

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<u>http://bmjopen.bmj.com</u>).

If you have any questions on BMJ Open's open peer review process please email <u>info.bmjopen@bmj.com</u>

BMJ Open

BMJ Open

"This bloody rona!": Using digital story completion to learn about mental health impacts of COVID-19 in Australia

| Journal: | BMJ Open |
|-------------------------------|--|
| Manuscript ID | bmjopen-2021-057393 |
| Article Type: | Original research |
| Date Submitted by the Author: | 14-Sep-2021 |
| Complete List of Authors: | Vaughan, Priya; University of New South Wales, Black Dog Institute Lenette, Caroline; University of New South Wales, School of Social Sciences, Faculty of Arts, Design and Architecture Boydell, Katherine; University of New South Wales, Black Dog Institute |
| Keywords: | COVID-19, MENTAL HEALTH, QUALITATIVE RESEARCH |
| | |





I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our <u>licence</u>.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which <u>Creative Commons</u> licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

reliez on

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Title: "This bloody rona!": Using digital story completion to learn about mental health impacts of COVID-19 in Australia

Corresponding Author: Dr Priya Vaughan. <u>Postal Address</u>: Black Dog Institute, Hospital Road, Randwick, 2031, N.S.W., Australia. <u>Email</u>: <u>p.vaughan@blackdog.org.au</u>

Authors:

Priya Vaughan: Black Dog Institute, University of New South Wales, Sydney 2031, Australia; p.vaughan@blackdog.org.au

Caroline Lenette: School of Social Sciences, Faculty of Arts, Design and Architecture, University of New South Wales, Sydney 2031, Australia; c.lenette@unsw.edu.au

Katherine Boydell: Black Dog Institute, University of New South Wales, Sydney 2031, Australia; k.boydell@unsw.edu.au

Word Count (excluding title page, abstract, references, figures and tables): 3,081

"This bloody rona!": Using digital story completion to learn about mental health impacts of COVID-19 in Australia

KEYWORDS: COVID-19, Story Completion, Mental Health, Coping Strategies, Social Supports, COVID-19 Vocabulary.

ABSTRACT

Objectives: To use digital story completion to prompt participants to describe thoughts, fears, and mental health experiences in response to a story stem about COVID-19 to capture a specific socio-historic moment.

Design: We used digital story completion, a qualitative research method, to gather narratives from Australians coping with physical distancing and social restriction measures. Our reflexive thematic analysis of the data was underpinned by a constructionist approach to reflect the importance of social context in understanding health experiences.

Setting: Australia.

Participants: 52 people living in Australia (aged 18 years and over).

Results: Four meta-themes were prevalent across 52 stories submitted: (i) Expressions of *Mental Distress* linked to COVID-19; (ii) Various *Coping Strategies* offered by characters in stories; (iii) Narratives outlining *Social Supports* offered to alleviate distress; and (iv) Specialised *COVID-19 Vocabulary*.

Conclusion: We cautiously propose that points of convergence across stories suggest a level of shared experience among participants resulting from intensive media coverage, persistent public-health messaging, engagement with social media and instant messaging technologies, and extended lockdowns that impacted vast numbers of Australians.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- Story Completion has the potential to elicit rich detail regarding individual and • collective experiences of social phenomenon, such as the impact of a pandemic on health and wellbeing.
- The story completion method invites people to think creatively and • speculatively to reveal processes of sense-making and social experience.
- First study to report on data generated from story completion relating to the COVID-19 pandemic.
- Need for caution vis-à-vis assumptions about the relationship between the story content and participants' realities.
- Lack of significant ethnic and cultural diversity in our cohort signaled that we had not utilised story completion in appropriate ways for diverse cultural ey.e groups.

BACKGROUND

Story completion is an innovative mode of qualitative inquiry which offers a unique means of creatively engaging research participants. The method encourages participants to respond creatively and speculatively to a scenario in a manner that does not require them to disclose personal details or their own experiences.^{1,2,3} It is adaptable to various epistemological frameworks but is most frequently used within a social constructionist framework.^{1,2} The story completion method has burgeoned in recent years.^{4, 5} This relatively new research approach has been detailed in the introduction to a special journal issue on story completion.² The method was also featured in a 2019 symposium with an introduction and three abstracts published in

BMJ Open

BMJ Open,⁶⁻⁹ signalling a growing interest in its applications in health and social care.

Story completion originated in psychology, feminist theory and psychotherapy traditions. ^{2, 10} It was first adapted by Kitzinger and Powell for use in qualitative research using a social constructionist perspective and discourse analysis.¹¹ Story completion is increasingly used to study repeated patterns of social meaning and assumptions depicted in stories.¹² The method has recently garnered interest from qualitative researchers keen to pursue its possibilities as a narrative method,² largely to stimulate social meanings and understand sense-making and lifeworlds.¹³ As such, story completion has untapped potential to elicit rich detail regarding individual and collective experiences of large-scale social phenomena such as the impact of a pandemic on health and wellbeing.

DESIGN

We used digital story completion to gather narratives from Australians coping with physical distancing and social restriction measures in place from March 2020. Story completion was appropriate to explore how people were responding to rapidly changing situations, given its use as a tool for "accessing *social* meanings and discourses, and dominant assumptions and norms".¹⁴ The method was used to archive unusual global circumstances affecting Australia as a distinct context. Our interest in capturing how respondents coped with public health restrictions informed our choice of stem: *An 11pm phone call is received from Ali's elderly parent who is distressed due to COVID-19. What happens next*?

We set up a submission point using Qualtrics. We outlined consent and ethics information, followed by the stem, and demographic questions. We shared the link in May 2020 via Twitter, seeking to recruit people living in Australia aged 18 years or

BMJ Open

older. We also posted a Facebook invitation on the [organisation] webpage (a specialist mental health research institute), after which we saw a net increase in submissions. We chose these recruitment strategies for a rapid response and to attract a diverse cross-section of respondents. When the survey was closed after four weeks, we had 52 stories. We did not set a word limit, hoping that it would encourage respondents to be creative with the stem.

We discussed the 'hypothetical' nature of the stem, in line with past applications of story completion. Given the uniqueness of the COVID-19 situation and attendant collective experiences of uncertainty, we acknowledged that the stem might also echo participants' reality.¹ We hypothesized that respondents might use the stem to creatively explore and represent their lived experiences of the pandemic.

Because of likely variation in quality and length of stories, recruiting at least 10 participants per story stem is recommended.¹⁵ However, story completion studies typically recruit sample sizes of 40 to 60 participants. ^{16, 17} We are confident that our 52 stories represent a robust corpus of data for analysis. The length of stories submitted varied from one sentence to a lengthy paragraph. The former identified the next step or action the protagonist would take, while the latter was either reflective or followed a narrative arc with a beginning, middle and end (orientation, complication, resolution).

To frame each participant's storytelling choices in our analysis, we collected demographic data using a mix of pre-determined and open responses. We wanted to understand who responded to the call to participate and what specific markers of identity might reveal about how people told stories about COVID-19. We provide demographic information in the results section.

ANALYSIS

Author1 read all the stories and Author2 and Author3 read half each, so that each story was read at least twice. We recorded our initial thoughts using two headings: (i) "Are there particular storylines? What are the 'turning points' or what Fels calls 'tug on the sleeve' moments?¹⁸ Are there repeated patterns of meaning?" and (ii) "Key themes". We identified the most prominent or important elements in the stories, before engaging in collaborative analysis.

We used reflexive thematic analysis,¹⁵ an approach widely utilised in psychology and story completion analysis. This method positions researchers as active agents in the process and requires reflection on the assumptions they bring to the analysis.¹⁹ We have used thematic analysis extensively in previous work.²⁰⁻²² We interpreted the data using a constructionist approach to story completion, as each story reflects the participant's social context.^{11, 23, 24}

We identified four meta-themes across the stories:

- 1. Expressions of Mental Distress linked to COVID-19;
- 2. Various Coping Strategies offered by Ali and other characters in stories;
- 3. Narratives outlining Social Supports offered to alleviate distress; and
- 4. Specialised COVID-19 Vocabulary.

In our overview of these meta-themes, we explore their prevalence across stories. Moller et al. note that reporting on "frequency counts or percentages" when using story completion "may be seen as controversial (e.g., antithetical to qualitative values)".⁵ However, given our interest in archiving a specific *moment* in Australia relating to a public health crisis, we felt that a top-down focus, which captured commonalities and differences in experiences, was imperative.

RESULTS

1. Mental distress

We tracked expressions of mental distress that Ali, the parent, or others conveyed in the stories. Almost all (96%) stories included implied or explicit discussions of experiences of mental distress. While the stem mentioned that Ali's parent was distressed, participants could choose how they developed their narrative and how much emphasis they placed on this element. We identified the language used in stories rather than assigning diagnostic categories to the texts, to understand how participants described a character's state of mind. Some participants explicitly named the type of mental distress a character suffered, while in other instances we made inferences about mental distress experienced.^{II} We used an iterative process to classify these expressions by counting mentions associated with mental distress. Many stories featured more than one form of distress. We then assigned these to 19 top-level categories.^{III}

The most expressed concern was *Worry* (41% of concerns), mostly related to the possibility that Ali or their parent would contract COVID-19. Other expressions of distress related to government-imposed physical and social distancing provisions, leading characters to feel lonely, isolated and angry. Table 1 summarises expressions of mental distress that account for more than 5% of those counted.^{iv}

| Mental | Example | Percentage |
|----------|---------|------------|
| Distress | | of Count |

| Worry | "Ali is tired, it's been a long day trying to work from home with | 41% |
|-------------------------|---|-----|
| | small kids, but they listen carefully to all the worries of their | |
| | dad." | |
| General | "Ali remains calm and tries to get to the root of the problem and | 10% |
| Implication of | lends a listening ear. She redirects one of the concerns | |
| Psychological | towards practical solutions to calm the parent and reminds the | |
| Discomfort ^v | parent of some trusted neighbours and friends nearby and | |
| | commits to checking back in in one hour." | |
| Fear | "She lives in an assisted care home and has been reading the | 8% |
| | news about the deaths in other nursing homes. She is | |
| | understandably scared" | |
| Lonely | "She's lonely, none of her children are there, this is not | 8% |
| | something she says often but Ali knows this to be true. The call | |
| | is about COVID-19 on the face of it but she just wants to talk to | |
| | someone." | |
| Anxiety | "his mother is anxious about running out of toilet rolls and not | 6% |
| | getting basic things from the grocery store." | |
| Distress | "Ali gets distressed with his mother's distress" | 5% |

Table 1: Mental Distress

2. Coping Strategies

79% of stories featured coping strategies of some kind, and 66% featured more than one strategy. Strategies were articulated by characters in the stories, typically to allay the distress of Ali's parent. We used an iterative process and counted mentions of coping strategies, then assigned these to a set of top-level strategy types. The most common strategy was *Talking* (29% of strategies). Talking as a coping strategy underpins the story stem, which begins with a phone call to Ali. Many stories began with Ali verbally reassuring their parent. Table 2 outlines coping strategies accounting for more than 5% of strategies counted.^{vi}

| Coping Strategy | Description of Strategy | Percentage |
|-----------------|--|------------|
| | | of Count |
| Talking | Talking through worries; Ali providing verbal | 29% |
| | reassurance; talking about things beyond COVID- | |
| | 19. | |
| Socialising | Planning to, or undertaking, social interaction. | 12% |
| Prevention | Discussing strategies to limit risks of catching | 11% |
| Strategies | COVID-19 to limit parental worry. | |
| Information | Getting information to combat worry and anxiety, | 10% |
| | including engaging with reputable sources to bust | |
| | COVID-19 myths (e.g., COVID-19 is caused by 5G | |
| | network). | |
| Instrumental | Practical support Ali proposed to alleviate stress | 10% |
| | (e.g., offering to shop for parents). | |
| Relaxation | Watching movies; reading books; gardening or | 8% |
| Activities | getting fresh air. | |

