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Thesis Title: Compelled to Connect: A Constructivist Grounded Theory of How Online Communication Compulsions Begin, Sustain, and End

Volume 2: Publishable Piece and Combined Case Study and Process Report

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List of Abbreviations

CMC   Computer Mediated Communication

DMR   Digitally Modified Relating

PEC   Problematic Electronic Communication

PIU   Problematic Internet Use

Glossary

Being "Left on Read" is the experience in messaging apps where a sent message is marked as read by the receiver of the message, but no reply is provided.

Cyber-socialisation is how individuals absorb and adopt online norms, values, and behaviours. It occurs due to exposure to digital social contexts.

Digital immigrants are people born before 1980 and not raised in the digital age. They may have adopted modern technologies but may be less comfortable or proficient at using them than younger persons (Herrmann et al., 2021).

A **Digital Native** is an individual born in or after 1980 who grew up exposed to digital technologies and the internet. Their lifelong exposure to modern technologies enhances their ability to navigate digital environments (Herrmann et al., 2021).

Digitally Mediated Communication is the exchange of information and messages via digital platforms.

Digitally Modified Relating is a term emerging from this research that captures how relating experiences may evolve due to exposure to electronic communication.

Electronic Chat is communication that occurs over digital devices, typically involving the exchange of text over messaging services.

Emoticons are graphical symbols used in digital communication to suggest an emotion.

FOMO (Fear of Missing Out) is the anxiety around missing out on rewarding experiences, particularly those connected to online social environments.

Groupthink is the tendency for group members to agree with the consensus of a group. It can lead to poor decision-making and the suppression of dissenting voices.

Hyperconnectedness describes a person who is continuously connected across multiple online communication channels (Quan-Haase & Wellman, 2006).

Nomophobia is an experience of anxiety or distress that a person may experience when separated from their mobile device.

The **Online Disinhibition Effect** is a phenomenon where persons exhibit less restraint online. They may express themselves more freely or aggressively due to online experiences of anonymity and reduced accountability.

Problematic Electronic Communication (PEC) is a concept developed by the research to focus the present enquiry. PEC involves repeated, problematic re-engagement with electronic communication, leading to altered relationship experiences.

Related Stimuli are cues associated with a particular source (e.g., mobile device) that may trigger similar responses through psychological reinforcement.

Supernormal Online Relating is an adaptation of the concept of supernormal stimuli. It is offered in this work to describe how online interactions may be exaggerated beyond typical interactions.

Supernormal Stimuli are exaggerated cues that trigger responses that are stronger than similar, naturally occurring responses. This concept was initially developed from Tinbergen's (1953) animal behaviour experiments.

Techno-optimism is a belief that technological advancements will lead to positive improvements in life.

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I dedicate this thesis to my parents. I sincerely believe that the achievement of this thesis is as much a part of their legacy as mine. Thank you, Mum, for your ever-constant patience and support! I am grateful for your love, thoughtfulness, and encouragement. I also dedicate this work to my dad, ███████ Sadly, my dad took his final journey during my doctoral training; his suffering and passing were painful for our family and friends. At the best of times, my father was a bright spark of uniqueness, engagement, and curiosity. I am so grateful for how he inspired my personal, intellectual, and

academic growth. I know my dad would have been pleased to celebrate the completion of this research and my doctoral training. Thank you, Dad!

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Chapter 5: Publishable Piece

Digitally Modified Relating:

How Might Online Communication Become Problematic?

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5.1 Abstract

Background: Research-based understandings of the effects of digital technologies on relationships and mental health are in their infancy. The extant literature does not provide phenomenologically informed accounts of how exposure to computer-mediated communication may modify face-to-face relating experiences.

Methodology: This research used the constructivist grounded theory method to investigate these experiences with UK residents. Of the 40 participants who self-selected for participation, 17 contributed by writing about their experiences, and seven went on to be interviewed. The analysis of participant data adhered to Charmaz's (2014) constructivist grounded theory method and Willig's (2013) guidelines for adapting grounded theory to an abbreviated version.

Findings: The tentative model of Problematic Electronic Communication suggested that participants could cultivate desirable online relating experiences to address their needs and reduce their suffering. I present "digitally modified relating," a process whereby exposure to supernormal relating may modify in-person social experiences.

Conclusion: Digitally modified relating may be a useful concept in psychological assessment, formulation, and interventions.

Keywords: cyberpsychology; electronic communication; computer-mediated communication; problematic internet use

Data Availability: Permission was not sought to make personal data available.

5.2 Introduction

As the Internet facilitates billions of electronic messages transmitted across the world every day (Meredith, 2019), there have been calls to consider how electronic communication technologies have altered society (Byrne & Kirwan, 2019) and affected mental health (Forsman & Nordmyr, 2015). This article presents a constructivist grounded theory of problems with electronic communication. After reviewing the relevant literature, I shall outline the development of the theory of "problematic electronic communication" (PEC). This work focuses on a process within PEC that I call "digitally modified relating" (DMR) and its relevance to psychological therapy.

Aiken (2016) suggests that cyberspace offers unique social contexts that might profoundly affect personal psychology. She argues that the online disinhibition effect causes cyberspace to be a catalyst for human expression and behaviour. Suler (2016) proposed the existence of the online disinhibition effect (ODE), where online, prosocial, and antisocial behaviour are amplified. Barrett (2015) extended the concept of supernormal stimuli to explain how human responses may be amplified by modifying instinctual cues. Online social spaces may offer unique experiences (McFarland & Ployhart, 2015) that facilitate supernormal experiences. For example, increasing consumption of online pornography is correlated with decreased real-life sexual satisfaction (Dwulit & Rzymski, 2019). If supernormal experiences are pleasurable, Katz et al.'s (1973) Uses and Gratifications Theory (UGT) may suggest an explanation. UGT assumes people instrumentally use electronic communication. In her conception of the cyber-self, Aiken (2016) asserts that people curate an idealised self that influences their sense of self. She reflects on the normalisation of impression management in online

spaces. Aiken's perspective is echoed by Walther's hyperpersonal model (Walther & Whitty, 2020), which suggests that providing unrealistic impressions of self may produce feedback that reinforces online engagement.

The operant conditioning model of addiction suggests anticipatory excitement and pleasure experiences reinforce addictive cycles (Achab et al., 2015). Experiences that have been observed for online interactions (e.g., notifications) sounds can be understood as "related stimuli" which serve to reinforce online interactions (Thomson et al., 2021).

Research into internet addiction (IA) also acknowledges how online rewards may perpetuate problematic behaviours. Due to its contrasting definitions, measures, and severity thresholds (Lortie & Guitton, 2013), IA is not currently a diagnosis. Nevertheless, research has found IA was associated with males (Ostovar et al., 2016), younger people (Hassan et al., 2020), lower economic status (Urbanova et al., 2019), perfectionism (Taymur et al., 2016), psychoticism (Jiang et al., 2018) and boredom proneness (Skues et al., 2016). Davis (2001) theorised that IA develops in the context of "psychopathology." Support for this includes associations with psychological distress (Islam & Hossin, 2016), depression, stress, loneliness (Ostovar et al., 2016) and social anxiety (de Bérail et al., 2019).

