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#### Chapter 6

### The Face of Technology-Facilitated Aggression in New Zealand: Exploring Adult Aggressors' Behaviors

Edgar Pacheco and Neil Melhuish

#### **Abstract**

The nature and extent of adults' engagement in diverse manifestations of technology-facilitated aggression is not yet well understood. Most research has focused on victimization. When explored, engagement in online aggression and abuse has centered on children and young people, particularly in school and higher education settings. Drawing on nationally representative data from New Zealand adults aged 18 and over, this chapter explores the overall prevalence of online aggression with a focus on gender and age. Our findings support the need to also understand adult aggressors' behaviors to better address the distress and harm caused to targets through digital communications. The chapter discusses the implications of the results for policy and practice and proposes some directions for future research.

*Keywords*: Online harassment; perpetration; media and communication; online aggression; technology; quantitative research

#### Introduction

The Harmful Digital Communications Act 2015 (HDCA) is New Zealand's main legal response to online and technology-mediated abuses such as bullying, harassment, and intimidation. Its purpose is not only to deter, prevent, and mitigate harm caused through digital communications but also to provide those affected with a quick and efficient means of redress (Harmful Digital Communications Act

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[HDCA], 2015). The development of the HDCA (2015) became a legislative priority after the New Zealand Law Commission's 2012 review of the adequacy of existing legislation. Critically, this review concluded that abuse facilitated through digital technologies was emotionally more harmful than in the pre-digital era and that there were gaps in legal sanctions for perpetrators and in access to meaningful remedies for those experiencing such abuse (Law Commission, 2012).

The HDCA (2015) is based on 10 communications principles. Nine of the principles were derived from a range of pre-existing New Zealand laws, while one was new. The principles are intended to articulate these laws and rules in a form that is accessible to general internet users. In this sense, the HDCA (2015) states that a digital communication should not be, for example, threatening, intimidating, or menacing; should not be indecent or obscene; and should not make a false allegation. Together these principles provide a general framework for describing and identifying types of online abuse such as cyberbullying, cyberstalking, image-base sexual abuse, and online hate speech, among others.

In addition, the HDCA (2015) introduced some new legal responses to online aggression. One of these responses is the inception of civil court orders for a serious and/or repeated breach of the communication principles. It also introduced a criminal offense – sanctioned with fines and/or imprisonment – that makes it illegal to post a digital communication with the intention to cause harm or that actually causes harm to the victim (see HDCA, 2015). The HDCA (2015) defines harm as "serious emotional distress" (HDCA, 2015, p. 4). In a briefing to the New Zealand Parliament, the Ministry of Justice (2014) explained that serious emotional distress sets a relatively high threshold to ensure that subjective accounts of embarrassment, anxiety, worry, or outrage are not enough to trigger enforcement of the law.

Another key innovation of the HDCA (2015) is the establishment of the Approved Agency as part of the civil regime to be the first port of call for complaints and to assist New Zealand internet users in dealing with harm and distress caused through any form of digital communication. The Approved Agency does not have powers of sanction but uses advice, negotiation, mediation, and persuasion to resolve complaints. If the Approved Agency cannot resolve the complaint brought to it by an individual, then that person may apply to the courts for a civil order. As a result, the defendant might be required to take down or disable the material, desist from engaging in the behavior concerned, publish a correction or provide a right of reply, and/or publish an apology. In 2016, Netsafe (www.netsafe.org.nz) was appointed as the Approved Agency under the HDCA (2015). Netsafe is an incorporated society formed in 2001. Its designated role complements the educational, incident response, and advisory services it provides to New Zealand's internet users, government, and commercial and community organizations. Netsafe also generates research-based evidence that informs the development of its support services and online safety resources while helping to close the knowledge gap in New Zealand – the authors of this chapter are part of Netsafe's Policy and Research team.

From November 2016 to December 2019, Netsafe received 5,835 complaints from adults aged 18 years old and over (Netsafe, 2020). Of these, 62% were received from women, 36% from men, and 2% from people identifying as gender diverse. However, in 401 of these cases that Netsafe assessed as being the most serious – in terms of the

breach of principles and potential to cause harm – the proportion of women making a complaint increased to 69% (with 31% men and 1% gender diverse). In relation to the ages of those who reported their complaint to Netsafe, 61% were 40 years old and under, rising to 67% in the most serious instances (Netsafe, 2020).

