

The Emerald International Handbook of Technology-Facilitated Violence and Abuse

This page intentionally left blank

The Emerald International Handbook of Technology- Facilitated Violence and Abuse

COMPILED AND EDITED BY

JANE BAILEY

University of Ottawa, Canada

ASHER FLYNN

Monash University, Australia

NICOLA HENRY

RMIT University, Australia



United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2021

Editorial matter and selection © 2021, Jane Bailey, Asher Flynn and Nicola Henry.
Individual chapters © 2021 the authors.
Published by Emerald Publishing Limited



This work is licensed under a Creative Commons Attribution 4.0 License (CC BY 4.0).

Anyone may reproduce, distribute, translate and create derivative works of this book (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-83982-849-2 (Print)

ISBN: 978-1-83982-848-5 (Online)

ISBN: 978-1-83982-850-8 (Epub)



Open Access

The ebook edition of this title is Open Access and is freely available to read online.



ISOQAR
REGISTERED

Certificate Number 1985
ISO 14001

ISOQAR certified
Management System,
awarded to Emerald
for adherence to
Environmental
standard
ISO 14001:2004.



INVESTOR IN PEOPLE

Table of Contents

List of Figures and Tables	<i>xi</i>
About the Editors and Contributors	<i>xv</i>
Acknowledgments	<i>xxiii</i>
Technology-Facilitated Violence and Abuse: International Perspectives and Experiences	1
<i>Jane Bailey, Nicola Henry, and Asher Flynn</i>	
Section 1 TFVA Across a Spectrum of Behaviors	
Chapter 1 Introduction	21
<i>Jane Bailey</i>	
Chapter 2 Is it <i>Actually</i> Violence? Framing Technology-Facilitated Abuse as Violence	25
<i>Suzie Dunn</i>	
Chapter 3 “Not the Real World”: Exploring Experiences of Online Abuse, Digital Dualism, and Ontological Labor	47
<i>Chandell Gosse</i>	
Chapter 4 Polyvictimization in the Lives of North American Female University/College Students: The Contribution of Technology-Facilitated Abuse	65
<i>Walter S. DeKeseredy, Danielle M. Stoneberg, and Gabrielle L. Lory</i>	

Chapter 5 The Nature of Technology-Facilitated Violence and Abuse among Young Adults in Sub-Saharan Africa	83
<i>Olusesan Ayodeji Makinde, Emmanuel Olamijuwon, Nchelem Kokomma Ichehgo, Cheluchi Onyemelukwe, and Michael Gboyega Ilesanmi</i>	
Chapter 6 The Face of Technology-Facilitated Aggression in New Zealand: Exploring Adult Aggressors' Behaviors	103
<i>Edgar Pacheco and Neil Melhuish</i>	
Chapter 7 The Missing and Murdered Indigenous Women Crisis: Technological Dimensions	125
<i>Jane Bailey and Sara Shayan</i>	
Chapter 8 Attending to Difference in Indigenous People's Experiences of Cyberbullying: Toward a Research Agenda	145
<i>Bronwyn Carlson and Ryan Frazer</i>	
Section 2 Text-Based Harms	
Chapter 9 Introduction	167
<i>Nicola Henry</i>	
Chapter 10 "Feminism is Eating Itself": Women's Experiences and Perceptions of Lateral Violence Online	171
<i>Emma A. Jane</i>	
Chapter 11 Claiming Victimhood: Victims of the "Transgender Agenda"	189
<i>Ben Colliver</i>	
Chapter 12 Doxxing: A Scoping Review and Typology	205
<i>Briony Anderson and Mark A. Wood</i>	
Chapter 13 Creating the Other in Online Interaction: Othering Online Discourse Theory	227
<i>Elina Vaahensalo</i>	

**Chapter 14 Text-Based (Sexual) Abuse and Online Violence
Against Women: Toward Law Reform?** 247
Kim Barker and Olga Jurasz

Section 3 Image-Based Harms

Chapter 15 Introduction 267
Nicola Henry

**Chapter 16 Violence Trending: How Socially Transmitted
Content of Police Misconduct Impacts Reactions toward Police
Among American Youth** 271
Madeleine Novich and Alyssa Zduniak

**Chapter 17 Just Fantasy? Online Pornography’s Contribution to
Experiences of Harm** 289
Samantha Keene

**Chapter 18 Intimate Image Dissemination and Consent in a
Digital Age: Perspectives from the Front Line** 309
Olga Marques

Section 4 Dating Applications

Chapter 19 Introduction 331
Asher Flynn

**Chapter 20 Understanding Experiences of Sexual Harms
Facilitated through Dating and Hook Up Apps among Women
and Girls** 333
Elena Cama

**Chapter 21 “That’s Straight-Up Rape Culture”: Manifestations
of Rape Culture on Grindr** 351
Christopher Dietzel

**Chapter 22 Navigating Privacy on Gay-Oriented Mobile Dating
Applications** 369
Ari Ezra Waldman

**Section 5 Intimate Partner Violence and Digital
Coercive Control**

- Chapter 23 Introduction** 385
Jane Bailey
- Chapter 24 Digital Coercive Control and Spatiality: Rural,
Regional, and Remote Women’s Experience** 387
Bridget Harris and Delanie Woodlock
- Chapter 25 Technology-Facilitated Violence Against Women in
Singapore: Key Considerations** 407
Laura Vitis
- Chapter 26 Technology as Both a Facilitator of and Response to
Youth Intimate Partner Violence: Perspectives from Advocates in
the Global-South** 427
Gisella Lopes Gomes Pinto Ferreira
- Chapter 27 Technology-Facilitated Domestic Abuse and Culturally
and Linguistically Diverse Women in Victoria, Australia** 447
Yee Man Louie

Section 6 Legal Responses

- Chapter 28 Introduction** 471
Jane Bailey
- Chapter 29 Human Rights, Privacy Rights, and
Technology-Facilitated Violence** 475
Elizabeth Coombs
- Chapter 30 Combating Cyber Violence Against Women
and Girls: An Overview of the Legislative and Policy Reforms
in the Arab Region** 493
Sukaina Al-Nasrawi
- Chapter 31 Image-Based Sexual Abuse: A Comparative Analysis
of Criminal Law Approaches in Scotland and Malawi** 513
Seonaid Stevenson-McCabe and Sarai Chisala-Tempelhoff

**Chapter 32 Revenge Pornography and Rape Culture in Canada’s
Nonconsensual Distribution Case Law** 533
Moira Aikenhead

**Chapter 33 Reasonable Expectations of Privacy in an Era of Drones
and Deepfakes: Expanding the Supreme Court of Canada’s Decision
in *R v Jarvis*** 555
Kristen Thomasen and Suzie Dunn

**Chapter 34 Doxing and the Challenge to Legal Regulation:
When Personal Data Become a Weapon** 577
Anne Cheung

**Chapter 35 The Potential of Centralized and Statutorily
Empowered Bodies to Advance a Survivor-Centered Approach to
Technology-Facilitated Violence Against Women** 595
Pam Hrick

Section 7 Responses Beyond Law

Chapter 36 Introduction 619
Asher Flynn

**Chapter 37 Technology-Facilitated Violence Against Women and
Girls in Public and Private Spheres: Moving from Enemy to Ally** 623
Alison J. Marganski and Lisa A. Melander

**Chapter 38 As Technology Evolves, so Does Domestic Violence:
Modern-Day Tech Abuse and Possible Solutions** 643
Eva PenzeyMoog and Danielle C. Slakoff

**Chapter 39 Threat Modeling Intimate Partner Violence: Tech
Abuse as a Cybersecurity Challenge in the Internet of Things** 663
Julia Slupska and Leonie Maria Tanczer

**Chapter 40 Justice on the Digitized Field: Analyzing Online
Responses to Technology-Facilitated Informal Justice through
Social Network Analysis** 689
Ella Broadbent and Chrissy Thompson

Chapter 41 Bystander Apathy and Intervention in the Era of Social Media	711
<i>Robert D. Lytle, Tabrina M. Bratton, and Heather K. Hudson</i>	
Chapter 42 “I Need You All to Understand How Pervasive This Issue Is”: User Efforts to Regulate Child Sexual Offending on Social Media	729
<i>Michael Salter and Elly Hanson</i>	
Chapter 43 Governing Image-Based Sexual Abuse: Digital Platform Policies, Tools, and Practices	749
<i>Nicola Henry and Alice Witt</i>	
Chapter 44 Calling All Stakeholders: An Intersectoral Dialogue about Collaborating to End Tech-Facilitated Violence and Abuse	769
<i>Jane Bailey and Raine Liliefeldt</i>	
Chapter 45 Pandemics and Systemic Discrimination: Technology-Facilitated Violence and Abuse in an Era of COVID-19 and Antiracist Protest	787
<i>Jane Bailey, Asher Flynn, and Nicola Henry</i>	

List of Figures and Tables

Chapter 5

- Figure 5.1. Experiences of Various Dimensions of TFVA by Gender. 94

Chapter 12

- Figure 12.1. Combined Line/Bar Graph Showing the Number of Doxxing-Related Studies Published per Year between 2010–2019. 208

Chapter 13

- Figure 13.1. Attributes of Othering Online Discourse (OOD) Can Be Divided Based on How the Discourses Relate to the Topic and Imagined Audience of the Discussion or How the Discourses Appear to the Reader. 237
- Figure 13.2. The Orientations of Othering Online Discourse (OOD) Explore the Relationship between the Producer or the Target of OOD and the Imagined Audience of the Discussion. 238
- Figure 13.3. Usages of Othering Online Discourse (OOD) Examine the Repercussions That Othering Can Have or How It Will Appear to the Reader. 239