Table 2: Coping Strategies

3. Social Supports

BMJ Open

85% of stories included Ali providing or offering social support to their parent.^{vii} Arguably, Ali's ability to provide support underpins the story stem, as Ali's parent calls while distressed. We counted explicit mentions of supports articulated in stories. In health research, various social support categories are used including: instrumental, emotional, tangible, affectionate, positive interactions, or appraisal.²⁵⁻²⁸ We used three broad social supports categories: 1) *Emotional*: Expression of empathy, love, trust, care and support. 2) *Instrumental*: Tangible service or help. 3) *Informational*: Advice, suggestions and information. Table 3 records the presence (or co-presence) of social supports in stories. *Emotional* support was by far the most prevalent. We note that coping strategies and social supports sometimes overlapped.

| Support | Example | Percentage of |
|---------------|--|---------------|
| Type(s) | | Stories |
| - 31 (-) | | Type(s) |
| | | Appear |
| Emotional | " Ali speaks to her mother for a few minutes, calming her | 30% |
| | down and reassuring her that she will be ok" | |
| Emotional | "Ali assures her Mum that she is listening and encourages her | 18% |
| and | Mum to share what is worrying her Ali sits at her laptop while | |
| Informational | she talks to her Mum and looks up trusted sources of medical | |
| | information (WHO, Aus Govt, mydr.com.au) to help her Mum, | |
| | and herself, understand what we know." | |
| Emotional, | "Ali seeks to reassure her parent that if he/she follows current | 16% |
| Instrumental, | health advice that the risks to this parent can be minimised | |

| how 5G is linked to increased cases Ali rubs his eyes and explains that you should never believe what you see and read on social media The next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum."9%Instrumental testing centre, he brought them to be tested the next day."9%Instrumental"Ali, now wide awake, opens her laptop, googles the5% | Informational | "Ali's mum then goes on to explain she saw on Facebook | 11% |
|--|---------------|--|-----|
| on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum."Instrumental"Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day."9%Instrumental"Ali, now wide awake, opens her laptop, googles the5% | | | |
| sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum."Instrumental"Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day."9%Instrumental"Ali, now wide awake, opens her laptop, googles the5% | | explains that you should never believe what you see and read | |
| Virus and 5G and send them to his mum."Instrumental"Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day."9%Instrumental"Ali, now wide awake, opens her laptop, googles the5% | | | |
| Virus and 5G and send them to his mum." Instrumental "Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day." 9% Instrumental "Ali, now wide awake, opens her laptop, googles the 5% | | | |
| Instrumental "Ali drove to his parent's house, bringing with him some 9% medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day." 9% Instrumental "Ali, now wide awake, opens her laptop, googles the 5% | | | |
| medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day." Instrumental " <u>Ali, now wide awake, opens her laptop, googles the</u> | Instrumentel | | 0% |
| testing centre, he brought them to be tested the next day." Instrumental "Ali, now wide awake, opens her laptop, googles the 5% | Instrumental | "Ali drove to his parent's house, bringing with him some | 9% |
| Instrumental "Ali, now wide awake, opens her laptop, googles the 5% | | medicine. After looking at the nearest drive-through | |
| Instrumental "Ali, now wide awake, opens her laptop, googles the 5% | | testing centre, he brought them to be tested the next day " | |
| | | testing centre, he brought them to be tested the next day." | |
| | Instrumental | | 5% |
| and automations of Carona and acted has source if the is suffering from | Instrumental | | 5% |
| and symptoms of Corona and asks her mum it she is suffering from | and | symptoms of Corona and asks her mum if she is suffering from | |
| Informational any of these symptoms Ali will check on her in the | Informational | any of these symptoms Ali will check on her in the | |
| Informational any of these symptomsAli will check on her in the | Informational | any of these symptomsAli will check on her in the | |
| | | | |

Table 3: Social Supports

4. COVID-19 Vocabulary

Stories contained specific language and terminology that became more prominent due to the COVID-19 pandemic. We compiled a COVID-19 vocabulary list drawing on news and web articles on COVID-19 terminology and vocabulary.²⁹⁻³⁵ We counted 24 COVID-19 vocabulary words or expressions (and variations) in 65% of stories.^{viii} Table 4 lists terms that appear in 5% or more of the stories.^{ix}

| Covid-19 Term | Related Variations | Percentage of Stories |
|--------------------------|---|-----------------------|
| | | Term Appears |
| COVID-19 | COVID, Corona Virus, Corona, Rona | 30% |
| Isolation | Isolate, Self-Isolate, Self-Isolated, Self- | 10% |
| | Isolation | |
| Social Distancing | Socially Distanced, Socially Distancing, | 8% |
| | Distancing, Distance from People, Kept | |
| | Our Distances | |
| Lockdown | | 5% |
| Pandemic | | 5% |
| Vulnerable Group | Vulnerable Age Group, Vulnerable Age | 5% |
| | Bracket, High Risk Category | |
| T 1 1 0 1 1 1 0 1 | 1 | 1 |

Table 4. Covid-19 Vocabulary

5. Demographic Data

Demographic data indicates participant composition:

- Age: Most participants were aged 25-34 years (39%), followed by 35-44 years (27%).
- Gender: Majority identified as women (84%); 10% as men; 6% as non-binary or trans.
- Marital status: Most were married or in de facto relationships (67%); 33% were single.
- Location: Majority lived in Major Cities of Australia (42 out of 46 postcodes recorded or 91.3%) according to Australian Bureau of Statistics Remoteness Area Designations.³⁶
- *Highest level of education*: Largest proportion had completed a university degree (47%); second largest had completed a postgraduate degree (45%).
- Country of origin: Most participants listed Australia as country of origin (78%); 6% from UK; 4% from USA and remainder from China, Germany, Malaysia, New Zealand, Pakistan, and Sweden.
- Languages spoken at home: 94% spoke English at home; remainder spoke a mix of languages (Dutch, Polish, Spanish, Urdu, Punjabi) in addition to English.
- *Employment status*: Most were in full time employment (53%).
- *Ethnicity*: Majority identified as Caucasian or Anglo (56%).

Two participants did not answer, and some did not respond to all demographic questions. Given the relative homogeneity of the cohort and small sample size, demographic data did not significantly enhance our analysis but provided contextual information about who participated and who had not, which impacted our thinking regarding future story completion research. The lack of significant ethnic and cultural

BMJ Open

diversity in our cohort signalled that we had not utilised story completion in appropriate ways for diverse cultural groups. This led us to develop recommendations to decolonise story completion.³⁷

DISCUSSION

Story completion has been used in psychology, health and social research to learn about personal crisis. It is emerging as an effective method to engage with COVID-19; "a crisis on a much larger scale".¹⁴ To our knowledge, this is the first study to report on *data* generated from story completion with a COVID-19 scenario. We acknowledge Braun, Clarke and Moller's work describing their methodological approach using story completion during the pandemic.¹⁴ The story completion method garnered a rich array of engaging and moving stories, with insights into individual knowledge about, and experiences of, pandemic-related language, mental distress, and strategies to alleviate discomfort and offer social support. The stories stand as a creative, textual archive of the pandemic as experienced in Australia in early 2020.

Mental Distress

Preliminary research in Australia indicates that the pandemic and associated health risks, social restrictions, and economic impacts have adversely impacted the mental health of the general public and those with pre-existing mental health diagnosis.^{38, 39} The full mental health impact is yet to become fully apparent. Preliminary research on the topic should be followed up with rigorous longitudinal studies.⁴⁰ In our research, creative, narrative expressions seemed to imitate real-life, with most stories centring around experiences of psychological anguish. Mental distress caused by fear of COVID-19, and the emotional and psychological impact of hearing from a loved one

in distress formed the narrative core of most stories. This correlates with findings from narrative qualitative research undertaken in Australia which documented feelings of vulnerability and anxiety due to the threat of catching COVID-19 and hearing about the impact of COVID-19 on others.⁴¹ The stories clearly conveyed (sometimes viscerally) the psychological suffering wrought by COVID-19.

Social Supports and Coping Strategies

While mental distress permeates most stories, various social supports and coping strategies were also included. Ali and their parent offered, recommended, and practiced diverse coping strategies. Most are associated with positive self-care approaches such as recreation, socialising, or exercise, rather than maladaptive coping strategies such as shouting, smoking or binge drinking.⁴² This suggests that participants had a relatively high level of mental health literacy and were aware of healthy approaches to managing psychological discomfort. This may be due to our recruitment approach (i.e., distribution via [organisation] and our social media networks).

There is an emerging body of small-scale research assessing coping strategies in response to COVID-19. Socially oriented coping strategies, as well as mindfulness or positive thinking, emerge across this literature as productive and healthy approaches to cope with COVID-19 related distress. ⁴³⁻⁴⁵ While we identified these coping strategies across stories, respondents also suggested additional practical approaches including: strategies to limit the risk of contracting COVID-19, reading reputable material to learn facts or combat myths about the virus, or engaging in practical actions to alleviate anxiety (such as Ali shopping for their parent). The characters sought out or offered a combination of cognitive, emotional and practical

BMJ Open

supports or coping strategies to address distress. Again, this suggests a good level of mental health literacy *and* shows awareness of stressors beyond the threat of catching COVID-19, such as: increased news consumption and 'doom scrolling';⁴⁶ the flourishing of COVID-myths, misinformation, and conspiracy theories;^{41, 47, 48} and panic related to supermarket shortages.⁴⁹

COVID-19 Vocabulary

The language used in stories largely reflected public health messaging at the time of data collection. New words had entered the lexicon, likely due to increased exposure and attention to the 24-hour news cycle. Indeed, news media was mentioned in 13 stories (~8%) as a source of both information and anxiety. It is likely that constant engagement with media caused new terms to permeate everyday conversations. This uptake of a COVID-19 vocabulary assisted respondents to express their fears using commonly understood language that can unite people "around a set of collective cultural references points [like a]...lexical 'social glue'".³³ The ubiquity of COVID-19 vocabulary in stories reflects community engagement with media and health messaging. As Rudd and Baur report, "communication messages and materials related to COVID-19 have introduced unusual vocabulary and phrases into common speech over the past several months…over a short time period these previously rare words have become commonly understood".⁵⁰

Conclusions and Future Research Directions

We cautiously suggest that points of convergence across stories might indicate a shared experience amongst participants resulting from intensive media coverage, persistent public-health messaging, engagement with social media and instant messaging technologies, and extended lockdowns that impacted vast numbers of

BMJ Open

Page 18 of 24

Australians. However, we cannot do more than cautiously speculate. Part of the appeal of story completion, and what makes it a potentially empowering research tool, is that it engages participants in a hypothetical, creative, and imaginative way. It asks participants to imagine themselves in a situation but does not *demand* that stories only reflect their lived realities. Researchers must be cautious about making sweeping assumptions regarding the relationship between story content and respondents' realities. While we agree that story completion has the potential to reveal much about participants' social, personal, and psychological worlds, more information was needed to undertake this form of extended interpretative analysis within our dataset. This does not diminish the method's potential in illustrating how narrative inquiry can elicit and capture social knowledge, mores, vocabulary, and experience.

It may be effective to pair story completion with complementary methods such as one-on-one interviews¹⁰ to examine, for example, the gap between knowledge of positive mental health coping strategies and their uptake or practice. The combination of arts-based or narrative-based methods with oral qualitative data collection methods has worked successfully in our own previous research.^{51, 52}

ACKNOWLEDGEMENTS: We would like to thank all study participants. We acknowledge that this research took place on unceded Aboriginal land.

