Healthy Relationships Online (HeRO) Project

Final Report

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Executive Summary

The online environment offers multiple means to facilitate interpersonal interactions. While many of these interpersonal interactions can be positive (such as the provision of emotional and social support), the online environment also allows negative interpersonal interactions, including cyber dating abuse. Cyber dating abuse includes a constellation of anti-social and potentially harmful behaviours, including monitoring and controlling a partner's online behaviour; using online media to aggress, insult, or threaten a partner; and the solicitation and use of technologically facilitated information that may be damaging (e.g., "nudes").

While young people are usually considered to be technological savvy and are considered to be "digital natives", the intersection between technology and their developmental stage means that multiple risky opportunities emerge when interacting online in this age group. These risks may be exacerbated by regionality, with impacts on not only mental health but also the development of norms as young people transition into adulthood.

This study therefore aimed to provide increased insight into and understanding of young people's perceptions of healthy online relationship behaviours, focusing on the Latrobe Valley in Gippsland. Participants were 45 young people aged between 15 and 25 years, who answered questionnaires on their digital literacy, relationships, and mental health, as well as taking part in semi-structured interviews.

Findings reflected developmental growth in terms of an in increasing understanding of social interactions with higher age. Cyber dating abuse was more closely related to relationship attitudes than to digital literacy. Cyberdating abuse was associated with stress, depression, and anxiety. In interviews, themes emerged including the importance of trust and communication, reciprocity and transparency, and safety and help-seeking.

Recommendations include involving young people in the co-design of educational programs, a stronger focus on building healthy relationship norms in this age group, maintenance of open lines of communication, and bespoke approaches to cybersafety consistent with the young person's social development.

About the Project

This research targeted two of Latrobe Health Assembly's strategic priorities. By exploring how adolescents and emerging adults in Latrobe Valley are experiencing Cyber Daring Abuse, we target **Community Connectedness and Vulnerability**, with an emphasis on cyber safety of a population that is especially vulnerable to experiencing Cyber Dating Abuse (i.e., younger persons). We also target **Mental Health**, as experiencing Cyber Dating Abuse can have significant psychological, physical, and social impact on the target/survivor.

Project Team

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　　*all team members are employed by Federation University Psychology. The team also acknowledge Molly Branson and Dr Justin Timora for their assistance in the focus group interviews.

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We would also like to acknowledge the Gunai Kurnai people, on whose lands this research project took place.

Background

Cyber Dating Abuse (also known as Technology Facilitated Intimate Partner Violence) is the use of cyber technologies to monitor, harass, or control an intimate partner (Zweig et al., 2014). Cyber Dating Abuse includes online aggression, such as insults and threats intended to hurt a partner (Borrajo et al., 2015) and/or controlling online behaviours, such as monitoring, interfering with, or limiting a partner's online activity (Branson & March, 2021). Cyber Dating Abuse is widespread and increasingly prevalent (González Ortega et al., 2020), especially in women (Zweig et al., 2013) and younger populations (Cardidade & Braga, 2020; Borrajo et al., 2015). Of people aged 18 to 30 years, >80% report controlling (Cava et al., 2020) and >25% report aggressing towards an intimate partner online (Branson & March, 2021). Cyber Dating Abuse is a public health risk, and those who experience Cyber Dating Abuse report significant impact, including depression and anxiety (Borrajo & Gamez-Guadix, 2016), sleep disturbances, and self-harm (Sheridan & Lyndon, 2012).

For adolescents and emerging adults, Cyber Dating Abuse can often be predictive of subsequent face-to-face dating abuse (Lu et al., 2021). Cyber Dating Abuse can co-occur with offline interpersonal violence (Cheyne & Guggisberg, 2018), and the two forms may share a reciprocal relationship (Temple et al., 2021). Given the rates of intimate partner abuse and violence that are recorded in Latrobe Valley (Family Violence Issues and Impact Database, 2021), there is urgency for evidence-based interventions to address the experience of online relational abuse – a behaviour that likely co-occurs with offline abuse but remains underexplored.

Research Aims

1. To gain an understanding of how adolescents and emerging adults in Latrobe Valley perceive healthy online relationship behaviours (including enthusiastic consent)

2. To gain an understanding of how adolescents and emerging adults in Latrobe Valley perceive unhealthy online relationship behaviours (including technological facilitated coercive control)

3. How these adolescents and emerging adults use features of online platforms (e.g., social networking sites such as Instagram and TikTok, and location-based real time dating apps such as Tinder, Bumble, and Clover) to cause, or mitigate, Cyber Dating Abuse, and how inequalities in digital literacy and education impact the use of such features

4. How individual differences, such as attitudes, empathy, self-esteem, and identity, relate to the perception and experience of healthy and unhealthy relationship behaviours online in adolescents and emerging adults in Latrobe Valley

5. How parental/caregiver modelling of forms of Cyber Dating Abuse influence and normalise Cyber Dating Abuse

Scope

The Latrobe HeRO (Healthy Relationships Online) Project is a psychosocial research and educational program to support adolescents and emerging adults in Latrobe Valley develop and maintain healthy online relationships, thus improving wellbeing. The program is guided by the Health Promotion Model (see Figure 1) with the following aims:

1. Understand the gaps in young people's knowledge of healthy online relationship behaviours, with a focus on vulnerable groups that may lack access to educational resources and/or digital literacy that would otherwise allow them to develop healthy norms **(Phase 1)**
2. Create educational resources to address these gaps in knowledge, including a mobile phone app alongside resources for parents, clinicians, and those working with young people most at risk, as well as to the public more broadly **(Phase 2)**
3. Evaluate the effectiveness of those resources to assess impacts on social and digital literacy, online relationship behaviours, and mental health outcomes including depression, anxiety, sleep disturbance, and self-harm **(Phase 3)**

The Latrobe Health Assembly provided funding to support Phase 1 of the project, and outcomes are reported here.
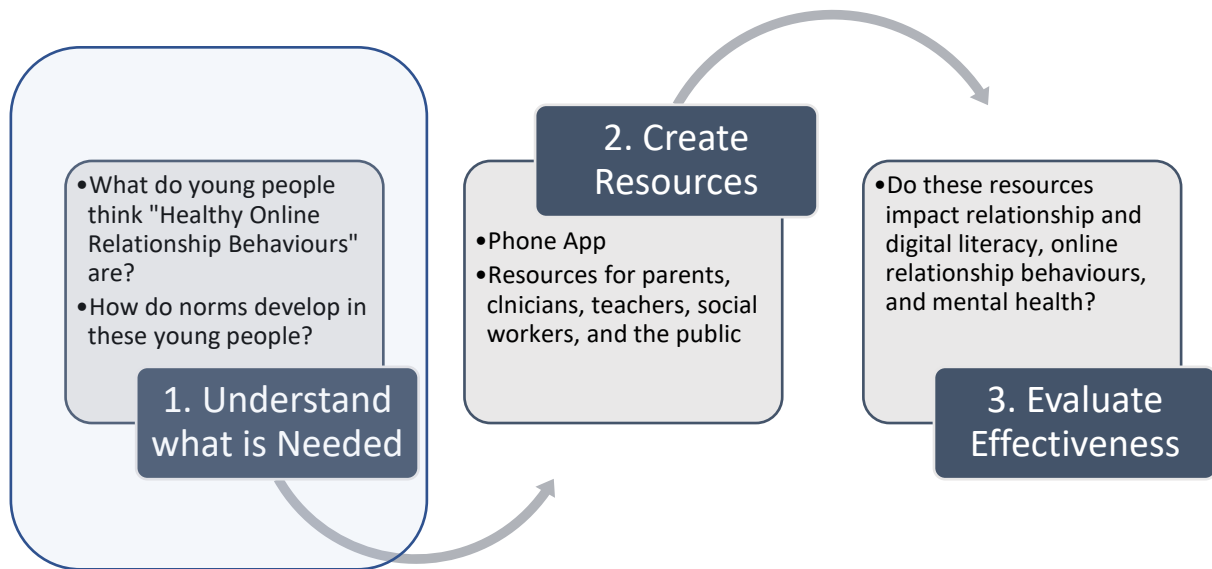
Figure 1. Healthy Relationships Online (HeRO) Project phases embedded in the Health Promotion model. The Latrobe Health Assembly supported Phase 1 (highlighted on left).