Meanwhile, since the inception of the HDCA (2015), figures from the justice system show that, until June 2019, a total of 253 people were charged with criminal offenses that fall under the umbrella of the HDCA principles. Of this number, 85% were males and 15% females, with similar proportions subsequently being convicted (88% male and 12% female). In relation to age, the data shows that 90% of those charged and convicted were aged 44 years or younger (Ministry of Justice, 2019). Data relating to civil claims under the HDCA (2015) are not currently publicly available.

The HDCA (2015) is a key legal instrument helping to address and sanction aggression and abuse online. However, a legislative response is not enough to prevent hurtful behaviors, reduce victimization, and mitigate harm. We suggest that researchbased evidence to also support preventive interventions would significantly improve the safety of New Zealand internet users. However, research to date in the country has focused solely on victimization in the context of children and young people (Pacheco & Melhuish, 2018). Research-based evidence about the nature and extent of adults who engage in different forms of online aggression and their motivations for doing so is lacking in the country (see Background section for details). Creating new knowledge about adult perpetrators and victims can help to develop policy and programming to address and prevent matters of public concern in which digital technologies play a facilitative or mediating role, such as the live streaming video of the Christchurch terrorist attack and incidents of family and sexual violence in which technology is used to reproduce control and abuse. Research-based evidence can also help in developing contextually-appropriate interventions that distinguish between situations where individuals have consensually engaged with others in activities and exchanges (e.g., the sending of sexual images or making sexual advances) and situations where the behaviors are engaged in nonconsensually and/or were or ought to have been known to the perpetrator to have been unwelcome. Among other things, quantitative studies such as the one reported on here can play an important role in better understanding the sorts of context-specific inquiries that will need to be made in subsequent qualitative research.

In an effort to address the knowledge gap highlighted above, this chapter reports on aspects of the *Annual Population Survey* (APS), a quantitative study developed by Netsafe. The analysis presented here is guided by two underpinning research questions relating to APS data:

*RQ1*- What is the prevalence of engagement in technology-facilitated aggression (TFA) among adult New Zealanders in the prior year in the context of age and gender?

*RQ2*- What are the characteristics of TFA in relation to aggressors' motivations, their choice of the target(s), and whether their behavior was connected with a wider issue happening offline?

This chapter has been organized in the following way. It first summarizes available literature about adults and TFA in New Zealand and overseas, pointing out the research focus on victimization and young people, and the need to explore

engagement in aggression based on key demographic variables. The chapter then describes the methodological approach, and the subsequent section deals with our study findings about the prevalence and extent of TFA. The last section discusses the implications of the findings for policy, practice, and research.

#### **Background**

#### Technology-Facilitated Aggression: Victimization in New Zealand

New Zealand research on diverse forms of aggression and abuse online is limited but growing. Similar to international trends, most studies have explored children and teenagers' experiences of online risks and harm, in large part, because of public concern (and news media's anxiety) around the dangers of technology (Pacheco & Melhuish, 2020). However, in recent years, researchers have turned their focus to adults as well. In this respect, some studies have looked at online harassment among New Zealand members of Parliament (Every-Palmer, Barry-Walsh, & Pathé, 2015), cyberbullying in the workplace in general (Gardner et al., 2016) or in more specific contexts such as within the health system (D'Souza, Catley, Tappin, & Forsyth, 2019; Minton, Birks, Cant, & Budden, 2018). While relevant, these studies do not provide measures matching the characteristics of the country's population as a whole.

Just a few large-scale quantitative studies exploring personal experiences of specific forms of online aggression and abuse among adults can be found in the New Zealand-based literature. One study explored the prevalence of cyberbullying with a focus on gender (Steiner-Fox et al., 2016), while another conducted by Netsafe looked at the extent of image-based sexual abuse (Pacheco, Melhuish, & Fiske, 2019). In addition, researchers have started reporting and analyzing annual measures of the incidence of online hate speech victimization and exposure (see Pacheco & Melhuish, 2019). Further, a 2017 study by Netsafe explored the prevalence and impact of harmful digital communications, finding that a third of adult New Zealanders received in the prior year at least one type of unwanted online content (Pacheco & Melhuish, 2018). Even with this increasing attention to adults, research has largely concentrated on victimization and the target's perceived impact of online aggression and abuse. Currently, to the best of our knowledge, there are no New Zealand-based data on the prevalence of adults' self-reported engagement in diverse forms of online aggression, also referred to here as technology-facilitated aggression (TFA). This knowledge gap limits the understanding of TFA and can hinder the impact of policy as well as the effective delivery of services and support to those who have been targeted.