FUNDING STATMENT: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

ETHICS APPROVAL: This project was reviewed and approved by the [removed for review] Human Research Ethics Committee.

 AUTHOR CONTRIBUTIONS: Author2 and Author3 were responsible for conceptualising, planning, and implementing the study. Author 1 wrote the first draft of the paper. All authors contributed to data analysis and interpretation and approved the final draft.

PATIENT AND PUBLIC INVOLVEMENT STATEMENT: Members of the public were not involved in the development of this research. As noted above we believe the lack of significant ethnic and cultural diversity in our cohort signalled that we had not utilised story completion in appropriate ways for diverse cultural groups. This led us to develop recommendations to decolonise story completion (see Authors 2021). A key recommendation is that story completion research be co-developed in collaboration with individuals with lived experience that is relevant to the research being undertaken.

COMPETING INSTERESTS: None declared.

REFERENCES

- 1. Clarke V, Braun V. How can a heterosexual man remove his body hair and retain his masculinity? Mapping stories of male body hair depilation. *Qual Res Psychol* 2019;16(1):96-114.
- 2. Braun V, Clarke V, Frith H, et al. Qualitative story completion: Possibilities and potential pitfalls. *Qual Res Psychol* 2019;16(1):136-55.
- 3. Lupton D. 'Things that matter': poetic inquity and more-than-human health literacy. *Qual Res Sport Exerc Health* 2021;13(2):267-82.
- Braun V, Clark V, Hayfield N, et al. Qualitative story completion: A method with exciting promise. In: Liamputtong P, ed. Handbook of Research Methods in Health Social Sciences. Singapore: Springer 2018:1-18.
- 5. Moller N, Clark V, Braun V, et al. Qualitative Story Completion for Counseling Psychology Research: A creative method to interrogate dominant discourses. *Journal of Counseling Psychology* 2020;68(3):286-98.
- Braun V. 034 Imagining 'healthy eating:' using story completion to understand everyday meaning-making. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.34
- Braun V, Moller N, Clark V. 033 Qualitative story completion: An innovative method with exciting potential for health research. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.33
- Williams T, Lozano-Sufrategui L, Tomasone J. O35 Exploring narratives of physical activity and disability using story completion. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.35

- Tischner I, Moller N, Vossler A. O36 Using story completion tasks to explore perceptions about mental health in a work context. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.36
- Gravett K. Story Completion: Storying as a method of meaning-making and discursive discovery. *Int J Qual Methods* 2019 doi: 10.1177/1609406919893155
- 11. C K, D P. Engendering infidelity: essentialist and social constructionist readings of a story completion task. *Fem Psychol* 1995;5(3):345-72.
- Clark V, Braun V, Frith H, et al. Editorial introduction to the special issue: Using story completion methods in qualitative research. *Qual Res Psychol* 2019;16(1):1-20. doi: 10.1080/14780887.2018.1536378
- Braun V, Clark V, Gray D. Innovations in qualitative methods In: Gough B, ed. The Palgrave handbook of critical social psychology. London: Palgrave Macmillan 2017:243-66.
- Braun V, Clark V, Moller N. Pandemic tales: Using story completion to explore sense-making around COVID-19 lockdown restrictions. In: Kara H, Khoo S, eds. Researching in the Age of COVID-19 Volume 3: Creativity and Ethics Bristol: Bristol University Press 2020:39-48.
- 15. Braun V, Clark V. Successful Qualitative Research. London: Sage 2013.
- 16. Clark V, Braun V, Wooles K. Thou shalt not covet another man? Exploring constructions of same-sex and different-sex infidelity using story completion. *J Community Appl Soc Psychol* 2015;25(2):153-66.
- 17. Hayfield N, Wood M. Looking heteronormatively good! Combining story completion with Bitstrips to explore understandings of sexuality and appearance. *Qual Res Psychol* 2018;16(1):115-35.
- 18. Fels L. Collecting data through performative inquiry: A tug on the sleeve. Youth *Theatre Journal* 2012;26(1):50-60.
- 19. Braun V, Clark V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health* 2019;11(4):589-97.
- 20. Author3 et al. 2018a

- 21. Author3 et al. 2018b
- 22. Authors et al. 2019
- 23. Walsh E, Malson H. Discursive constructions of eating disorders: A story completion task. *Fem Psychol* 2010;20(4):529-37.
- 24. Frith H. Accounting for orgasmic absence: exploring heterosex using the story completion method. *Psychol Sex* 2013;4(3):310-22.

| 3 | |
|----------|--|
| | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |
| 25 | |
| | |
| 26 | |
| 27 | |
| 28 | |
| 29 | |
| 30 | |
| 31 | |
| 32 | |
| 33 | |
| | |
| 34 | |
| 35 | |
| 36 | |
| 37 | |
| 38 | |
| 39 | |
| 40 | |
| 40 41 | |
| | |
| 42 | |
| 43 | |
| 44 | |
| 45 | |
| 46 | |
| 47 | |
| 48 | |
| 40 49 | |
| | |
| 50 | |
| 51 | |
| 52 | |
| 53 | |
| 54 | |
| 55 | |
| 56 | |
| 50 57 | |
| | |
| 58 | |
| 59 | |
| 60 | |

- 25. Robbins LB, Ling J, Dalimonte-Merckling DM, et al. Sources and Types of Social Support for Physical Activity Perceived by Fifth to Eighth Grade Girls. *J Nurs Scholarsh* 2018;50(2):172-80.
- Newton-John TR, Ventura AD, Mosely K, et al. 'Are you sure you're going to have another one of those?': A qualitative analysis of the social control and social support models in type 2 diabetes. *Journal of Health Psychology* 2017;22(14):1819-29.
- 27. Tye SK, Kandavello G, Gan KL. Types of social supports predicting healthrelated quality of life among adult patients with CHD in the Institut Jantung Negara (National Heart Institute), Malaysia. *Cardiol Young* 2017;27:46-54.
- Malecki CK, Demaray MK. What Type of Support Do They Need? Investigating Student Adjustment as Related to Emotional, Informational, Appraisal, and Instrumental Support. Sch Psychol Q 2003;18(3):231-52.
- 29. University of Pennsylvania. Coronavirus or COVID-19? A Glossary to Help Navigate Pandemic Vocabulary Washington D.C.: Targeted News Service; 2020 [Available from: https://login.wwwproxy1.library.unsw.edu.au/login?qurl=https%3A%2F%2Fse arch.proquest.com%2Fdocview%2F2408545418%3Faccountid%3D12763.
- Saghaie T. An A to Z glossary of the new coronavirus words Australia: The Lighthouse; 2020 [Available from: https://lighthouse.mq.edu.au/article/may-2020/An-A-to-Z-glossary-of-the-new-coronavirus-words accessed 15th September 2020 2020.
- 31. Ro C. Why we've created new language for coronavirus U.K.: BBC Worklife; 2020 [Available from: https://www.bbc.com/worklife/article/20200522-whyweve-created-new-language-for-coronavirus accessed 15th September 2020 2020.
- 32. Merriam-Webster. A Guide to Coronavirus-Related Words: Merriam-Webster; 2020 [Available from: https://www.merriam-webster.com/words-atplay/coronavirus-words-guide/covid-19 accessed 15th September 2020 2020.
- 33. Lawson R. Coronavirus has led to an explosion of new words and phrases and that helps us cope Australia: The Conversation; 2020 [Available from: https://theconversation.com/coronavirus-has-led-to-an-explosion-of-newwords-and-phrases-and-that-helps-us-cope-136909 accessed 15th September 2020 2020.
- Burridge K, Manns H. 'Iso', 'boomer remover' and 'quarantini': how coronavirus is changing our language Australia: The Conversation; 2020 [Available from: https://theconversation.com/iso-boomer-remover-and-quarantini-howcoronavirus-is-changing-our-language-136729 accessed 15th September 2020 2020.
- 35. ABC English. Coronavirus vocabulary: Australian Broadcasting Corporation; 2020 [Available from: https://www.abc.net.au/education/learn-

english/coronavirus-vocabulary/12060370 accessed 15 September 2020 2020.

- 36. Australian Bureau of Statistics. 1270.0.55.005 Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure, July 2016 (released 16.3.2018). "Correspondence, 2017 Postcode to 2016 Remoteness Area" Australia: Australian Bureau of Statistics; 2018 [Available from: https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1270.0.55.005July %202016?OpenDocument accessed 5th Novermber 2020 2020.
- 37. Authors 2021
- 38. Fisher J, Tran T, Hammarberg K, et al. Quantifying the mental health burden of the most severe covid-19 restrictions: A natural experiment. *J Affect Disord* 2021;293:406-14.
- 39. Newby JM, O'Moore K, Tang S, et al. Acute mental health responses during the COVID-19 pandemic in Australia. *PLOS ONE* 2020;15(7):e0236562. doi: https://doi.org/10.1371/journal.pone.0236562
- 40. Moreno C, Wykes T, Galderisi S, et al. How mental health care should change as a consequence of the COVID-19 pandemic. *Lancet Psychiatry* 2020;7:813-24.
- 41. Lupton D, Lewis S. 'The day everything changed': Australians' COVID-19 risk narratives. *J Risk Res* 2021 doi: https://doi.org/10.1080/13669877.2021.1958045
- 42. Black Dog Institute. Importance of self-care planning COVID-19 mental health and wellbeing resources Australia: Black Dog Institute,; 2020 [Available from: https://www.blackdoginstitute.org.au/wp-content/uploads/2020/04/COVID-19_Self-Care-Planning_Black-Dog-Institute.pdf?sfvrsn=8 accessed 5th March 2021 2021.
- 43. Sandbakken EM, Moss SM. "Now We Are All in the Same Boat. At the Same Time, We Are Not." Meaning-Making and Coping Under COVID-19 Lokdown in Norway. *Human Arenas* 2021 doi: https://doi.org/10.1007/s42087-021-00208-z
- 44. Stamps DL, Mandell L, Lucas R. Relational maintenance, collectivism, and coping strategies among Black populations during COVID-19. *J Soc Pers Relat* 2021;38(8):2376-96.
- 45. Budimir S, Probst T, Pieh C. Coping strategies and mental health during COVID-19 lockdown. *Journal of Mental Health* 2021;30(2):156-63.
- Ytre-Arne B, Moe H. Doomscrolling, Monitoring and Avoiding: News Use in COVID-19 Pandemic Lockdown. *Journalism Studies* 2021 doi: 10.1080/1461670X.2021.1952475
- 47. Stephens M. A geospatial infodemic: Mapping Twitter conspiracy theories of COVID-19. *Dialogues Hum Geogr* 2020;10(2):276-81.

- 48. Bruns A, Harrington S, Hurcombe E. 'Corona? 5G? or both?': the dynamics of COVID-19/5G conspiracy theories on Facebook. *Media International Australia* 2020;177(1):12-29.
- O'Connor P, Anglim J, Smillie L. Disagreeability, neuroticism and stress: what drives panic buying during the COVID-19 pandemic Australia: The Conversation; 2020 [Available from: https://theconversation.com/disagreeability-neuroticism-and-stress-whatdrives-panic-buying-during-the-covid-19-pandemic-141612 accessed 3rd March 2021 2021.
- 50. Rudd R, Baur C. Health Literacy and early insights during a pandemic. *Journal of Communication in Healthcare* 2020;13(1):13-16.
- 51. Author 3 et al. 2018
- 52. Author1 et al. 2019

ⁱⁱⁱ We sought to retain participant language when creating meta-categories and combined only closely related terms under each overarching category. For example, *scared* was included in the category of *fear*, while *worry* and *anxiety* were retained as separate categories.