While internet socialising may benefit socially anxious people (Grieve et al., 2017) and can promote connectedness (Lundy et al., 2016), it may amplify insecurities (Larsen, 2022) and reduce self-esteem (Staniewski & Awruk, 2022). Caplan's (2010) Generalised Problematic Internet Use (GPIU) model theorises that "preference for online social interactions" (POSI) suggests IA is perpetuated by cognitions suggesting the Internet is more effective, comfortable, and safe than face-to-face. Techno-optimistic

cognitions may include believing that the Internet offers escapism and controllability (Caplan; Casale et al., 2016). As has been suggested for other addictions (Flores, 2004), IA may be a dysfunctional form of emotional regulation (Gioia et al., 2021) that has been connected to anxious attachment and compensatory online behaviour (D'Arienzo et al., 2019).

5.3 Qualitative Research

5.3.1 Search Strategy

The search strategy was guided by Sandelowski et al.'s (2007) six-step meta-synthesis approach. Since a full meta-synthesis was beyond the scope of this research, a thematic analysis was developed. Various databases were systematically searched: Academic Search Complete, PsycARTICLES, and PsycINFO. Figure 1 shows how the eligibility criteria were applied to qualitative research from 2014 to 2023. The screening process yielded 32 relevant research studies (see Table 1).

Figure 1

A PRISMA Style Flow Diagram Outlining the Screening Process.

Table 1

Qualitative Research Found to be Relevant to the Present Study.

Author (year)	Location of study	Number of participants, (age in years)	Data collection method	Analytic strategy
Alavi Asil et al. (2022)	Tehran	N=15, (no age information)	Interviews	Grounded theory method
Arness & Ollis (2022)	Australia	N=24, (18-31)	Focus group	Thematic analysis
Bell (2019)	England	N=35, (13-17)	Focus group	Thematic analysis
Best et al. (2015)	Northern Ireland	N=56, (14-15)	Focus group	Thematic analysis
Burnette et al. (2017)	America	N=38, (12-14)	Focus group	Thematic analysis
Calancie et al. (2017)	Canada	N=8, (13-15)	Focus group	Interpretive narrative analysis
Chegeni et al. (2021)	Iran	N=18, (16-41)	Interviews	Content analysis
Chua and Chang (2016)	Singapore	N=26, (12-16)	Interviews	Grounded narrative analysis
Conroy et al. (2022)	England	N=14, (18-30)	Interviews	IPA
Danso, and Awudi (2022)	Ghana	N=12, (18-23)	Interviews and focus groups	Thematic analysis
De Groote et al. (2022)	Belgium	N=24, (13-16)	Focus groups	Thematic analysis
Duvenage et al. (2020)	Australia	N=16, (13-16)	Focus groups	Thematic analysis
Hjetland et al. (2021)	Norway	N=27, (15-18)	Focus groups	Thematic analysis
Jong and Drummond (2016)	Australia	N=28, (12-14)	Focus groups	Thematic content analysis

Kamalikhah et al. (2021)	Tehran	N=27, (mean = 16.14)	Interviews	Content analysis
Keles et al. (2023)	England	N=11, (14-16)	Interviews	IPA
Li et al. (2015)	America	N=27, (mean = 21.0)	Focus groups	Grounded analysis
MacIsaac et al. (2017)	Scotland	N=41, (11-18)	Focus group, interviews	Thematic analysis
O'Reilly (2020)	England	N=54, (11-18)	Focus group	Thematic analysis
O'Reilly et al. (2018)	England	N=54, (11-18)	Focus group	Thematic analysis
Radovic et al. (2017)	America	N=23, (13-20)	Interviews	Content analysis
Rakhmawati et al. (2021)	Indonesia	N=9, (15-17)	Interviews	Thematic analysis
Romero Saletti et al. (2022)	Belgium and Perú	N=19, (18-28)	Surveys and Interviews	Constructivist grounded theory method
Ryan et al. (2016)	Australia	N=417, (18-80)	Online surveys	Phenomenological thematic analysis
Scott et al. (2019)	Scotland	N=24, (11-17)	Focus group	Thematic analysis
Singleton et al. (2016)	England	N=12, (14-18)	Interview	Constructivist grounded theory method
Sun (2018)	China	N=20, (not stated)	Focus groups, interviews	Content analysis
Throuvala et al. (2019a)	England	N=42, (12-16)	Focus groups	Thematic analysis
Throuvala et al. (2019b)	England	N=42, (12-16)	Focus groups	Constructivist grounded theory method
Vermeulen et al. (2018)	Belgium	N=22, (14-18)	Interviews	Thematic analysis
Weinstein (2018)	America	N=26, (13-18)	Interviews	Thematic analysis
Winstone et al. (2021)	England	N=24, (13-14)	Interviews	Thematic analysis

Table 2

Eight Meta-Themes that Emerged from the Thematic Analysis of the 32 Included Qualitative Studies.

Meta-Theme / Study	Background Factors	Empowerment and Gaining Control	Disempowerment and Losing Control	Impression management	Positive and negative consequences	Online Norms	Identity	Instrumental Use — Connection and Disconnection	Instrumental Use — Emotional Regulation	Instrumental Use — Other Instrumental Use
Alavi Asil et al. (2022)	x	x	x		x			x	x	x
Arness & Ollis (2022)	x		x		x			x	x	x
Bell (2019)		x				x	x	x		
Best et al. (2015)		x					x	x		
Burnette et al. (2017)		x	x			x				
Calancie et al. (2017)					x		x	x		
Chegeni et al. (2021)	x		x						x	
Chua and Chang (2016)			x	x	x					
Conroy et al. (2022)			x					x		
Danso, and Awudi (2022)	x	x	x		x					
De Groote et al. (2022)					x	x				
Duvenage et al. (2020)					x				x	
Hjetland et al. (2021)			x	x	x	x		x		

Jong and Drummond (2016)					x		x		
Kamalikhah et al. (2021)	x	x	x		x		x	x	x
Keles et al. (2023)		x	x		x		x		
Li et al. (2015)	x				x			x	x
MacIsaac et al. (2017)		x		x			x		x
O'Reilly (2020)		x	x		x			x	x
O'Reilly et al. (2018)		x					x		
Radovic et al. (2017)		x			x		x		
Rakhmawati et al. (2021)		x	x		x		x	x	
Romero Saletti et al. (2022)		x	x		x	x	x	x	x
Ryan et al. (2016)		x	x		x		x	x	
Scott et al. (2019)						x	x		
Singleton et al. (2016)		x	x	x	x	x	x		
Sun (2018)	x		x		x		x	x	
Throuvala et al. (2019a)		x	x			x	x	x	x
Throuvala et al. (2019b)		x	x	x	x	x	x	x	x
Vermeulen et al. (2018)		x		x		x	x	x	
Weinstein (2018)						x	x		
Winstone et al. (2021)					x	x	x		

5.4 Results of Thematic Analysis

The thematic analysis of the 32 studies resulted in eight meta-themes (Table 2).

5.4.1 Meta-Theme 1: Background

The reviewed studies pointed to various background experiences in the development of problems. These included challenges in cognition (Chegeni et al., 2021), loneliness (Kamalikhah et al., 2021), socialising and communication (Chegeni et al.), mental health (Alavi Asil et al., 2022), emotional dysregulation (Arness & Ollis, 2022) and stress (Danso, & Awudi, 2022).