Chapter 38

- Figure 38.1. The Framework for Inclusive Safety within the Design Process. 655

Chapter 39

- Figure 39.1. Three Phases of IPV that Affected Technology Use, Focusing on Privacy & Security Practices. 666
- Figure 39.2. Overview of the Smart Lock System. 674

Chapter 40

Figure 40.1.	Differentiation in Sentiment and Demographic Responses among Twitter Users within the “Nathan Broad” Search Term.	696
Figure 40.2.	Distribution of References, Mediators, and Listeners within Network.	698
Figure 40.3.	Listener–Mediator Network Prior to Community Detection.	699
Figure 40.4.	Listener–Mediator Network Following Community Detection via ForceAtlas2 Clustering Algorithm and Size Differentiation Based on Betweenness Centrality.	700
Figure 40.5.	Social Media Spectatorship and Image-Based Sexual Abuse.	706

Chapter 5

Table 5.1.	Descriptive Characteristics of Respondents.	92
Table 5.2.	Self-Reported Experience of Any Specific TFVA Among Respondents.	93
Table 5.3.	Coping Strategies by Respondents.	96

Chapter 6

Table 6.1.	Adult New Zealanders’ Overall Engagement in TFA by Gender and Age.	110
Table 6.2.	Prevalence of Each Type of TFA by Gender and Age.	111
Table 6.3.	The Target of TFA by Gender and Age.	113
Table 6.4.	Aggressors’ Reasons for Engaging in TFA by Gender and Age.	114
Table 6.5.	Channels Used for TFA.	115
Table 6.6.	TFA as Part of a Wider Issue Happening Offline.	116

Chapter 12

Table 12.1.	A Typology of Doxxing.	210
-------------	------------------------	-----

Chapter 14

Table 14.1.	Harms Arising from Text-Based (Sexual) Abuse.	256
-------------	---	-----

Chapter 29

Table 29.1.	Relating Technology-Facilitated Violence and Abuse Harms to Human Rights Instruments.	481
-------------	---	-----

Chapter 30

Table 30.1.	The Status of Domestic Violence Laws in the Arab Region.	501
Table 30.2.	The Status of Sexual Harassment Laws in the Arab Region.	503
Table 30.3.	The Status of Cybercrime Laws in the Arab Region.	507

Chapter 31

Table 31.1.	Data Set Decisions and Outcomes.	538
-------------	----------------------------------	-----

Chapter 39

Table 39.1.	Tech Abuse Threat Model.	671
Table 39.2.	Account Capabilities.	675

This page intentionally left blank

About the Editors and Contributors

Editors

Jane Bailey is a Full Professor at the University of Ottawa Faculty of Law (Common Law) in Canada. Jane's research focuses on technology's intersections with law and equality, with a particular current focus on technology-facilitated violence and its impacts on young people from marginalized communities. She has published and spoken locally, nationally, and internationally on a wide variety of technology-related topics, including "cyberbullying," online hate, gender-based technology-facilitated violence, and the discriminatory effects of corporate data collection practices and how those practices set young people up for conflict and harassment. She currently co-leads The eQuality Project, a seven-year Social Sciences and Humanities Research Council of Canada research initiative funded by a Cdn\$2.5 million Partnership Grant. The Project involves an interdisciplinary group of researchers from Canada, the US, Hong Kong, and Finland, as well as over 20 community, governmental, educational, and youth organizations. It focuses on young people's experiences with privacy and equality in digitally networked environments. Jane leads the Project stream on technology-facilitated violence. She is a member of the New College of the Royal Society of Canada and the Women's Legal Education and Action Fund Committee on Gender-Based Technology-Facilitated Violence, was awarded the Ramon John Hnatyshyn Award for Law by the Canadian Bar Association, acted as lead counsel for an intervener before the Supreme Court of Canada on its first case dealing with the offense of voyeurism, and has been a visiting professor at RMIT, Hong Kong University, and the Universidad de Puerto Rico.

Dr Asher Flynn is an Associate Professor of Criminology at Monash University, a Group of Eight institution in Victoria, Australia. Asher's research utilizes a socio-legal framework to understand, critique, and transform legal policy and practice, with a particular focus on gendered and technology-facilitated violence and abuse. Asher has published widely and is lead researcher on several projects in the fields of AI-facilitated abuse, deepfakes, gendered violence, and image-based sexual abuse. Asher is the recipient of a number of prestigious national and international research fellowships including at the University of Durham, Pennsylvania State University, the University of Manchester, and the University of Warwick. She has advised the United Nations, Facebook, and the Australian Office of the eSafety Commissioner on policy and prevention of technology-facilitated violence and abuse and has received several awards for her research.

Nicola Henry is an Associate Professor and Vice-Chancellor's Principal Research Fellow in the Social and Global Studies Center at RMIT University (Melbourne, Australia). Nicola's research focuses on the prevalence, nature, and impacts of sexual violence, including legal and non-legal responses in Australian and international contexts. The goal of her work is to contribute to social, legal, and political change, deepen knowledge, and provide support to victim-survivors of violence. She has conducted numerous projects on image-based sexual abuse and technology-facilitated abuse which have led to significant legal and policy change in Australia. She is a member of the Office of the eSafety Commissioner's Expert Advisory Committee. She was Expert Advisor on the development of the eSafety Office's world-first image-based abuse portal as well as the award-winning eSafety Women: Online Training for Frontline Workers. Nicola has published widely in the sexual violence field and has been interviewed many times for television, radio, print, and online media.

Contributors

Moira Aikenhead is a PhD Candidate at the Peter A. Allard School of Law at the University of British Columbia, Canada. Her dissertation research explores the Canadian criminal response to technology-facilitated intimate partner violence through a feminist lens, and she has previously published research on Canada's nonconsensual distribution and voyeurism laws.

Sukaina Al-Nasrawi is a sustainable development expert at the United Nations ESCWA. She has a notable record of publications in the areas of technology for gender equality, digital divide, and smart sustainable cities, among others. Sukaina received research and professional awards including the United Nations Gold Award for Advancing Gender Equality and the Empowerment of Women. She holds a PhD in technology for development.

Briony E. Anderson is a graduate researcher in Criminology at the University of Melbourne, recently commencing her PhD candidature in 2020. Briony's thesis engages with privacy and anonymity in online space by considering the harm experience of doxxing.

Dr Kim Barker is Senior Lecturer in Law at the Open University (UK). Dr Barker's research focuses on internet regulation and intellectual property law. Her research focuses on the online regulation of platforms, with specific expertise in online abuses, online violence, and the legal responsibilities of internet actors.

Tabrina M. Bratton is a PhD student in the Department of Criminal Justice at the University of Arkansas at Little Rock. She received her Master's Degree in Criminal Justice. Tabrina's research interest includes public attitudes toward sexual and gender minority populations, policy processes, and technology-facilitated victimization.

Ella Broadbent is a Criminology Honors graduate, who has completed a thesis researching image-based sexual abuse. Her research interests include the role social media plays in facilitating violence and harm and how mixed methods and quantitative research design can enrich criminological scholarship.

Elena Cama is a Scientia PhD Candidate at UNSW Law in Sydney, Australia. She is a mixed methods researcher with a background in criminology, social science, and public health. Her PhD research focuses on digital communications technologies and the perpetration of sexual harms in online dating.

Professor Bronwyn Carlson is an Aboriginal scholar and Head of the Department of Indigenous Studies at Macquarie University. She is the recipient of three consecutive Australia Research Council grants that focus on Indigenous cultural, social, and political engagements on social media. Her current project explores Indigenous people's experiences of online conflict.

Anne Cheung is a Professor of Law at the University of Hong Kong whose research encompasses the areas of law and technology, freedom of expression, and privacy. Her most recent project concerns China's social credit system, and she is the co-editor of *Privacy and Legal Issues in Cloud Computing* (2015).

Sarai Chisala-Tempelhoff LLB (Hons) LLM is a Malawian human rights lawyer and legal researcher. She is the founder and Executive Director of the Gender and Justice Unit, an initiative that hones in on legal empowerment as a tool to bring about gender equality and social justice in Malawi.

Ben Colliver is a Lecturer in Criminology at Birmingham City University. His research interests include hate crime, queer studies, gender, and sexuality. He has recently published in the area of online hate speech. He is a member of the steering group of the British Society of Criminology Hate Crime Network.

Dr Elizabeth Coombs was Privacy Commissioner of New South Wales, Australia from 2011–2017 and held CEO positions and statutory appointments in Government. Based in Malta, Elizabeth works for the UN Special Rapporteur on the Right to Privacy, chairing the Taskforce "Privacy and Personality" and acting as a member of Health-Related Data; Corporations' Use of Personal Data, and Big Data–Open Data Taskforces.

Walter S. DeKeseredy is Anna Deane Carlson Endowed Chair of Social Sciences, Director of the Research Center on Violence, and Professor of Sociology at West Virginia University. He has published 26 books and over 100 refereed journal articles on topics such as woman abuse, rural criminology, and critical criminological theory.

Christopher Dietzel is a PhD candidate at McGill University. His doctoral research examines sexual consent related to dating app use and sexual violence against LGBTQ+ people.

Suzie Dunn is a PhD candidate and a Part-Time Professor at the University of Ottawa, Faculty of Law. Her research centers on the intersections of gender, equality, technology, and the law, with a specific focus the nonconsensual distribution of intimate images, deepfakes, and impersonation in digital spaces.

Dr Ryan Frazer is a settler scholar and cultural geographer. He recently completed his PhD, which drew on the work of Deleuze and Guattari to rethink

geographies of care, volunteering, and refugee resettlement. He is currently Postdoctoral Research Fellow in Indigenous Studies, exploring Indigenous people's experiences of online conflict.