^{iv} Expressions of distress appearing in fewer than 5% of stories were *upset, frustration, panic, anger, anguish, trapped, helplessness, isolation, paranoia, stress, suicidal ideation, uncertainty, unease.*

^v There were instances (10% of concerns) where no specific feeling of mental distress was articulated but there was a general implication or expression of mental distress in the narratives.

^{vi} Strategies accounting for less than 5% were *cognitive* (e.g., changing, and challenging patterns of thinking), food and drink, limiting new consumption, planning for the future, caring for others, exercise, professional support (e.g., consulting a GP or therapist), and sleep.

^{vii} We did not track supports offered to Ali by their parents as these appeared only infrequently in stories.

^{viii} We counted the number of stories which featured specific words from the Covid Vocabulary list (e.g., if a single story used the word *Covid* three times, this was counted as one story featuring that word). The authors took context into consideration when tracking words use. For example, *isolated* was taken to be an example of Covid Vocabulary if it related to public health orders about isolating to prevent the spread of Covid-19: "she's in a place where she can self-isolate". However, we did not count *isolated* as Covid Vocabulary if it appeared in contexts like the following: "Ali's mother is feeling isolated and lonely".

^{ix} Other words counted (that appeared in less than 5% of stories) were *Face Mask*, *Restrictions*, *Washing Hands*, *1.5 Meters*, *Hand Sanitiser*, *Telehealth*, *Zoom*, *Asymptomatic*, *Cluster*, *COVIDsafe App*, *Death Tolls*, *Drive-Through Testing*, *Essential Activities*, *Frontline Healthcare Worker*, *Incubation Period*, *Intubate*, *Panic Buying*, and *Safety Measures*.

ⁱ Indeed, one participant wrote that the stem was an exact reflection of their life during the pandemic. ⁱⁱ For example, we inferred that the following was taken as an expression of *anger*: "*F**** off *Mum, she thinks. F**** off *Everybody. F**** off *COVID*".

Standards for Reporting Qualitative Research (SRQR) -Checklist for "This bloody rona!": Using digital story completion to learn about mental health impacts of COVID-19 in Australia

Page(s)

| and abstract | |
|---|---|
| Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended | 1 |
| Abstract - Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions | 1 |

Introduction

| Drablem formulation Description and significance of the problem /phonomenon | |
|--|-----|
| Problem formulation - Description and significance of the problem/phenomenon | |
| studied; review of relevant theory and empirical work; problem statement | 2-6 |
| Purpose or research question - Purpose of the study and specific objectives or | |
| questions | 3-4 |

Methods

| ods | |
|--|-----|
| Qualitative approach and research paradigm - Qualitative approach (e.g., | |
| ethnography, grounded theory, case study, phenomenology, narrative research) | |
| and guiding theory if appropriate; identifying the research paradigm (e.g., | |
| postpositivist, constructivist/ interpretivist) is also recommended; rationale | 5 |
| | |
| Researcher characteristics and reflexivity - Researchers' characteristics that may | |
| influence the research, including personal attributes, qualifications/experience, | |
| relationship with participants, assumptions, and/or presuppositions; potential or | |
| actual interaction between researchers' characteristics and the research | |
| questions, approach, methods, results, and/or transferability | N/A |
| Context - Setting/site and salient contextual factors; rationale | 4-5 |
| Sampling strategy - How and why research participants, documents, or events | |
| were selected; criteria for deciding when no further sampling was necessary (e.g., | |
| sampling saturation); rationale | N/A |
| Ethical issues pertaining to human subjects - Documentation of approval by an | |
| appropriate ethics review board and participant consent, or explanation for lack | |
| thereof; other confidentiality and data security issues | 16 |
| Data collection methods - Types of data collected; details of data collection | |
| procedures including (as appropriate) start and stop dates of data collection and | |
| analysis, iterative process, triangulation of sources/methods, and modification of | |
| procedures in response to evolving study findings; rationale | 3-4 |

| Data collection instruments and technologies - Description of instruments (e.g., | |
|--|-------|
| interview guides, questionnaires) and devices (e.g., audio recorders) used for data | |
| collection; if/how the instrument(s) changed over the course of the study | 3-4 |
| | |
| Units of study - Number and relevant characteristics of participants, documents, | |
| or events included in the study; level of participation (could be reported in results) | 13-14 |
| Data processing - Methods for processing data prior to and during analysis, | |
| including transcription, data entry, data management and security, verification of | |
| data integrity, data coding, and anonymization/de-identification of excerpts | 5 |
| Data analysis - Process by which inferences, themes, etc., were identified and | |
| developed, including the researchers involved in data analysis; usually references a | |
| specific paradigm or approach; rationale | 5-13 |
| | |
| Techniques to enhance trustworthiness - Techniques to enhance trustworthiness | |
| and credibility of data analysis (e.g., member checking, audit trail, triangulation); | _ |
| rationale | 5 |

Results/findings

| Synthesis and interpretation - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with | |
|--|------|
| prior research or theory | 6-12 |
| Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings | 6-12 |
| | 1 - |
| ussion | 1 |

Discussion

| the field - Short summary of main findings; explanation of how conclusions connect to, support, elaborate on, or challenge co scholarship; discussion of scope of application/generalizability | onclusions | of earlier | |
|---|------------|------------|-------------|
| unique contribution(s) to scholarship in a discipline or field | | | 13-16 |
| Limitations - Trustworthiness and limitations of findings | | | 2 and 15-16 |

Other

| Conflicts of interest - Potential sources of influence or perceived influence on | |
|---|----|
| study conduct and conclusions; how these were managed | 17 |
| Funding - Sources of funding and other support; role of funders in data collection, | |
| interpretation, and reporting | 16 |

BMJ Open

BMJ Open

"This bloody rona!": Using the digital story completion method to explore mental health impacts of COVID-19 in Australia

| Journal: | BMJ Open |
|--------------------------------------|--|
| Manuscript ID | bmjopen-2021-057393.R1 |
| Article Type: | Original research |
| Date Submitted by the Author: | 19-Nov-2021 |
| Complete List of Authors: | Vaughan, Priya; University of New South Wales, Black Dog Institute Lenette, Caroline; University of New South Wales, School of Social Sciences, Faculty of Arts, Design and Architecture Boydell, Katherine; University of New South Wales, Black Dog Institute |
| Primary Subject Heading : | Mental health |
| Secondary Subject Heading: | Mental health |
| Keywords: | MENTAL HEALTH, QUALITATIVE RESEARCH, COVID-19 |
| | |





I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our <u>licence</u>.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which <u>Creative Commons</u> licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

reliez oni

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Title: "This bloody rona!": Using the digital story completion method to explore mental health impacts of COVID-19 in Australia

Corresponding Author: Dr Priya Vaughan. <u>Postal Address</u>: Black Dog Institute, Hospital Road, Randwick, 2031, N.S.W., Australia. <u>Email</u>: <u>p.vaughan@blackdog.org.au</u>

Authors:

Priya Vaughan: Black Dog Institute, University of New South Wales, Sydney 2031, Australia; p.vaughan@blackdog.org.au

Caroline Lenette: School of Social Sciences, Faculty of Arts, Design and Architecture, University of New South Wales, Sydney 2031, Australia; c.lenette@unsw.edu.au

Katherine Boydell: Black Dog Institute, University of New South Wales, Sydney 2031, Australia; k.boydell@unsw.edu.au

Word Count (excluding title page, abstract, references, figures and tables): 3,105

"This bloody rona!": Using the digital story completion method to explore mental health impacts of COVID-19 in Australia

KEYWORDS: COVID-19, Story Completion, Mental Health, Coping Strategies, Social Supports, COVID-19 Vocabulary.

ABSTRACT

Objectives: To use the digital story completion method to prompt participants to describe thoughts, fears, and mental health experiences in response to a story stem about COVID-19, to capture a specific socio-historic moment.

Design: We used digital story completion, a qualitative research method, to gather narratives from Australians coping with physical distancing and social restriction measures. Our reflexive thematic analysis of the data was underpinned by a constructionist approach to reflect the importance of social context in understanding health experiences.

Setting: Australia.

Participants: 52 people living in Australia (aged 18 years and over).

Results: Four meta-themes were prevalent across 52 stories submitted: (i) Expressions of *Mental Distress* linked to COVID-19; (ii) Various *Coping Strategies* offered by characters in stories; (iii) Narratives outlining *Social Supports* offered to alleviate distress; and (iv) Specialised *COVID-19 Vocabulary*.

Conclusion: We cautiously propose that points of convergence across stories suggest a level of shared experience among participants resulting from intensive media coverage, persistent public-health messaging, engagement with social media and instant messaging technologies, and extended lockdowns that impacted vast numbers of Australians.

Strength and Limitations of this Study:

- Story completion has the potential to elicit rich detail regarding individual and collective experiences of social phenomenon, such as the impact of a pandemic on health and wellbeing.
- The story completion method invites people to think creatively and speculatively to reveal processes of sense-making and social experience.
- First study to report on *data* generated from story completion research relating to the COVID-19 pandemic.
- Need for caution vis-à-vis assumptions about the relationship between the story content and participants' realities.
- Lack of significant ethnic and cultural diversity in our cohort signaled that we had not used story completion in appropriate ways for diverse cultural groups.

L'ANO

BACKGROUND

Story completion is an innovative mode of qualitative inquiry that offers a unique means of creatively engaging research participants. The method encourages participants to respond creatively and speculatively to a scenario in a manner that does not require them to disclose personal details or their own experiences. ¹⁻³ It is adaptable to various epistemological frameworks but is most frequently used within a social constructionist framework. ^{1, 2} The story completion method has burgeoned in recent years. ^{4, 5} This relatively new research approach has been detailed in the introduction to a special journal issue on story completion. ² The method was also featured in a 2019 symposium with an introduction and three abstracts published in

BMJ Open

BMJ Open, ⁶⁻⁹ signalling a growing interest in its applications in health and social care.

Story completion originated in psychology, feminist theory and psychotherapy traditions. ^{2, 10} It was first adapted by Kitzinger and Powell for use in qualitative research using a social constructionist perspective and discourse analysis. ¹¹ Story completion is increasingly used to study patterns of social meaning and assumptions depicted in a set of stories responding to a 'stem' or cue. ¹² The method has recently garnered interest from qualitative researchers keen to pursue its possibilities as a narrative method, ² largely to stimulate social meanings and understand sensemaking and lifeworlds. ¹³ As such, story completion has untapped potential to elicit rich detail regarding individual and collective experiences of large-scale social phenomena such as the impact of a pandemic on health and wellbeing.

METHODS

Design

We used digital story completion to gather narratives from Australians coping with physical distancing and social restriction measures in place from March 2020. We were particularly interested in the pandemic's impact on mental health and wellbeing as, at the time, government and media discourse often focused on mental health concerns resulting from the management of COVID-19. ¹⁴⁻¹⁷ For example, in April 2020 the New South Wales Government announced a \$73 million dollars support package intended to support mental wellbeing during the pandemic.¹⁸

Story completion was appropriate to explore how people were responding to rapidly changing situations, given its use as a tool for "accessing *social* meanings and discourses, and dominant assumptions and norms". ¹⁹ The method was used to archive unusual global circumstances affecting Australia as a distinct context. Our

interest in capturing how respondents coped with public health restrictions and their impact on health and wellbeing informed our choice of stem: *An 11pm phone call is received from Ali's elderly parent who is distressed due to COVID-19. What happens next?*

We discussed the 'hypothetical' nature of the stem, in line with past applications of story completion. Given the uniqueness of the COVID-19 situation and attendant collective experiences of uncertainty, we acknowledged that the stem might also echo participants' reality.¹ We hypothesized that respondents might use the stem to creatively explore and represent their lived experiences of the pandemic.