5.4.2 Meta-Theme 2: Empowerment and Gaining Control

Themes reflecting empowerment through social media were found across the studies (e.g., Singleton et al., 2016). Social media was understood to improve or compensate for deficits in social skills and problem-solving (O'Reilly, 2020). Participants felt less socially inhibited online (Throuvala et al., 2019b) and found that social media facilitated both online (Best et al., 2015) and offline relationships (Bell, 2019). Participants reported feeling listened to, normalised, and validated (Burnette et al., 2017). Some studies reported enhanced motivation (Singleton et al.) and increased self-control with internet use (Kamalikhah et al., 2021). Rakhmawati et al. (2021) found that their participants experienced control when forming relationships with others online. Controllability of communication styles was also appreciated (Vermeulen et al., 2018), while loss of online self-control was feared (Throuvala et al.).

5.4.3 Meta-Theme 3: Disempowerment and Losing Control

While social media was an everyday experience (O'Reilly et al., 2018), negative use patterns were reported (Radovic et al., 2017). Without quantifiable feedback (e.g., likes; Chua & Chang, 2016), participants experienced unmet social needs when offline (Rakhmawati et al., 2021). Themes of social comparisons and judgement were reported (Bell, 2019).

The studies reported reduced agency (Conroy et al., 2022), distraction (Keles et al., 2023), and loss of control (Arness & Ollis, 2022). Social media compulsions were seen to be the result of an 'always on' culture (Throuvala et al., 2019a). Many studies reported addiction-like themes (Sun, 2018), including compulsions and over-reliance (Hjetland et al., 2021). Self-directed behaviour was impaired (Conroy et al.), and reducing social media use sometimes required conscious effort (Arness & Ollis). Issues with self-control were connected to avoidance of challenging emotions (Alavi Asil et al., 2022).

5.4.4 Meta-Theme 4: Impression Management

Impression management was found to motivate compulsive social media use (Hjetland et al., 2021). Motivating factors included hypervigilance and threat avoidance (Singleton et al., 2016). Studies found vigilance around avoiding negative feedback where participants took feedback personally and experienced social stigma (Singleton et al.). While managing online impressions produced positive feedback and enjoyable feelings, impressions were managed using carefully constructed identities (Throuvala et al., 2019a). The struggle to navigate idealised and normalised versions of self (Throuvala et al.) was hard to resist (Romero Saletti et al., 2022). Insecurities were found to drive the manipulation of self-images, and beauty ideals drove the imitation of other people's appearances (Chua & Chang, 2016). MacIsaac et al. (2017) claimed their participants could enhance their online social capital by managing impressions.

5.4.5 Meta-Theme 5: Positive and Negative Consequences

Singleton et al. (2016) found that social media users were trying to balance their negative experiences with positive ones. Positive impacts were found in various areas: academic performance (Alavi Asil et al., 2022), work productivity (Li et al., 2015), social connecting (Romero Saletti et al., 2022), gaining support (Singleton et al.), personal resilience and positive social comparisons (Keles et al., 2023). Social comparisons were also

reported to impact self-worth negatively (Chua & Chang, 2016). Other negative consequences reported included internet addiction (Alavi Asil et al.), distractibility and procrastination (Throuvala et al., 2019b), depression (Radovic et al., 2017), anxiety problems (Calancie et al., 2017), feelings of insecurity (Rakhmawati et al., 2021), self-harm (Singleton et al.), aggression (Kamalikhah et al., 2021), higher self-consciousness (Throuvala et al.) and low self-esteem (Sun, 2018). Social media may involve negative emotional experiences, including "anger," "discomfort," "envy," "sadness," "shame" (Romero Saletti et al.), and fear (Keles et al.). Social media was used at the expense of sleeping, doing homework (Hjetland et al., 2021), praying, bathing, and eating (Rakhmawati et al.). It could result in sleep deprivation (Li et al.) and disturbed sleep patterns (O'Reilly, 2020). De Groote et al. (2022) supported Steele et al.'s (2020) digital stress model, where stress was caused by constant availability, anxiety around approval, fear of missing out, overload from excessive communication, and online vigilance.

5.4.6 Meta-Theme 6: Online Norms

The meta-theme "online norms" were reflected in several studies (Burnette et al., 2017). These were understood as implicit rules (Romero Saletti et al., 2022), cultural norms (Bell, 2019), social obligations (Winstone et al., 2021) and a foundation for social and identity development. Online norms contained expectations around continuous online connectivity and availability (De Groote et al., 2022) and "Violating" online social "etiquette" was found to cause anxiety (Hjetland et al., 2021). De Groote et al. found that increased digital stress (Steele et al., 2020) was induced by online norms (from feeling overwhelmed by constant communication). Conforming to social norms was found alongside loss of individuality, social disinhibition, and erosion of personal responsibility (Throuvala et al., 2019b).

5.4.7 Meta-Theme 7: Identity

The development of personal and group identity may be connected to perceived common experiences (Singleton et al., 2016), social status, sense of belonging (Best et al., 2015), and the negotiation of self within online social spaces (Calancie et al., 2017). Online spaces were valued for their immediate visible feedback (Bell, 2019), which may play a role in constructing identity and self-esteem (Jong & Drummond, 2016). Identity may be understood through judgemental or validating feedback (Weinstein, 2018) and its impact on social validation and perceived popularity (Throuvala et al., 2019a). However, online self-disclosure, social comparisons, and the pursuit of validation risked being judged (Singleton et al.).

5.4.8 Meta-Theme 8: Instrumental Use

The meta-theme "instrumental use" reflects studies that found social media served functions for participants. These functions included procrastination, distraction from problems (Throuvala et al., 2019b), entertainment and fun (MacIsaac et al., 2017), passing time, facilitating homework (Throuvala et al., 2019a) and gaining resilience (Keles et al., 2023). Since the literature review focused on online communication and social media, it is understandable that participants seemed to use social connection and disconnection instrumentally.

5.4.8.1 Connection and Disconnection

Online connectivity was found to serve multiple functions, including feeling connected (Arness & Ollis, 2022), facilitating communication (Keles et al., 2023), expanding the social world (Hjetland et al., 2021), gaining social capital (MacIsaac et al., 2017), enhancing relationships (Ryan et al., 2016), facilitating friendships (Winstone et al., 2021), maintaining relationships (Bell, 2019), approval seeking (Calancie et al., 2017), finding common ground with others, safe sharing of personal information, acquiring social support

(Singleton et al., 2016; Vermeulen et al., 2018) and becoming less socially inhibited
(Throuvala et al., 2019b). Constant online comparisons (Romero Saletti et al., 2022) set the
scene for negative social judgement (Calancie et al.). A range of antisocial behaviours were
experienced (Hjetland et al.), which included relational aggression (Throuvala et al.),
cyberbullying and trolling (Radovic et al., 2017). Social difficulties may be more likely to
escalate online (Calancie et al.). Indeed, it has been reported that fears of exclusion,
disconnection (Scott et al., 2019) and negative social repercussions (Conroy et al., 2022) may
fuel further social engagement online.

5.4.8.2 Emotional Regulation

Another instrumental use was emotional regulation. This came in many forms
including the avoidance of negative emotions (Duvenage et al., 2020), emotional suppression
(Alavi Asil et al., 2022), social validation (Romero Saletti et al., 2022), "releasing emotions"
(Sun, 2018), and using the Internet to escape (Li et al., 2015) from "real life" (Sun) or
"loneliness" (Chegeni et al., 2021). Some studies found that social media was a coping
mechanism for emotions (Romero Saletti et al.), stress, and negative life circumstances
(O'Reilly, 2020).

5.5 Limitations of the Identified Qualitative Research

Several limitations of the reviewed qualitative research were identified. As can be
seen in Table 1, most of the studies (23 of 32) focused on child or adolescent participants.
Studies seem biased towards the assumption that online issues primarily affect younger
people. Adult qualitative studies are under-represented.