Methodology

A mixed-methods design was used, with quantitative (survey) data from psychometrically valid measures collected in combination with qualitative (interview) data. Interviews were conducted one-on-one or in small groups. Prior to all data collection, the project received ethical approval from the Federation University Human Research Ethics Committee (ref 2023/022). Informed consent was obtained from both participants and—in the case of minors—their parents.

Survey methods

We collected a range of numeric data from participants, including their responses on the following scales:

Youth Digital Skills Indicator (Helsper et al., 2020)

Media and Technology Usage and Attitudes Scale (Rosen et al., 2013)

Experience in Close Relationships Scale (Wei et al., 2007)

Relationship Assessment Scale (Hendrick, 1988)

Modified Cyber Dating Abuse Questionnaire (Borrajo et al., 2015)

Self-Esteem Scale (Rosenberg, 1965)

Depression, Anxiety, and Stress Scale (Lovibond & Lovibond, 1995)

Participants completed these scales online via a survey portal.

Interview methods

Participants who completed the surveys were invited to complete 60-90 minute interviews. Some interviews were completed as part of group interviews, conducted at the Gippsland campus of Federation University. The remaining interviews were conducted one-on-one via a Microsoft Teams meeting with one of the researchers.

Interview questions were derived in a semi-structured nature. This means we had a specific set of questions we wanted to ask, but there was room to probe and expand depending on the participants' responses. Questions included things like "*What online behaviours do you consider healthy/unhealthy in a relationship?*" and "*What kinds of behaviours do you consider controlling?*"

All interviews were recorded and transcribed. Thematic analysis (drawing on Braun & Clarke's 2006 recommended method), was used to determine the key themes underlying participants' responses. This involved 6 steps:

1. Familiarisation with data
2. Generation of initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Reporting

Results

Participant Details

Adolescents
- *n* = 25
- age range = 15-17 years

Young Adults
- *n* = 17
- age range = 18-25 years

Overall sample
- mean age = 18.98 years
- additional *n* = 4 completed questionnaires but no interview
- Latrobe Region localities:
  - Churchill
  - Morwell
  - Traralgon
  - Yinnar
  - Moe
  - Boolara
  - Glengarry
  - Traralgon South
  - Yallourn North

Table 1: Digital Literacy - Technical and Operational in <u>Adolescents</u>

Adolescents	I do not understand what you mean by this	Not at all true of me	Not very true of me	Neither	Mostly true of me	Very true of me
I know how to adjust privacy settings	9.1%		4.5%	9.1%	18.2%	54.5%
I know how to turn off the location settings on mobile devices	4.5%			9.1%	13.6%	63.6%
I know how to protect a device	9.1%	4.5%	4.5%	9.1%	18.2%	50.0%
I know how to store photos, documents, or other files in the cloud	9.1%	4.5%		9.1%	22.7%	54.5%
I know how to use private browsing	9.1%		4.5%	9.1%	9.1%	54.5%
I know how to block unwanted pop-up messages or ads	4.5%		4.5%	13.6%	22.7%	45.5%

Table 2: Digital Literacy - Technical and Operational in <u>Young Adults</u>

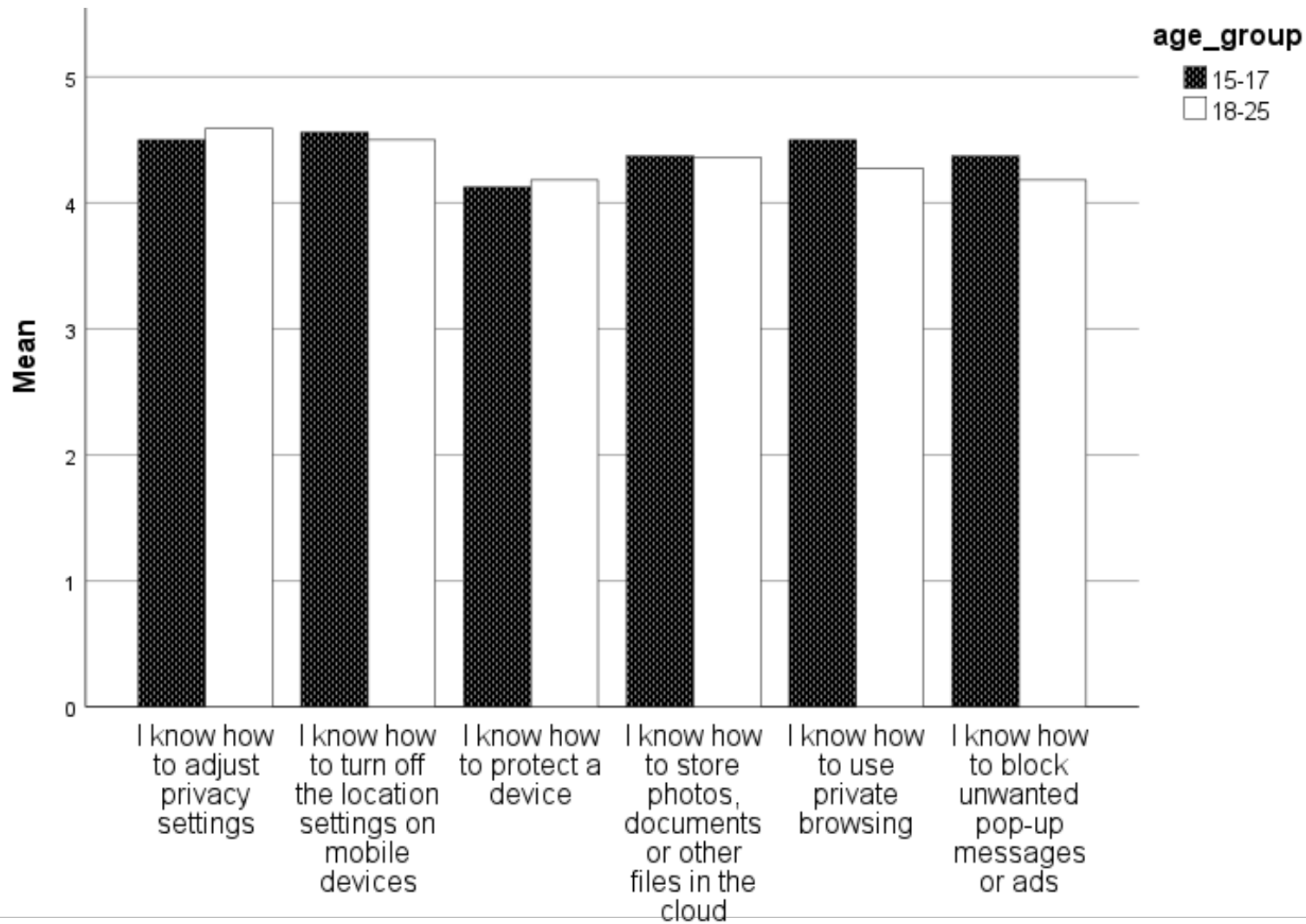| Young Adults	I do not understand what you mean by this	Not at all true of me	Not very true of me	Neither	Mostly true of me	Very true of me
I know how to adjust privacy settings			4.0%		24.0%	64.0%
I know how to turn off the location settings on mobile devices		4.0%			32.0%	56.0%
I know how to protect a device		4.0%	12.0%		20.0%	52.0%
I know how to store photos, documents, or other files in the cloud		4.0%	4.0%	4.0%	32.0%	48.0%
I know how to use private browsing		4.0%	8.0%		24.0%	56.0%
I know how to block unwanted pop-up messages or ads		8.0%	8.0%	4.0%	12.0%	60.0%

