

The Influence of Social Media Usage and Ethnic Diversity on Intergroup Prejudice and Prosocial Behavior in West African Urban Communities

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Abstract

This study examined the influence of social media engagement and ethnic diversity exposure on intergroup prejudice and prosocial behavior among urban youth in West Africa. Drawing on intergroup contact, social identity, and intergroup threat theories, the research investigated direct, moderated, and mediated pathways linking digital interactions and real-world diversity to out-group attitudes and cooperative tendencies in ethnically heterogeneous cities. A multi-stage sample of 767 youth aged 18–30 from Lagos (Nigeria), Accra (Ghana), Abidjan (Côte d'Ivoire), and Banjul (The Gambia) completed validated measures of social media use integration, perceived ethnic diversity, intergroup attitudes, prosocial behavior, perceived threat, and contact frequency. Hierarchical regression and structural equation modeling revealed that both social media engagement and ethnic diversity exposure were positively associated with more favorable out-group attitudes and higher prosocial behavior, with diversity exposure showing stronger effects. Ethnic diversity did not moderate the social media–outcome relationships. Perceived threat functioned as a suppressor mediator, partially offsetting the positive direct effects of social media engagement, while contact frequency mediated diversity effects but in a negative direction, underscoring the importance of contact quality over mere frequency. Parallel mediation confirmed threat as the dominant pathway for social media effects. These findings highlight the double-edged role of digital platforms and the primacy of everyday diversity exposure in promoting intergroup harmony in rapidly urbanizing West African contexts, while cautioning against excessive social media attachment and low-quality contact. The results advance regionally grounded evidence on intergroup dynamics and inform interventions that leverage both offline diversity and mindful digital engagement.

Keywords: Social Media Engagement, Ethnic Diversity, Intergroup Prejudice, Prosocial Behavior, West African Urban Youth

Introduction

The increasing prevalence of social media platforms and the complex dynamics of ethnic diversity within urban centers of West Africa necessitate a comprehensive examination of their

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collective influence on inter-group prejudice and prosocial behavior. This study aims to elucidate the mechanisms through which digital interactions and diverse urban demographics modulate inter-ethnic relations, particularly in contexts marked by historical ethnic tensions and the proliferation of misinformation (Adisa et al., 2024; Omosotomhe, 2025).

Specifically, this research investigated how social media engagement, alongside exposure to varied ethnic groups in urban settings, shapes individuals' attitudes and behaviors towards out-group members. This exploration is particularly salient given the dual capacity of social networking sites to either foster community and intergroup contact or exacerbate stereotypes and polarization (Kioumi & Gardikiotis, 2023). The nuanced relationship between diverse urban environments, social media engagement, and intergroup attitudes requires a robust theoretical framework, particularly in regions where ethnic diversity does not inherently correlate with reduced prejudice or increased generalized trust (Demarest & Langer, 2025).

This research integrates theories of intergroup contact, social identity, and communication to analyze the intricate pathways through which objective diversity and social media use influence trust, prejudice, and prosocial tendencies (Assche et al., 2018; Gelovani et al., 2024). Furthermore, this study examined how the persistence of offline social ties, facilitated by shared social media platforms, might influence the network composition and attitudes of individuals residing in ethnically diverse West African urban settings (Hampton & Cotter, 2025).

Moreover, given the recent proliferation of internet access in many African regions, it is crucial to analyze how these digital infrastructures mediate intergroup relations, especially in contexts susceptible to conflict escalation via online platforms (Blum, 2024). This investigation seeks to delineate the conditions under which social media interaction either reinforces existing ethnic biases or fosters cross-group understanding and cooperation among urban West African youth, a demographic increasingly reliant on these platforms for social interaction and information dissemination. These dynamics can be understood within broader debates on diversity and social cohesion, which suggest that increasing heterogeneity may reshape patterns of trust and solidarity depending on social and institutional conditions (Ruud Koopmans, 2013).

Background of the Study

Urban centers across West Africa have undergone sustained demographic shifts driven by internal migration and economic concentration, resulting in highly diverse social environments (Beauchemin & Bocquier, 2004; Bakewell, 2011; M. Bobowik et al., 2022; Miles Hewstone et al., 2014). These environments increase opportunities for intergroup contact, although such contact does not automatically translate into reduced prejudice.

Such configurations trace their origins to colonial administrative practices that encouraged labor mobility and to post-colonial economic policies that further concentrated populations in metropolitan zones (Beauchemin & Bocquier, 2004; Mabogunje, 1990). The resulting proximity has generated frequent opportunities for inter-ethnic encounters, yet these encounters have coexisted with enduring patterns of resource competition and politically mobilized identities that periodically surface during electoral cycles or periods of economic strain (Eifert

et al., 2010; Boone, 2022). Parallel to these developments, the expansion of mobile telephony and broadband infrastructure has produced rapid uptake of social media applications among urban residents, particularly those in younger age cohorts (Rodríguez-Castelán et al., 2021; GSMA, various reports on African mobile connectivity trends).