Most studies (27 of 32) had limited transferability because their participants were
school or university students. Since focus group studies are susceptible to presentation biases,
holding them in school settings in front of peers or staff members risks biases in the data

(Burnette et al., 2017). School children may participate due to peer pressure or by assuming participation is a required school activity (Felzmann, 2009). Dual roles in research may exacerbate such pressures, for example, when teachers are recruiters (Winstone, 2021) or researchers (MacIsaac et al., 2017). Felzmann asserts that focus groups in school settings may negatively impact research quality through impression management, confidentiality issues and the risk of negative social consequences.

Of the studies which aimed to construct a grounded theory of such problems (Alavi Asil et al., 2022; Romero Saletti et al., 2022; Singleton et al., 2016; Throuvala et al., 2019b), there were only two conducted in the UK and those focused on children.

5.6 Rationale for this Research

There is currently a lack of clarity about how communication technologies impact mental health. Both quantitative and qualitative research have been shown to have limitations. These indicate the need for further exploration. The present research aimed to address these concerns.

5.7 Research Question

The research question was: "What social and psychological processes are involved in beginning, sustaining and ending a problematic relationship with electronic communication?"

5.8 Methodology

Following guidelines from Charmaz (2014), this research adopted the constructivist-interpretivist paradigm by acknowledging how constructivist grounded theories emerge from co-construction and interpretation. It adopted critical realism, which assumes this research relates to objective reality, but there is no clear relationship between reality and participant accounts. To make this research feasible within the limits of a doctoral training program, it used Willig's (2013) abbreviated version of grounded theory.

5.8.1 Eligibility Criteria

Ethical approval was given for research participants with the following characteristics:

- Adults (18+).

- Resident in the UK.

- Self-identified electronic communication compulsions.

- Fluent in English.

- Presence of internet use problems (score over 69 on GPIUS-2).

- No severe mental health problems (score not over 32 on CORE-10).

- No recent suicidal plans (CORE-10).

- Not considered too vulnerable to participate.

- No other relationship with the researcher.

5.9 Materials and Methods

5.9.1 Measure of Internet Problems

This research used Caplan's (2010) Generalised Problematic Internet Use Scale-2 (GPIUS-2) to screen for problematic internet use. This 15-item questionnaire has an 8-point Likert scale ranging from "definitely disagree" to "definitely agree." GPIUS-2 has good psychometric properties (Laconi et al., 2014).

5.9.2 Measure of Psychological Wellbeing

To screen for mental health challenges, the CORE-10 was used (Barkham et al., 2013). The measure consists of 5-point Likert scales rated from 0 ("not at all") to 4 ("most or all of the time"). Barkham et al. report good psychometric properties ($\alpha = .90$).

5.10 Procedure and Ethics

5.10.1 Recruitment

An online invitation (Appendix J) was posted on Prolific's (participant recruitment service) website. Participants were paid (£15 for interviews and £7.95/hr for Qualtrics contributions). This research had two recruitment stages (written reflections and interviews).

5.10.2 Procedure

The eligibility criteria were used to ensure participants had the required characteristics. Prolific allowed initial screening by selecting participant characteristics. After self-selecting for the reflective writing part of the study, potential participants were directed to a Qualtrics survey to read the research information and check eligibility. Participants completed the CORE-10 and GPIUS-2 measures. Those who did not fulfil the eligibility criteria were provided with sources of support and a sensitive message explaining why further data would not be sought.

Participants reflectively wrote about their PEC experiences (on Qualtrics). A Zoom screening meeting was arranged if they indicated openness to an interview. This meeting encouraged questions and explored the research's voluntary nature, anonymity, use of data and right to withdraw.

Following the BPS (Oates, 2021) recommendations, this study established informed consent both digitally and verbally (for interviewees). The Participant Information Sheet outlined research aims, limits of confidentiality, risks, benefits, anonymity processes, use of quotations, data gathering, processing and GDPR compliance. Before starting the interviews, I checked that the participants understood the research and obtained verbal consent.

5.10.3 Participant Characteristics

The sample for this study consisted of 17 participants (10 males, seven females) aged between 19 and 37 years old (mean=29). All 17 were white. Of the 40 participants who self-selected for participation, 23 candidates did not meet the eligibility criteria. Reflective writing data were collected from 17 participants. Those open to interview were emailed to arrange their interview over Zoom. Five participants were interviewed over video, and two were text-based (Table 3 shows participant information).

5.10.4 Interviews

Semi-structured interviews took place over Zoom. Each lasted between 54 and 110 minutes and followed the interview schedule (Appendix E). The audio was recorded using a digital audio recorder and later transcribed.

5.11 Data Processing and Analysis

All transcriptions were pseudonymised by removing or changing all identifying language. A participant key was separately stored in a password-protected file. The analytic strategy followed guidance from Charmaz (2014) for constructivist grounded theory. The memo-writing employed throughout this research provided reflective and creative spaces to explore my intuitions and ideas (Birks & Mills, 2015).

Using Willig's (2013) guidelines, participant data were subjected to detailed line-by-line coding; also, the interview schedule was not revised between interviews, theoretical sampling asked questions of the original data set, and theoretical saturation was not sought. Initial coding broke texts into their smallest possible fragments to allow for the coding of components and interrelationships (Corbin & Strauss, 2008). Action-orientated coding was prioritised, and implicit relationships inspired memos. Constant comparisons helped to

Table 3.

Participant Demographic Information and Data

Participant Number	Participant Pseudonym	Age	Gender identity	Relationship Status	Interview length	Number of Codes
Video Interview Participants						
1	Aiden	3█	Male	██	87 minutes	674
2	Ben	3█	Male	██	79 minutes	510
3	Clara	2█	Female	██	85 minutes	551
4	Dani	3█	Female	██	77 minutes	600
5	Edward	3█	Male	██	54 minutes	300
Text Interview Participants						
6	Faye	3█	Female	██	79 minutes	91
7	Gemma	2█	Female	██	110 minutes	151
Open Writing Participants						
8	Harry	3█	Male	██	No data	22
9	Imogen	2█	Female	██	No data	7
10	Jamie	3█	Male	██	No data	25
11	Karen	2█	Female	██	No data	96
12	Larry	2█	Male	██	No data	19
13	Monica	3█	Female	██	No data	3
14	Nick	1█	Male	██	No data	23
15	Oliver	2█	Male	██	No data	15
16	Peter	3█	Male	██	No data	12
17	Quinn	3█	Male	██	No data	16

determine how data, codes, and emerging categories were similar and different, and identifying dimensional contrasts for categories led to their further development.

Focused coding aimed to synthesise more abstract concepts across the wider body of data. These focused codes were used to synthesise hypothetical categories that captured the essential properties of the underlying coding. The developing theory was represented by a hierarchy of interconnected concepts that attempted to accommodate each hypothetical category.

The use of axial coding attempted to locate categories with each other meaningfully. Categories and codes were sorted throughout this process, and hierarchical relationships were identified. Theoretical sampling occurred through developing questions and plausible hypotheses from the developing theory and attempting to answer these within the current dataset. As an abbreviated form of grounded theory, theoretical saturation was not sought. Instead, the analysis aimed to develop a coherent tentative theory representative of the data gathered.