Patient and Public Involvement

Members of the public were not involved in the development of this research. As discussed below, we believe the lack of significant ethnic and cultural diversity in our participant cohort signalled that we had not utilised story completion in culturally appropriate ways nor paid enough attention to the recruitment strategy to engage more diverse respondents. This led us to develop recommendations to decolonise story completion. A key recommendation is that story completion research be co-developed in collaboration with individuals with lived experience relevant to the research topic. ²⁰

Ethics approval was sought from the [removed for review] Human Research Ethics Committee and approval was gained in May 2020 (Approval Number: [removed for review]).

Data Collection

We set up a submission point using Qualtrics. We outlined consent and ethics information, followed by the stem, and demographic questions. We began participant

Page 7 of 28

BMJ Open

recruitment in May 2020. At the time, various COVID-19 related restrictions in place across all states and territories were beginning to ease slightly. For example, in Australia's most populous state, New South Wales, strict restrictions aimed at limiting the spread of COVID-19 began to relax in May 2020. For instance, a household was allowed up to five visitors at one time, up to ten people could gather outdoors, and cafes and restaurants could seat a maximum of 10 people. However, various restrictions on physical distancing, travel across state and territory borders, and international travel remained in place. ¹⁸

We shared the Qualtrics link via Twitter, seeking to recruit people living in Australia aged 18 years or older. Participation was not incentivised. We also posted a Facebook invitation on the [organisation] webpage (a specialist mental health research institute), after which we saw a net increase in submissions. We chose these recruitment strategies for a rapid response and to attract a diverse crosssection of respondents. When the survey was closed after four weeks, we had 52 stories. We did not set a word limit, hoping that it would encourage respondents to be creative with the stem.

To frame each participant's storytelling choices in our analysis, we collected demographic data using a mix of pre-determined and open responses. We wanted to understand who responded to the call to participate and what specific markers of identity might reveal about how people told stories about COVID-19. We provide demographic information in the results section.

Sample Size

Because of likely variation in quality and length of stories, recruiting at least 10 participants per story stem is recommended. ²¹ However, story completion studies

typically recruit sample sizes of 40 to 60 participants. ^{22, 23} We are confident that our 52 stories represent a robust corpus of data for analysis.

ANALYSIS

We used reflexive thematic analysis, ²¹ an approach widely used in story completion analysis and in qualitative research more generally. ^{12, 24} This analytical lens positions researchers as active agents in the process and requires reflection on the assumptions and experiences they bring to the analysis. ²⁵ Author 2 and Author 3 are senior researchers and have extensive experience using arts-based qualitative methods in the context of participatory sociological and psychological research on mental health and social inclusion. Author 1 is an early-career, postdoctoral researcher who trained as a social anthropologist and has also used arts-based research methods to collect data on mental health. This was the first time members of the research team had used story completion as a research method. We have used thematic analysis extensively in previous work. ²⁶⁻²⁸ We interpreted the data using a constructionist approach to story completion, as each story reflects the participant's social context. ^{11, 29, 30}

The data analysis process involved the following phases. A detailed overview of this process is described elsewhere. ³¹

- 1. *Familiarisation*: All researchers reviewed all stories to get a sense of the data set as a whole.
- 2. *Initial Coding*: Author1 read all the stories and Author2 and Author3 read half each, so that each story was read at least twice. We recorded our initial thoughts using two headings: (i) "Are there particular storylines? What are the

 'turning points' or what Fels calls 'tug on the sleeve' moments? ³² Are there repeated patterns of meaning?" and (ii) "Key themes".

- 3. *Identification of Themes*: We identified the most prominent or important elements in the stories, before engaging in collaborative analysis to produce an initial set of themes (or codes).
- 4. *Refining Themes*: We collaboratively reviewed themes and iteratively refined our coding structure to identify the overarching themes which characterised the data set. This led to the identification of four meta-themes described below.

RESULTS

Participants produced 52 stories. The length of each story varied from one sentence to a lengthy paragraph. Typically, short stories covered the next step or action the protagonist would take in immediate response to the situation outlined in the stem. Longer stories outlined a narrative arc with a beginning, middle and end (orientation, complication, resolution), or contained reflections on the situation the protagonist faced.

Demographic Data

Demographic data collected indicated a relatively homogenous participant composition, particularly regarding ethnic or cultural background (see Table 1 for details). Not all participants responded to all demographic questions. Given the relative homogeneity of the cohort and small sample size, demographic data did not significantly enhance our analysis but provided contextual information about who participated and who had not, which impacted our thinking regarding future story completion research. We discuss this in greater detail below.

| 1 |
|----|
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
| 17 |
| 18 |
| 19 |
| 20 |
| 21 |
| 22 |
| 23 |
| 24 |
| 25 |
| 26 |
| 27 |
| 28 |
| 29 |
| 30 |
| 31 |
| 32 |
| 33 |
| 34 |
| 35 |
| 36 |
| 37 |
| 38 |
| 39 |
| 40 |
| 41 |
| 42 |
| 43 |
| 44 |
| 45 |
| 46 |
| 47 |
| 48 |
| 49 |
| 50 |
| 51 |
| 52 |
| 53 |
| 54 |
| 55 |
| 56 |
| 57 |
| 58 |
| 59 |
| 60 |

| Demographics | Participants n (% |
|---|-------------------|
| Age | |
| 18-24 | 2 (4%) |
| 25-34 | 20 (39%) |
| 35-44 | 14 (27%) |
| 45-54 | 7 (14%) |
| 55-64 | 6 (12%) |
| 65-74 | 2 (4%) |
| 75 and older | 0 |
| Gender | |
| Female | 42 (84%) |
| Male | 5 (10%) |
| Non-binary | 1 (2%) |
| Trans | 2 (4%) |
| ~ | |
| Highest education level | |
| Some high school but not completed final year | 0 |
| Completed final year at high school | 0 |
| Completed some post-school technical training | 1 (2%) |
| Completed some university study | 3 (6%) |
| Completed university degree | 24 (47%) |
| Postgraduate degree | 23 (45%) |
| | |
| Marital status | |
| Married/de-facto | 30 (67%) |
| Single | 15 (33%) |
| Widowed | 0 |
| Race/Ethnicity† | 2 |
| Aboriginal | 1 (2%) |
| Anglo | 4 (8%) |
| Anglo Australian | 3 (6%) |
| Anglo Celtic | 1 (2%) |
| Anglo Saxon | 1 (2%) |
| Anglo White | 1 (2%) |
| Anglo/Sri Lankan | 1 (2%) |
| Asian | 1 (2%) |
| Asian Australian | 1 (2%) |
| Australian | 8 (16%) |
| Caucasian | 11 (22%) |
| Caucasian (Anglo Celtic) | 1 (2%) |
| Caucasian Australian | 1 (2%) |
| Chinese | 1 (2%) |
| European | 3 (6%) |
| Irish Catholic Australian | 1 (2%) |
| Jewish Anglo | 1 (2%) |
| | |

| 1 |
|----------|
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| |
| 7 |
| 8 |
| 9 |
| 10 |
| |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
| 10 |
| 17 |
| 18 |
| 19 |
| 20 |
| 21 |
| 21 |
| 22 |
| 23 |
| 24 |
| 25 |
| 26 |
| 20 |
| 27 |
| 28 |
| 29 |
| 30 |
| 31 |
| 21 |
| 32 |
| 33 |
| 34 |
| 35 |
| 36 |
| 36 37 |
| 3/ |
| 38 |
| 39 |
| 40 |
| 41 |
| |
| |
| 43 |
| 44 |
| 45 |
| 46 |
| 40 47 |
| |
| 48 |
| 49 |
| 50 |
| 51 |
| 52 |
| |
| 53 |
| 54 |
| 55 |
| 56 |
| |
| 57 |
| |

58

59 60

| Non Indigenous Australian | 1 (2%) |
|---|-----------|
| None - my family comes from many continents | 1 (2%) |
| South Asian | 1 (2%) |
| The Human Race | 1 (2%) |
| White | 3 (6%) |
| White Australian | 1 (2%) |
| Language of participants retained | |
| Country of origin | |
| Australia | 39 (78%) |
| China | 1 (2%) |
| Germany | 1 (2%) |
| Malaysia | 1 (2%) |
| New Zealand | 1 (2%) |
| Pakistan | 1 (2%) |
| Sweden | 1 (2%) |
| UK | 3 (6%) |
| USA | 2 (4%) |
| Language(s) spoken at home | |
| English only | 47 (94%) |
| English and other language(s) | 3 (6%) |
| t Other languages reported: Dutch, Polish, Punj | |
| | |
| Employment status | 07 (500() |
| | 27 (53%) |
| Part-time employment | 16 (31%) |
| Unemployed | 7 (14%) |
| Volunteer | 1 (2%) |
| | |
| Residency | |
| Major city | 42 (91%) |
| Regional | 4 (9%) |

Meta-Themes

We identified four meta-themes across the stories:

- 1. Expressions of *Mental Distress* linked to COVID-19;
- 2. Various Coping Strategies offered by Ali and other characters in stories;
- 3. Narratives outlining Social Supports offered to alleviate distress; and
- 4. Specialised COVID-19 Vocabulary.

In the following overview of these meta-themes, we explore their prevalence across stories. Moller et al. note that reporting on "frequency counts or percentages" when using story completion "may be seen as controversial (e.g., antithetical to qualitative values)".⁵ However, given our interest in archiving a specific *moment* in Australia relating to a public health crisis, we felt that a top-down focus, which captured commonalities and differences in experiences, was imperative.

1. Mental distress

We tracked expressions of mental distress that Ali, the parent, or others conveyed in the stories. Almost all (96%) stories included implied or explicit discussions of experiences of mental distress. While the stem mentioned that Ali's parent was distressed, participants could choose how they developed their narrative and how much emphasis they placed on this element. We identified the language used in stories rather than assigning diagnostic categories to the texts, to understand how participants described a character's state of mind. Some participants explicitly named the type of mental distress a character suffered, while in other instances we made inferences about mental distress experienced.ⁱⁱ We used an iterative process to classify these expressions by counting mentions associated with mental distress. Many stories featured more than one form of distress. We then assigned these to 19 top-level categories.ⁱⁱⁱ

The most expressed concern was *Worry* (41% of concerns), mostly related to the possibility that Ali or their parent would contract COVID-19. Other expressions of distress related to government-imposed physical and social distancing provisions, leading characters to feel lonely, isolated and angry. Table 2 summarises expressions of mental distress that account for more than 5% of those counted.^{iv}

Page 13 of 28

| Mental | Example | Percenta |
|-------------------------|---|----------|
| Distress | | of Count |
| Worry | "Ali is tired, it's been a long day trying to work from home with | 41% |
| | small kids, but they listen carefully to all the worries of their | |
| | dad." | |
| General | "Ali remains calm and tries to get to the root of the problem and | 10% |
| Implication of | lends a listening ear. She redirects one of the concerns | |
| Psychological | towards practical solutions to calm the parent and reminds the | |
| Discomfort ^v | parent of some trusted neighbours and friends nearby and | |
| | commits to checking back in in one hour." | |
| Fear | "She lives in an assisted care home and has been reading the | 8% |
| | news about the deaths in other nursing homes. She is | |
| | understandably scared" | |
| Loneliness | "She's lonely, none of her children are there, this is not | 8% |
| | something she says often but Ali knows this to be true. The call | |
| | is about COVID-19 on the face of it but she just wants to talk to | |
| | someone." | |
| Anxiety | "his mother is anxious about running out of toilet rolls and not | 6% |
| | getting basic things from the grocery store." | |
| Distress | "Ali gets distressed with his mother's distress…" | 5% |