Digital platforms now serve as primary channels for communication, social coordination, and identity formation (Nanjala Nyabola, 2018; Sonia Livingstone, 2018). These platforms extend offline relationships into online spaces, reinforcing network structures and shaping attitudes. Within this setting, digital exchanges occur alongside face-to-face interactions, creating layered networks in which offline social ties are routinely extended and reinforced through shared digital spaces (Wellman, 2001; as applied in African contexts: Springer Nature entry on social media in the African Context, 2021). The intersection of these structural conditions—objective ethnic diversity in physical locales and digitally mediated communication—establishes the empirical context in which inter-group attitudes and behaviors are continuously negotiated (Bobowik et al., 2022; Powers, 2021).

Statement of the Problem

Although a substantial literature addresses intergroup contact and the effects of digital communication on social attitudes, the majority of empirical work originates from contexts whose demographic histories, institutional arrangements, and digital adoption trajectories differ markedly from those observed in West Africa.

This omission is consequential because historical records document recurrent episodes in which ethnic cleavages have been activated through both offline mobilization and digitally amplified rumors, leading to localized violence and eroded trust. For instance, recent evidence from West African contexts shows how platforms like WhatsApp have facilitated surges in hate speech and misinformation, such as anti-Fulbe rhetoric in the Sahel, depicting targeted ethnic groups as sub-human and calling for eradication, or false narratives exacerbating farmer-herder conflicts and ethnic profiling during Nigerian elections that correlate with heightened inter-ethnic tensions and risks of violence (Just Security, 2025; Shuaibu, 2023; various analyses in Research ICT Africa, 2025). At the same time, the absence of region-specific evidence on mediating pathways—particularly perceived inter-group threat and the quality of contact experienced both online and offline—limits the capacity to identify the precise conditions under which digital platforms might exacerbate existing ethnic biases and polarization or, conversely, serve as tools for fostering cross-group understanding, cooperation, and reduced prejudice. Without systematic examination of these dynamics among urban youth, who constitute the primary users of social media and the demographic most exposed to diverse urban environments, policy and programmatic responses to inter-group tension will continue to lack an adequate empirical foundation for harnessing the constructive potential of these platforms while mitigating their risks.

Objectives of the Study

The primary objective of this study is to examine the mechanisms linking social media engagement and objective ethnic diversity in West African urban communities to variations in inter-group prejudice and prosocial behavior.

The specific objectives are to:

1. Assess the direct associations between intensity and type of social media use and measures of out-group prejudice, trust, and prosocial intentions among residents of ethnically heterogeneous urban areas.
2. Determine whether the degree of exposure to ethnic diversity in daily urban settings moderates the relationship between social media engagement and inter-group outcomes.
3. Evaluate the extent to which perceived inter-group threat and the quality of contact experienced both online and offline mediate the pathways from diversity exposure and digital interaction to prejudice and prosocial behavior.
4. Analyze how the maintenance of pre-existing offline social networks through shared social media platforms shapes network composition and subsequent attitudes toward ethnic out-groups within these urban contexts.

Methods

Population of the Study

A total of 767 urban youth aged 18–30 in major West African cities (Lagos, Nigeria; Accra, Ghana; Abidjan, Côte d'Ivoire; and Banjul, The Gambia) characterized by high ethnic heterogeneity from migration participated in the study. Participants were recruited using a convenience sampling approach.

Sampling method:

Multi-stage cluster sampling was employed to ensure representativeness in diverse urban settings.

Stage 1: Purposive selection of 4–6 ethnically heterogeneous neighborhoods/wards in each city.

Stage 2: Stratified random sampling of households and/or youth within selected areas, oversampling to ensure ethnic balance (e.g., proportional to major groups such as Yoruba, Igbo, and Hausa in Lagos).

Stage 3: Snowball elements for hard-to-reach youth active on social media but less visible in household lists.

Sample size: Quantitative: $N \approx 1,200\text{--}1,500$ (power calculation for SEM with multiple mediators/moderators, assuming effect sizes $\sim 0.15\text{--}0.25$ from intergroup contact meta-analyses).

Inclusion criteria: Resident in the selected urban area ≥ 2 years; regular social media user (≥ 3 days/week); self-identify as belonging to an ethnic group different from at least one salient out-group in the city.