Chandell Gosse (she/her) is a PhD Candidate in Media Studies in the Faculty of Information and Media Studies at Western University in London, Ontario. Her research takes an interdisciplinary approach and sits most broadly at the intersection of feminism, digital culture, and anti-violence work. Find her on Twitter @ChandellEnid

Dr Elly Hanson is a Clinical Psychologist who focuses on the prevention of sexual abuse and reducing its impact. She has both academic and practice-based strands to her work, undertaking research, consultation, training and assessments, and working primarily with educators, law enforcement, social workers, survivors, and charities. Elly's recent research and writing has focused on online forces and dynamics conducive to sexual abuse.

Bridget Harris is an Australian Research Council DECRA Fellow based at Queensland University of Technology. Bridget researches on violence against women and spatiality; gender-based violence; domestic and family violence; and technology-facilitated violence, advocacy, and justice. Her edited collection (with Woodlock) examines *Domestic Violence and Technology: Experiences, Perpetration, and Responses* (Routledge).

Pam Hrick (JD, LLM) is a lawyer at Stockwoods LLP in Toronto, Canada. She maintains a broad practice that includes civil litigation, administrative law, criminal law, and constitution litigation. She regularly advises and represents survivors of sexual violence.

Heather K. Hudson is an Associate Professor in the Department of Health Sciences at the University of Central Arkansas. She received her PhD in Health Education from Southern Illinois University. Her research interests include human sexuality and technology, sexual communication and social media, and women's health issues.

Nchelem Kokomma Ichegbo is a Program Officer at Viable Knowledge Masters in Nigeria where she provides technical support to multiple projects. She is experienced in conducting literature reviews and collecting quantitative and qualitative data. She has interests in adapting technological innovations to public health and education.

Michael Gboyega Ilesanmi is a Senior Social Development Specialist and Social Safeguards Coordinator for the World Bank Nigeria Country Office, Abuja. Currently, he is co-leading the World Bank's operation on Women's Economic Empowerment in Nigeria and leads the Bank's GBV risk mitigation work in Nigeria.

Dr Emma A. Jane is an Associate Professor at UNSW Sydney. Her interdisciplinary research focuses on the political, economic, social, technological, legal, and environmental (PESTLE) causes and effects of emerging technology. Dr Jane's 10th book—*Misogyny Online: A Short (and Brutish) History*—was published by Sage in 2017.

Dr Olga Jurasz is a Senior Lecturer in Law at the Open University (UK). Dr Jurasz's research focuses on international law, human rights, and legal responses to violence against women (including online violence), specializing in feminist perspectives on law in these areas.

Dr Samantha Keene is a Lecturer at Criminology at the Institute of Criminology at Te Herenga Waka – Victoria University of Wellington. Dr Keene's research focuses on gendered experiences of crime, mainstream pornography and its effects, rough sex, and sexual violence.

Raine Liliefeldt is YWCA Canada's Director of Member Services and Development. She has over 16 years of experience in the nonprofit sector, was responsible for the federally-funded initiative Project Shift: Creating a Safer Digital World for Young Women, and oversees Lead Now, a national young women's leadership program.

Gisella Lopes Gomes Pinto Ferreira is a qualified lawyer in Brasil and has a degree in Law from UFMG. She holds a MPhil in Justice from Queensland University of Technology. Her thesis research explores the prevention of gendered violence in youth cohorts in Brasil.

Gabrielle L. Lory is a second-year PhD student at West Virginia University, specializing in criminology. Her research focuses on rural crime, violence against women, and restorative justice. She currently works as a Graduate Assistant in the Division of Diversity, Equity, and Inclusion and serves as co-editor of The Rural Criminologist newsletter.

Yee Man Louie is a PhD candidate at the Technology, Communication and Policy Lab, Digital Ethnography Research Center at RMIT University in Melbourne, Australia. Her current research focuses on the use of digital communication technologies, domestic violence, and the lived experiences of Chinese women in Melbourne.

Robert D. Lytle is an Assistant Professor in the Department of Criminal Justice at the University of Arkansas at Little Rock. He received his PhD in Criminology and Criminal Justice from the University of Nebraska – Omaha. Robert's research interests include criminal justice policy, corrections, and public attitudes about criminal justice.

Olusesan A. Makinde is the managing partner at Viable Knowledge Masters (VKM), a research and consulting company registered in Nigeria. He has researched the intersection between gender-based violence and social media in Nigeria.

Alison J. Marganski, PhD is Associate Professor and Director of Criminology at Le Moyne College in Syracuse, NY. Her research takes an interdisciplinary approach to studying violence (perpetration as well as victimization), including technologically facilitated violence, intimate partner violence, sexual violence, and mass murder, along with their respective solutions.

Olga Marques, PhD, is an Assistant Professor of Criminology and Justice at Ontario Tech University. Her teaching and research focuses on the construction, policing, and regulation of sexed, gendered, and raced bodies. She is also engaged in research on the impacts of incarceration, as well as Indigenous experiences of criminalization and victimization.

Lisa A. Melander, PhD, is an Associate Professor in the Department of Sociology, Anthropology, and Social Work at Kansas State University. Her primary research interests lie in the intersection of family and crime and include issues such as intimate partner violence, cyber aggression, and women's incarceration.

Neil Melhuish is Director of Policy and Research at Netsafe, New Zealand. He has worked on online safety issues since 2004.

Madeleine Novich, PhD is a Criminal Justice Professor at Manhattan College, USA. Her research focuses on the intersection of policing, procedural justice, and criminalized communities of color.

Emmanuel Olamijuwon is a Lecturer in the Department of Statistics and Demography at the University of Eswatini, Eswatini. He is also a PhD candidate in demography and population studies at the University of the Witwatersrand, South Africa. His current research examines opportunities for advancing sexual and reproductive health of young African adults in the digital age.

Dr Cheluchi Onyemelukwe is a lawyer, academic, and international consultant with expertise in gender law and policy, gender-based violence, international human rights, and health law and policy. She is Associate Professor of Law at Babcock University School of Law and Security Studies.

Dr Edgar Pacheco is a Research Analyst at Netsafe, New Zealand. His work focuses on online risks and harm as well as disability and higher education.

Eva PenzeyMoog is a user experience designer working to build out the field of "safety design." She works to make technology safe through centering the safety of survivors of domestic violence. Eva created the "Framework for Inclusive Safety" to help technologists create safe tech. Readers can learn more at www.inclusivesafety.com.

Dr Michael Salter is the Scientia Associate Professor of Criminology at the University of New South Wales, where he specializes in the study of complex trauma, gendered violence, and technology. He is an expert advisor to national and international online child protection agencies.

Sara Shayan is a lawyer practicing in Toronto, Ontario. She holds a Bachelor of Arts (Honors) in English Literature from the University of British Columbia and a JD from the University of Ottawa. The views and opinions expressed are those of the author and do not necessarily reflect the view of her employer.

Dr Danielle C. Slakoff is an Assistant Professor of Criminal Justice at California State University, Sacramento. Her research interests include media criminology and domestic violence. Danielle's work on women's issues within the criminal justice system can be found in *Feminist Criminology*, *Sociology Compass*, and *Criminology*, *Criminal Justice*, *Law and Society*.

Julia Slupska is a doctoral student at the Center for Doctoral Training in Cybersecurity and the Oxford Internet Institute. She researches how cybersecurity concepts and practices can address technologically mediated abuse, as well as how feminist theories and methodology—such as action research and the ethics of care—can improve cybersecurity.

Seonaid Stevenson-McCabe LLB (Hons) LLM is a Scottish lawyer and Lecturer in Law at Glasgow Caledonian University. Inspired by the rebellious lawyering movement founded by Gerald López, she is the co-founder of *RebLaw Scotland*, an organization which explores how law can be used as a tool for social justice.

Danielle M. Stoneberg is a PhD student in Sociology at West Virginia University. Her publications include articles in *International Criminal Justice Review* and *Crime Prevention and Community Safety* on topics such as drug use and policing in rural US communities and violence against women.

Leonie Maria Tanczer is Lecturer in International Security and Emerging Technologies at University College London's (UCL) Department of Science, Technology, Engineering and Public Policy (STePP). Her research focuses on questions related to internet security, and she is specifically interested in the intersection points of technology, security, and gender.

Kristen Thomassen is an Assistant Professor of Law, Robotics, and Society at the University of Windsor, Faculty of Law, and a PhD candidate at the University of Ottawa, Faculty of Law. Her research focuses on the legal, social, and ethical implications of robotic and autonomous machines, with particular focus on privacy and public spaces.

Chrissy Thompson holds a PhD in Criminology. Her doctoral research examined upskirting in Australia, and she has published on topics including media archeology, creepshots, viral justice, countersurveillance, and upskirting. Chrissy's research interests include understanding how crime intersects with technology, gender, and disability.

Elina Vaahensalo is a doctoral candidate in the field of digital culture at the University of Turku. Elina's chapter is based on her doctoral thesis that focuses on othering online discourse, polarization in internet cultures, and methods that can be applied to the study of online discussion cultures.

Dr Laura Vitis' research focuses on how technology is used to facilitate gendered, sexual, and domestic violence within the Global-South. Her work also examines the regulation of and resistance to technologically facilitated violence and youth sexting. In 2017, she co-edited a collection entitled *Gender, Technology, and Violence* for Routledge.

Ari Ezra Waldman is the John Marshall Harlan II Professor of Law and the Founding Director of the Innovation Center for Law and Technology at New York Law School. He earned a PhD in Sociology at Columbia University, a JD at Harvard Law School, and an AB, magna cum laude, at Harvard College.