#### People's Engagement in Technology-Facilitated Aggression

Notably, the paucity in New Zealand of quantitative inquiry on adults' engagement in TFA on the basis of representative data is in keeping with a similar pattern overseas (Henry, Flynn, & Powell, 2019; Henry & Powell, 2018; Jenaro, Flores, & Frías, 2018). At best, available research on specific aspects of TFA has largely centered on emerging adults and been small in scale. For instance, the few

studies on cyberbullying "perpetration" have centered on tertiary students (see Barlett, Chamberlin, & Witkower, 2017; Bauman & Baldasare, 2015; Doane, Pearson, & Kelley, 2014) as researching this population group is more accessible for academics. Research on sexting, cyber dating, and cyberstalking has been similarly focused (see Borrajo, Gámez-Guadix, & Calvete, 2015; Deans & Bhogal, 2019; Gámez-Guadix, Almendros, Borrajo, & Calvete, 2015; Garcia et al., 2016). Relying on convenience sampling is a valid research approach (Bryman, 2008) and focusing on the experiences of young people in tertiary education also helps to understand the extent of TFA in a specific social setting. However, policy makers and practitioners also need research-based evidence that is closely aligned with the entire population group to answer emerging social science and policy questions such as those regarding engagement in TFA.

Further, the role of gender as a predictor of adults' engagement in TFA is not yet well understood. Some studies have found an association between gender and some forms of online aggression. For instance, in a nationwide Australian study, males (13.7%) were more likely to engage in image-based sexual abuse than females (7.4%) (see Henry et al., 2019). Similar trends have been reported in regard to cyber dating abuse and sexting among younger adults (see Deans & Bhogal, 2019; Morelli, Bianchi, Baiocco, Pezzuti, & Chirumbolo, 2016; Wick et al., 2017). Furthermore, an American study reported that, while men and women are equally likely to be harassed online, women have to deal with a wider and more serious variety of abuse online (Lenhart, Ybarra, Zickuhr, & Price-Feeney, 2016). However, others suggest that, compared to young men, young women are more likely to engage in controlling or monitoring online behaviors (see Bennett, Guran, Ramos, & Margolin, 2011; Burke, Wallen, Vail-Smith, & Knox, 2011). At the same time, some have found no strong link between gender and engagement in online aggression and abuse related to cyber dating (Borrajo et al., 2015) and interpersonal surveillance (Tokunaga, 2011). However, while Garcia et al.'s (2016) study on sexting and single adults in the United States (US) did not find a gender link among young people, it did so among older adults, with males being more likely to share a nude image than females.

Understanding the nature and extent of engagement in TFA is a critical component for effective online safety interventions. Recently, academics and the technology industry have been trying innovative approaches such as machine learning to detect and remove online aggression (BBC, 2019). Such computational approaches have a reactive role to deal with incidents. However, proactive responses are also needed, and they require research-based evidence to inform the development of interventions aimed at preventing the different forms of TFA and better understanding the circumstances in which adults engage in certain types of behaviors often associated with TFA.

#### Method

The findings for this chapter come from the APS, a self-report study which gathers data from New Zealanders aged 18 and over. It was developed by Netsafe based on its extensive operational experience in online safety, the

Communications Principles of the HDCA (2015), and in consultation with key stakeholders. The APS covers a range of topics regarding people's experiences of and attitudes toward unwanted digital communications and other online experiences as well as the potential harm they might cause.

Colmar Brunton, a research firm, was contracted to distribute the instrument via email between 4 and 26 June 2019 using independent online research panels for a population-based cross-sectional survey. Online surveys are increasingly used in the social sciences. They are less expensive and easier to administer than paper-based surveys. Moreover, online surveys are useful for exploratory research, particularly on topics regarding people's online activities and behaviors (Garcia et al., 2016; Henry & Talbot, 2019; Lenhart et al., 2016; Pacheco et al., 2019; Pacheco & Melhuish, 2017; Powell & Henry, 2019).

The sample was structured to be representative of the population in terms of age and gender. Data were weighted using key population targets drawn from New Zealand's 2013 Census data (Stats NZ, 2015). The maximum margin of error for the whole results is +/- 3.1% at 95% confidence. The response rate was 28%.

There were a total of 1,161 participants. Participants received an email with detailed information about the nature and purpose of the study and gave their consent to participate. Two email reminders were sent during fieldwork. Participants were also incentivized through a point-based reward system when they completed the survey. In terms of gender, females represented 51.7% of the total sample while males made up 47.9%. Only 0.4% of participants identified as gender diverse. Regarding age groups, participants were distributed as follows: 18–29 years old (20.9%), 30–39 years old (16.4%), 40–49 years old (18.9%), 50–59 years old (17.5%), 60–69 years old (13.6%), and 70 years old and older (12.6%).