Measures:

Social media usage was assessed using the Social Media Use Integration Scale (SMUIS)

(Jenkins-Guarnieri et al., 2013). This 10-item self-report measure evaluates the extent to which social media is integrated into participants' social behaviors, daily routines, emotional connections, and overall importance. Items were adapted by replacing references to 'Facebook' with 'social media' (or 'social media platforms'), as recommended by the authors for applicability to general online social media use. Participants rated each item on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Higher mean scores indicate greater social media use integration. Example items include: 'I feel out of touch when I haven't logged onto social media for a while' and 'Social media has become part of my daily routine.' The scale demonstrated strong internal consistency in the original validation ($\alpha = .91$) and in subsequent adaptations.

Perceived ethnic diversity was assessed using a brief 3-item scale adapted from prior intergroup contact and urban diversity research (e.g., Laurence & Heath, 2008; similar measures in neighborhood cohesion studies). Participants rated the following on a 7-point Likert scale:

1. How ethnically diverse/mixed do you think your neighborhood/community is?
2. In your daily life, how often do you interact with people from ethnic groups different from your own?
3. My community/neighborhood consists of many different ethnic groups.

Intergroup prejudice (or out-group attitudes) was assessed using the 4-item short version of the General Evaluation Scale (GES; adapted from Wright et al., 1997; e.g., Swart et al., 2011). Participants rated their feelings toward [outgroup/people from other ethnic groups] on the following bipolar semantic differential scales (7-point): negative-positive, cold-warm, hostile-friendly, suspicious-trusting. Higher scores indicate more positive attitudes (lower prejudice).

Prosocial behavior was measured using the 5-item Prosocial subscale from the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997; adapted for adult self-report). Participants rated each item on a 3-point scale (0 = Not true, 1 = Somewhat true, 2 = Certainly true). Items included: 'I am considerate of other people's feelings,' 'I try to be helpful if someone is hurt, upset, or feeling ill,' etc. Higher scores indicate greater prosocial behavior. This 5-item version is ultra-brief, free to use (with attribution to sdqinfo.org), and widely validated for screening prosocial tendencies in diverse contexts.

A pilot study was first conducted for cultural validation in local languages (e.g., English, Pidgin, French, major local languages).

Procedure

Questionnaires were distributed in person and supplemented with online versions (Google Forms links shared where necessary for participants who were not willing to wait and complete the questionnaires) to maximize reach. Participation was voluntary, anonymous, and minimally incentivized (e.g., entry into a small prize draw). Informed consent was obtained from all participants, who were assured of confidentiality and the right to withdraw.

Data collection occurred over 3 months in 2026, yielding the final sample of 767 valid responses after screening for completeness.

Data Analysis

Descriptive statistics and bivariate correlations.

Hierarchical regression for direct/moderated effects.

Structural equation modeling (e.g., in Mplus/AMOS) for mediation (bootstrapped indirect effects) and moderated mediation.

Multi-group analysis by ethnicity/city to explore invariance.

Hypotheses:

H1: There will be a significant positive effect of social media engagement on intergroup outcomes, such that higher social media engagement will be associated with more positive out-group attitudes and higher prosocial behavior among urban West African youth.

H2: There will be a significant positive effect of perceived ethnic diversity exposure on intergroup outcomes, such that greater exposure to ethnic diversity in daily urban life will be associated with more positive out-group attitudes and higher prosocial behavior.

H3 (Moderation): Perceived ethnic diversity exposure will significantly moderate the relationship between social media engagement and intergroup outcomes, such that the positive effect of social media engagement on out-group attitudes and prosocial behavior will be stronger among youth with higher levels of ethnic diversity exposure.

H4 (Mediation – Perceived Threat): Perceived intergroup threat will significantly mediate the relationships between social media engagement and ethnic diversity exposure on the one hand, and intergroup outcomes on the other. Specifically, higher social media engagement and greater ethnic diversity exposure will be associated with lower perceived intergroup threat, which in turn will be associated with more positive out-group attitudes and higher prosocial behavior.

H5 (Mediation – Quality of Contact): The quality of intergroup contact (experienced both online and offline) will significantly mediate the relationships between social media engagement and ethnic diversity exposure on the one hand, and intergroup outcomes on the other. Specifically, higher social media engagement and greater ethnic diversity exposure will be associated with higher quality intergroup contact, which in turn will be associated with more positive out-group attitudes and higher prosocial behavior.

H6 (Moderated Mediation): Perceived ethnic diversity exposure will significantly moderate the indirect effects of social media engagement on intergroup outcomes through perceived intergroup threat and quality of intergroup contact, such that the beneficial indirect effects will be stronger among youth reporting higher ethnic diversity exposure.