Figure 2. **Mean knowledge scores for each digital literacy – technical and operational items as a function of age group.**

Table 3: Digital Literacy – Communication and Interaction in <u>Adolescents</u>

Adolescents	I do not understand what you mean by this	Not at all true of me	Not very true of me	Neither	Mostly true of me	Very true of me
Depending on the situation, I know which medium or tool to use to communicate with someone	9.1%			9.1%	36.4%	40.9%
I know when I should mute myself or disable video in online interactions	9.1%		4.5%	4.5%	22.7%	54.5%
I know which images and information of me it is ok to share online	4.5%			9.1%	31.8%	45.5%
I know how to report negative content relating to me or a group to which I belong				9.1%	27.3%	50.0%
I know how to recognise when someone is being bullied online	9.1%		4.5%	9.1%	22.7%	45.5%

Table 4: Digital Literacy – Communication and Interaction in <u>Young Adults</u>

| Young Adults	I do not understand what you mean by this	Not at all true of me	Not very true of me	Neither	Mostly true of me	Very true of me
Depending on the situation, I know which medium or tool to use to communicate with someone			8.0%	4.0%	40.0%	36.0%
I know when I should mute myself or disable video in online interactions			4.0%		20.0%	64.0%
I know which images and information of me it is ok to share online				4.0%	28.0%	56.0%
I know how to report negative content relating to me or a group to which I belong				4.0%	24.0%	60.0%
I know how to recognise when someone is being bullied online			4.0%		24.0%	60.0%
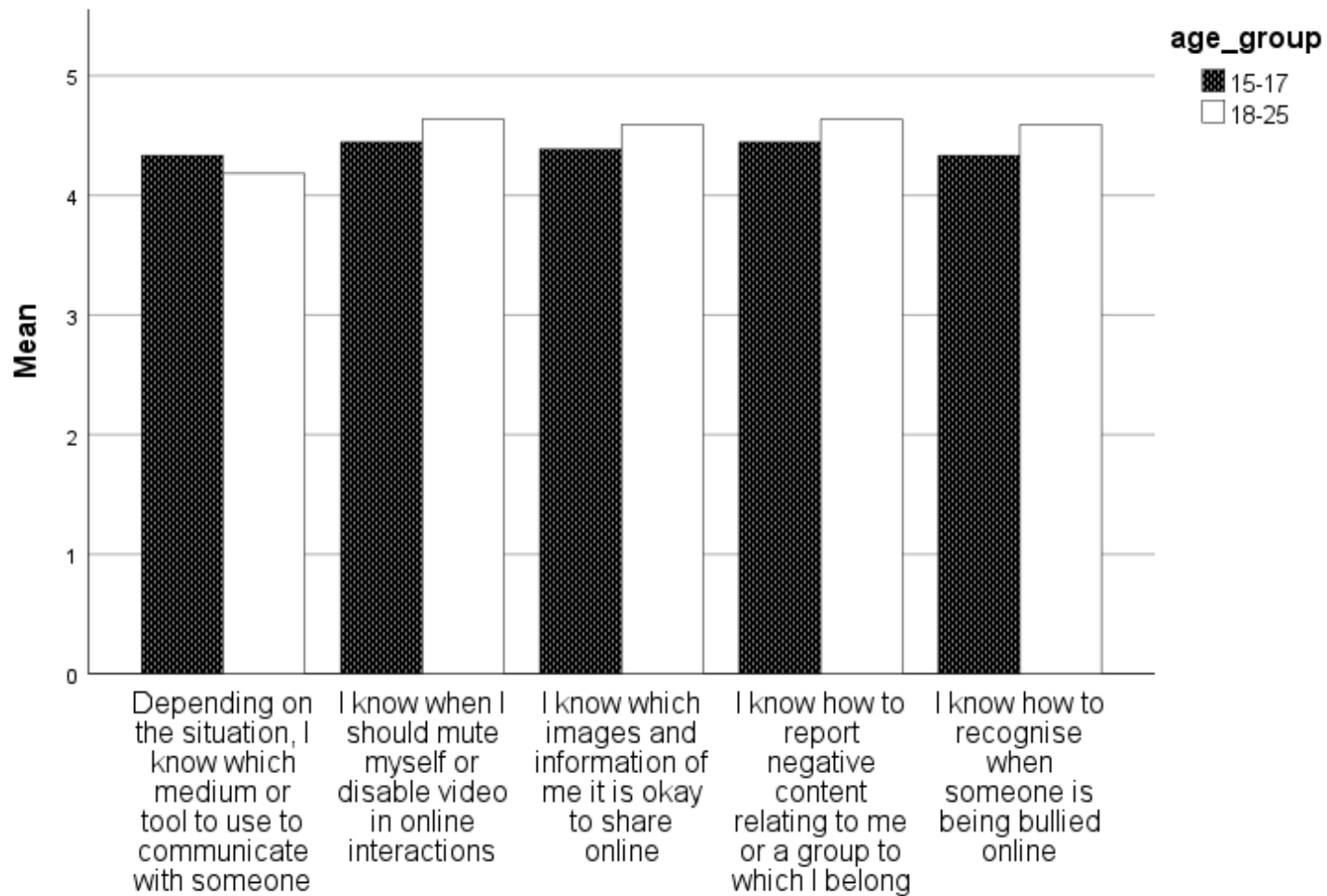
Figure 3. Mean knowledge scores for digital literacy – communication and interaction items as a function of age group.