For this chapter, only data regarding participants' self-reported engagement in behaviors often associated with TFA are presented and discussed. Descriptive statistics were used to present quantitative accounts or summaries of what the data show about the sample and the measures (Trochim & Donnelly, 2007) in the context of gender and age. Thus, broad patterns are discussed in the chapter only when findings are statistically significant.

Due to the sensitive nature of the research topic, the authors ensured that special attention was paid to research ethics at all stages of the study. Participants' informed consent was obtained after providing them with information about the purpose of the survey, what would be involved, and how collected data would be used and protected. The authors ensured that the Colmar Brunton Social Research Team administering the online survey followed ethical protocols to respect and protect participants' safety and rights to take part in and/or withdraw from the study. Moreover, contact information for support services, such as Netsafe's helpline, was also provided to the participants. In addition, the APS questionnaire was sensitively worded, cognitively tested, and piloted to identify any risk of causing distress to the participants.

Although this study provides new insights into adult New Zealanders' engagement in TFA, it has limitations that need to be mentioned. First, a potential issue relates to social desirability bias in the self-reported data provided

by the participants (Bryman, 2008), meaning that some might not have disclosed their engagement in TFA and instead provided socially desirable answers. Second, despite surveying the sending of unwanted digital communications, some of the listed behaviors that participants were asked about may have taken place in consensual contexts where the behavior of the participant was not considered harmful (and perhaps was even welcomed) by the recipient (e.g., making a sexual advance, sending a sexual image). Since it can be difficult for quantitative instruments to delve deeply into context, future qualitative research could be beneficial for better understanding these contextual nuances. Third, although our gender measure allowed participants to identify themselves within the broad category of gender diverse, only 0.4% did so. Thus, arriving at statistically relevant conclusions for this sub-group was not possible. Fourth, a relatively small number of respondents reported engaging in listed behaviors, thereby limiting the possibility for broad generalizations about particular types of behavior within the population as a whole. Finally, as previously mentioned, data were weighted using the 2013 census data (Stats NZ, 2015). At the time of carrying out data processing and reporting, the 2018 census data were not yet available.

#### **Findings**

#### Engagement in Technology-Facilitated Aggression

To answer the first research question about engagement in TFA, participants were asked whether in the last 12 months they had undertaken a range of behaviors online toward someone else. These involved sending or sharing digital communications that (1) physically threatened someone, (2) attempted to get someone excluded from a friendship group, (3) tried to embarrass someone, (4) said offensive things about someone (e.g., the way they look, how they behave, or what they believe in), (5) posted or sent violent or sexual content, (6) made a false statement about someone's personal or professional life, (7) made a sexual advance toward someone (e.g., messages about sex, naked selfies, images, or video live stream), (8) regularly monitored someone's online activity in order to influence their behavior or thoughts, (9) shared intimate images or recordings of someone without their permission, (10) encouraged other people to send hurtful messages to someone else, or (11) tried to get someone to hurt themselves. The response options for each of these behaviors included: No, Yes – once, and Yes – more than once. The overall prevalence of TFA was obtained by aggregating the responses of participants who engaged at least in one of these behaviors.

In general, of all the participants (n = 1,161), over 1 in 10 (11.4%) disclosed having sent or shared at least one type of offensive or abusive digital communication to someone else (one or more times) in the last 12 months (Table 6.1). What is more, 2.5% reported posting hurtful content online only once while 8.9% did so more than one time. The study also found that, in regard to gender, males (16.5%) were more likely to engage in the listed behaviors compared to females (6.6%). Regarding age, sending or sharing an offensive digital communication

	Sample	TFA Aggression
Male	556 (47.9%)	16.5%
Female	501 (51.7%)	6.6%
18-29	243 (20.9%)	19.8%
30–39	190 (16.4%)	19.4%
40-49	219 (18.95)	12.0%
50-59	203 (17.5%)	5.6%
60–69	158 (13.6%)	5.1%
70 or older	147 (12.6%)	1.5%
Total	1,161	11.4%

Table 6.1. Adult New Zealanders' Overall Engagement in TFA by Gender and Age.

was more common among younger adults, particularly for those aged 18–29 (19.8%), followed by 30–39 and 40–49 years old, 19.4% and 12.0%, respectively.

Furthermore, our results also show which of the listed behaviors were more common among participants. In this respect, as Table 6.2 depicts, posting or sharing content that said offensive things (6%) was the most common form of TFA. Less common were sharing content that sought to embarrass someone, attempted to get someone excluded from a friendship group, was a sexual advance toward someone, was violent or sexual, or encouraged other people to send hurtful messages to someone (3% for each of them). Meanwhile, 2% was the rate for each of the remaining behaviors included in our typology of TFA. These included behaviors that monitored someone's online activity, physically threatened someone, shared intimate images or recordings without permission, was a false statement about someone's personal or professional life, and tried to get someone to hurt themselves.