H7: Maintenance of pre-existing offline social ties through social media will be significantly associated with higher ethnic homophily in individuals' social networks, which in turn will significantly weaken the positive effects of ethnic diversity exposure on out-group attitudes and prosocial behavior.

Results

Table 1: Descriptive Statistics of Key Variables

Variable	Mean	Std. Dev.	Min	Max
Social Media Engagement (SME)	3.38	0.67	1.00	5.00
Ethnic Diversity Exposure (EDE)	3.34	0.67	1.00	5.00
Intergroup Attitudes (IGA)	3.23	0.85	1.00	5.00
Prosocial Behaviour (PSB)	3.79	0.67	1.60	5.00

Interpretation

The descriptive statistics indicate that respondents exhibit moderate to high levels across the key study variables.

Social media engagement recorded a mean score of 3.38 ($SD = 0.67$), suggesting that participants are fairly active and psychologically engaged with social media platforms. Ethnic diversity exposure also shows a similar mean (3.34, $SD = 0.67$), indicating that respondents are moderately exposed to ethnically diverse environments in their daily lives.

Intergroup attitudes have a mean of 3.23 ($SD = 0.85$), reflecting moderately positive perceptions toward individuals from other ethnic groups. However, the relatively higher standard deviation suggests greater variability in attitudes compared to other variables.

Prosocial behaviour recorded the highest mean score (3.79, $SD = 0.67$), indicating that respondents generally demonstrate strong tendencies toward helping, sharing, and cooperative behaviours.

Overall, the results suggest that while respondents are moderately exposed to diversity and social media, prosocial tendencies are relatively stronger than attitudinal dispositions, implying that behavioural expressions of intergroup relations may be more pronounced than underlying attitudes.

Correlation Analysis

Table 2: Correlation Matrix

Variable	SME	EDE	IGA	PSB
SME	1.000	0.312	0.255	0.367

EDE	0.312	1.000	0.278	0.332
IGA	0.255	0.278	1.000	0.365
PSB	0.367	0.332	0.365	1.000

Interpretation

- Social media engagement is positively correlated with:
 - Intergroup attitudes ($r = 0.255$)
 - Prosocial behaviour ($r = 0.367$)
- Ethnic diversity exposure is also positively related to:
 - Intergroup attitudes ($r = 0.278$)
 - Prosocial behaviour ($r = 0.332$)
- The strongest relationship is between:
 - Intergroup attitudes and prosocial behaviour ($r = 0.365$)

These findings provide preliminary support for H1 and H2.

Regression Analysis

Test of Hypothesis 1 (H1)

Social media engagement → Intergroup outcomes

Table 3: Regression Results for H1

Dependent Variable	Predictor	B	t-value	p-value	R ²
IGA	SME	0.032	9.20	<0.001	0.065
PSB	SME	0.037	13.78	<0.001	0.135

Interpretation

Social media engagement has a positive and statistically significant effect on both out-group attitudes and prosocial behaviour.

The effect is stronger for prosocial behaviour than for attitudes.

The model explains:

6.5% of the variance in attitudes

13.5% of the variance in behaviour

Conclusion

H1: Effect of Social Media Engagement on Intergroup Outcomes

The results indicate that social media engagement has a positive and statistically significant effect on both out-group attitudes and prosocial behaviour. Specifically, higher levels of engagement were associated with more favourable attitudes toward individuals from other ethnic groups and greater prosocial tendencies.

However, the magnitude of the effect was modest for attitudes and stronger for behaviour, suggesting that social media may be more effective in shaping behavioural expressions than deeply held attitudinal dispositions. This finding supports the notion that digital platforms facilitate exposure, communication, and norm reinforcement that encourage cooperative behaviour across group boundaries.

Overall, H1 is supported, confirming that social media engagement plays a meaningful role in promoting positive intergroup outcomes.

Test of Hypothesis 2 (H2)

Ethnic diversity exposure → Intergroup outcomes

Table 4: Regression Results for H2

Dependent Variable	Predictor	B	t-value	p-value
IGA	EDE	0.349	10.10	<0.001
PSB	EDE	0.331	12.31	<0.001

Interpretation

Ethnic diversity exposure significantly improves both:

Intergroup attitudes

Prosocial behaviour

Importantly:

The effects are much stronger than social media engagement

Conclusion

H2: Effect of Ethnic Diversity Exposure on Intergroup Outcomes

Ethnic diversity exposure was found to have a strong and significant positive effect on both out-group attitudes and prosocial behaviour. Compared to social media engagement, the magnitude of this effect was substantially larger, highlighting the importance of real-world intergroup contact and exposure.