Dr Alice Witt is a postdoctoral research fellow in the Digital Media Research Center, Faculty of Law at the Queensland University of Technology. Her research investigates the exercise of governing power in the digital age, focusing on the intersections of regulation, technology, and gender.

Mark A. Wood is a Lecturer in Criminology in the School of Humanities and Social Sciences at Deakin University. Most of Mark's research falls within the digital criminology sphere and examines intersections between technology, crime, and criminal justice. His first monograph, *Antisocial Media*, was published by Palgrave Macmillan in 2017.

Delanie Woodlock is a community researcher and adjunct lecturer at University of New England, Armidale, Australia and associate with the Research Center on Violence at West Virginia University. Her research interests include violence against women, domestic violence, and the medicalization of women's health.

Alyssa Zduniak is an English, Political Science, and Philosophy major at Manhattan College, USA. She previously presented research at the Undergraduate Woman's Philosophy Conference and the International Symposium on Lasallian Research. Alyssa will be graduating in the spring of 2020 and plans to pursue a PhD in English.

Chapter 5

The Nature of Technology-Facilitated Violence and Abuse among Young Adults in Sub-Saharan Africa

Olusesan Ayodeji Makinde, Emmanuel Olamijuwon, Nchelem Kokomma Ichegbo, Cheluchi Onyemelukwe, and Michael Gboyega Ilesanmi

Abstract

Incidents of violence perpetrated through digital technology platforms or facilitated by these means have been reported, often in high-income countries. Very little scholarly attention has been given to the nature of technology-facilitated violence and abuse (TFVA) across sub-Saharan Africa (SSA) despite an explosion in the use of various technologies. We conducted a literature review to identify and harmonize available data relating to the types of TFVA taking place in SSA. This was followed by an online survey of young adults through the [SHYad.NET](#) forum to understand the nature of TFVA among young adults in SSA. Our literature review revealed various types of TFVA to be happening across SSA, including cyberbullying, cyberstalking, trolling, dating abuse, image-based sexual violence, sextortion, and revenge porn. The results of our online survey revealed that both young men and women experience TFVA, with the most commonly reported TFVA being receiving unwanted sexually explicit images, comments, emails, or text messages. Female respondents more often reported repeated and/or unwanted sexual requests online via email or text message while male respondents more often reported experiencing violent threats. Respondents used various means to cope with TFVA including blocking the abuser or deleting the abused profile on social media.

The Emerald International Handbook of Technology-Facilitated Violence and Abuse, 83–101

Copyright © 2021 Olusesan Ayodeji Makinde, Emmanuel Olamijuwon, Nchelem Kokomma Ichegbo, Cheluchi Onyemelukwe, and Michael Gboyega Ilesanmi

Published by Emerald Publishing Limited. This chapter is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of these chapters (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>.

doi:10.1108/978-1-83982-848-520211005

Keywords: Adolescents; internet; social media; sub-Saharan Africa; mobile phones; violence

Introduction

The utilization of technology, including cell phones, cameras, internet-associated gadgets, personal computers, and social media, has become part of regular day-to-day activities (Douglas, Harris, & Dragiewicz, 2019; Gillwald, 2017; Henry & Powell, 2018; Simon, Goldberg, Aharonson-Daniel, Leykin, & Adini, 2014). These technologies are used for communicating and to carry out routine tasks. Africa's technology scene is fast-evolving, driven to a great extent by growth in cell phone penetration, which has become a significant tool for innovators beyond its basic use as a communication device. Today, Africa's continuous advancement in technology cannot be separated from the desire to solve its socioeconomic challenges (Eziakonwa, 2019). Cell phones brought new possibilities to Africa: connecting individuals and markets, and facilitating service delivery across the urban-rural divide (Aker & Mbiti, 2011).

The overwhelming importance of the internet to development and the economy in the current information age cannot be overemphasized. In 2016, access to the internet was deemed a human right by the United Nations and the intentional disruption of internet, a human rights violation (Howell & West, 2016). About 75% of respondents surveyed across 39 countries by Pew Research were found to either use the internet occasionally or own a smartphone (Poushter, Caldwell, & Chwe, 2018a). Unlike more developed parts of the world where internet access is almost universal and the growth in use has plateaued, internet use in sub-Saharan Africa (SSA)¹ has seen remarkable growth since 2013 (Silver & Johnson, 2018a). In SSA, 41% of respondents utilize the internet across six countries surveyed (Silver & Johnson, 2018a). Of these six countries, South Africa had the highest population with internet access, a median of 59%. This was followed by Senegal (46%), Nigeria (42%), Ghana (39%), Kenya (39%), and Tanzania (25%) (Silver & Johnson, 2018a). The majority of internet users in SSA go online for social communication purposes (Silver & Johnson, 2018a).

Paralleling the growth in use of the internet, the use of social media (such as Facebook, Instagram, and Twitter) has continued to see tremendous adoption in emerging and developing economies. The use of online social networking sites in these economies rose by 19% points from 34% to 53% between 2013 and 2018 (Poushter, Caldwell, & Chwe, 2018b). In 2010, Facebook was the most visited website in Africa with more than 17 million subscribers (André-Michel, 2010). The population accessing Facebook from Africa had ballooned to more than 139 million users a month by 2018, with the majority accessing it through their mobile devices (Shapshak, 2018). Social media has played important roles in sociopolitical discussions in the region such as during the "bring back our girls" campaign that was launched after more than 200 secondary school girls were kidnapped by Boko Haram insurgents in Nigeria (Peters, 2014). Twitter was used in coordinating the widespread condemnation and protests that followed to pressure the

Nigerian government to act (Fink, Schmidt, Barash, Cameron, & Macy, 2016). Twitter was also used for communication and coordination during the Westgate mall attack in Kenya, with researchers calling for a formal guideline on how to use these communication channels effectively in such emergency situations (Simon et al., 2014).

The internet has contributed to various facets of the economy in SSA, including education, health, agriculture, and communication (Silver & Johnson, 2018b; Tom-Aba et al., 2015). In Tanzania, mobile phones have been used as surveillance tools for managing data from a rabies outbreak (Mtema et al., 2016). Similarly, in Malawi, people living with HIV and AIDS receive text messages daily via mobile phones reminding them to take their medicines on schedule (Aker & Mbiti, 2011). In Nigeria, citizens can report domestic and sexual violence via phone calls or email (P.M. News, 2019), and in Ghana, farmers are able to find out the price of tomatoes in Accra, several kilometers away, via text message and decide whether it's worth ferrying their goods there for sale (Aker & Mbiti, 2011). Also in Niger, laborers are able to call friends in Benin Republic to find out about job opportunities ahead of traveling there (Aker & Mbiti, 2011).

African business owners are leveraging mobile phones to increase efficiency and delivery of services to consumers (Aker, 2010). The general availability of cell phones has paved the way for electronic banking (Donner & Tellez, 2008). Mobile payment systems have emerged as a reliable alternative payment platform for transactions, consistently reducing the market share of cash-based transactions in national economies that once relied absolutely on cash payments (Aker & Mbiti, 2011). Kenya launched M-PESA in 2007, "a mobile phone-based money transfer, financing, and microfinancing service to allow users to deposit, withdraw, transfer money and pay for goods and services" (Calvo, Morales, & Zikidis, 2017, p. 127). M-PESA allows branchless banking service whereby users can withdraw money from a network of agents that includes airtime resellers and retail outlets acting as banking agents (Jack & Suri, 2011). Between July 2016 and July 2017, 1.7 billion transactions were processed over M-PESA, totaling about 3.6 trillion shillings or 48.76% of the country's GDP (McGath, 2018). Thus, mobile technology has greatly affected the lives of the poor in Kenya and is noted to have lifted over 2% of households out of poverty (Suri & Jack, 2016).

Despite the many advantages of technology on a country's economy and populace (Silver & Johnson, 2018b), there are emerging negative consequences of the use of technology that require additional investigation on their dimensions and consequences, and possible action to mitigate their effect (Douglas et al., 2019). Technology-facilitated violence and abuse (TFVA) has emerged as one of these consequences and has been increasingly studied in developed countries that birthed and embraced the widespread use of information and communications technology (ICT) long before SSA countries.

The rapid growth in the adoption of various technologies across SSA increases the number of people at risk for TFVA. The use of the World Wide Web and cell phones exposes new opportunities for perpetrators of violence to abuse their targets. Across the world, the number of reported cases of cyberbullying has been on the rise (Burton & Mutongwizo, 2009). The unbound climes of the web equally

make those accessing the internet from remote villages exposed to these risks. [Hertz and David-Ferdon \(2009\)](#) emphasize that the contemporary nature of electronic aggression limits the availability of information on the subject. However, available evidence is predominantly from the United States, Canada, the United Kingdom, Australia, and a few European countries.

Information relating to TFVA by race, ethnicity, gender, or location reveals TFVA's complexities. For example, although gender-based violence (GBV) is predominantly targeted at women, with at least one in three women having a lifetime experience of GBV ([United Nations Population Fund, 2016](#)), a large study conducted in Australia did not find significant differences between men's and women's reported experiences of TFVA (proportion of respondents who experienced at least one type of TFVA was 62.1% for women and 62.0% for men) ([Powell & Henry, 2019](#)), although variations were observed to exist across the different dimensions of TFVA investigated in the study.

Pockets of research have been conducted in various parts of SSA that describe what has been observed by researchers within their immediate environment. However, we are not aware of any study of TFVA that encompasses the whole of SSA. The purpose of this chapter is to examine the different types of TFVA that have been recorded in SSA, with a particular focus on young adults. The first section provides background information in the form of a review of the current literature on TFVA in SSA. The second section sets out the methodology we used in conducting an online survey of young adults in SSA relating to their experiences with TFVA. The third section sets out the results of our online survey and discusses connections between our findings and the existing literature. Our conclusion summarizes these results and suggests directions for future research and policy.