5.12 Results

The analysis produced a tentative theory of PEC in the form of interconnected processual categories. The core category of "Navigating Electronic Communication" connects five main categories: "Seeking Solutions," "Using Electronic Communication as a Solution," "Developing Problematic Electronic Communication," "Navigating Electronic Communication as a Problem," and "Reducing Electronic Communication Problems." Although it is not the central focus of this article, I shall briefly describe the grounded theory of PEC.

5.13 Problematic Electronic Communication

The constructivist grounded theory of PEC provides an account of how participants initially sought a solution to their suffering by connecting with others online. Online interactions offered a controllable alternative to in-person relating, allowing participants to distract themselves from their suffering alongside the facility to amplify or diminish aspects of online relating experiences. While engaging in desirable online social interactions as a solution, participants noticed their experiences of in-person interactions felt altered (through DMR). Despite noticing the negative impacts of PEC, people grew to prefer curated online experiences. Often, PEC was masked by the normalisation of electronic communication. Problems were acknowledged when PEC appeared to impact their lives substantially. However, even then, they struggled to control their PEC. Since electronic communication felt necessary, participants tried to balance its use with "real life."

5.14 Digitally Modified Relating

The concept of DMR was found to be central to understanding the development of problematic electronic communication. DMR captures how participants adapted to their online communication experiences in ways that altered subsequent experiences of face-to-face interactions. The reinforcement of electronic communication as a solution may eventually lead to the development of PEC. Figure 2 shows a schematic of this process.

Figure 2

The Role of DMR in the Development of PEC.

Developing Problematic Electronic Communication:
Neglecting face-to-face relating. Impacting on relational presence.
Finding face-to-face relating unsatisfying, uncomfortable, challenging,
or unrewarding. Losing social skills, getting burn out, feeling
disconnected when not online, avoiding face-to-face relating,
avoiding "real life" problems.

Relating in Two Worlds:
Experiencing relative disadvantages of face-to-face relating.

Being Pulled Back to Electronic Communication:

Developing a preference for e-relating.

Prioritising electronic communication as a solution
for suffering or to enhance human connection.

Wanting to maintain electronic
communication payoffs.

Experiencing supernormal interactions online.

Appreciating electronic communication
as a solution for suffering.

Compensating for unsatisfying face-to-face relating.

Compensating for percieved lack of social skills.

Adapting to Electronic Communication: Digitally Modified Relating
Adapting to percieved relational norms.
Normalising supernormal relating experiences.

**Using Electronic Communication
as a Solution:**

**Amplifying or Diminishing Aspects
of Electronic Communication:**
Cultivating desirable
relating experiences.

**Avoiding or Distracting from
Experiences of Suffering**

Seeking Solutions:
Using electronic communication as a solution,
Cultivating payoffs and benefits through electronic communication,
(modifying mood, reduce experience of suffering)

5.14.1 Main Category 1: Using Electronic Communication as a Solution

When participants felt electronic communication might offer opportunities to reduce their suffering, they generally found unique ways to achieve this. They demonstrated two ways to address their suffering through online communication: avoiding or distracting themselves from difficult experiences or amplifying or diminishing specific qualities of electronic communication.

5.14.2 Avoiding, or Distracting from Experiences of Suffering

Participants found that electronic communication could directly reduce their suffering. Clara used electronic communication to help her escape from her experiences of being overwhelmed with work, housework, and parenting:

"In the past, that was my sort of escape from life […] I think that lots of people… we use our phone as an escape from our children (laughs)" [Clara]

In his youth, Ben experienced an existential crisis. He used electronic communication and gaming to distract himself from similar disturbing thoughts:

"I have to distract myself from life, you know, that like I said it's video games, [electronic] chat […] it stops me thinking […] sometimes you don't wanna think too much about stuff, you just want to keep busy." [Ben]

5.14.3 Amplifying and Diminishing Aspects of Electronic Communication

Participants cultivated more desirable relating experiences by choosing or controlling the quality and style of online interactions. For example, Aiden psychologically retreated from the stress of ████████████████████ by engaging in supportive online relationships:

"…it seemed like a simpler or safer space…" [Aiden]

Some participants influenced their sense of social significance to fulfil their social needs. Gemma and Clara were less worried about electronic communication. Clara perceived less social judgement online when off-camera:

"It's less personal. You can't hear how my tone of voice/background sounds, so there are essentially less things I have to worry about. I can also think through my answers rather than thinking on the spot…" [Gemma]

"[Online,] I feel people can be a bit more honest as well, because if you can't see the person's reaction, [then] there's no judgement." [Clara]

For Dani, electronic communication involved impression management. She felt more self-conscious in person and over video. Since she had chosen a video interview, I asked how she experienced our interaction.

"…it just takes such an effort. You know, you've got to think about the face that you're pulling, […] your tone of voice, you know, are you responding in the way that they want you to respond?" [Dani]

5.14.4 Main Category 3: Developing Problematic Electronic Communication

Participants experienced different kinds of electronic communication problems. The development of these were underpinned by three processes, "Adapting to Electronic Communication: Digitally Modified Relating," "Relating in Two Worlds," and "Being Pulled Back to Electronic Communication."

5.14.5 Adapting to Electronic Communication: Digitally Modified Relating

The subcategory "Adapting to Electronic Communication: Digitally Modified Relating" reflects how most participants adapted to and integrated electronic communication into their lives. Ben, Clara, and Edward shared that they had

communicated online since childhood. Ben struggled to recall when he started electronic communication:

"…it's been over █ years. I can't remember when the first time was..." [Ben]

Edward understood electronic communication as both useful and necessary; it felt like a technological extension of himself:

" I would feel lost without it. And, um, it's like, having an extra, probably like an extra limb at the end of the day." [Edward,]

Karen felt social expectations to communicate with others constantly, which modified her sense of relational needs. She wrote:

"It has made me feel like I need to be communicating with someone 24/7 to feel engrossed or happy." [Karen]

Aiden felt his electronic communication was linked to primitive social desires. He understood his adaptations in terms of addiction:

"Each time I get in touch with somebody or respond to something. I think it's a… […] to what extent does your brain get rewired to crave that hit? I suppose but… I think the desire to engage in those sorts of interactions is more instinctive, primitive, than it is considered." [Aiden]

He understood messaging applications to amplify pre-existing social needs so that people felt they had to use them.

"…the design of these products perhaps […] I'm not sure it's, sure it's creating its own need. I think it's latching onto what is probably a small part of most people, or maybe a large part for some people… and amplifying it." [Aiden,]

5.14.6 Relating in Two Worlds

The subcategory "relating in two worlds" reflected the perceived distinction between electronic communication and "real life." Electronic communication seemed less real Edward due to the physicality of "real life":

"I could say this [interview] isn't real life. But it is. […] I think it would be more natural face-to-face in a coffee shop, than over a camera. […] [with face-to-face there's] probably more feelings there, I don't know, like you're seeing the person… you're seeing their flesh." [Edward]

Participants thought there were contrasting cultural norms for online and in-person interactions (Ben, Clara, Edward, Gemma, and Larry). Gemma wrote about her appreciation of reduced social obligations when relating online:

"[Y]ou don't have to follow some of the same social cues […] You don't have to hug, give handshakes, pull out a chair etc." [Gemma]

Aiden and Clara appreciated the culture around people being always available. Clara shared how she could call on social support at any time:

"…in unsociable hours, if you're struggling, um, with your child or whatever, and you want some support or some reassurance and you want to speak to a friend, you can message them..." [Clara]

Aiden pointed to how fewer channels for information in electronic communication reduced his susceptibility to emotional triggers:

"…[it] Strips away, a lot of the emotional triggers or indicators that you get face-to-face. So, I guess you don't, you don't have those reactions.." [Aiden]

5.14.7 Being Pulled Back to Electronic Communication

Electronic communication felt like a lifestyle choice, habit, or preference. Participants either experienced benefits in reducing negative affect or found electronic communication more satisfying or comfortable than face-to-face relating. Electronic communication appeared essential and interwoven into Ben, Faye, and Oliver's lives. Faye shared:

"I'm quite reliant on electronic chat" [Faye]

Participants sometimes felt compelled to prolong social rewards. Dani felt compulsions to contribute to group chats; interacting increased her sense of belonging:

"In group chats, I find, [I experience] that compulsion […] I enjoy the entertainment side of it and its just, sometimes when it is funny, it just makes you feel good and makes you feel you're part of something." [Dani]

Aiden experienced compulsions to generate social validation through proactively encouraging online conversations:

"…if you open up your phone and you have a bunch of messages, then there's a part of you, that feels like you *do* have some friends who actually care about you. This is where it becomes a compulsion, […] that generates itself by you proactively, um, constructing these conversations." [Aiden]

Contributing to their return to electronic communication were participants' difficulties in identifying it as a problem. Clara thought she was too engaged in using her mobile phone to identify problems. Aiden searched for a word to describe his difficulties in observing the development of his online problems. He agreed with my suggestion that it might be an "insidious" process. He said:

"…I think you can probably fool yourself into thinking that there's no [personal] cost […] there's no mess, there's no need to go out and buy more bottles. There's no cost in terms of, you know, financial costs. Um, and there's no obvious demonstrable consequence […] There's no obvious indicator of whether it's getting worse or becoming a problem, until it sort of hits a certain point." [Aiden]

5.15 Discussion

This paper focuses on a process I call "Digitally Modified Relating" that emerged from participants experiencing online problems. The subcategory "Adapting to Electronic Communication: Digitally Modified Relating" was found to be central to the development of Problematic Electronic Communication (characterised by compulsions). DMR was conceptualised as a transformative process involving the active cultivation of more satisfying forms of interaction online (perhaps supernormal relating experiences). It suggests that exposure to these more satisfying relationship experiences can lead to modifications to perceived relational norms and perceived advantages of electronic communication over face-to-face relating; developing a preference for a more rewarding or comfortable electronic communication experience may be experienced as reinforcing process that pulls people back to seeking further solutions for suffering.

5.15.1 Main Category 1: Using Electronic Communication as a Solution

The main category, "Using Electronic Communication as a Solution," captures how participants made instrumental use of electronic communication to address their suffering. Two subcategories were reflected, "Avoiding, or Distracting from Experiences of Suffering" and "Amplifying and Diminishing Aspects of Electronic Communication." These two subcategories reflect how participants influenced the quality of their electronic

communication experiences. This theme was echoed in extant research, which connected online activities with a sense of control and empowerment (Bell, 2019; Best et al., 2015; Keles et al., 2023; MacIsaac et al., 2017; Singleton et al., 2016; Throuvala et al., 2019b).

Overall, the category "Using Electronic Communication as a Solution" might be considered an instance of specific utilisation of the Internet reflected in Davis' (2001) model of pathological internet use. The theory echoes the "instrumental use" meta-theme from the literature review and is consistent with UGT (Choi & Choung, 2021).

5.15.2 Subcategory 1.1: Avoiding, or Distracting from Experiences of Suffering

The subcategory, "Avoiding or Distracting from Experiences of Suffering," is consistent with Douglass et al.'s (2008) Internet Addiction Model, which suggests people may use the Internet to escape challenging experiences. DMR and other evidence (Menon & Meghana, 2021) support the validity of UGT's concept of "diversion" (Blumler & Katz, 1974), which suggests that people seek to escape from their emotions online. Indeed, the Internet has been used for procrastination and distraction (Throuvala et al., 2019b), to reduce loneliness (Chegeni et al., 2021), stress (O'Reilly, 2020), and to improve mood (Romero Saletti et al., 2022).

If PEC is assumed to be a problem of addiction, internet activity may result in rewards that reinforce compulsive behaviour (Chandler & Andrews, 2019). Barrett's (2015) work on supernormal stimuli suggests the Internet may provide (what I call) supernormal relating experiences. The concept of supernormal relating is suggested in PEC and DMR since participants actively curated enhanced forms of electronic communication (e.g., support or reassurance) that addressed their unmet needs or reduced their suffering.

5.15.3 Subcategory 1.2: Amplifying and Diminishing Aspects of Electronic Communication

The subcategory "Amplifying and Diminishing Aspects of Electronic Communication" provided fine-tuned control over the quality of online relating experiences. By controlling aspects of electronic communication, the participants experienced reduced suffering and fulfilment of their needs.

The meta-theme of empowerment and gaining control highlighted the importance of choice and control in internet activities (Throuvala et al., 2019b), the formation of relationships (Rakhmawati et al., 2021) and influence over communication styles while online (Vermeulen et al., 2018).

The category suggests that people may cultivate various forms of social significance (including feelings of comfort, friendship, belonging, and being kept in mind). Cain (2018) reflected a culture around electronic communication characterised by immediate digital responses and the continuous availability of others. DMR agrees with Cain, who suggests that the online culture around such social obligations can impact mental well-being due to the freedom to choose.

The category aligned with Singleton et al. (2016), Throuvala et al. (2019a), and Hjetland et al. (2021), who found that online impression management involved people actively curating their online self-presentation to enhance social value. This category was also echoed by Chua and Chang (2016), who found that "edited beauty" was driven by personal insecurities around external perceptions of beauty. Huang et al. (2021)

highlighted how online identity reconstruction was fuelled by the fear of missing out and the wish to attract sexual partners.

Aiken (2016) suggests that people present an idealised self online that they come to know through identifying with their perceptions of how others see them. Throuvala et al. (2019a) reflected participants' struggle to navigate idealised and normalised versions of self and others.

5.15.4 Main Category 2: Developing Problematic Electronic Communication

The category "Developing Problematic Electronic Communication" reflects how problems may emerge from engagement with electronic communication. Repeated exposure to electronic communication experiences may cause people to experience face-to-face relating as less satisfying than electronic communication.

5.15.5 Subcategory 2.1: Adapting to Electronic Communication: Digitally Modified Relating

The subcategory "Adapting to Electronic Communication: Digitally Modified Relating" reflected how people may get used to electronic communication. Aiken's (2016) account of cyber problems suggests that adapting to electronic communication may involve "cyber-socialisation"; where people assimilate and accommodate online norms and rules. While empirical evidence offers support for this (Throuvala et al., 2019b), the passiveness suggested by Aiken's cyber-socialisation seems at odds with the Uses and Gratifications theory (Marino et al., 2018), which suggests people actively try to address their needs.

The process of adapting to electronic communication experiences may be like the reduction in sexual satisfaction sometimes observed in persons exposed to supernormal pornography (Dwulit & Rzymski, 2019). The parallel implies that adapting to supernormal relating may change the experience of face-to-face social encounters. Digitally modified relating suggests processes of adaptation and normalisation may render face-to-face relating less satisfying. A person's psychological adaptation to supernormal relating experiences online might change their social expectations, so offline relating feels insufficient. These experiences of face-to-face relating are consistent with research that finds motivation and reward deficits associated with addiction and mental health problems in general (Koob & Volkow, 2018).