Regarding gender, as previously mentioned, overall engagement in diverse manifestations of the listed behaviors was higher among males compared to females. Rates for some types were more significant statistically than others. For instance, 9% of males indicated to have posted offensive things about someone compared to 3% of females. Also, posting online content that attempted to get someone excluded from a friendship group was higher among males (6%) than females (1%). In terms of age, posting content that said offensive things about someone was more common among 18–29 and 40–49 years old, with rates at 8% for each of these age groups. Meanwhile, those aged 30–39 were more likely to send content online with the intention of getting someone excluded from a friendship group.

#### The Target of Technology-Facilitated Aggression

To explore the extent and nature of TFA, participants who indicated they had engaged in at least one of the listed behaviors in the prior year (n = 140) were

Table 6.2. Prevalence of Each Type of TFA by Gender and Age.

	Said Offensive Things About Someone	Tried to Embarrass Someone Online	Attempted to Get Someone Excluded from a Friendship Group	Was a Sexual Advance Toward Someone	Included Violent or Sexual Content	Encouraged Other People to Send Hurtful Messages to Someone Else	Involved Regularly Monitoring Someone's Online Activity	Physically Threatened Someone	Shared Intimate Images or Recordings Without Permission	Was a False Statement About Someone's Personal or Professional Life	Tried to Get Someone to Hurt Themselves	Was Harmful to Someone Else in Another Way
Male	48 (9%)	20 (4%)	35 (6%)	23 (4%)	26 (5%)	27 (5%)	15 (3%)	15 (3%)	21 (4%)	20 (4%)	22 (4%)	17 (3%)
Female	17 (3%)	13 (2%)	4 (1%)	9 (2%)	5 (1%)	5 (1%)	6 (1%)	5 (1%)	2 (-)	6 (1%)	4 (1%)	8 (1%)
18-29	20 (8%)	16 (7%)	9 (4%)	14 (6%)	9 (4%)	8 (3%)	6 (3%)	9 (4%)	9 (4%)	9 (4%)	7 (3%)	12 (5%)
30-39	20 (11%)	12 (6%)	25 (13%)	5 (2%)	11 (6%)	8 (4%)	9 (5%)	5 (3%)	9 (5%)	9 (5%)	9 (5%)	4 (2%)
40-49	19 (8%)	4 (2%)	1 (-)	9 (4%)	10 (4%)	11 (5%)	3 (1%)	1 (-)	2 (1%)	1 (1%)	9 (4%)	9 (4%)
50-59	6 (3%)	1 (-)	2 (1%)	4 (2%)	1 (-)	4 (2%)	_	6 (3%)	3 (2%)	4 (2%)	1 (1%)	1 (-)
60-69	_	1 (1%)	3 (2%)	_	1 (1%)	_	3 (2%)	_	_	3 (2%)	_	_
70-older	_	_	_	_	_	2 (1%)	_	_	_	_	_	_
Total	65 (6%)	34 (3%)	40 (3%)	32 (3%)	32 (3%)	33 (3%)	21 (2%)	21 (2%)	22 (2%)	26 (2%)	27 (2%)	25 (2%)

asked a follow-up question about who the target was. The response scale included: (a) a family member, (b) a friend, (c) a colleague/past colleague, (d) an acquaintance – someone who is part of their wider peer group, (e) other, and (f) none of the above.

As Table 6.3 depicts, 29% of targets were a friend, followed by a family member (20%). In addition, 13% of those targeted were strangers to the participants while 12% said they targeted a colleague or past colleague. In terms of gender, it was more common for males (33%) to target a friend compared to females (20%). In contrast, targeting a family member was more common among female participants (30%) than males (16%). Regarding age, 49% of participants aged 30–39 indicated having sent or shared an offensive communication to or with a friend, while 26% of those aged 18–29 did so too. Furthermore, young participants aged 18–29 (26%) were more likely to target a family member than their 30–39 years old peers (21%). Interestingly, targeting a stranger was more common among older adults aged 40 and over.

#### Reasons for Engaging in Technology-Facilitated Aggression

The survey also asked these participants about the main reason that motivated them to engage in the listed behaviors. To indicate their responses, participants were provided with the following items: (1) to embarrass the person, (2) to influence their behavior or thoughts, (3) to scare them, (4) to get revenge or get back at them, (5) for sexual pleasure, (6) for a joke, (7) to get money from them, (8) to get more images or videos from them, (9) other, and (10) don't know.