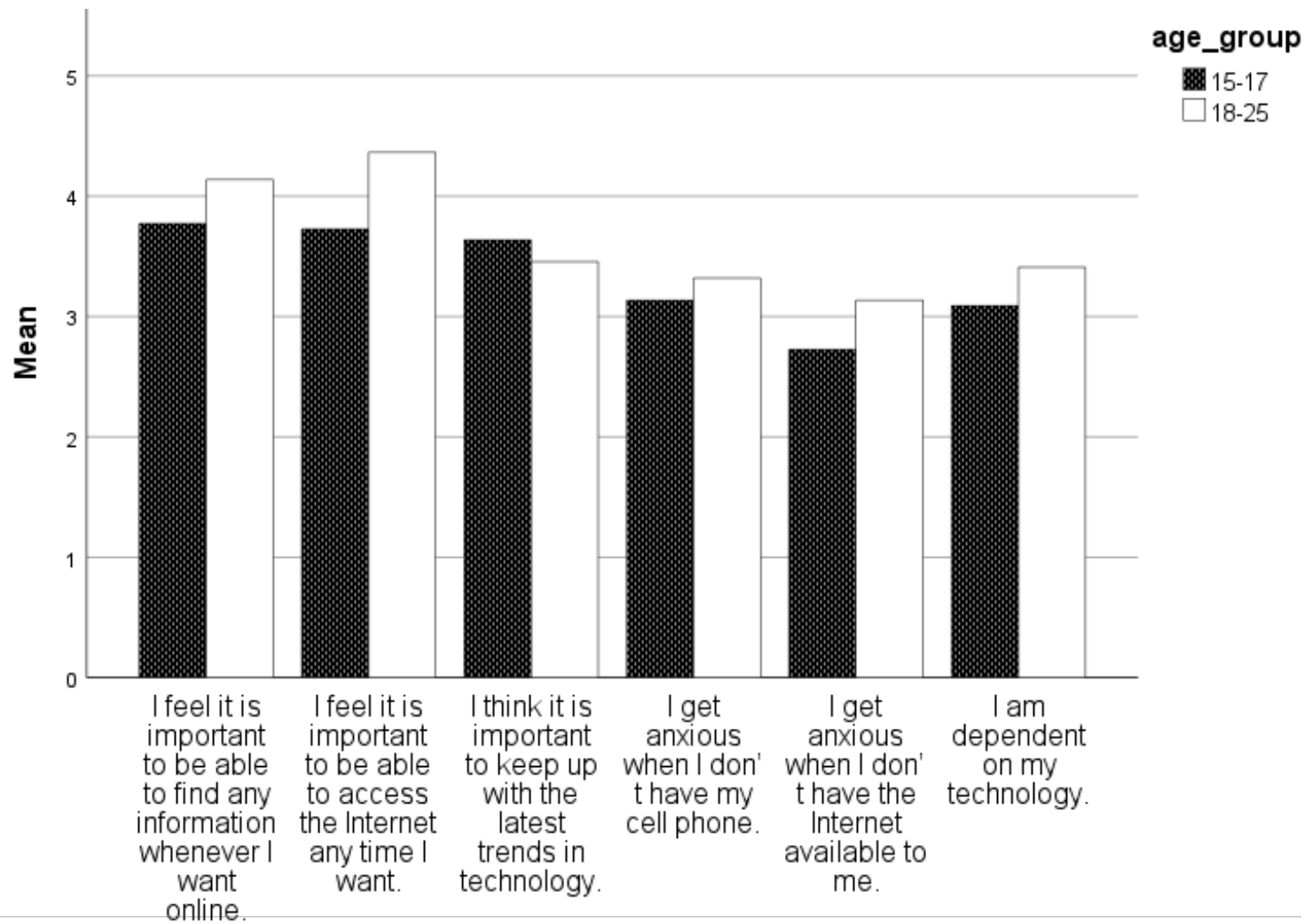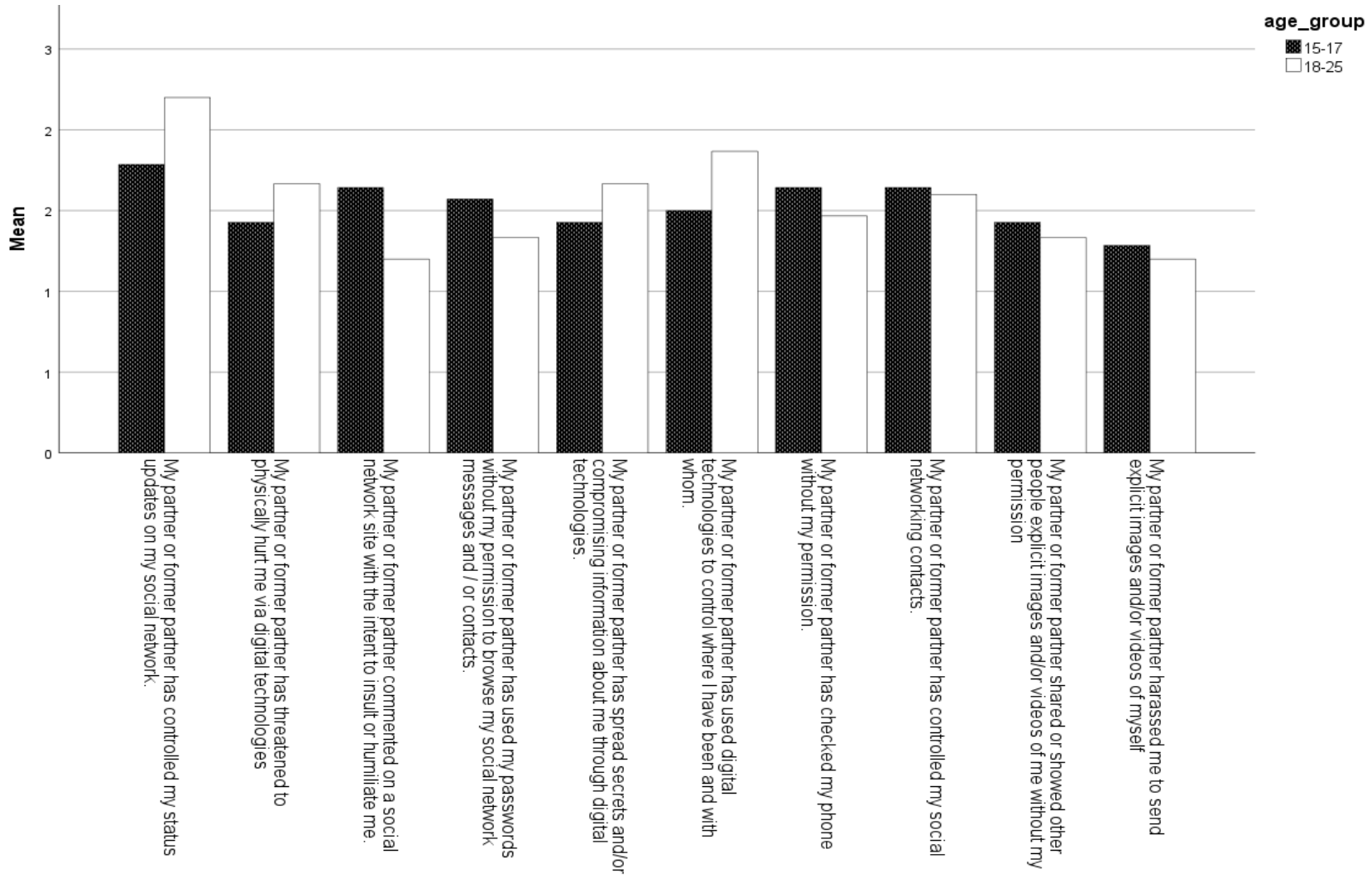*Figure 4.* **Mean attitudes to and dependency on technology as a function of age group**

