measures of agency and gender norms, there may be some conceptual ambiguity about the concepts being measured. Although extensive qualitative and quantitative research informed the development of both measures, there are challenges inherent in measuring advanced concepts among adolescents aged 10–14 years. This was particularly apparent when attempting to differentiate between awareness of norms and personal attitudes in the development of the gender norms scales, as adolescents were not easily able to separate these two domains.

Despite these limitations, this study contributes to the literature by using validated measures of agency and gender norms perceptions that are tailored to this developmental stage, to assess concepts that are generally unstudied among very young adolescents. Additionally, the sample includes boys and girls between aged 10 and 14 years and in and out of school youth, representing a variety of experiences and developmental stages.

Our analysis has demonstrated that perceived gender norms and agency are conceptually distinct, but related constructs. While the perceptions of highly inequitable gender norms are ubiquitous among youth in Kinshasa, their relationship with empowerment is complex and deserving of critical reflection by researchers and programmers. As perceptions of sexual double standards were correlated with

greater voice and decision-making, careful attention should be paid to potential unexpected consequences of gender-transformative interventions. Ultimately, our results call for integrated approaches to concomitantly address gender inequities and agency to promote adolescent health and well-being.

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Supplementary Data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jadohealth.2021.03.031>.

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