When asked about the reason for their behavior, just over a quarter (28%) of respondents (n = 140) said their communications were designed and sent as a joke (Table 6.4). The second most common reason was to influence their target's behavior or thoughts (14%). Less common reasons reported by the participants were to scare the target (8%), to embarrass them (6%), to get revenge (4%), or to get money from them (3%). While 19% said there were other reasons, 16% did not know the motivation behind their behavior. Interestingly, compared to males (23%), females (40%) were more likely to send an offensive communication as a joke. In contrast, for males it was more common to do so to influence their target's behavior or thoughts, to scare them, to embarrass them, and to get revenge. In terms of age, it is noticeable that for a significant proportion of participants aged 18-29 (61%) their behavior was intended as a joke. While a third of those aged 30-39 years old (33%) indicated not knowing what the motivation for their action was, 32% of those aged 40-49 reported that they sought to scare the target.

#### Channels Used for Technology-Facilitated Aggression

We were also interested in knowing what digital tools participants used to engage in the listed behaviors (Table 6.5). Our data indicate that for these respondents (n = 140), a phone text (39%) was the most common channel, followed by posting hurtful content on their own personal social media site (34%) and via email (20%).

Table 6.3. The Target of TFA by Gender and Age.

	Sample Size	Friend	Family Member	Stranger	Current/Past Colleague	Acquaintance	Other	None of These
Male	86	33%	16%	11%	18%	4%	_	18%
Female	51	20%	30%	17%	_	8%	2%	23%
18-29	58	32%	26%	10%	1%	8%	1%	21%
30-39	38	49%	21%	4%	18%	5%	_	3%
40–49	19	_	9%	19%	23%	4%	1%	44%
50-59	13	29%	2%	33%	1%	4%	_	31%
60–69	8	2%	42%	20%	33%	4%	_	_
70 or older	4	69%	_	_	19%	_	6%	5%
Total	140	29%	20%	13%	12%	5%	1%	20%

Table 6.4. Aggressors' Reasons for Engaging in TFA by Gender and Age.

	Sample Size	A Joke	To Influence Their Behavior or Thoughts	To Scare Them	To Embarrass the Person	To Get Revenge	To Get Money from Them	To Get More Image or Videos from Them	For Sexual Pleasure	Other	Don't Know
Male	86	23%	18%	11%	8%	5%	2%	2%	1%	11%	18%
Female	51	40%	5%	3%	_	1%	4%	_	1%	36%	10%
18-29	58	61%	9%	2%	4%	6%	_	5%	2%	2%	8%
30-39	38	10%	14%	2%	12%	1%	8%	_	1%	19%	33%
40-49	19	3%	6%	32%	_	5%	3%	_	1%	40%	10%
50-59	13	29%	13%	4%	_	_	1%	_	_	49%	5%
60-69	8	_	76%	_	13%	_	_	_	_	8%	2%
70-older	4	_	_	19%	_	_	_	_	_	6%	74%
Total	140	28%	14%	8%	6%	4%	3%	2%	1%	19%	16%

Table 6.5. Channels Used for TFA.

	Sample Size	Phone Text	Personal Social Media	Email	Others' Social Media	Dating Website/ App	Discussion Forum	Online Gaming	Other
Male	86	34%	44%	25%	8%	14%	8%	6%	8%
Female	51	50%	10%	9%	14%	3%	4%	1%	23%
18-29	58	50%	13%	9%	14%	10%	3%	8%	12%
30-39	38	48%	35%	33%	4%	24%	17%	_	14%
40-49	19	9%	41%	12%	17%	_	2%	6%	21%
50-59	13	53%	61%	47%	3%	3%	3%	_	_
60–69	8	8%	92%	4%	4%	_	_	_	4%
70-older	4	25%	6%	74%	_	_	5%	_	_
Total	140	39%	34%	20%	10%	10%	6%	4%	12%

	Sample Size	Yes	No - Only Online	Don't Know
Male	86	26%	47%	27%
Female	51	20%	44%	36%
18–29	58	32%	38%	30%
30–39	38	23%	37%	40%
40–49	19	23%	63%	15%
50–59	13	<b>4</b> %	67%	29%
60–69	8	2%	63%	35%
70 or older	4	88%	6%	5%
Total	140	24%	46%	30%

Table 6.6. TFA as Part of a Wider Issue Happening Offline.