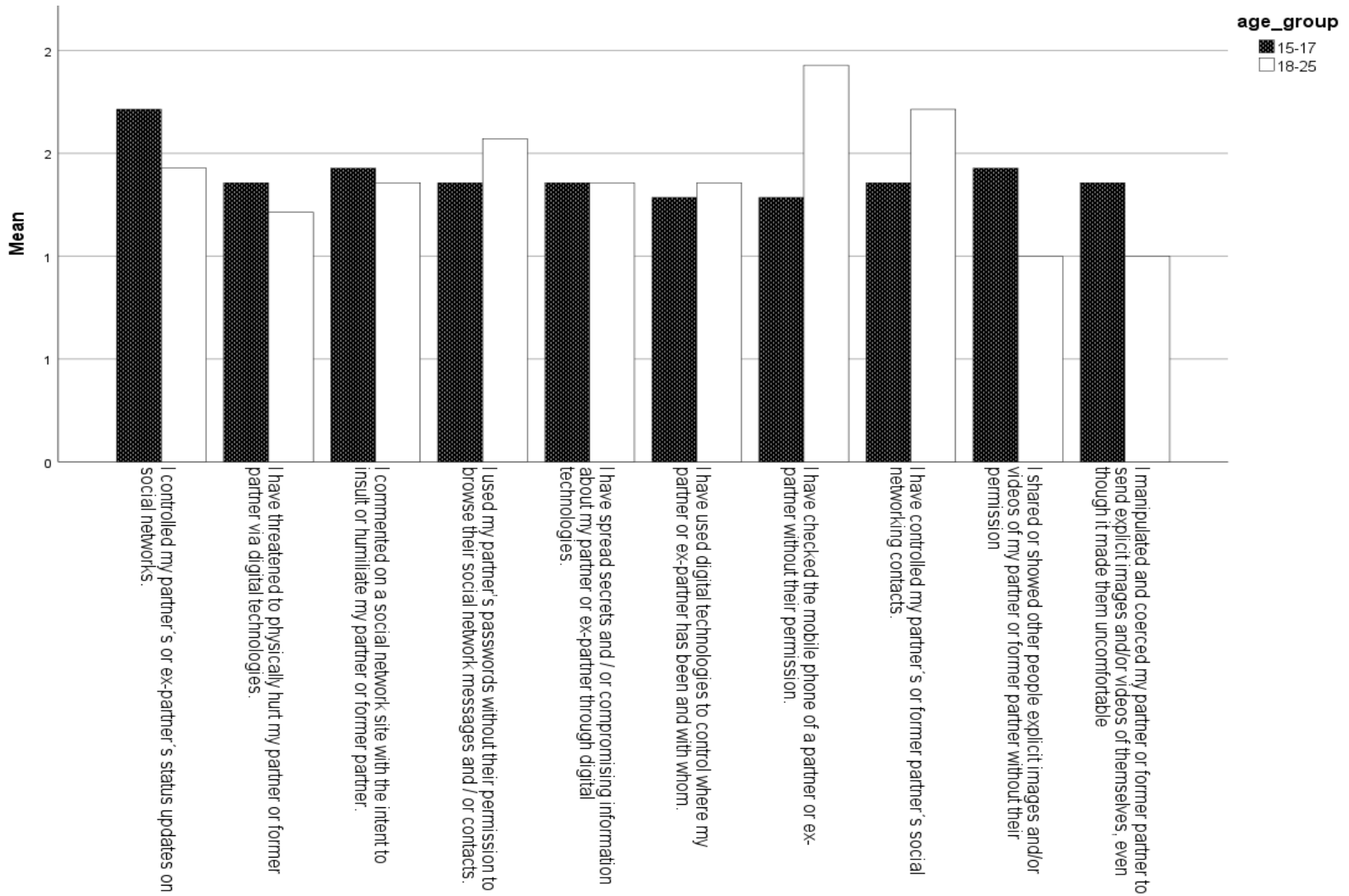*Figure 5.* **Mean experience of cyber dating abuse as a function of age group**

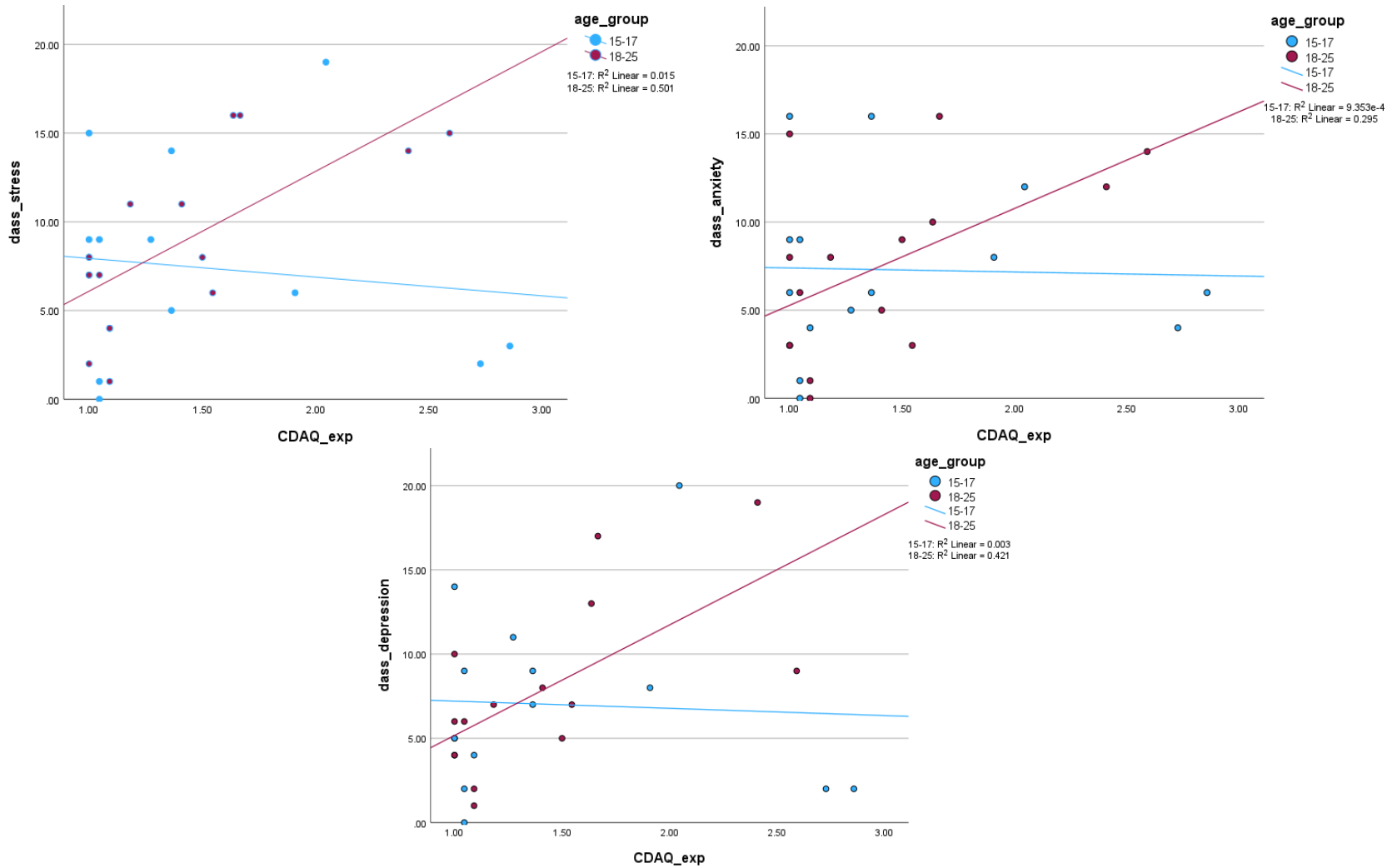**Figure 6.** Mean perpetration of cyber dating abuse between adolescents and young adults.