Table 2: Mental Distress

2. Coping Strategies

79% of stories featured coping strategies of some kind, and 66% featured more than one strategy. Strategies were articulated by characters in the stories, typically to

allay the distress of Ali's parent. We used an iterative process and counted mentions of coping strategies, then assigned these to a set of top-level strategy types. The most common strategy was *Talking* (29% of strategies). Talking as a coping strategy underpins the story stem, which begins with a phone call to Ali. Many stories began with Ali verbally reassuring their parent. Table 3 outlines coping strategies accounting for more than 5% of strategies counted.^{vi}

| Coping Strategy | Description of Strategy | Percentage |
|-----------------|--|------------|
| | | of Count |
| Talking | Talking through worries; Ali providing verbal | 29% |
| | reassurance; talking about things beyond COVID- | |
| | 19. | |
| Socialising | Planning to, or undertaking, social interaction. | 12% |
| Prevention | Discussing strategies to limit risks of catching | 11% |
| Strategies | COVID-19 to limit parental worry. | |
| Information | Getting information to combat worry and anxiety, | 10% |
| | including engaging with reputable sources to bust | |
| | COVID-19 myths (e.g., COVID-19 is caused by 5G | |
| | network). | |
| Instrumental | Practical support Ali proposed to alleviate stress | 10% |
| | (e.g., offering to shop for parents). | |
| Relaxation | Watching movies; reading books; gardening or | 8% |
| Activities | getting fresh air. | |

Table 3: Coping Strategies

3. Social Supports

85% of stories included Ali providing or offering social support to their parent.^{vii} Arguably, Ali's ability to provide support underpins the story stem, as Ali's parent calls while distressed. We counted explicit mentions of supports articulated in stories. In health research, various social support categories are used including instrumental, emotional, tangible, affectionate, positive interactions, or appraisal. ³³⁻³⁶ We used three broad social supports categories: 1) *Emotional*: Expression of empathy, love, trust, care and support. 2) *Instrumental*: Tangible service or help. 3) *Informational*: Advice, suggestions and information. Table 4 records the presence (or co-presence) of social supports in stories. *Emotional* support was by far the most prevalent. We note that coping strategies and social supports sometimes overlapped.

| Support | Example | Percentage of |
|---------------|---|---------------|
| Type(s) | | Stories |
| | | Type(s) |
| | | Appear |
| Emotional | " Ali speaks to her mother for a few minutes, calming her | 30% |
| | down and reassuring her that she will be ok" | |
| Emotional | "Ali assures her Mum that she is listening and encourages her | 18% |
| and | Mum to share what is worrying her Ali sits at her laptop while | |
| Informational | she talks to her Mum and looks up trusted sources of medical | |
| | information (WHO, Aus Govt, mydr.com.au) to help her Mum, | |
| | and herself, understand what we know." | |
| Emotional, | "Ali seeks to reassure her parent that if he/she follows current | 16% |
| Instrumental | health advice that the risks to this parent can be minimised | |
| | Ali is mindful of his/her parents' social isolation during COVID- | |

| explains that you should never believe what you see and read on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum." "Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day." "Ali, now wide awake, opens her laptop, googles the symptoms of Corona and asks her mum if she is suffering from | 9% |
|--|---|
| on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum." "Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through testing centre, he brought them to be tested the next day." | |
| on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum." "Ali drove to his parent's house, bringing with him some medicine. After looking at the nearest drive-through | 9% |
| on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum." "Ali drove to his parent's house, bringing with him some | 9% |
| on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona Virus and 5G and send them to his mum." | 9% |
| on social mediaThe next morning he finds some credible sources explaining there is absolutely no link between Corona | |
| on social mediaThe next morning he finds some credible | |
| | |
| explains that you should never believe what you see and read | |
| | |
| how 5G is linked to increased cases <u>Ali rubs his eyes and</u> | |
| "Ali's mum then goes on to explain she saw on Facebook | 11% |
| We will take care of you. We love you." | |
| pantry, we can send you toilet paper and hand sanitizer | |
| you groceries, there will be enough food, what's in your | |
| "It will be okay, we can help. What do you need, we can get | 11% |
| and to arrange a flu shot." | |
| parent is informed on how best to look after themselves, | |
| a Telehealth consult with his/her elderly's parent to ensure | |
| assistance line for advice. The following day, Ali arranges | |
| minimised Ali contacts the Government COVID-19 | |
| his/her parent and to remain isolated to ensure risks are | |
| | minimised Ali contacts the Government COVID-19 assistance line for advice. The following day, Ali arranges a Telehealth consult with his/her elderly's parent to ensure barent is informed on how best to look after themselves, and to arrange a flu shot." It will be okay, we can help. What do you need, we can get you groceries, there will be enough food, what's in your bantry, we can send you toilet paper and hand sanitizer We will take care of you. We love you." Ali's mum then goes on to explain she saw on Facebook |

Table 4: Social Supports

4. COVID-19 Vocabulary

Stories contained specific language and terminology that became more prominent among the general public due to the COVID-19 pandemic. We compiled a COVID-19 vocabulary list drawing on news and web articles on COVID-19 terminology and vocabulary. ³⁷⁻⁴³ We counted 24 COVID-19 vocabulary words or expressions (and variations) in 65% of stories.^{viii} Table 5 lists terms that appear in 5% or more of the stories.^{ix}

| Covid-19 Term | Related Variations | Percentage of Stories Term |
|-------------------|---|-------------------------------|
| | | Appears |
| COVID-19 | COVID, Corona Virus, Corona, Rona | 30% |
| Isolation | Isolate, Self-Isolate, Self-Isolated, Self- Isolation | 10% |
| Social Distancing | Socially Distanced, Socially Distancing, Distancing, Distance from People, Kept Our Distances | 8% |
| Lockdown | 2 | 5% |
| Pandemic | | 5% |
| Vulnerable Group | Vulnerable Age Group, Vulnerable Age Bracket, High Risk Category | 5% |

Table 5. Covid-19 Vocabulary

DISCUSSION

Story completion has been used in psychology, health and social research to learn about personal crisis and health concerns. It is emerging as an effective method to

engage with COVID-19, "a crisis on a much larger scale". ¹⁹ To our knowledge, this is the first study to report on *data* generated from story completion with a COVID-19 scenario. We acknowledge Braun, Clarke and Moller's work describing their methodological approach using story completion during the pandemic.¹⁹ In our research, the story completion method garnered a rich array of engaging and moving stories, with insights into individual knowledge about, and experiences of, pandemic-related language, mental distress, and strategies to alleviate discomfort and offer social support. The stories stand as a creative, textual archive of the pandemic and mental health and wellbeing concerns as experienced in Australia in early 2020.

Mental Distress

Preliminary research in Australia indicates that the pandemic and associated health risks, social restrictions, and economic impacts have adversely impacted the mental health of the general public and those with pre-existing mental health diagnosis. ^{44, 45} The full mental health impact is yet to become fully apparent. Preliminary research on the topic should be followed up with rigorous longitudinal studies. ⁴⁶ In our research, creative, narrative expressions seemed to imitate real-life, with most stories centring around experiences of psychological anguish. Mental distress caused by fear of COVID-19, and the emotional and psychological impact of hearing from a loved one in distress formed the narrative core of most stories. This correlates with findings from narrative qualitative research undertaken in Australia which documented feelings of vulnerability and anxiety due to the threat of catching COVID-19 and hearing about the impact of COVID-19 on others. ⁴⁷ The stories clearly conveyed (sometimes viscerally) the psychological suffering wrought by COVID-19 because of its highly infectious nature and the fatalities that resulted from the virus.

Page 19 of 28

BMJ Open

Social Supports and Coping Strategies

While mental distress permeates most stories, respondents also included various social supports and coping strategies. Ali and their parent offered, recommended, and practiced diverse coping strategies. Most were associated with positive self-care approaches such as recreation, socialising, or exercise, rather than maladaptive coping strategies such as shouting, smoking or binge drinking. ⁴⁸ This suggests that participants had a relatively high level of mental health literacy and were aware of healthy approaches to managing psychological discomfort. This may be due to our recruitment approach (i.e., distribution via [organisation name removed for review] and our social media networks).

There is an emerging body of small-scale research assessing coping strategies in response to COVID-19. Socially oriented coping strategies, as well as mindfulness or positive thinking, emerge across this literature as productive and healthy approaches to cope with COVID-19 related distress. ⁴⁹⁻⁵¹ While we identified these coping strategies across stories, respondents also suggested additional practical approaches including strategies to limit the risk of contracting COVID-19, reading reputable material to learn facts or combat myths about the virus, or engaging in practical actions to alleviate anxiety (such as Ali shopping for their parent). The characters sought out or offered a combination of cognitive, emotional and practical supports or coping strategies to address distress. Again, this suggests a good level of mental health literacy *and* shows awareness of stressors beyond the threat of catching COVID-19, such as: increased news consumption and 'doom scrolling'; ⁵² the flourishing of COVID-myths, misinformation, and conspiracy theories; ^{47, 53, 54} and panic related to supermarket shortages. ⁵⁵

COVID-19 Vocabulary

The language used in stories largely reflected public health messaging at the time of data collection. New words had entered the lexicon among the general public, likely due to increased exposure and attention to the 24-hour news cycle. Indeed, news media was mentioned in 13 stories (~8%) as a source of both information and anxiety. It is likely that constant engagement with media caused new terms to permeate everyday conversations. This uptake of a COVID-19 vocabulary assisted respondents to express their fears using commonly understood language that can unite people "around a set of collective cultural references points [like a]...lexical 'social glue'". ⁴¹ The ubiquity of COVID-19 vocabulary in stories reflects community engagement with media and health messaging. As Rudd and Baur report, "communication messages and materials related to COVID-19 have introduced unusual vocabulary and phrases into common speech over the past several months…over a short time period these previously rare words have become commonly understood". ⁵⁶

CONCLUSION

We cautiously suggest that points of convergence across stories indicate a shared experience amongst participants resulting from intensive media coverage, persistent public-health messaging, engagement with social media and instant messaging technologies, and extended lockdowns that impacted the mental health and wellbeing of vast numbers of Australians. However, we cannot do more than cautiously speculate the reason for this caution is outlined below.

Strengths, Limitations and Directions for Future Research

Page 21 of 28

BMJ Open

A strength of the story completion method, and what makes it a potentially empowering research tool, is that it engages participants in a hypothetical, creative, and speculative manner to reveal patterns and processes of sense-making and social experience. It asks participants to imagine themselves in a situation but does not *demand* that stories only reflect their lived realities. ⁵ In our research, this methodological strength has resulted in a limitation regarding how much we can infer about data collected. Researchers must be cautious about making sweeping assumptions regarding the relationship between story content and respondents' realities. While we agree that story completion has the potential to reveal much about participants' social, personal, and psychological worlds, more information was needed to undertake this form of extended interpretative analysis within our dataset. This does not diminish the method's potential in illustrating how narrative inquiry can elicit and capture social knowledge, mores, vocabulary, and experience. In future research, it may be effective to pair story completion with complementary methods such as one-on-one interviews ¹⁰ to examine, for example, the gap between knowledge of positive mental health coping strategies and their uptake or practice. The combination of arts-based or narrative-based methods with oral gualitative data collection methods has worked successfully in our previous research. 57, 58

Another limitation of this study was the lack of significant ethnic and cultural diversity in our cohort. This perhaps signals that we did not utilise story completion in culturally appropriate ways nor paid enough attention to the recruitment strategy to engage more diverse respondents. For example, our stem (which we developed in line with the accepted story completion approach) privileged western modes of story construction, with participants being asked to complete a story by providing a *middle* and *end* to the *beginning* offered by the stem. ⁵⁹ This approach may not have

appealed to those familiar with other storytelling approaches grounded in distinct sociocultural contexts. ⁶⁰ A lack of diversity in our sample may also have been the result of our recruitment strategy via social media.⁶¹ In the future, these shortcomings could be addressed through the collaborative co-creation of a stem with a diverse participant advisory group, and via deliberative recruitment to ensure cultural diversity. These considerations have led us to develop recommendations to decolonise story completion.²⁰

ACKNOWLEDGEMENTS: We would like to thank all study participants. We acknowledge that this research took place on unceded Aboriginal land.