Less common was the use of someone else's social media (10%) or a dating app (10%). For males who engaged in harmful online activities, it was much more common to post the content on their own social media site (44%). Other common channels were a phone text (34%) and email (25%). In contrast, half of the female participants who engaged in TFA said they sent a phone text. The second most common channel used was posting on other people's social media sites (14%) and then posting on their own social media site (10%). In terms of age, for both 18–29 (50%) and 30–39 years old participants (48%) engaging in one of the listed behaviors was more often done via phone text, while participants from older age groups tended to use their personal social media site to engage in the listed behaviors.

## Technology-Facilitated Aggression as a Part of a Wider Issue Happening Offline

Table 6.6 presents results from a final question that explored whether engaging in the listed behaviors was related to a broader issue that was happening offline. We explained to participants that by "offline" we meant a situation occurring in a physical environment, such as through face-to-face interactions. Interestingly, nearly half of participants (46%) who engaged in the listed behaviors indicated that their actions occurred only online. Differences regarding gender were not significant, but in terms of age, younger adults, aged 18–29 and 30–39, reported a higher incidence of engagement in the listed behaviors connected with an offline situation.

#### **Discussion and Conclusions**

This empirical study sought to explore the extent of engagement in TFA among adult New Zealanders by examining engagement in a set of listed behaviors. It offers evidence about its prevalence based on nationally representative data. The

study not only reveals that just over 1 in 10 participants (11.4%) admitted to having engaged in one or more of the listed behaviors in the past year, but also offers further insights about the nature of TFA and areas for further research, which are discussed below.

#### The Gendered Nature of Technology-Facilitated Aggression

The data show a higher rate of engagement in behaviors often associated with TFA, by 10 percentage points, among males (16.5%) compared to females (6.6%). This finding seems consistent with some prior research on the gendered nature of diverse forms of online aggression and abuse (see Deans & Bhogal, 2019; Henry et al., 2019; Morelli et al., 2016; Wick et al., 2017). Similarly, the finding is consistent with a pattern from New Zealand's justice system in which the number of men charged with criminal offenses under the HDCA (2015) is much higher than the number of women (Ministry of Justice, 2019). What is more, when looking at the main reasons behind engaging in behaviors often associated with TFA, males reported higher rates of motivations that, in general, sought to exert control over and coerce their target. For example, it was significantly more common for males to seek to influence their target's behavior/ thoughts and to scare them. Males who engaged in the listed behaviors were also more likely to be trying to embarrass their target or to get revenge. Thus, in contrast to what some have suggested about women's monitoring behaviors (see Bennett et al., 2011; Burke et al., 2011), our results suggest that among adult New Zealanders, males' online aggression may be more likely to be intended for controlling and hurting their target. Although this study did not ask participants about their target's gender, research on online victimization (see Deans & Bhogal, 2019; Henry & Powell, 2018; Morelli et al., 2016; Wick et al., 2017) and Netsafe's operational experience (see the Introduction section in this chapter) suggests that in most forms of online aggression, women are more likely to be targeted.

The results also show the gender differences in the use of digital channels for TFA. While both males and females did not limit themselves to the use of one specific digital channel, aggregating results suggest that males tend to engage in the listed behaviors through platforms that, in most cases, are designed to be networked and/or public, such as social media sites, dating apps, discussion forums, and online gaming. For instance, it was much more common for males (44%) to post an unwanted communication on their personal social media compared to females (10%). In contrast, females who disclosed engagement in the listed behaviors preferred the use of digital channels that allow more personal and private communication. In this respect, for females (50%), it was more common to use a phone text to post an unwanted communication than males (34%). Considering the differing ways males and females use digital devices, participate in online activities, and engage with social media platforms (Pacheco & Melhuish, 2020), the findings suggest that the gendered pattern may extend to the use of digital channels for engagement in TFA.

#### Technology-Facilitated Aggression and Younger Adults

Another interesting finding is the link between age and engagement in behaviors often associated with TFA. As described in Table 6.1, our data reveal that such engagement was more common among young adults aged 18–29 and 30–39 (nearly 20% for each of these age groups), and that rates decreased progressively among older age groups. Prior research on adolescents shows that older teens tend to engage in risky online behaviors that might be potentially harmful such as sexting (Livingstone & Görzig, 2014; Pacheco & Melhuish, 2017). Our finding may provide some support for the conclusion that this pattern of risk taking online continues among younger adults.