Figure 7. **Relationships between experience of cyber dating abuse and stress, anxiety and depression as a function of age group**

Summary of survey findings

Overall, adolescents and young adults in the Latrobe Valley appear to have a reasonable level of digital literacy. Interestingly, there were only small differences in digital literacy skills between adolescents and young adults, but these followed a pattern. Specifically, adolescents scored higher on knowledge of using private browsing, and blocking, which may reflect a stronger focus in more recent years on cybersafety initiatives in schools. On the other hand, the young adults scored higher on knowledge of how to recognise bullying, knowing what information they should share, and how to report someone (Figures 2 and 3). These differences may reflect increasing exposure to negative online interactions that occur as people age and have more experiences online. Notably, a small but consistent proportion of adolescents reported not being familiar with terms such as "privacy settings" and "protect a device". This adds to a growing understanding that assumptions around younger people having higher levels of digital literacy may not always be founded, or perhaps indicate that adolescents engage in these activities intuitively, without knowing the terminology associated with their actions.

The findings regarding digital literacy relating to communication and interaction online broadly reflect developmental changes as individuals transition from adolescence to young adulthood. Specifically, young adults were more likely to endorse items in a way that reflected a greater understanding of social norms in the online space.

Both adolescents and young adults showed a moderate reliance on technology (Figure 4). Interestingly the young adults showed slightly higher reliance scores on items such as being able to access the Internet at all times, and always having access to a phone. These small but non-significant differences are likely a reflection of young adults more independent lives once they leave high school.

Approximately two-thirds of the sample were able to provide responses to the items regarding the experience and perpetration of Cyber Dating Abuse. There were few differences, although some small differences on individual items emerged. Specifically, adolescents were more likely to report humiliation online at the hands of a partner. On the other hand, young adults were more likely to report checking on a partner's phone without their permission, and controlling a partner's social media contacts (Figures 5 and 6).

Of interest to Aim 3, there was no relationship demonstrated between digital literacy skills, and either experience or perpetration of cyber dating abuse. This demonstrates that it is unlikely to be those skills relevant to cybersafety that impact cyber dating abuse. Instead, the experience and perpetration of cyber dating abuse are likely more closely tied to attitudes towards relationships. This is something that will need to be addressed in future research, however the current findings indicate that interventions seeking to reduce cyber dating abuse may not be effective if they focus exclusively on the technical aspects of cybersafety.

The experience of Cyber Dating Abuse was related to mental health as well. As shown in Figure 7, there was a positive relationship between the experience of cyber dating abuse (CDA) and depression, anxiety, and stress, however, this was

only for the young adults. In young adults, the strongest relationship was seen between CDA and stress, then CDA and depression, and then CDA and anxiety (with ~25%, 17%, and ~8% of variance explained respectively. These data indicate that the negative impacts of cyberdating abuse are (at least in the short term) stronger young adults than in adolescents, and that in particular stress is likely to be heightened in individuals experiencing cyber dating abuse. If this is confirmed in future research, then interventions that not only aim to reduce cyber dating abuse but also directed at buffering this effect on stress (such as social support) will be welcomed.

Major Interview Findings
Healthy Interactions – Communication is Key

Participants described a wide range of behaviours when interacting with their significant others online that were healthy or made them feel comfortable. Primarily, these interactions were described as honest, they were reciprocal, and they made the person feel good, for instance "giving them compliments". Some participants described their partners enthusiastically cheering them on in public spaces online, such as complimenting their photos or tagging them in posts that indicate their relationship is positive. Interactions with partners online were used largely to keep in contact when not apart, or as a public display of their relationship status. Others described that these interactions were a demonstration that "*shows they were thinking of me*", or "*when you give someone reassurance, just to remind them important they are to you how you're lucky to have them.*"

Healthy relationship interactions online were also described as those that had clear, pre-agreed boundaries, "*obviously it depends on the boundaries and what they've consented to*", including on what was acceptable behaviour for interacting with those outside of the relationship in online spaces.

> "*you have to trust and give each other the benefit of the doubt, you have to be transparent about your online activities*"

Others described that healthy relationship interactions relied on some level of knowledge of the other person's mind state. For instance, one participant

described that their partner could be having a bad day and therefore, text messages would appear "rude" to an outsider, however "*you really can't determine what's positive and what's negative unless you really know them.*" One participant described a healthy relationship interaction as one where partners "*met each other's energy*". As many participants described, "*communication is key*" in a healthy relationship.

Participants were also able to describe how consent could be conveyed in an online environment, although some of this was linked to pre-agreed boundaries, "*when there's just a mutual understanding between the two people, umm, and they're on the same page.*" Participants were able to describe the reasons why consent was more difficult to convey online, including a lack of facial expressions and body language. However, they were able to describe enthusiastic consent, even if they did not know the term. Enthusiastic consent can be conveyed online using text features such as exclamation marks, capital letters, and emojis, particularly the party emoji.

Figure 8. Commonly used words to describe healthy online behaviours

Unhealthy Interactions – Problematic but Normalised Behaviours

Unhealthy interactions with others were described in a multitude of ways, many of which were the mirror of the healthy behaviours described above. Arguing or lying to one another were marked as disrespectful and therefore unhealthy relationship behaviours. As with the healthy relationship behaviours, many participants discussed pre-agreed boundaries. When these were broken, this was considered unhealthy. This included the boundary of trust. This included oversharing information about a partner in a public forum, *"we have to respect each other's privacy"*. Some participants described that being on social media could also facilitate cheating on a partner more easily, *"the platforms these days give people access to talk or instigate [interaction] maybe that wouldn't have happened otherwise, which is, I would say unhealthy."* Thus, not being transparent in interactions with others was considered unhealthy, *"hiding online interaction, you know, without the knowledge of your partner, there is a place for transparency."*

More concerning behaviours described by participants included threats to share personal information or spread personal images, pressure to send explicit images to a partner, bullying, blackmail, and stalking. Keeping tabs on a partner's location and interactions with others was described by many participants, *"digital stalking, you know, continuously checking continuously, checking the partners online profiles, checking your location through social media, checking, you know, GPS tracking and of MGS tracking apps, you know, without the consent, it's invasive and it's actually violate privacy boundaries you know"*. Knowing a

partner's location, or checking someone's phone without their knowledge was among the most commonly described unhealthy behaviours that participants described, yet often admitted to doing themselves, "*I'm not saying it's nice to, you know check your partners phone all the time, tracking and all of that, but once in a while, check his or her phone, you could just discover something that, if you keep quiet about it, will definitely damage the relationship at the end.*"

On the more extreme end, participants described relationship partners gaslighting them by bullying, then deleting messages later such that no evidence existed, and were able to define gaslighting: "*you manipulate your partner's perception of reality then to you tend to deny the experiences in online interactions, gaslighting really has to do with emotional manipulation.*" They also described controlling behaviours, where a relationship partner would limit who they could interact with online, their friends list, or even monitor their accounts by using their password without their partner's knowledge to track their online interactions. Concerningly, many participants described aspects of this behaviour as being normalized: "*It is normalised a lot in guys groups and that, though*". The adolescent participants in particular described that men think it is normal to receive nude images from their girlfriends, and thus applied pressure to receive these, and subsequently broke trust by sharing these images with others. "*It comes back, again, to, really, revenge porn type stuff where there's this couple or whatever, they've spread around someone else's photo because they broke up with them or something. Some stupid stuff like that – that's always something that's constantly happening, especially in Year 8.*"

What to do when under threat

Pleasingly, many participants were able to describe the steps they should take when feeling threatened by another person online. These included blocking and reporting them, ignoring them, checking with others as to the identity of a person, or calling them out on their behaviour. As one participant put it, "*Block, report, delete.*" In extreme cases, participants knew they could speak to trusted adults such as parents, teachers, police, report them on websites or call services such as Headspace. Importantly though, these avenues were only described as being suitable if the situation was deemed "severe" enough to require adult intervention, and if an adolescent deemed they would not get in trouble for coming forward. Situations they described as *not* being safe to seek help included if they were being threatened with blackmail.