Literature Review

In our review of current literature on TFVA in SSA, we found various studies that highlighted a range of issues around the topic across specific countries. We have grouped the issues discussed by these studies into three categories: (1) cyberbullying, cyberstalking, and trolling; (2) digital dating abuse and electronic dating violence; and (3) image-based sexual abuse (IBSA), sextortion, and revenge porn. It is noteworthy that these have been categorized for convenience, and there is no clear line separating one category from the other.

Cyberbullying, Cyberstalking, and Trolling

Cyberbullying is "bullying which involves the use of ICT such as email, cell phone and text messages, instant messaging, defamatory personal websites, and defamatory online personal polling websites to support deliberate, repeated, and hostile behavior by an individual or group that is intended to harm others" ([Belsey, 2005](#), cited in; [Burton & Mutongwizo, 2009](#), p. 1). Cyberbullying has been widely reported across several countries in SSA including Botswana,

Ethiopia, Ghana, South Africa, Senegal, Nigeria, Uganda, and others (Madanda, Ngolobe, & Amuriat, 2009; Mooketsi, 2018; Mulisa & Getahun, 2018; Olumide, Adams, & Amodu, 2015b; Sall, 2017; Sam, Bruce, Agyemang, Amponsah, & Arkorful, 2019). In one study, more than 45% of 18- to 45-year-old female users of Facebook or Twitter in West and Central Africa reported having experienced some form of GBV on social media (Internet Sans Frontieres, 2019). In 2010, the UN estimated that 95% of online “aggressive behavior, harassment, abusive language and denigrating images in online spaces were aimed at women and came from partners or former male partners” (APC, 2010, para 2). Burton and Mutongwizo (2009) reported that in South Africa, young people experienced cyberaggression within and outside the school premises, although this was more pronounced outside the school environment (42.9% vs. 31.0%). Various studies have shown that in Nigeria, about 40% of young people had experienced some form of cyberbullying, though many of them were also perpetrators (Olumide, Adams, & Amodu, 2015a; Olumide et al., 2015b).

Cyberstalking involves the use of the internet or electronic devices to monitor a person’s activity (Sissing, 2013), while internet trolling involves posting irritating comments, often to get others into an argument (Ansong, Takyi, Damoah, Ampomah, & Larkotey, 2013). These types of abuse have equally been reported in different countries in the region including Ghana, Uganda, South Africa, and Nigeria (Ansong et al., 2013; Madanda, Berna, & Amuriat, 2009; Punch Newspapers, 2020; Sissing, 2013). In Uganda, two women were murdered by their spouses after claiming they discovered romantic SMSs on their phones (APC, 2010; Madanda et al., 2009). In a recent incident reported in Nigeria, a woman was sentenced to death for killing her husband after finding nude pictures of another woman on his phone (Punch Newspapers, 2020).

Digital Dating Abuse and Electronic Dating Violence

Dating fraud is one of the most frequently discussed forms of TFVA in Africa. While Nigeria has been regularly accused of being the source of romance scams, leading such scams to be popularly referred to as “Nigerian scams,” Edwards et al.’s (2018) analysis found several other African and non-African origins of such scams including Ghana, South Africa, Togo, Senegal, Ivory Coast, Kenya, Malaysia, the United Kingdom, the United States and Turkey. While most of the targets of the dating scams are women seeking companionship in developed countries, there are instances of men who are also tricked using various female profiles (Aransiola & Asindemade, 2011). The mode of operation of the dating scams often involves long-term engagements with victims who fall in love believing such to be a mutual feeling. Unfortunately, many of the victims are tricked into parting with huge sums of money before realizing they were being scammed. Victims of dating scams are left with scars that end up affecting their psychological health. The consequences of dating scams could go beyond emotional and financial losses. In one instance, someone being scammed was convinced to travel to meet her supposed boyfriend based in West Africa. In the

course of her visit, she was kidnapped by the boyfriend's gang and held by the group for ransom (Edwards et al., 2018).

There is also evidence of severe physical and sexual violence arising from internet-facilitated dating and intimate relationships in Africa. Five cases of women who met their abusers on Facebook or were reunited with them through this channel after not being in contact for a while have been chronicled in Nigeria. Two of the victims were raped while the other three were victims of attempted rape (Makinde, Odimegwu, Abdulmalik, Babalola, & Fawole, 2016). One of the victims was murdered in the process while two others suffered severe physical violence. The victim who lost her life had traveled believing she was meeting with her boyfriend and his business partners based in Lagos (Idongesit, 2014). In another case, a young university undergraduate who first met with a young man on Facebook was pushed out of a third-floor apartment following an argument with him (Idongesit, 2014). While she did not die from her injuries, she suffered severe physical and life-changing injuries including a fractured pelvis (Idongesit, 2014).

Image-Based Sexual Abuse, Sextortion, and Revenge Porn

Technology-facilitated sexual violence (TFSV) is one form of TFVA. TFSV can include the use of technology to facilitate sexually violent physical encounters (as discussed above), as well as IBSA, sextortion, and revenge porn. IBSA is becoming a prevalent form of TFVA with the increasing availability of camera and video-enabled cell phones (Powell & Henry, 2019). Often, images and videos are made with the consent of everyone involved. However, when the relationship goes sour, one of those involved may threaten to use the image against the other unless the other person meets some specified requests. IBSA can take many forms including sextortion and “revenge porn” (McGlynn, Rackley, & Houghton, 2017). Sextortion is “the threatened dissemination of explicit, intimate, or embarrassing images of a sexual nature without consent, usually for the purpose of procuring additional images, sexual acts, money, or something else” (Patchin & Hinduja, 2018, p. 2). Revenge porn is “the nonconsensual distribution of private, sexual images by a malicious ex-partner” (McGlynn et al., 2017, p. 26). There have been documented incidents of sextortion and revenge porn in Malawi, Uganda, Senegal, Nigeria, and South Africa (Chisala-Tempelhoff & Kirya, 2016; Musoni, 2019; Sall, 2017). In Nigeria, a female university student was expelled after her boyfriend shared a sex video that they had both made at an earlier stage in their relationship (Vanguard News, 2019). Some research indicates that most of the denigrating sexual images available online feature women (APC, 2010).

Overall, there is relatively little research on TFVA generally or TFSV specifically in SSA. Only one identified study attempted to quantify the level of TFVA in the region, although its methodology was not adequately explained (Internet Sans Frontieres, 2019). Among available studies, various dimensions of TFVA have been recorded across the breadth of SSA, as outlined above, although incidents of TFVA and TFSV cannot be easily categorized as there is significant

crossover among the various types. As a result, little is known about the nature and dimensions of TFVA and TFSV specifically in SSA as a whole, providing reason for additional investigation of these issues. Gaining a better understanding of these issues will be important for developing strategic advocacy, enactment of laws, and preventive action to respond to TFVA and TFSV in SSA.

Methodology

Study Design and Recruitment

We conducted an online survey between November 2019 and February 2020 in order to better understand experiences with various forms of TFVA (with a focus on TFSV) among young African adults between the ages of 18 and 34. Respondents were recruited primarily through a paid advertisement on Facebook. Our team also shared the link to the survey on personal social media profiles and early respondents were encouraged to share the survey link with their friends. The Facebook advertisement environment provides potential advertisers a unique opportunity to target users on the platform based on a set of socio-demographic characteristics (such as age, sex, education, location), interests, or behaviors. Leveraging this opportunity, we initially created an advertisement campaign targeting Facebook users who were living in any SSA country at the time of data collection, were between ages 18 and 34 years, and whose primary language on Facebook was English. However, in order to increase female participation, after observing initially low responses from women, we created another campaign targeting young female adults. Both advertisements ran throughout the period of data collection.

The Facebook advertisements were delivered on the news feed of users whose profile matched our inclusion criteria. The advertisement caption described the survey as exploring the use of technology and adverse experiences that could occur from its use. The Facebook advertisement included a link to the survey website ([SHYad.NET](#)). [SHYad.NET](#) is an online collaborative platform by and for young African adults and is actively managed by one of the authors (EO). The platform was developed in 2018 as a data collection network for monitoring the sexual and reproductive health changes in young African adults.

Detailed information about the survey was provided on the [SHYad.NET](#) website. Respondents were informed that participation in the survey was voluntary and they could skip any question they did not want to answer. The contact details of one of the authors was also provided on the survey, and respondents were informed that they could get in touch via email should they require additional information about the survey.

Instrument

We combined several approaches to delineate experiences and coping strategies of TFVA among young adults in SSA countries. Respondents were asked about four

forms of TFVA, of which many focused on specific forms of TFSV, as shown in the list below:

- digital harassment;
- image-based abuse;
- sexual aggression and/or coercion; and
- gender-/sexuality-based harassment.²

The TFSV questions were adapted from a dichotomous scale with a 21-item measure of TFSV from a previous study conducted by [Powell and Henry \(2019\)](#). The TFSV scale covered four different thematic areas: digital sexual harassment, IBSA, sexual aggression and/or coercion, and gender- and/or sexuality-based hate speech. There were different questions that addressed each of these four themes. Four questions that related to intimate partner technology-facilitated violence in the original scale were modified to reflect technology-facilitated violence perpetrated by anyone. For example, “Partner gained access to your emails or other online accounts without permission” was revised to “Someone gained access to your emails or other online accounts without permission.”

Furthermore, respondents who reported having experienced any of the listed behaviors were asked to provide an additional narration of the circumstances of such experience. The respondents who reported having experienced any of the listed behaviors were also asked to describe how upsetting the experience was for them and how they handled the situation (coping strategies). The descriptions provided by the respondents were reviewed and categorized based on themes.