FUNDING STATEMENT: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

ETHICS STATEMENT: This project was reviewed and approved by the University of New South Wales Human Research Ethics Committee (Approval number: HC200535). Participant involvement in the study was voluntary and informed consent was gained from participants prior to their participation. A study information sheet and consent form were provided at the outset of the digital platform for the research.

DATA AVAILABILITY STATEMENT: No additional data available.

AUTHOR CONTRIBUTIONS: CL and KB were responsible for conceptualising, planning, gaining ethics approval, and initiating data collection for the study. PV, CL, and KB all undertook analysis and interpretation of data, working collaboratively to code the stories and to identify core meta-themes. This manuscript was co-conceived by all authors. PV wrote the manuscript and produced the tables. The manuscript was critically reviewed by CL and KB who provided detailed feedback. All authors take responsibility for the work, had access to the data, and controlled the decision to publish.

COMPETING INTERESTS: None declared.

REFERENCES

- 1. Clarke V, Braun V. How can a heterosexual man remove his body hair and retain his masculinity? Mapping stories of male body hair depilation. *Qual Res Psychol* 2019;16(1):96-114.
- 2. Braun V, Clarke V, Frith H, et al. Qualitative story completion: Possibilities and potential pitfalls. *Qual Res Psychol* 2019;16(1):136-55.
- 3. Lupton D. 'Things that matter': poetic inquity and more-than-human health literacy. *Qual Res Sport Exerc Health* 2021;13(2):267-82.
- Braun V, Clarke V, Hayfield N, et al. Qualitative story completion: A method with exciting promise. In: Liamputtong P, ed. Handbook of Research Methods in Health Social Sciences. Singapore: Springer 2018:1-18.
- 5. Moller N, Clarke V, Braun V, et al. Qualitative Story Completion for Counseling Psychology Research: A creative method to interrogate dominant discourses. *Journal of Counseling Psychology* 2020;68(3):286-98.
- Braun V. 034 Imagining 'healthy eating:' using story completion to understand everyday meaning-making. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.34
- Braun V, Moller N, Clarke V. 033 Qualitative story completion: An innovative method with exciting potential for health research. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.33
- Williams T, Lozano-Sufrategui L, Tomasone J. 035 Exploring narratives of physical activity and disability using story completion. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.35
- Tischner I, Moller N, Vossler A. 036 Using story completion tasks to explore perceptions about mental health in a work context. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.36
- Gravett K. Story Completion: Storying as a method of meaning-making and discursive discovery. *Int J Qual Methods* 2019 doi: 10.1177/1609406919893155
- 11. Kitzinger C, Powell D. Engendering infidelity: essentialist and social constructionist readings of a story completion task. *Fem Psychol* 1995;5(3):345-72.

- Clarke V, Braun V, Frith H, et al. Editorial introduction to the special issue: Using story completion methods in qualitative research. *Qual Res Psychol* 2019;16(1):1-20. doi: 10.1080/14780887.2018.1536378
- Braun V, Clarke V, Gray D. Innovations in qualitative methods In: Gough B, ed. The Palgrave handbook of critical social psychology. London: Palgrave Macmillan 2017:243-66.
- 14. Newby J. 'Some anxiety can be helpful': How to manage your COVID-19 fears. *The Sydney Morning Herald* 2020 17 March 2020.
- 15. Dell A. How to Talk to your children about coronavirus. *ABC News* 2020 4 March 2020.
- 16. Reilly N, Precel N. How to manage anxiety during coronavirus crisis. *The Sydney Morning Herald* 2020 18 March 2020.
- 17. McCauley D. GPs inundated with 'anxious' calls as coronavirus impacts mental health. *The Sydney Morning Herald* 2020 18 March 2020.
- Storen R, Corrigan N. COVID-19: a chronology of state and territory government announcements (up until 30 June 2020). Research Paper Series 2020-2021. Canberra, ACT: Parliament of Australia, 2020.
- Braun V, Clarke V, Moller N. Pandemic tales: Using story completion to explore sense-making around COVID-19 lockdown restrictions. In: Kara H, Khoo S, eds. Researching in the Age of COVID-19 Volume 3: Creativity and Ethics Bristol: Bristol University Press 2020:39-48.
- 20. Author 2, Author 1, Author 3 [Removed for Review]
- 21. Braun V, Clarke V. Successful Qualitative Research. London: Sage 2013.
- 22. Clarke V, Braun V, Wooles K. Thou shalt not covet another man? Exploring constructions of same-sex and different-sex infidelity using story completion. *J Community Appl Soc Psychol* 2015;25(2):153-66.
- 23. Hayfield N, Wood M. Looking heteronormatively good! Combining story completion with Bitstrips to explore understandings of sexuality and appearance. *Qual Res Psychol* 2018;16(1):115-35.
- 24. Clarke V, Braun V. Thematic Analysis. J Posit Psychol 2017;12(3):297-98.
- 25. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health* 2019;11(4):589-97.
- 26. Author 3, Author 1 et al [Removed for review]
- 27. Author 1, Author 3 et al [Removed for review]
- 28. Author 1 et al [Removed for review]
- 29. Walsh E, Malson H. Discursive constructions of eating disorders: A story completion task. *Fem Psychol* 2010;20(4):529-37.
- 30. Frith H. Accounting for orgasmic absence: exploring heterosex using the story completion method. *Psychol Sex* 2013;4(3):310-22.

- 31. Author 2, Author 1, Author 3 [Removed for Review]
- 32. Fels L. Collecting data through performative inquiry: A tug on the sleeve. *Youth Theatre J* 2012;26(1):50-60.
- 33. Robbins LB, Ling J, Dalimonte-Merckling DM, et al. Sources and Types of Social Support for Physical Activity Perceived by Fifth to Eighth Grade Girls. J Nurs Scholarsh 2018;50(2):172-80.
- Newton-John TR, Ventura AD, Mosely K, et al. 'Are you sure you're going to have another one of those?': A qualitative analysis of the social control and social support models in type 2 diabetes. *J Health Psychol* 2017;22(14):1819-29.
- 35. Tye SK, Kandavello G, Gan KL. Types of social supports predicting healthrelated quality of life among adult patients with CHD in the Institut Jantung Negara (National Heart Institute), Malaysia. *Cardiol Young* 2017;27:46-54.
- 36. Malecki CK, Demaray MK. What Type of Support Do They Need? Investigating Student Adjustment as Related to Emotional, Informational, Appraisal, and Instrumental Support. *Sch Psychol Q* 2003;18(3):231-52.
- University of Pennsylvania. Coronavirus or COVID-19? A Glossary to Help Navigate Pandemic Vocabulary Washington D.C.: Targeted News Service; 2020 [Available from: https://login.wwwproxy1.library.unsw.edu.au/login?qurl=https%3A%2F%2Fse arch.proquest.com%2Fdocview%2F2408545418%3Faccountid%3D12763.
- Saghaie T. An A to Z glossary of the new coronavirus words Australia: The Lighthouse; 2020 [Available from: https://lighthouse.mq.edu.au/article/may-2020/An-A-to-Z-glossary-of-the-new-coronavirus-words accessed 15th September 2020 2020.
- 39. Ro C. Why we've created new language for coronavirus UK: BBC Worklife; 2020 [Available from: https://www.bbc.com/worklife/article/20200522-why-wevecreated-new-language-for-coronavirus accessed 19 August 2020.
- 40. Merriam-Webster. A Guide to Coronavirus-Related Words: Merriam-Webster; 2020 [Available from: https://www.merriam-webster.com/words-at-play/coronavirus-words-guide/covid-19 accessed 15th September 2020 2020.
- 41. Lawson R. Coronavirus has led to an explosion of new words and phrases and that helps us cope Australia: The Conversation; 2020 [Available from: https://theconversation.com/coronavirus-has-led-to-an-explosion-of-newwords-and-phrases-and-that-helps-us-cope-136909 accessed 15th September 2020 2020.
- 42. Burridge K, Manns H. 'Iso', 'boomer remover' and 'quarantini': how coronavirus is changing our language Australia: The Conversation; 2020 [Available from: https://theconversation.com/iso-boomer-remover-and-quarantini-how-coronavirus-is-changing-our-language-136729 accessed 15th September 2020 2020.
- 43. ABC English. Coronavirus vocabulary: Australian Broadcasting Corporation; 2020 [Available from: https://www.abc.net.au/education/learn-

english/coronavirus-vocabulary/12060370 accessed 15 September 2020 2020.

- 44. Fisher J, Tran T, Hammarberg K, et al. Quantifying the mental health burden of the most severe covid-19 restrictions: A natural experiment. *J Affect Disord* 2021;293:406-14.
- 45. Newby JM, O'Moore K, Tang S, et al. Acute mental health responses during the COVID-19 pandemic in Australia. *PLOS ONE* 2020;15(7):e0236562. doi: https://doi.org/10.1371/journal.pone.0236562
- 46. Moreno C, Wykes T, Galderisi S, et al. How mental health care should change as a consequence of the COVID-19 pandemic. *Lancet Psychiatry* 2020;7:813-24.
- 47. Lupton D, Lewis S. 'The day everything changed': Australians' COVID-19 risk narratives. *J Risk Res* 2021 doi: https://doi.org/10.1080/13669877.2021.1958045
- 48. Black Dog Institute. Importance of self-care planning COVID-19 mental health and wellbeing resources Australia: Black Dog Institute,; 2020 [Available from: https://www.blackdoginstitute.org.au/wp-content/uploads/2020/04/COVID-19_Self-Care-Planning_Black-Dog-Institute.pdf?sfvrsn=8 accessed 5th March 2021 2021.
- 49. Sandbakken EM, Moss SM. "Now We Are All in the Same Boat. At the Same Time, We Are Not." Meaning-Making and Coping Under COVID-19 Lokdown in Norway. *Human Arenas* 2021 doi: https://doi.org/10.1007/s42087-021-00208-z
- 50. Stamps DL, Mandell L, Lucas R. Relational maintenance, collectivism, and coping strategies among Black populations during COVID-19. *J Soc Pers Relat* 2021;38(8):2376-96.
- 51. Budimir S, Probst T, Pieh C. Coping strategies and mental health during COVID-19 lockdown. *J Mentl Health* 2021;30(2):156-63.
- 52. Ytre-Arne B, Moe H. Doomscrolling, Monitoring and Avoiding: News Use in COVID-19 Pandemic Lockdown. *Journal Stud* 2021 doi: 10.1080/1461670X.2021.1952475
- 53. Stephens M. A geospatial infodemic: Mapping Twitter conspiracy theories of COVID-19. *Dialogues Hum Geogr* 2020;10(2):276-81.
- 54. Bruns A, Harrington S, Hurcombe E. 'Corona? 5G? or both?': the dynamics of COVID-19/5G conspiracy theories on Facebook. *Media International Australia* 2020;177(1):12-29.
- 55. O'Connor P, Anglim J, Smillie L. Disagreeability, neuroticism and stress: what drives panic buying during the COVID-19 pandemic Australia: The Conversation; 2020 [Available from: https://theconversation.com/disagreeability-neuroticism-and-stress-whatdrives-panic-buying-during-the-covid-19-pandemic-141612 accessed 3rd March 2021 2021.
- 56. Rudd R, Baur C. Health Literacy and early insights during a pandemic. *J Commun Healthc* 2020;13(1):13-16.