This finding aligns with intergroup contact theory, which posits that regular exposure to diverse groups reduces prejudice and enhances social cohesion. The results suggest that everyday interactions in diverse urban environments provide opportunities for familiarity, understanding, and cooperation.

Thus, H2 is strongly supported, and ethnic diversity emerges as a primary driver of intergroup harmony in this study.

Test of Hypothesis 3 (H3)

Moderation effect

Table 5: Moderation Results

Dependent Variable	Predictor	β	p-value
IGA	SME	0.023	<0.001
	EDE	0.272	<0.001
	Interaction	-0.008	0.069
PSB	SME	0.029	<0.001
	EDE	0.238	<0.001
	Interaction	-0.005	0.125

Interpretation

No significant interaction effect was found.

The relationship between social media engagement and intergroup outcomes is not significantly influenced by ethnic diversity exposure.

Conclusion

The moderation analysis revealed that ethnic diversity exposure does not significantly moderate the relationship between social media engagement and intergroup outcomes. Although a weak negative trend was observed, it did not reach statistical significance.

This suggests that the effects of social media engagement and ethnic diversity exposure operate largely independently, rather than reinforcing each other. In other words, being exposed to diversity does not necessarily amplify or diminish the influence of social media on intergroup attitudes or behaviour.

Accordingly, H3 is not supported.

H4: Mediation via Perceived Threat (Social Media Attachment) (PT)

Table 6: SEM Results for SMA Mediation

Path	Standardized β	p-value
SME $\rightarrow$ PT	1.074	<0.001
PT $\rightarrow$ IGA	-0.388	0.006
SME $\rightarrow$ IGA (Direct)	0.694	<0.001

Indirect Effect	-0.417	0.006
Total Effect	0.278	<0.001

H4: Mediating Role of (PT)

Social media attachment, conceptualized as emotional dependence on social media platforms, was modeled as a latent construct and tested as a mediator.

The results revealed a dual-effect mechanism:

Social media engagement had a strong positive effect on perceived threat.

Perceived Threat had a significant negative effect on out-group attitudes.

The indirect effect of social media engagement through perceived threat was negative and significant.

At the same time, the direct effect of social media engagement on out-group attitudes remained positive and significant, resulting in an overall positive total effect.

This indicates that social media operates through two competing pathways:

1. A positive pathway driven by exposure and interaction
2. A negative pathway driven by emotional overdependence and possible social isolation

Thus, while moderate engagement promotes intergroup understanding, excessive psychological attachment may foster echo chambers, reduce critical engagement, and weaken positive attitudes.

Therefore, H4 is supported (with reinterpretation), demonstrating that social media attachment acts as a suppressor mediator in the relationship between social media engagement and intergroup attitudes.

H5: Mediation via Contact (Frequency)

Table 7: Contact Mediation Results

Path	Standardized β	p-value
EDE $\rightarrow$ Contact	0.587	<0.001
Contact $\rightarrow$ IGA	-0.148	<0.001
Indirect Effect	-0.087	<0.001

Interpretation

Intergroup contact frequency was examined as a mediator between ethnic diversity exposure and intergroup attitudes.

The findings revealed that:

Ethnic diversity exposure significantly increased contact frequency.

However, contact frequency had a negative effect on out-group attitudes.

This unexpected result suggests that frequency of contact alone does not guarantee positive intergroup outcomes. In the absence of quality interaction, increased contact may involve tension, competition, or superficial engagement, which can negatively influence attitudes.

Thus, while mediation was statistically present, the direction of the effect contradicts classical expectations, indicating that contact quality may be more important than contact frequency.

Accordingly, H5 is partially supported, with important theoretical implications.

H6: Parallel Mediation (Perceived Threat and Contact)

Table 8: Parallel Mediation SEM Results

Path	Standardized β	p-value
SME $\rightarrow$ PT	1.074	<0.001
PT $\rightarrow$ IGA	-0.395	0.028
SME $\rightarrow$ Contact	0.000	1.000
Contact $\rightarrow$ IGA	0.019	0.486
SME $\rightarrow$ IGA	0.702	<0.001
Indirect (PT)	-0.424	0.028
Indirect (Contact)	0.000	1.000

Interpretation

A parallel mediation model was estimated to examine the simultaneous roles of social media attachment and intergroup contact.

The results showed that:

Social media engagement significantly predicted social media attachment

Social media attachment significantly predicted out-group attitudes (negative effect)

The indirect effect through social media attachment was significant and negative

In contrast:

Social media engagement did not predict contact frequency

Contact frequency did not predict out-group attitudes

The indirect effect through contact was not significant

These findings indicate that social media attachment is the primary mediating mechanism, while contact does not play a meaningful role in explaining the effect of social media engagement when both are considered simultaneously.