Study Sample

A total of 581 responses were received on the survey website as of February 28, 2020. During data collection, respondents were first asked to indicate whether they consented to participating in the study or not. The survey was subsequently terminated for the respondents who did not consent to participate in the survey. The survey website tracked the number of attempts made by a user to complete the questionnaire. We identified a few instances of multiple attempts to complete the survey by some users. However, the majority of the multiple attempts involved respondents who did not initially consent to participate in the study during the first attempt but consented prior to participating subsequently. For a few respondents who responded more than once, we carefully identified and excluded all subsequent responses during data analysis. Due to ethical reasons regarding the sampling of minors, we excluded responses from adolescents under 18 years at the time of data collection. We also excluded survey responses with missing information on key demographic characteristics such as age, sex, country of residence, and religious affiliation. These criteria resulted in the exclusion of about 32% of responses from those who did not provide consent to participate in the study, were taking the survey more than once, or did not meet any of the

criteria highlighted. Our final analytic sample for the study comprised 389 complete responses from young adults aged 18–34 years who were resident in SSA.

Ethical Considerations

Ethical approval to collect responses on sexual and reproductive health using SHYad.NET was obtained from the University of the Witwatersrand Human Research Ethics Committee (nonmedical) under research ethics number H19/02/25 prior to recruiting respondents.

Data Processing and Analysis

We assessed experiences with TFVA based on the respondent's self-reported experience of the listed behaviors. The results were further stratified by gender to compare differences in the experiences of men and women. We then tested the observed differences across gender using Chi-square. A qualitative text analysis of respondents' description of any of the listed experiences was also conducted to provide a contextual description and explanation of the quantitative analysis of TFVA. Quotes from these descriptions were extracted and used to provide additional clarity to observations. Finally, we examined how the respondents handled their personal experience of any of the listed behaviors. Their described experiences were recoded into categorical groups to allow for proportional analysis. All data processing, analysis, and visualizations were done using R statistical package. R is an open source robust statistical package that is rich in conducting visualizations and enables manipulation of charts produced through the application in various dimensions. Its strength in visualization made it helpful in the analysis.

Results and Discussion

Table 5.1 presents the summary of descriptive characteristics of the sample. The respondents were drawn from 22 countries with one-third of respondents resident in Nigeria (34%), 28% in Kenya, and about 6% in South Africa. The mean age of the respondents was 25 years (SD = 4.94 years). Respondents were mostly male (64%) and the majority (77%) had attained tertiary or higher education. More than three-quarters of the respondents were not married, although 43% were in a relationship. About 82% of the respondents were Christian and 14% were Muslim.

The high proportion of respondents from Nigeria, Kenya, and South Africa might have been influenced by the high penetration of internet in these countries (Silver & Johnson, 2018a). More educated and affluent people are known to participate in surveys than people with lower levels of education (Bhutta, 2012; Smith, 2008). As such, it was unsurprising that the majority of the respondents in this study had higher educational qualifications. Past research on using Facebook as a recruitment platform also suggests that the Facebook advertising platform

Table 5.1. Descriptive Characteristics of Respondents.

Sociodemographic Characteristics	<i>N</i> = 389
Age	24.8 (4.94)
Sex	
Female	140 (36.0%)
Male	249 (64.0%)
Education	
Tertiary	91 (23.4%)
Tertiary/Higher	298 (76.6%)
Country	
Ghana	27 (6.94%)
Kenya	108 (27.8%)
Nigeria	133 (34.2%)
South Africa	23 (5.91%)
Uganda	29 (7.46%)
Zambia	24 (6.17%)
Others	45 (11.6%)
Relationship Status	
Not married: not in relationship	148 (38.0%)
Not married: in a relationship	169 (43.4%)
Married or living with partner	65 (16.7%)
Formerly married	7 (1.80%)
Religious Affiliation	
Christian	318 (81.7%)
Muslim	53 (13.6%)
Others	10 (2.57%)
No religious affiliation	8 (2.06%)

tends to oversample better educated, young, and more active members (Rife, Cate, Kosinski, & Stillwell, 2016). This category of people may also have easier access to the internet than their peers with lower levels of education and income.

Reported Instances of Technology-Facilitated Violence and Abuse

Table 5.2 presents the distribution of self-reported experience of any of the listed behaviors by gender. About 89% of males and 82% of females reported experiencing at least one of the listed behaviors. While more male respondents reported

Table 5.2. Self-Reported Experience of Any Specific TFVA Among Respondents.

	Experience of TFVA	No Experience of Any TFVA	<i>p</i> Value
Sex			
Female	115 (82.1%)	25 (17.9%)	0.073
Male	222 (89.2%)	27 (10.8%)	

experiencing at least one of the listed behaviors, this difference was not statistically significant. This finding is similar to a study conducted in Australia that did not find an overall statistically significant difference across the proportion of men and women that had experienced at least one type of TFSV (Powell & Henry, 2019).

Type of Technology-Facilitated Violence and Abuse Experienced

Fig. 5.1 presents the most common types of TFVA that our respondents reported having experienced. The results show that unwanted sexually explicit images, comments, emails or text messages were the most common types of TFVA experienced by the respondents. More than half (56%) of the respondents (56% females, 56% males) reported receiving unwanted sexually explicit images, comments, or text messages. A 24-year-old male respondent from South Africa described his experience as follows:

Someone unknown messaged me on Facebook and after I responded they started talking about sex and they (sent) nude pictures to me.

About 46% of the respondents reported receiving repeated and unwanted sexual requests online, via email or text message. We also found statistically significant evidence that female respondents (54%) reported this behavior more often than male respondents (42%) in the sample ($\chi^2 = 3.9283$; *p*-value = 0.0475). Less than 10% of respondents (10% women and 9% men) reported having had an unwanted sexual experience with someone they met online. However, a 24-year-old female respondent from Uganda reported:

A guy I met online and pretended to be knowing me forced me into sex once. When he was requesting another time (more than once) I refused.

Close to one-third of the respondents reported that someone had gained access to their emails or other online accounts without permission. Men (33%) more

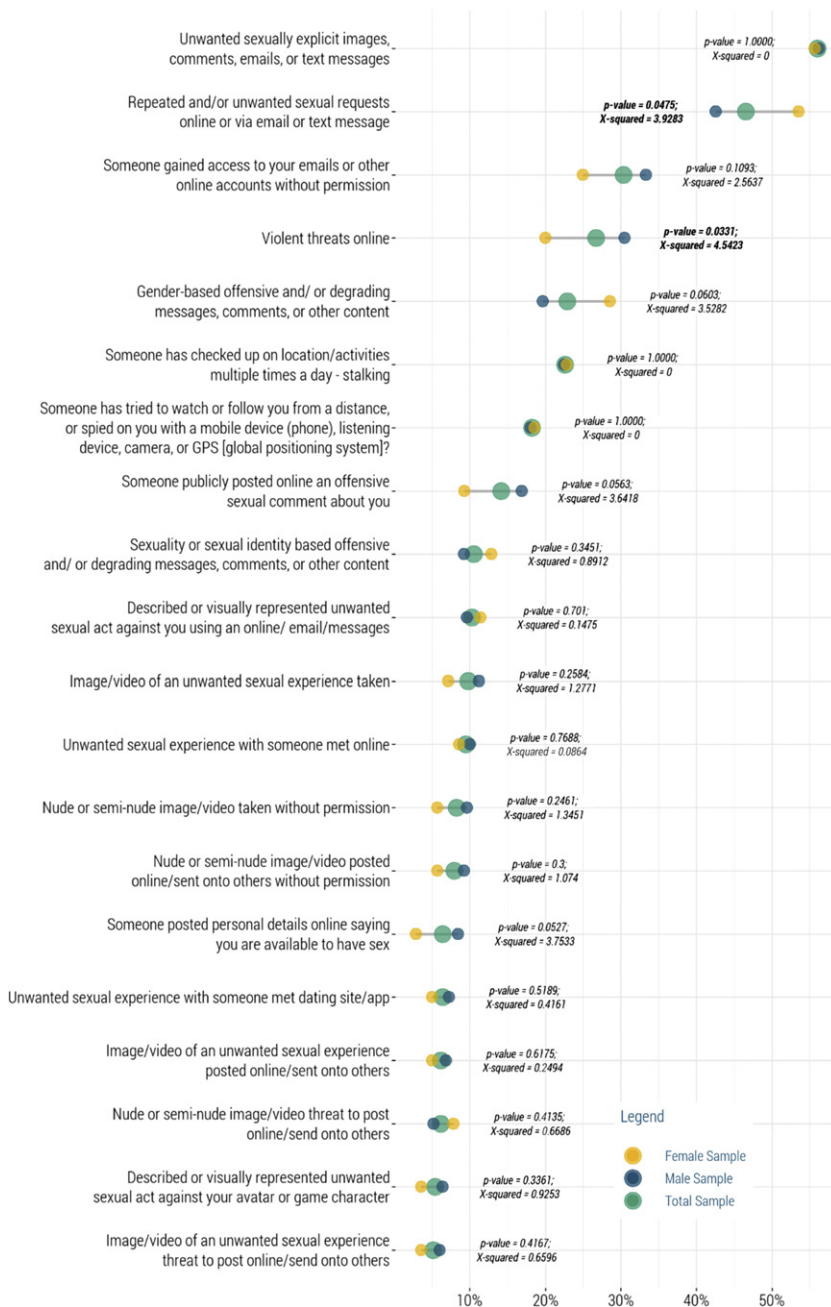


Fig. 5.1. Experiences of Various Dimensions of TFVA by Gender.

often reported this form of TFVA than women (25%). However, this difference was not statistically significant. A 31-year-old male Nigerian noted that:

Someone hacked into my Facebook account and used the opportunity to request for financial assistance from my friends and family members.