5.15.6 Subcategory 2.2: Relating in Two Worlds

While the subcategory "Relating in Two Worlds" does not dispute the interconnectedness of online and offline social worlds (Winstone et al., 2021), it suggests they consist of contrasting experiences and processes. As suggested by Caplan (2007), people may develop a preference for online social interactions, perhaps because online life feels better than offline life (Davis, 2001). The DMR process is consistent with the "Online Norms" meta-theme, which reflected such contrasting social experiences where online life was subject to different social-cultural norms (Bell, 2019), rules (Hjetland et al., 2021), obligations (Winstone et al., 2021), expectations (De Groote et al., 2022) and pressures (De Groote et al., 2022). Aiken (2016) suggests that after a cyber-socialisation process, the "cyber-self" may function in dissociated ways online. Related to this is Suler's (2004) "online disinhibition effect" shown by participants who experienced social freedom due to impersonal relating (dissociative anonymity), variations in the sense of

the realness of online life (solipsistic introjection), preferred asynchronicity of online interactions; and dissociative imagination by experiencing their online life as a fantasy world.

5.15.7 Subcategory 2.3: Being Pulled Back to Electronic Communication

The subcategory "Being Pulled Back to Electronic Communication" reflected how people can feel compelled to communicate electronically and develop a preference for electronic communication. The theory of PEC touched on the biopsychosocial concepts of addiction, like reward, loss of control, compulsions, tolerance, withdrawal, and repetition of behaviour (Chandler & Andrews, 2019). The meta-theme "Disempowerment and Losing Control" reflected how addiction themes were found in qualitative research, including loss of self-control, addiction, compulsions, over-reliance, overuse, and habitual behaviour (Chegeni et al., 2021).

Biopsychosocial addiction theories (like Chandler & Andrews, 2019), however, do not account for how some participants of the current study felt trapped by aversive social experiences. The PEC model agreed with extant findings around the aversive motivations for social media engagement; these included the "fear of missing out" (De Groote et al., 2022) and the pressures to be instantly available and constantly connected (Winstone et al., 2021).

Walther (1996) suggests electronic communication may be more intense than face-to-face interactions. DMR agreed with Walther's suggestion that online relationships may be supernormal due to increased intimacy, selective self-presentation, and the speed of interactions. Walther suggests that curating self-presentations may be part of a

reinforcing feedback loop. Other socially mediated reinforcers are implied by UGT (Hussain et al., 2020) and gaining online status through the number of friends and likes (Kuss & Griffiths, 2017).

DMR might extend Caplan's (2010) model by highlighting perpetuating cognitions as social norms, obligations, and techno-optimism. It suggests that POSI is developed through experiencing online controllability and rewards. Indeed, Casale et al. (2016) suggest that techno-optimistic cognitions may mediate the relationship between emotional dysregulation and IA.

Since self-regulation problems have been linked to insecure attachment styles (Orehek et al., 2017), and deficient self-regulation has been associated with compulsive use of the Internet to regulate mood (Caplan, 2010), people may return to electronic communication to manage their experiences of underlying mood problems (Throuvala et al., 2019).

DMR is suggested by Balick (2018), who claims that communication technologies are the architects of human intimate relationships, and their use can cause psychological changes. DMR suggests supernormal relating is relevant. Supernormal relating experiences may be relational forms of "supernormal stimuli" (Barrett, 2015) that can be curated online to be more satisfying than face-to-face interactions might be appropriately considered supernormal. When a person adapts to cyberspace environments that offer unique relating experiences within an alternative culture (Aiken, 2016), this may result in DMR.

The present research suggests that DMR is an egosyntonic change (Levinson, 1972). Online self-presentation may align with an ideal self-image, so people may boost their self-esteem by managing online impressions (Aiken, 2016). The perceived normalcy of electronic communication may obscure DMR and PEC.

5.16 Strengths of this Research

This research used the constructivist grounded theory method to address the absence of processual explanations for adult PEC in the UK. It offers the concept of DMR which outlines how exposure to online relating may modify a person's subsequent relating experiences. While the research results are compatible with previous research, the concept of DMR expands previous empirical knowledge that may serve theorists, researchers, and therapists. This paper outlines processes not fully articulated elsewhere: 1) how people may amplify and diminish aspects of electronic communication to curate relating experiences that reduce their suffering, 2) how exposure to supernormal (curated) relating altered subsequent experiences of face-to-face relating through the process of DMR, and 3) how relational rewards, developing a preference for electronic communication, and its perceived normalcy result in self-reinforcing processes for DMR.

5.17 Clinical Implications

Counselling psychologists (and allied professionals) may benefit from this new knowledge in multiple ways. The concept of DMR suggests it would be useful considering the person's digital life when conducting assessments, formulating, and providing interventions. While knowledge of DMR offers a foundation for understanding clients seeking support for problems connected to online relationships, it may also impact

therapeutic process. Such clients may struggle to utilise face-to-face therapy when it does not meet those needs that have been moulded by online experiences.

The present research suggests that DMR and perhaps other electronic communication problems may be invisible to people until they become impossible to ignore. For some clients, while their online lives may be relevant to understanding their presenting problem, electronic communication may not be problematic. Indeed, online relating may contribute to problems that are not immediately evident. If the client or therapist experiences online relating as just another part of normal life, this may obscure its importance in therapy. Relating patterns could be interpreted incorrectly by a therapist unaware of DMR and the client's online life.

The concept of DMR offers factors that might be considered warning signs or indications of online problems. While many of these echoed Caplan's (2003) theory of Problematic Internet Use (i.e., barriers to face-to-face relating, negative impacts from electronic communication and a preference for social interaction), other indicators were found that may be psychologically relevant; these included exposure to supernormal relating, a tendency to generate rewarding interaction (for validation, approval, or support,), and feeling trapped in a cycle of online engagement.

5.18 Limitations and Future Research Directions

The paradigmatic assumptions of this research limit the generalisability of the findings. The findings may, however, provide a foundation for future research to investigate predictions, diagnosis, or therapeutic benefits.

Since this research used an abbreviated form of the grounded theory method (Willig, 2013), it did not attempt to arrive at theoretical saturation (Charmaz, 2006). Future research will benefit from being on a larger scale.

While this research specifically focused on problems the participants were experiencing around electronic communication, it may also contribute to psychological knowledge about internet addiction and problems associated with internet use. It may prompt revisions to existing theories or cause investigations into the applicability of the knowledge with other persons who may have similar problems. The knowledge presented here may also inform social strategies to protect vulnerable persons from experiencing the problems described.

5.19 Conclusion

The grounded theory method used for this research provides a credible constructivist account of PEC and DMR. These constructivist accounts represent original substantive contributions to psychological knowledge. The PEC model and its subprocess DMR appear to be consistent with the extant literature while offering psychologists and therapists informative conceptualisations to enhance their work. The concept of DMR may provide therapists with a primer for understanding clients with online communication problems. Alternatively, if a client is currently experiencing problems online, these may be fed into a different presenting problem. Exploring online life may be important to formulation and treatment. If DMR is indicated, it will be important to know this since it may impact other face-to-face relationships, including potentially affecting the therapeutic relationship. Due to the normalisation of digital communication technologies, PEC may be invisible until it is undeniable.

Since a significant amount of social contact is now mediated by digital communication technologies, understanding their impact on mental health is highly important. The model of PEC and the concept of DMR offer an extension to current perspectives that may reinvigorate psychological research and encourage the consideration of these within clinical work.