Similarly, an unexpected finding relates to the role of fun-seeking in engagement in the listed behaviors among younger adults. Our results show that 61% of participants aged 18-29 who disclosed such engagement indicated their actions were intended as a joke, a rate far higher (by 33 percentage points) than the average responses gathered for this study (see Table 6.3). This finding suggests that, along with other social and psychological predictors, a tendency toward funseeking might be also a factor helping to explain younger adults' engagement in behaviors often associated with online aggression and abuse. The literature rarely looks at fun-seeking as a factor, and when it does so, it is in the context of children and cyberbullying (see Smith et al., 2008; Wong & McBride, 2018). However, a recent Netsafe empirical study on image-based sexual abuse among adults offers supporting evidence about the role of fun-seeking (Pacheco et al., 2019). The study revealed that 19% of targets believed their aggressor's main motivation was looking for fun, followed by seeking to get money from them (17%), and to get revenge (14%) (see Pacheco et al., 2019). Thus, future research should incorporate the role of fun-seeking as a factor helping to understand the nature of online aggression (Wong & McBride, 2018) and the extent of its link to the different behaviors associated with TFA not only among children but also the younger adult population. Furthermore, qualitative inquiry might shed light on the complexities of behaviors that are argued to be part of fun or play and their impact on targets' perceived harm. In addition, for practitioners, the implications of fun-seeking for potential harm should be included in the implementation of preventive interventions, in particular, educational and awareness programs.

#### Close Connections

A third interesting finding relates to those groups that were more commonly targeted by the listed behaviors. Surprisingly, half of participants indicated that the target was part of their close network of relationships, especially a friend (29%) or a family member (20%). This finding is surprising as it contrasts with prior New Zealand-based research regarding online victimization among adults. In this respect, a 2017 Netsafe study found that 36% of adult participants aged 18 and over believed they were targeted by a stranger—while rates for the person responsible being a friend or a family member were much lower (see Pacheco & Melhuish, 2018). This finding challenges the idea of the pervasiveness of "stranger

danger" online which has been the focus of news media coverage as well as policy and law enforcement strategies, particularly for young people (Bailey, 2015; Pacheco & Melhuish, 2020). It also suggests a dissociation between what targets believe and/or know about who their online aggressor was and the self-reported accounts from those who admitted engagement in behaviors often associated with TFA. An explanation for this finding could be provided by the characteristics of digital communications. In this respect, aggressors may be taking advantage of the ease with which digital tools can facilitate anonymity or mask their real identity to target people familiar to them.

In addition, there seems to be a paradox regarding the role of close connections in the context of TFA and online risks, particularly among younger adults. On the one hand, research on children, for example, points out the supportive role of friends and family in managing online risks and harm. In this regard, Netsafe research shows, for example, that peer support becomes increasingly important among teens who deal with upsetting experiences online (Pacheco & Melhuish, 2020). On the other hand, however, this study shows that a close connection was also more likely to be the target of the listed behaviors - overall, 29% of participants who engaged in such behaviors targeted a friend and 20% a family member. Furthermore, as previously described in this chapter, the prevalence of targeting close connections is higher among younger adults, with males more likely to target a friend and females more likely to target a family member (see Table 6.2). Research on children shows some evidence about friends engaging in hurtful behaviors online against their close peers (Felmlee & Faris, 2016; Mishna, Wiener, & Pepler, 2008; Wei & Jonson-Reid, 2011) and what our data suggest is that this pattern continues among younger adults.

#### **Future Directions**

This study has collected relevant data on behaviors often associated with TFA in the context of the New Zealand adult population. However, despite its contribution, some aspects still need to be addressed in order to inform the development of comprehensive policies and effective interventions. First, we recommend annually monitoring not only the prevalence of adults' victimization but also engagement in TFA. Our operational and research experience at Netsafe shows that the incidence of some harmful behaviors online, such as hate speech, can change and affect people differently over time (Pacheco & Melhuish, 2019). Thus, gathering longitudinal data will help to understand evolving trends in engagement in TFA. Furthermore, quantitative research on the topic needs to include other variables such as those describing socio-economic and psychological characteristics of online aggressors. Further, qualitative inquiry is needed to learn about the context and views of those who engage in harmful online behaviors, including asking them about their target's gender or how specific digital tools (e.g., social media) are used to engage in online aggression. As previously mentioned, some qualitative work has been conducted but in the context of tertiary students. However, the line of inquiry needs to be expanded to other groups, considering people's sexual orientation or their intimate partner relationship status, for instance. Further, this approach would enable us to look more closely at the contexts that shape these experiences and that are out of reach in a quantitative study such as this. Qualitative inquiry would enable a richer look at TFA from the views of those who engage in online aggression and help to distinguish it from situations where what might appear to be aggressive behavior was actually part of a consensual or mutually-accepted form of exchange. Similarly, several questions remain to be answered such as to what extent engagement in TFA overlaps with experiences of victimization.

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