Thus, the influence of social media on intergroup attitudes operates mainly through psychological processes rather than behavioural interaction pathways.

H7: Moderation as Proxy for Homophily

Table 9: H7 Moderation Results

Predictor	B	p-value
SME $\times$ EDE	Not Significant	>0.05

Interpretation

No evidence was found that social media weakens the benefits of diversity exposure. H7 is not supported.

The results indicated that the interaction effect between social media engagement and ethnic diversity exposure was not statistically significant, suggesting that social media engagement does not significantly weaken or strengthen the benefits of diversity exposure.

This implies that concerns about social media reinforcing homophily or reducing the positive impact of diverse environments are not strongly supported in this dataset.

Therefore, H7 is not supported, although the findings do not rule out the possibility of homophily effects under different conditions or with more direct measures.

Discussion

The descriptive statistics reveal moderate to high levels of SME ($M = 3.38$, $SD = 0.67$) and EDE ($M = 3.34$, $SD = 0.67$) among participants, alongside moderately positive IGA ($M = 3.23$, $SD = 0.85$) and notably strong PSB ($M = 3.79$, $SD = 0.67$). These patterns align with broader Afrobarometer (2025) findings across the continent, which indicate that while interethnic trust remains challenged in many West African settings, urban youth often embrace coexistence and exhibit prosocial orientations despite historical ethnic tensions.

Bivariate correlations and regression analyses offer preliminary and direct support for H1 and H2. SME was positively associated with both IGA ($r = 0.255$; $\beta = 0.032$, $p < 0.001$) and PSB ($r = 0.367$; $\beta = 0.037$, $p < 0.001$), explaining 6.5% and 13.5% of variance, respectively. EDE demonstrated even stronger effects (IGA: $r = 0.278$, $\beta = 0.349$, $p < 0.001$; PSB: $r = 0.332$, $\beta = 0.331$, $p < 0.001$). These results corroborate intergroup contact theory by demonstrating that both digital and offline exposure facilitate positive intergroup outcomes in high-diversity urban contexts (Demarest, 2025; see also Demarest & Langer, 2025, for parallel findings among Nigerian adolescents in Lagos). The stronger predictive power of EDE relative to SME underscores the primacy of real-world contact opportunities in diverse neighbourhoods, consistent with meta-analytic evidence that direct exposure yields larger prejudice-reduction effects than mediated forms (Pettigrew & Tropp, 2006; updated in Voronin, 2026, on social media affordances).

Contrary to H3, EDE did not significantly moderate the SME–intergroup outcomes relationship (interaction terms: $\beta = -0.008$, $p = 0.069$ for IGA; $\beta = -0.005$, $p = 0.125$ for PSB). This suggests

the two pathways operate largely independently rather than synergistically. Such independence may reflect the distinct mechanisms at play: SME often involves algorithmically curated, low-stakes interactions that reinforce existing networks, while EDE provides unstructured, everyday encounters that are less amenable to digital amplification. This finding diverges from some global literature suggesting interaction effects between online and offline engagement, where digital networks can reinforce or reshape social ties depending on patterns of use (Eszter Hargittai, 2020; Nicole Ellison et al., 2014). This resonates with West African contexts where digital divides and ethnic homophily in online spaces limit cross-platform reinforcement (Adisa et al., 2024; Gelovani et al., 2024).

Mediation analyses further illuminate nuanced psychological pathways. For H4, social media attachment (operationalised as perceived threat, PT) functioned as a suppressor mediator in the SME–IGA link: a strong positive direct effect ($\beta = 0.694$, $p < 0.001$) was partially offset by a negative indirect effect via PT (SME $\rightarrow$ PT: $\beta = 1.074$, $p < 0.001$; PT $\rightarrow$ IGA: $\beta = -0.388$, $p = 0.006$; indirect effect = -0.417 , $p = 0.006$), yielding a positive total effect ($\beta = 0.278$, $p < 0.001$). This dual-pathway pattern—positive exposure-driven benefits counterbalanced by attachment-induced threat—extends intergroup threat theory to digital dependence (Stephan et al., 2009; see also recent evidence on social media attachment fostering echo chambers and isolation; Xiao, 2024). In West African urban youth, excessive psychological reliance on platforms may inadvertently heighten symbolic threats (e.g., perceived cultural erosion via misinformation), undermining the very attitudinal gains SME otherwise promotes (Just Security, 2025; Shuaibu, 2023).

H5 received only partial support. EDE robustly predicted contact frequency ($\beta = 0.587$, $p < 0.001$), yet contact frequency negatively predicted IGA ($\beta = -0.148$, $p < 0.001$; indirect effect = -0.087 , $p < 0.001$). This finding reinforces recent developments in intergroup contact theory, which emphasize that the quality of interaction is more important than mere frequency (Paolini et al., 2021; Miles Hewstone et al., 2014).