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SECTION C: COMBINED CASE STUDY AND PROCESS REPORT

Chapter 6. Combined Client Study and Process Report:

Two Journeys Towards Mentalising

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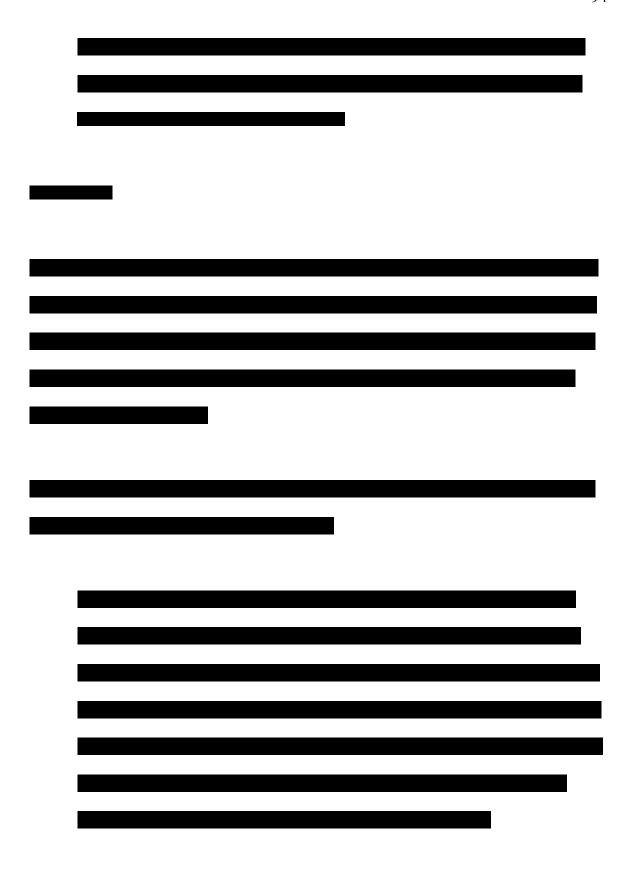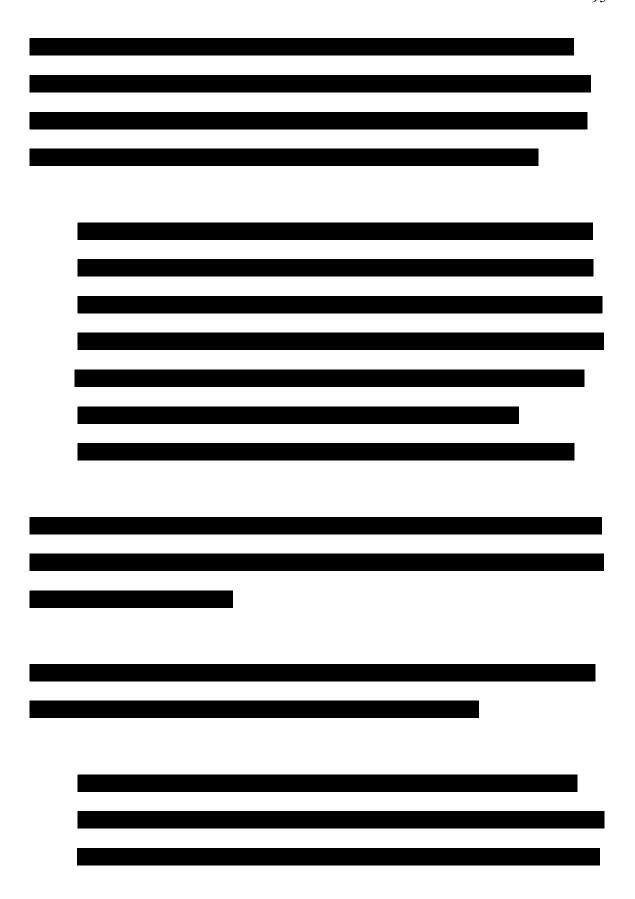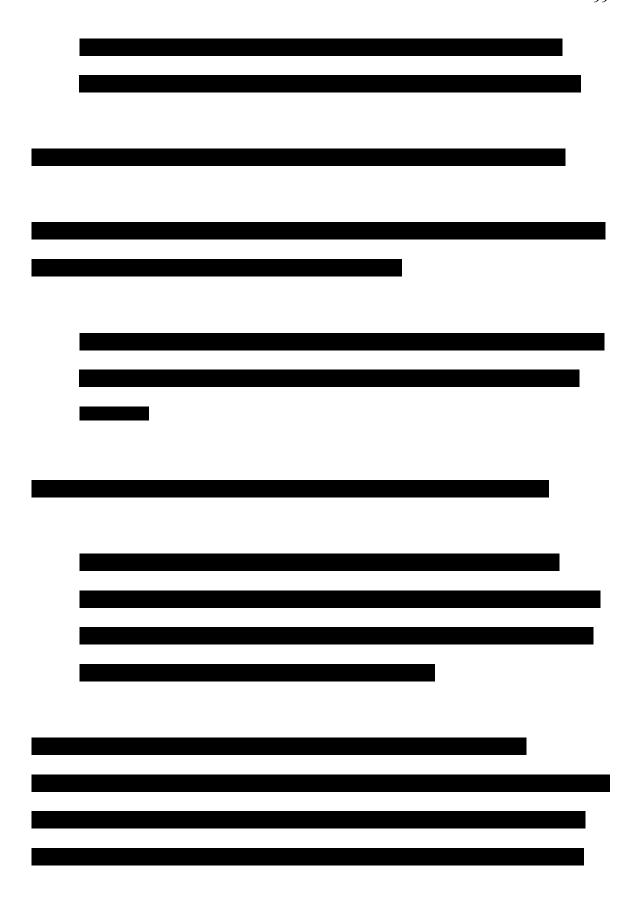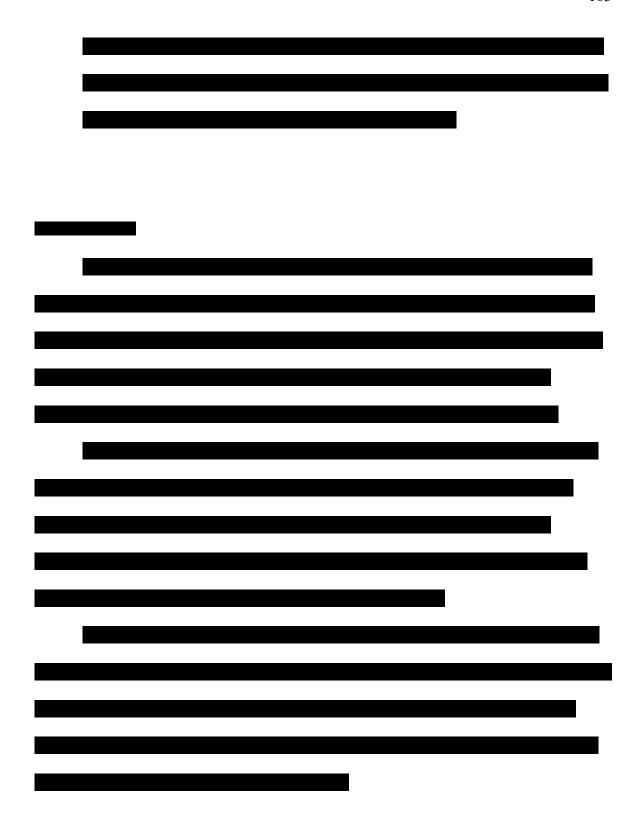
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Appendices