Unfortunately, most of these situations described being approached by a stranger. Participants, in particular the adolescent participants, were less often able to describe the steps one could take to limit a threat from someone of close proximity. Some participants described "questioning" the person, setting boundaries, or clarifying if there was a misunderstanding, e.g., "ask why in case they got the wrong intention at first". Some participants, a mix of both adolescents and young adults, did mention "screenshotting" messages, but only one young adult participant was able to describe this was a means to "gather evidence". As such, then, it's not clear to what extent young people can, or do, use safety features of platforms to mitigate cyber dating abuse.

Parental Modeling

Interestingly, many participants were unable to describe situations where they had seen parents or caregivers interacting online. There was a general sense that parents, in fact, did not know anything about the social media platforms that young people are on, as "old people" are on Facebook while young people generally are not. There was a general distrust of parents in online spaces with a belief that parents are easily open to being scammed, and thus that they are unlikely to be able to help if someone is experiencing trouble online. It is possible, then, that the normalisation of technological facilitated dating abuse is not necessarily normalised because of models of behaviour from parents and caregivers. There are likely other sources of modeling which should be explored in future research, including media.

Education

Importantly, many participants were able to list various websites or places they could go for information about how to protect themselves online, but concerningly, the education the participants described was largely focused on cyber security, and less on cyber safety. For instance, many participants knew how about authentication and password security, and described that relationship behaviours should be "respectful" but lamented that these aspects didn't apply in their real day-to-day interactions. One reason for this might be that technology changes so rapidly, that education doesn't seem to apply, "*Everything's changing so much that it's something kind of new that's happening. Snapchat, for example,*

you've got all your sex bots and stuff – like people just trying to scam you and get you onto a website just so they can sign me up – trying to get information about you so – I don't know – that's what my cyber security is – like I've experienced sex bots and stuff like that."

Participants were able to describe their digital footprint, and the reputational damage that might occur from being online. However, their description of this was largely in context of not giving in to "pressure" to share nudes with people, and they described that this education often came too late: *"Two years too late. Didn't we get taught about Year 9?"* Other participants described being told that bullying or harassment could happen, but not what it looks like or what to do: *"not really more past tell a teacher. If you're still at school and you end up in an abusive relationship, or your parents are in an abusive relationship, or something like that, you can tell your teacher. But that was the extent of it."* Overwhelmingly, participants described wanting earlier, and more specific, education on how to keep themselves safe.

Themes arising from interviews

Two underlying themes also emerged in participants' discussions of their experiences in relationships and interacting with others online, that trust and safety were core components of online interactions.

Trust

Trust was an important part of interacting with others or relationship partners online. When discussing what behaviours participants themselves had experienced, or what they'd seen others experience, participants largely discussed behaviours where a sense of trust was either kept or broken. For instance, healthy relationship behaviours were described as those where someone communicated, told the truth, was honest, and kept their word. In contrast, unhealthy behaviours, or those that were perceived as threatening or made people uncomfortable, were those where a sense of trust had been broken. For instance, participants described threats of blackmail, "having something that they don't want you to have and threaten share it." In other scenarios, participants described people making up stories about them and "spreading lies". Trust was an important component of online consent. For instance, in the context of consenting online, consent was given if you trust the person would keep their word, but it was also important to "trust that they'll take it if you say no as well."

Determining whether another person trusted you and was fully consenting to an interaction was also described as difficult in an online environment. Given a lack of body language and tone, participants described needing to both communicate trust and consent, and receive indications of this from others, in the

form of exclamation marks, emojis, capital letters, and the use of colloquial phrases.

Safety

Another important component of interacting with others online was a sense of safety. Healthy relationship behaviours were described as those where participants felt a sense of safety to express themselves with their partner, for instance, without fear of ridicule or being "put down". A range of unhealthy behaviours were described which included safety violations. These included being stalked, harassed, bullied, and experiencing emotional abuse.

The adolescent participants in particular described "adults invading children's spaces". Spaces which should have been safe to play or interact online, such as Roblox or My Little Pony, were described as spaces where adults were likely to reach out and engage with children. Many participants described receiving unsolicited inappropriate images from adults, or even feeling pressured from others to share images of themselves, whether from an adult or a relationship partner. Many participants described being doxed, i.e., having their personal usernames shared in places which meant threatening people could reach out to them directly.

Safety was an important aspect of responding to threatening or uncomfortable behaviour online. Many participants described cyber safety features on the platforms they interacted with, describing the "block and report" features of major platforms as a point of first contact. Other participants described scenarios in which they were able to ignore or felt safe enough to set boundaries with another person. Whether they went to an adult such as a

teacher, the police, or their parents, was largely dependent on whether that was a safe space. For instance, "*some kids could be scared to go talk to their parents about it if something were to happen*", or "*thinking you're going to get in more trouble if you actually talk to someone, so you keep it in*". The young adult participants in particular described a sense of their own parents "not knowing" about social media and the internet, "*He'll go into Messenger and he'll click the links that you aren't meant to open and then they'll hack his phone, his Facebook and send everyone else the link.*" This indicates young adults in particular, may not believe their parents know how to keep them safe online, and so do not share their own struggles with cyber safety.

Summary of findings against aims

Aim 1: Adolescents and young people in Latrobe Valley perceived healthy online relationship behaviours to be those that were communicative, reciprocal, and respectful. There was a consensus that there is no one way to define healthy communication, but that if boundaries were agreed in advance, any number of behaviours might be considered healthy. In terms of enthusiastic consent, participants agreed that this was forthcoming, and often expressed in more than just words, using textual features such as emojis, which convey meaning beyond their imagery.

Aim 2: The participants in this study described a range of unhealthy online relationship behaviours, and many described having experienced or perpetrated aspects of these themselves. The most commonly described (and perpetrated) acts related to tracking a person's location or checking a partner's phone or messages without consent. More extreme behaviours including coercion and coercive control were described, though less often experienced. Problematically some behaviours were described as normalised, particularly adolescent participants describing being pressured to send nude images, and young adult participants describing checking a partner's location via GPS features in social media apps. This was corroborated with the survey data, which indicated that young adults more often checked their partner's phone without them knowing than adolescents.

Aim 3: We have found that both adolescents and young have a relatively good understanding of social media apps and how to use technology, as shown through

good digital literacy scores. This aligns with the adolescents claims in the interviews that they received good education on cyber-safety at school, specifically how to browse in private and avoid sharing passwords and private information. However, some interesting differences emerged between adolescents and young adults. Specifically, young adults seemed to score higher on knowledge of how to recognise when someone was being bullied, what images are okay to share, and how to report negative content. These findings indicate that while young adults may have developed some additional skills to keep themselves safe online and block and report unwanted contact, adolescents have not yet developed these skills and might need some additional help in recognising this behaviour. This was consistent with their interview responses which indicated they do not always know how to recognise what bullying or harassment looks like.