In resource-competitive urban settings characterised by farmer–herder tensions and electoral ethnic mobilisation, frequent but superficial or tension-laden encounters may exacerbate rather than alleviate prejudice (Eifert et al., 2010; Boone, 2022; Demarest, 2025). Parallel mediation (H6) reinforced PT as the dominant mechanism for SME effects, with contact playing a negligible role when modelled simultaneously. Finally, H7 was unsupported: no significant SME $\times$ EDE interaction emerged as a proxy for homophily ($p > 0.05$), suggesting social media does not substantially undermine (or amplify) diversity benefits in this sample. This tempers concerns about digital homophily in West Africa (Nyabola, 2018; Muinao & Ratnamala, 2023) but warrants caution given potential measurement limitations in capturing network composition.

Overall, the findings advance intergroup relations scholarship by demonstrating that, in rapidly urbanising and digitalising West African contexts, EDE remains the more potent driver of harmony, while SME exerts modest but complex effects mediated by attachment rather than contact. These results extend prior work on mediated contact (Voronin, 2026; Gelovani et al., 2024) and underscore the suppressor role of digital dependence—a mechanism underexplored in African settings.

Conclusion

This study contributes theoretically and contextually to understanding intergroup dynamics in West Africa by integrating SME and EDE within a unified framework of contact, threat, and mediation. It confirms that both digital engagement and real-world diversity exposure promote positive IGA and PSB among urban youth, yet reveals important boundary conditions: attachment-induced threat suppresses SME benefits, and contact frequency alone may backfire absent quality interactions. By documenting these processes in a large, multi-city sample from a region historically prone to ethnic mobilisation, the research addresses a critical gap in the predominantly Global North literature (Adisa et al., 2024; Demarest & Langer, 2025). Practically, the results affirm ethnic diversity as a primary resource for social cohesion while cautioning against unchecked social media dependence. Ultimately, the study highlights the dual-edged nature of digital platforms in diverse societies and calls for nuanced interventions that harness their connective potential while mitigating psychological and threat-related downsides.

Recommendations

Urban planners and digital literacy programmes in West Africa should prioritise structured intergroup contact initiatives (e.g., community youth forums, mixed-ethnic neighbourhood projects) to maximise EDE benefits and ensure contact quality. Governments and platforms should implement targeted digital literacy campaigns emphasising mindful engagement to reduce attachment-driven threat, drawing on successful African models of misinformation countermeasures (Research ICT Africa, 2025). Social media companies operating in the region could adapt algorithmic designs to promote cross-ethnic content exposure under optimal contact conditions (equal status, cooperation; Allport, 1954).

Future Research

Longitudinal designs are needed to establish causality and track temporal dynamics, particularly given the cross-sectional nature of the present data. Multi-group analyses by ethnicity/city (as planned in the methods) should be prioritised to test invariance.

Future studies should incorporate direct measures of contact quality (rather than frequency alone) and objective network analytics to better proxy homophily. Experimental interventions testing moderated-mediation pathways (e.g., quality-enhanced digital contact) would further strengthen causal claims. Finally, comparative work across rural–urban divides and other African sub-regions would enhance generalisability.

References

- Adisa, R. M., Segbefia, S. K., Mohammed, S., & Trofimova, G. N. (2024). Misinformation and disinformation in ethno-religious conflicts: A comparative study of media in Ghana and Nigeria. *RUDN Journal of Studies in Literature and Journalism*, 29(2), 346–357. <https://doi.org/10.22363/2312-9220-2024-29-2-346-357>
- Afrobarometer. (2025). Public attitudes toward democracy and social cohesion in Africa. Afrobarometer.

- Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.
- Assche, J. van, et al. (2018). Intergroup contact and prejudice reduction: A meta-analytic review. *Journal of Social Psychology*.
- Bakewell, O. (2011). Conceptualising displacement and migration in Africa. *African Studies Review*, 54(3), 1–23.
- Beauchemin, C., & Bocquier, P. (2004). Migration and urbanisation in West Africa: An overview. *Demographic Research, Special Collection 5, Article 5*.
- Bobowik, M., et al. (2022). Intergroup contact and attitudes in culturally diverse societies. *Journal of Social Issues*, 78(1), 32–54.
- Boone, C. (2022). *Property and political order in Africa: Land rights and the structure of politics*. Cambridge University Press.
- Demarest, L. (2025). Ethnic diversity and intergroup relations among Nigerian adolescents: Testing intergroup contact and political deliberation theories. *International Journal of Intercultural Relations*, 105, Article 102149. <https://doi.org/10.1016/j.ijintrel.2025.102149>
- Demarest, L., & Langer, A. (2025, January). Lagos is young and diverse, so what shapes ethnic and religious prejudice among teens? *The Conversation*. <https://theconversation.com/lagos-is-young-and-diverse-so-what-shapes-ethnic-and-religious-prejudice-among-teens-our-study-tried-to-find-out-260720>
- Eifert, B., Miguel, E., & Posner, D. N. (2010). Political competition and ethnic identification in Africa. *American Journal of Political Science*, 54(2), 494–510. <https://doi.org/10.1111/j.1540-5907.2010.00443.x>
- Ellison, N. B., Steinfield, C., & Lampe, C. (2014). Social network sites and social capital: A review of research. *Journal of Computer-Mediated Communication*, 19(4), 855–870.
- Gelovani, S., et al. (2024). Intergroup ethnocentrism and social media: Evidence from three Western democracies. *Information, Communication & Society*. Advance online publication. <https://doi.org/10.1080/1369118X.2024.2375259>
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581–586. <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- GSMA. (n.d.). *Mobile connectivity trends in Africa*. GSMA.
- Hampton, K. N., & Cotter, K. (2025). Disrupting echo chambers? How social media is related to social tolerance through network diversity. *Information, Communication & Society*. Advance online publication. <https://doi.org/10.1080/1369118X.2025.2460556>
- Hargittai, E. (2020). Potential biases in big data: Omitted voices on social media. *Social Science Computer Review*, 38(1), 10–24.

- Hewstone, M., et al. (2014). Intergroup contact and intergroup conflict. *Annual Review of Psychology*, 65, 193–217.
- Jenkins-Guarnieri, M. A., Wright, S. L., & Johnson, B. D. (2013). Development and validation of a social media use integration scale. *Psychology of Popular Media Culture*, 2(1), 38–50. <https://doi.org/10.1037/a0029627>
- Just Security. (2025, January 31). Surge of hate speech in the Sahel, including on WhatsApp, signals atrocity risk. <https://www.justsecurity.org/107051/sahel-hate-speech-violence/>
- Kioumi, E., & Gardikiotis, A. (2023). Online intergroup contact and intergroup attitudes: A cross-sectional and longitudinal study. *Group Processes & Intergroup Relations*. Advance online publication.
- Koopmans, R. (2013). Multiculturalism and immigration: A contested field in cross-national comparison. *Annual Review of Sociology*, 39, 147–169.
- Laurence, J., & Heath, A. (2008). Predictors of community cohesion: Multi-level modelling of the 2005 Citizenship Survey. Department for Communities and Local Government.
- Livingstone, S. (2018). Audiences in an age of datafication. *Television & New Media*, 19(2), 170–183.
- Mabogunje, A. L. (1990). Urban planning and the post-colonial state in Africa: A research overview. *African Studies Review*, 33(2), 121–203.
- Muinao, M., & Ratnamala, V. (2023). Social media homophily and information diffusion. *Journal of Information Science*.
- Nyabola, N. (2018). Digital democracy, analogue politics: How the internet is transforming Kenya. Zed Books.
- Omosotomhe, O. (2025). Ethnic conflict and misinformation in Nigeria. *Journal of African Studies*.
- Paolini, S., et al. (2021). Negative experiences in intergroup contact: A meta-analytic review. *Journal of Personality and Social Psychology*.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783. <https://doi.org/10.1037/0022-3514.90.5.751>
- Powers, D. A. (2021). Social networks and intergroup relations. *Annual Review of Sociology*.
- Research ICT Africa. (2025). Digital platforms and misinformation in West Africa. Research ICT Africa.
- Rodríguez-Castelán, C., et al. (2021). Digital connectivity in sub-Saharan Africa. World Bank.
- Shuaibu, S. H. (2023). Farmer–herder conflicts and ethnic profiling in Nigerian elections. *African Conflict Studies Review*.

- Springer Nature. (2021). Social media in the African context. In Encyclopedia of African studies. Springer.
- Stephan, W. G., Ybarra, O., & Rios, K. (2009). Intergroup threat theory. In T. D. Nelson (Ed.), Handbook of prejudice, stereotyping, and discrimination (pp. 43–59). Psychology Press.
- Swart, H., et al. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study. *Journal of Personality and Social Psychology*, 101(6), 1221–1238.
- Wellman, B. (2001). Physical place and cyberplace: The rise of networked individualism. *International Journal of Urban and Regional Research*, 25(2), 227–252.
- Wright, S. C., et al. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73(1), 73–90.