About one-quarter (27%) of the respondents reported experiencing a violent threat online. We observed a statistically significant ($\chi^2 = 4.5423$; p -value = 0.0331) difference in the online experience of violent threats between males (33%) and females (25%). A 33-year old male respondent from Kenya reported the following:

A fellow man was threatening to kill me and (was) sending abusive messages because he thought I was having (an) affair with her (his) wife.

Experiences of stalking (23%) and spying (18%) were also reported by the respondents. About one-fifth of respondents reported having had someone spy on them with a mobile device, listening device, camera, or GPS-enabled application. While we did not ask respondents whether the person stalking or spying on them was known to them, the concerning role that cyberstalking and tech-facilitated surveillance (e.g., by monitoring someone's phone messages) can play in intimate partner violence and homicide was graphically demonstrated in the murders of two Ugandan women discussed above (Madanda et al., 2009). And while studies of online stalking in other jurisdictions, such as Germany, indicate that victims are more likely to be women than men (Dreßing, Bailer, Anders, Wagner, & Gallas, 2014), our findings indicated no statistically significant difference between men and women.

Overall, women were less likely than men to report having experienced a number of the listed behaviors, including sharing an image or video of an unwanted sexual experience, someone posting an offensive sexual comment about them, and someone gaining access to their emails or other online accounts. However, more women (29%) reported having experienced gender-based offensive or degrading comments online than their male counterparts (20%), although this difference was not statistically significant. The higher frequency reported is similar to an earlier study that suggested that women in West and Central Africa were more likely than men to be targeted by gender-related abuses (Internet Sans Frontieres, 2019). In fact, in our study, gender-related abuse was much higher in women than several other forms of abuse (see Fig. 5.1). Thus, bias against the female population in gender-related abuse may be a carryover to the digital space of the patriarchal norms of African societies, which are more tolerant of men than women (Albertyn, 2009; Makinde, Onyemelukwe, Onigbanjo-Williams, Oyediran, & Odimegwu, 2017; Mudhai, Wright, & Musa, 2016).

Coping Strategies for Technology-Facilitated Violence and Abuse

As seen in [Table 5.3](#), respondents who had experienced TFVA reported having used a number of strategies for coping with their experiences.

The most common approach for handling TFVA (which 32% of our respondents reported using) was reporting or employing the “block” option on the device, website, or app to avoid the perpetrator. For example, a 34-year-old female respondent from Nigeria reported the following:

I always block the person or sometimes shut down the account and put a red flag on it.

Five percent of respondents reported attending a counseling session with a close associate – such as a family member, friend, teacher, or clergy person, while 12% of respondents apologized to their contacts and changed their passwords after their profiles had been used to transmit messages wrongfully (see [Table 5.3](#)). As a 28-year-old male respondent from Uganda puts it:

I changed my Yahoo email password and emailed my contacts notifying them of (the) account having been hacked.

None of the respondents who had experienced one of the listed behaviors indicated that they had reported to the police or other security agencies for assistance. This might be a reflection of the gap in regulation of digital media in SSA and the limited action that internet users can take to seek redress when they have been violated online. An earlier study highlighted that the growth in ICT use in SSA has outpaced its regulatory framework, and this may have manifested in the strategies that respondents used to cope with abuse online ([Chisala-Tempelhoff & Kirya, 2016](#)). Similar challenges with policing IBSA have been reported in developed countries ([Henry, Flynn, & Powell, 2018](#)). Thus, survivors of TFVA may be left with few options to seek redress when violated.

Table 5.3. Coping Strategies by Respondents.

Description	Number of Responses	Proportion
I went for counseling/prayed	11	5%
I reported/blocked the offender	77	32%
I did not respond	44	19%
I deleted the account/messages	34	14%
I apologized because my account was hacked	28	12%
I took other actions	43	18%
Total	237	100%

Limitations

Although our study contributes to literature in diverse ways, it is not without limitations. First is that respondents were recruited online using a nonprobabilistic sampling process, and our sample size was small. As a result, findings are not generalizable to the entire population of young SSA adults. Nevertheless, we believe that our study paves the way for future work in this area. Furthermore, while the risk of multiple submissions by an individual is a common limitation of studies using online samples, our study minimized this possibility using cookies already installed on the [SHYad.NET](#) website. This helped us to log and identify multiple responses from a single device, which were subsequently addressed at analysis, as noted above. Finally, as is typical of quantitative methodologies, while our online survey results provide an overview, they invite many additional questions about the context in which the reported incidents arose, including the gender of the perpetrator, their relationship to the victim, whether the incidents were isolated or part of a pattern of behavior, and what their impact was on the victim. These are the sorts of questions that could be pursued in future qualitative research.

Conclusion

Though not generalizable, it is notable that the overwhelming majority of young adults in our sample reported having experienced at least one of the listed forms of behavior often associated with TFVA. This is in keeping with the very limited existing research that has been conducted on the distribution and types of TFVA across the region. The young people in our study indicated experiencing different types of TFVA, with the most common being a form of TFSV: receiving unwanted sexually explicit images, comments, emails, or text messages. Overall, the vast majority of both young men and women respondents reported experiencing at least one form of TFVA, with the women respondents experiencing more sexual requests online and gender-based offensive and/or degrading comments and men respondents experiencing more online threats of violence. In terms of coping mechanisms, the fact that respondents were most likely to use the block option or delete their profiles, coupled with the fact that none of them indicated having reported their experiences to the authorities, may be suggestive of a number of things. It may be that they did not perceive the incident to have been serious enough to merit reporting and/or that they did not believe reporting would lead to any meaningful response. Future qualitative research could be effective for exploring both of these tentative explanations. The latter explanation would be consistent with suggestions by others, such as [Chisala-Tempelhoff and Kirya \(2016\)](#) and Facebook's Mark Zuckerberg ([BBC News, 2020](#)), that there are gaps in the regulatory framework for addressing online aggression that need to be addressed. However, there is a need for additional research to appropriately quantify the magnitude of TFVA generally and TFSV specifically across countries in the region in order to provide the evidentiary basis necessary to pave the way for interventions that will limit the impact that these new forms of violence may cause. Meaningfully addressing TFVA is particularly important in SSA as

technology becomes more and more implicated in people's lives, and increasingly central to plans for economic growth and development.

Notes

1. SSA is the part of the African continent that lies south of the Sahara.
2. More detailed examples of the specific types of behavior respondents were asked about are depicted in Fig. 5.1, which is included in our Findings section below.

References

- Aker, J. C. (2010). Information from markets near and far: Mobile phones and agricultural markets in Niger. *American Economic Journal: Applied Economics*, 2(3), 46–59.
- Aker, J. C., & Mbiti, I. M. (2011). Mobile phones and economic development in Africa. SSRN. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1693963. Accessed on January 10, 2020.
- Albertyn, C. (2009). 'The stubborn persistence of patriarchy'? Gender equality and cultural diversity in South Africa. *Constitutional Court Review*, 2(1), 165–208.
- André-Michel, E. (2010). A social media boom begins in Africa. *Africa Renewal*. Retrieved from <https://www.un.org/africarenewal/magazine/december-2010/social-media-boom-begins-africa>. Accessed on February 9, 2020.
- Ansong, E. D., Takyi, T., Damoah, D., Ampomah, E. A., & Larkotey, W. (2013). Internet trolling in Ghana. *International Journal of Emerging Science and Engineering*, 2(1), 42–43.
- APC. (2010). *How technology is being used to perpetrate violence against women - and to fight it*. Johannesburg: APC.
- Aransiola, J. O., & Asindemade, S. O. (2011). Understanding cybercrime perpetrators and the strategies they employ in Nigeria. *Cyberpsychology, Behavior, and Social Networking*, 14(12), 759–763.
- BBC News. (2020). Facebook boss calls for rules on harmful content. *BBC News*. February 15.
- Belsey, B. (2005). *Fair play at school – fair play in society towards a school without bullying! A manual for teachers and head teachers*. Daphne Project. Retrieved from www.cyberbuying.ca/facts-st.html
- Bhutta, C. B. (2012). Not by the book: Facebook as a sampling frame. *Sociological Methods & Research*, 41(1), 57–88.
- Burton, P., and Mutongwizo, T. (2009). Inescapable violence: Cyber bullying and electronic violence against young people in South Africa. *Centre for Justice and Crime Prevention*, 8, 12.
- Calvo, S., Morales, A., & Zikidis, Y. (2017). *Social and solidarity economy: The world's economy with a social face*. London: Taylor & Francis.
- Chisala-Tempelhoff, S., & Kirya, M. T. (2016). Gender, law and revenge porn in sub-Saharan Africa: A review of Malawi and Uganda. *Palgrave Communications*, 2, 16069.
- Donner, J., & Tellez, A. (2008). Mobile banking and economic development: Linking adoption, impact, and use. *Asian Journal of Communication*, 18, 318–332.