Aim 4: Interestingly, no differences in attitudes to technology emerged. Both adolescents and young adults showed similar levels of dependency on technology, which were at moderate levels. Attitudes to technology were also not correlated with either perpetration or experience of Cyber Dating Abuse. These results imply that attitudes towards and experience with technology are not factors that predict their use in unhealthy online relationship behaviours. On the basis of the interview findings, future research should explore the relationship between attitudes to relationships and experiences and perpetration of unhealthy online relationship behaviours, in order to uncover whether relationship factors, rather than technology factors, are predictive of online relationship behaviours.

Aim 5: It was not clear to us that direct modelling from caregivers was having an influence on the normalisation of unhealthy online behaviours. This certainly does

not imply that caregiver modelling has no role to play, as there is ample evidence to suggest that caregiver modelling of respectful and healthy relationships is an important component in helping children become aware of their own and others' feelings. Instead, our findings imply a disconnect between children and adults' use of technology. Many participants perceived their parents as being vulnerable to scams online, but did not recognise the ways in which parents and caregivers might be using technology to facilitate or mitigate a romantic relationship.

Instead, the normalisation of harassing and coercive relationship behaviour appeared to be through peer-modelling. Many participants spoke of many of their peers either experiencing harassment (e.g., to send photos), or themselves blurring boundary lines with regards to others' privacy in use of technology (e.g., checking up on a partner's location).

Recommendations

Tremendous strides have clearly been taken in teaching adolescents and young adults about cyber security, with most young people aware of a digital footprint and how to protect their personal information online. Furthermore, young people appear to have a good understanding of how to engage in safe behaviour to protect themselves when faced with the demands of an internet stranger. What arises from our investigation is an indication that a) adolescents and young people view problematic online behaviour with relationship partners, such as pressure to send nudes, or tracking a partner's location, as normalised, and b) that adolescents and young adults seem to perceive adults as a safe refuge only when things escalate. Based on our findings, we make a number of key recommendations. Where possible, we align these recommendations with the aims of our study.

Recommendation 1: Modifying Current Educational Programs

The first two aims of this project were to gain an understanding of how adolescents and emerging adults in Latrobe Valley perceive healthy, and unhealthy, online relationship behaviours. As noted in the summary of findings above, adolescents and young people in Latrobe Valley perceived healthy online relationship behaviours to be those that were communicative, reciprocal, and respectful. Concerningly, our participants reported that more problematic, "unhealthy" behaviours (e.g., tracking a person's location or checking a partner's phone or messages without consent) tended to be normalised. As such, our first recommendation is that educational programs targeting cyber safety and online

relationship behaviour shift their focus. Instead of continuing to focus on problematic behaviours – which in turn could potentially normalise the occurrence and experience of these behaviours – we recommend these programs should instead pivot to focus on and promote healthy, positive online interactions.

By largely focusing on the dangers of online communication and relationships, these exploitative and abusive behaviours might be inadvertently normalised. We recommend that the educational programs promoting cyber safety shift the focus from young people "protecting" themselves online, to teaching young people how to engage in respectful online relationship behaviour, particularly with people with whom they already have a relationship with offline. These educational programs should provide real, concrete examples of what unhealthy (e.g., exploitative) and healthy (e.g., respectful) online interactions look like. These programs might also emphasise the role of social support when navigating challenging online behaviours, as peer support appeared to be a critical coping mechanism for young adults.

Relatedly, our participants noted that much current educational content around being safe online is largely focused on avoiding future reputational damage by not 'giving in' to people on the internet asking for explicit images. Further, almost all our participants indicated that this education should be more specific, with concrete examples of *what* to look out for, beyond just knowledge that harassment and pressure can happen. Current educational programs could be modified to include more specific examples of both healthy, and unhealthy, online relationship behaviours.

Lastly, participants noted that current educational programs (e.g., Respectful Relationships) tended to lack information about online relationships. We therefore also recommend that the Respectful Relationships programs be extended and combined with other initiatives to include targeted information about online behaviour in relationships. Based on the findings of this research, these programs – and conversations – about online relationship behaviours should occur at an earlier time point, such as in Year 7.

In summary, we recommend current educational programs be modified to (1) include more information on online relationships, (2) have less emphasis on fear and avoidance, (3) promote growth and healthy, respectful online interactions, (4) include more concrete, specific examples of online behaviours, and (5) occur at an earlier time point in adolescence.

Recommendation 2: Co-Designed Programs

Our summary of findings in response to Aim 3 revealed individual differences regarding digital literacy. Therefore, we recommend that the development of education programs supporting the cyber safety of adolescents and young adults are **co-designed**. Specifically, young people should be directly, and meaningfully, involved in the development of education programs. This approach will ensure the broad spectrum of individual differences in digital literacy will be adequately represented.

The design of these programs could be guided by experienced facilitators and could include focus groups with young people, who have (1) input on the content these programs should cover (e.g., consent), and (2) co-design specific examples of healthy, and non-healthy, online relationship behaviours for inclusion

as program content. Another option would be to adopt an internship model where a young person (or persons) could be included as lived experience experts to contribute throughout the duration of the development of these programs.

Related to improvements in education, the social development of young people appears to warrant more attention. A collaborative design is further recommended as there was a substantial variation across the sample in terms of their understanding of social interaction, their emotional regulation, and their relationship experience. It seems that a "one-size-fits-all" to education and intervention has inherent limitations and will be unlikely to be effective. Instead, a bespoke approach that takes into account each individual's social development is indicated.

Collaboratively designed programs could generate school-based resources and development sessions. However, another potential solution that would address individual differences in knowledge and digital literacy would be to build an app where relevant information can be gleaned from an individual user and targeted support and education provided. These programs/the app should then undergo evaluation via pre- and post-intervention testing.

Although the current project did not provide a wealth of evidence for the fourth aim – how individual differences, such as attitudes, empathy, self-esteem, and identity, relate to the perception and experience of healthy and unhealthy relationship behaviours online in adolescents and emerging adults in Latrobe Valley – we strongly recommend future researchers consider this as an important avenue of investigation. Such information would highlight potential areas to address (e.g., self-esteem, attachment) during the co-development of these educational programs.

Recommendation 3: Proactively Modelling Healthy Online Interpersonal Relationships

Our last aim of the project was to explore modelling of healthy, and unhealthy, online relationship behaviours. Broadly, the data indicate the importance of norms and role-modelling in relation to healthy online relationships. While norms and role-modelling are clearly central to other relationship interactions, this is the first study to reveal that these are also critical in online-facilitated interactions. It is recommended that parents, guardians, and other important adults proactively demonstrate healthy relationships behaviours in both offline and—crucially—online interactions, noting that this maybe challenging as online interactions are typically less accessible to those not personally involved in the exchange. We recommend that relevant stakeholders in young people's lives – parents, teachers, other adults – take the time to proactively discuss online interpersonal behaviour with young people during their offline interactions. This might require these stakeholders to improve their own digital literacy as well as understanding of contemporary online issues young people face, such that their role modelling is explicitly relevant to the behaviours and context of the online world as experienced by young people.

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