- Douglas, H., Harris, B. A., & Dragiewicz, M. (2019). Technology-facilitated domestic and family violence: Women's experiences. *British Journal of Criminology*, 59(3), 551–570.
- Dreßing, H., Bailer, J., Anders, A., Wagner, H., & Gallas, C. (2014). Cyberstalking in a large sample of social network users: Prevalence, characteristics, and impact upon victims. *Cyberpsychology, Behavior, and Social Networking*, 17(2), 61–67.
- Edwards, M., Suarez-Tangil, G., Peersman, C., Stringhini, G., Rashid, A., & Whitty, M. (2018). The geography of online dating fraud. In *Workshop on technology and consumer protection (ConPro)* (Vol. 7). San Francisco, CA: IEEE.
- Eziakonwa, A. (2019). Can investing in Africa's tech generation change the future of development? | UNDP in Africa. *UNDP*. Retrieved from <https://www.africa.undp.org/content/rba/en/home/blog/2019/can-investing-in-africas-tech-generation-change-the-future-of-de.html>. Accessed on January 13, 2020.
- Fink, C., Schmidt, A., Barash, V., Cameron, C., & Macy, M. (2016). Complex contagions and the diffusion of popular twitter Hashtags in Nigeria. *Social Network Analysis and Mining*, 6(1), 1–19.
- Gillwald, A. (2017). *Internet use barriers and user strategies: Perspectives from Kenya, Nigeria, South Africa and Rwanda*. New York, NY: Mozilla Foundation.
- Henry, N., Flynn, A., & Powell, A. (2018). Policing image-based sexual abuse: Stakeholder perspectives. *Police Practice and Research*, 19(6), 565–581.
- Henry, N., & Powell, A. (2018). Technology-facilitated sexual violence: A literature review of empirical research. *Trauma, Violence, & Abuse*, 19(2), 195–208.
- Hertz, M. F., & David-Ferdon, C. (2009). *Electronic media and youth violence: A CDC issue brief for educators and caregivers*. Atlanta, GA: Center for Disease Control and Prevention.
- Howell, C., & West, D. M. (2016). *The internet as a human right*. Brookings. Retrieved from <https://www.brookings.edu/blog/techtank/2016/11/07/the-internet-as-a-human-right/>. Accessed on February 10, 2020.
- Idongesit, E. (2014). Youths, social media and gender-based violence: An emerging trend in Nigeria. *International Journal of Economy, Management and Social Sciences*, 3(1), 21–27.
- Internet Sans Frontières. (2019). #IWD2019: Online gender-based violence affects 45% of women on social media in West and Central Africa. *Internet Sans Frontières*. Retrieved from <https://internetwithoutborders.org/iwd2019-online-gender-based-violence-affects-45-of-women-on-social-media-in-west-and-central-africa/>. Accessed on February 10, 2020.
- Jack, W., & Suri, T. (2011). *Mobile money: The Economics of M-PESA*. w16721. Cambridge, MA: National Bureau of Economic Research.
- Madanda, A., Berna, N., & Amuriat, G. Z. (2009). *Uganda: Violence against women and information and communication technologies*. Johannesburg: Association for Progressive Communications (APC).
- Makinde, O. A., Odimegwu, C. O., Abdulmalik, J. O., Babalola, S. O., & Fawole, O. I. (2016). Gender-based violence following social media acquaintance in Nigeria. *African Journal of Reproductive Health*, 20(4), 67–76.
- Makinde, O. A., Onyemelukwe, C., Onigbanjo-Williams, A., Oyediran, K. A., & Odimegwu, C. O. (2017). Rejection of the gender and equal opportunities bill in Nigeria: A setback for sustainable development goal five. *Gender in Management: An International Journal*, 32(3), 234–240.

- McGath, T. (2018). M-PESA: How Kenya revolutionized mobile payments. *Medium*. Retrieved from <https://mag.n26.com/m-pesa-how-kenya-revolutionized-mobile-payments-56786bc09ef>. Accessed on February 10, 2020.
- McGlynn, C., Rackley, E., & Houghton, R. (2017). Beyond 'revenge porn': The continuum of image-based sexual abuse. *Feminist Legal Studies*, 25(1), 25–46.
- Mooketsi, B. (2018). An investigation on the prevalence of cyberbullying amongst undergraduate students in the University of Botswana. *Mosenodi Journal*, 21(2), 44–54.
- Mtema, Z., Chagalucha, J., Cleaveland, S., Elias, M., Ferguson, H. M., Jo, E., ... Hampson, K. (2016). Mobile phones as surveillance tools: Implementing and evaluating a large-scale intersectoral surveillance system for rabies in Tanzania. *PLoS Medicine*, 13(4), e1002002.
- Mudhai, O. F., Wright, B., & Musa, A. (2016). Gender and critical media-information literacy in the digital age: Kenya, South Africa and Nigeria. *Journal of African Media Studies*, 8(3), 267–280.
- Mulisa, F., & Getahun, D. A. (2018). Perceived benefits and risks of social media: Ethiopian secondary school students' perspectives. *Journal of Technology in Behavioral Science*, 3(4), 294–300.
- Musoni, M. (2019). The criminalization of 'revenge porn' in South Africa: Research. *Obiter*, 40(1), 61–74.
- Olumide, A. O., Adams, P., & Amodu, O. K. (2015a). International note: Awareness and context of cyber-harassment among secondary school students in Oyo state, Nigeria. *Journal of Adolescence*, 39, 10–14.
- Olumide, A. O., Adams, P., & Amodu, O. K. (2015b). Prevalence and correlates of the perpetration of cyberbullying among in-school adolescents in Oyo state, Nigeria. *International Journal of Adolescent Medicine and Health*, 28(2), 183–191.
- Patchin, J. W., & Hinduja, S. (2018). Sextortion among adolescents: Results from a national survey of US Youth. *Sexual Abuse*, 32(1), 30–54. doi:10.1177/1079063218800469
- Peters, M. A. (2014). 'Western education is sinful': Boko Haram and the abduction of chibok schoolgirls. *Policy Futures in Education*, 12(2), 186–190.
- P.M. News. (2019). How to report sexual & child abuse, domestic violence in Nigeria. *P.M. News*. Retrieved from <https://www.pmnewsnigeria.com/2019/06/28/how-to-report-sexual-child-abuse-domestic-violence-in-nigeria/>. Accessed on January 20, 2020.
- Poushter, J., Caldwell, B., & Chwe, H. (2018a). *Across 39 countries, three-quarters say they use the internet*. Pew Research Center's Global Attitudes Project. Retrieved from <https://www.pewresearch.org/global/2018/06/19/across-39-countries-three-quarters-say-they-use-the-internet/>. Accessed on February 9, 2020.
- Poushter, J., Caldwell, B., & Chwe, H. (2018b). *Social media use continues to rise in developing countries*. Pew Research Center's Global Attitudes Project. Retrieved from <https://www.pewresearch.org/global/2018/06/19/social-media-use-continues-to-rise-in-developing-countries-but-plateaus-across-developed-ones/>. Accessed on February 9, 2020.
- Powell, A., & Henry, N. (2019). Technology-facilitated sexual violence victimization: Results from an online survey of Australian adults. *Journal of Interpersonal Violence*, 34(17), 3637–3665.

- Punch Newspapers. (2020). Maryam Sanda sentenced to death for killing husband. *Punch Newspapers*. Retrieved from <https://punchng.com/maryam-sanda-sentenced-to-death-for-killing-husband/>. Accessed on February 12, 2020.
- Rife, S. C., Cate, K. L., Kosinski, M., & Stillwell, D. (2016). Participant recruitment and data collection through Facebook: The role of personality factors. *International Journal of Social Research Methodology*, 19(1), 69–83.
- Sall, O. (2017). The impact of social and digital medias on Senegalese society. *Studies in Media and Communication*, 5(2), 1–7.
- Sam, D. L., Bruce, D., Agyemang, C. B., Amponsah, B., & Arkorful, H. (2019). Cyberbullying victimization among high school and university students in Ghana. *Deviant Behavior*, 40(11), 1305–1321.
- Shapshak, T. (2018). Almost all of Facebook's 139 million users in Africa are on mobile. *Forbes*. Retrieved from <https://www.forbes.com/sites/tobyshapshak/2018/12/18/almost-all-of-facebooks-139m-users-in-africa-are-on-mobile/>. Accessed on February 9, 2020.
- Silver, L., & Johnson, C. (2018a). *Internet use growing across sub-Saharan Africa, but most are still offline*. Pew Research Center's Global Attitudes Project. Retrieved from <https://www.pewresearch.org/global/2018/10/09/internet-use-is-growing-across-much-of-sub-saharan-africa-but-most-are-still-offline/>. Accessed on February 9, 2020.
- Silver, L., & Johnson, C. (2018b). *Sub-saharan Africans say internet use has positively impacted education, personal relationships and economy*. Pew Research Center's Global Attitudes Project. Retrieved from <https://www.pewresearch.org/global/2018/10/09/sub-saharan-africans-say-internet-use-has-positively-impacted-education-personal-relationships-and-economy/>. Accessed on February 9, 2020.
- Simon, T., Goldberg, A., Aharonson-Daniel, L., Leykin, D., & Adini, B. (2014). Twitter in the cross fire—the use of social media in the Westgate mall terror attack in Kenya. *PloS One*, 9(8), e104136.
- Sissing, S. K. (2013). A criminological exploration of cyber stalking in South Africa. Ph.D. thesis. University of South Africa, Pretoria.
- Smith, G. (2008). Does gender influence online survey participation?: A record-linkage analysis of university faculty online survey response behavior. ERIC Document Reproduction Service No. ED 501717.
- Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292.
- Tom-Aba, D., Olaleye, A., Olayinka, A. T., Nguku, P., Waziri, N., Peter, A., ... Shuaib, F. (2015). Innovative technological approach to ebola virus disease outbreak response in Nigeria using the open data kit and form hub technology. *PloS One*, 10(6), e0131000.
- United Nations Population Fund. (2016). *Gender-based violence*. UNFPA - United Nations Population Fund. Retrieved from <http://www.unfpa.org/gender-based-violence>. Accessed on February 11, 2016.
- Vanguard News. (2019). Babcock university expels girl in viral sex tape video. *Vanguard News*. Retrieved from <https://www.vanguardngr.com/2019/11/babcock-university-expels-girl-in-viral-sex-tape-video/>. Accessed on February 10, 2020.