- 57. Author 1, Author 3 et al [Removed for review]
 - 58. Author 3 et al [Removed for review]
 - 59. Clarke V, Hayfield N, Moller N, et al. Once upon a time...Qualitative story completion methods. In: Braun V, Clarke V, Gray D, eds. Collecting Qualitative Data: A Practical Guide to Textual, Media, and Virtual Techniques. Cambridge: Cambridge University Press 2017.
 - Archibald Q'um Q'um Xiiem J, Bol Jun Lee-Morgan J, De Santolo J. Decolonizing Research: Indigenous Storywork as Methodology. London: Zed Books 2019.
 - 61. Sheldon H, Graham C, Pothecary N, et al. Increasing response rates amongst black and minority ethnic and seldom heard groups: A review of literature relevant to the National Acutre Patients' Survey. Oxford: Picker Institute, 2007.

^{vi} Strategies accounting for less than 5% were *cognitive* (e.g., changing, and challenging patterns of thinking), *food and drink, limiting new consumption, planning for the future, caring for others, exercise, professional support* (e.g., consulting a GP or therapist), *and sleep.*

^{vii} We did not track supports offered to Ali by their parents as these appeared only infrequently in stories.

^{viii} We counted the number of stories which featured specific words from the Covid Vocabulary list (e.g., if a single story used the word *Covid* three times, this was counted as one story featuring that word). The authors took context into consideration when tracking words use. For example, *isolated* was taken to be an example of Covid Vocabulary if it related to public health orders about isolating to prevent the spread of Covid-19: "she's in a place where she can self-isolate". However, we did not count *isolated* as Covid Vocabulary if it appeared in contexts like the following: "Ali's mother is feeling isolated and lonely".

^{ix} Other words counted (that appeared in less than 5% of stories) were Face Mask, Restrictions, Washing Hands, 1.5 Meters, Hand Sanitiser, Telehealth, Zoom, Asymptomatic, Cluster, COVIDsafe App, Death Tolls, Drive-Through Testing, Essential Activities, Frontline Healthcare Worker, Incubation Period, Intubate, Panic Buying, and Safety Measures.

ⁱ Indeed, one participant wrote that the stem was an exact reflection of their life during the pandemic. ⁱⁱ For example, we inferred that the following was taken as an expression of *anger*: "*F**** off *Mum, she thinks. F**** off *Everybody. F**** off *COVID*".

ⁱⁱⁱ We sought to retain participant language when creating meta-categories and combined only closely related terms under each overarching category. For example, *scared* was included in the category of *fear*, while *worry* and *anxiety* were retained as separate categories.

^{iv} Expressions of distress appearing in fewer than 5% of stories were *upset*, *frustration*, *panic*, *anger*, *anguish*, *trapped*, *helplessness*, *isolation*, *paranoia*, *stress*, *suicidal ideation*, *uncertainty*, *unease*.

^v There were instances (10% of concerns) where no specific feeling of mental distress was articulated but there was a general implication or expression of mental distress in the narratives.

Standards for Reporting Qualitative Research (SRQR) -**Checklist for** "This bloody rona!": Using the digital story completion method to explore mental health impacts of COVID-19 in Australia

| | Page(s) |
|---|---------|
| Title and abstract | |
| | |
| Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, facus group) is recommended | 1 |
| theory) or data collection methods (e.g., interview, focus group) is recommended | 1 |
| Abstract - Summary of key elements of the study using the abstract format of the | |
| intended publication; typically includes background, purpose, methods, results, | |
| and conclusions | 1-2 |
| | |
| Introduction | |
| | |

Introduction

| | Problem formulation - Description and significance of the problem/phenomenon | |
|-----|---|-----|
| | studied; review of relevant theory and empirical work; problem statement | 2-3 |
| | Purpose or research question - Purpose of the study and specific objectives or | |
| | questions | 3-4 |
| | | |
| Met | hods | |
| | | |

Methods

| · L . | |
|---|-----|
| Qualitative approach and research paradigm - Qualitative approach (e.g., | |
| ethnography, grounded theory, case study, phenomenology, narrative research) | |
| and guiding theory if appropriate; identifying the research paradigm (e.g., | |
| postpositivist, constructivist/ interpretivist) is also recommended; rationale | 6-7 |
| Researcher characteristics and reflexivity - Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, | |
| relationship with participants, assumptions, and/or presuppositions; potential or | |
| actual interaction between researchers' characteristics and the research | |
| questions, approach, methods, results, and/or transferability | 6 |
| Context - Setting/site and salient contextual factors; rationale | 3-4 |
| Sampling strategy - How and why research participants, documents, or events | |
| were selected; criteria for deciding when no further sampling was necessary (e.g., | |
| sampling saturation); rationale | N/A |
| Ethical issues pertaining to human subjects - Documentation of approval by an | |
| appropriate ethics review board and participant consent, or explanation for lack | |
| thereof; other confidentiality and data security issues | 4 |
| | |
| Data collection methods - Types of data collected; details of data collection | |
| procedures including (as appropriate) start and stop dates of data collection and | |
| analysis, iterative process, triangulation of sources/methods, and modification of | |
| procedures in response to evolving study findings; rationale | 4 |

| Data collection instruments and technologies - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data | |
|--|-----|
| collection; if/how the instrument(s) changed over the course of the study | 4 |
| Units of study - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results) | 7-9 |
| Data processing - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts | 6-7 |
| Data analysis - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale | 6-7 |
| Techniques to enhance trustworthiness - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale | 6-7 |

Results/findings

| Synthesis and interpretation - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with | |
|--|------|
| prior research or theory | 7-15 |
| Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, | |
| photographs) to substantiate analytic findings | 7-15 |
| | |
| cussion | |
| | |

Discussion

| he field - Short summary of main findings; explanation of how onclusions connect to, support, elaborate on, or challenge co cholarship; discussion of scope of application/generalizability | onclusions of earlie | |
|--|----------------------|-------|
| nique contribution(s) to scholarship in a discipline or field | | 15-18 |
| mitations - Trustworthiness and limitations of findings | | 18-20 |

Other

| Conflicts of interest - Potential sources of influence or perceived influence on | |
|---|----|
| study conduct and conclusions; how these were managed | 20 |
| Funding - Sources of funding and other support; role of funders in data collection, | |
| interpretation, and reporting | 20 |

BMJ Open

BMJ Open

"This bloody rona!": Using the digital story completion method and thematic analysis to explore mental health impacts of COVID-19 in Australia

| Journal: | BMJ Open |
|--------------------------------------|--|
| Manuscript ID | bmjopen-2021-057393.R2 |
| Article Type: | Original research |
| Date Submitted by the Author: | 14-Dec-2021 |
| Complete List of Authors: | Vaughan, Priya; University of New South Wales, Black Dog Institute Lenette, Caroline; University of New South Wales, School of Social Sciences, Faculty of Arts, Design and Architecture Boydell, Katherine; University of New South Wales, Black Dog Institute |
| Primary Subject Heading : | Mental health |
| Secondary Subject Heading: | Mental health |
| Keywords: | MENTAL HEALTH, QUALITATIVE RESEARCH, COVID-19 |
| | |





I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our <u>licence</u>.

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which <u>Creative Commons</u> licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

terez on

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Title: "This bloody rona!": Using the digital story completion method and thematic analysis to explore mental health impacts of COVID-19 in Australia

Corresponding Author: Dr Priya Vaughan. <u>Postal Address</u>: Black Dog Institute, Hospital Road, Randwick, 2031, N.S.W., Australia. <u>Email</u>: <u>p.vaughan@blackdog.org.au</u>

Authors:

Priya Vaughan: Black Dog Institute, University of New South Wales, Sydney 2031, Australia; p.vaughan@blackdog.org.au

Caroline Lenette: School of Social Sciences, Faculty of Arts, Design and Architecture, University of New South Wales, Sydney 2031, Australia; c.lenette@unsw.edu.au

Katherine Boydell: Black Dog Institute, University of New South Wales, Sydney 2031, Australia; k.boydell@unsw.edu.au

Word Count (excluding title page, abstract, references, figures and tables): 3348

"This bloody rona!": Using the digital story completion method and thematic analysis to explore mental health impacts of COVID-19 in Australia

KEYWORDS: COVID-19, Story Completion, Mental Health, Coping Strategies, Social Supports, COVID-19 Vocabulary.

ABSTRACT

Objectives: To use the digital story completion method to prompt participants to describe thoughts, fears, and mental health experiences in response to a story stem about COVID-19, to capture a specific socio-historic moment.

Design: We used digital story completion, a qualitative research method, to gather narratives from Australians coping with physical distancing and social restriction measures. Our reflexive thematic analysis of the data was underpinned by a constructionist approach to reflect the importance of social context in understanding health experiences.

Setting: Australia.

Participants: 52 people living in Australia (aged 18 years and over).

Results: Four meta-themes were prevalent across 52 stories submitted: (i) Expressions of *Mental Distress* linked to COVID-19; (ii) Various *Coping Strategies* offered by characters in stories; (iii) Narratives outlining *Social Supports* offered to alleviate distress; and (iv) Specialised *COVID-19 Vocabulary*.

Conclusion: We cautiously propose that points of convergence across stories indicate a level of shared experience among participants relating to COVID-19 in Australia. We suggest this is due to intensive media coverage of the pandemic, persistent public-health messaging, engagement with social media and instant

messaging technologies, and extended lockdowns that impacted the mental health of vast numbers of Australians.

Strength and Limitations of this Study:

- Story completion has the potential to elicit rich detail regarding individual and collective experiences of social phenomenon, such as the impact of a pandemic on health and wellbeing.
- The story completion method invites people to think creatively and speculatively to reveal processes of sense-making and social experience.
- First study to report on *data* generated from story completion research relating to the COVID-19 pandemic.
- Need for caution vis-à-vis assumptions about the relationship between the story content and participants' realities.
- Lack of significant ethnic and cultural diversity in our cohort signaled that we had not used story completion in appropriate ways for diverse cultural groups.

BACKGROUND

Story completion is an innovative mode of qualitative inquiry that offers a unique means of creatively engaging research participants. The method encourages participants to respond creatively and speculatively to a scenario in a manner that does not require them to disclose personal details or their own experiences. ¹⁻³ It is adaptable to various epistemological frameworks but is most frequently used within a social constructionist framework. ^{1, 2} The story completion method has burgeoned in recent years. ^{4, 5} This relatively new research approach has been detailed in the introduction to a special journal issue on story completion. ² The method was also

BMJ Open

featured in a 2019 symposium with an introduction and three abstracts published in *BMJ Open*, ⁶⁻⁹ signalling a growing interest in its applications in health and social care.

Story completion originated in psychology, feminist theory and psychotherapy traditions. ^{2, 10} It was first adapted by Kitzinger and Powell for use in qualitative research using a social constructionist perspective and discourse analysis. ¹¹ Story completion is increasingly used to study patterns of social meaning and assumptions depicted in a set of stories responding to a 'stem' or cue. ¹² The method has recently garnered interest from qualitative researchers keen to pursue its possibilities as a narrative method, ² largely to stimulate social meanings and understand sensemaking and lifeworlds. ¹³ As such, story completion has untapped potential to elicit rich detail regarding individual and collective experiences of large-scale social phenomena such as the impact of a pandemic on health and wellbeing.

Research undertaken in various locations globally, including Australia, reveals that COVID-19 (and the unique socio-economic impacts it has wrought) has adversely impacted the mental health and wellbeing of diverse cohorts of people. ¹⁴⁻²⁰ We utilised the story completion method with Australian participants coping with measures put in place to limit the spread of COVID-19 to gain insights regarding the impact of the pandemic on mental health and wellbeing.

METHODS

Design

We used digital story completion to gather narratives from Australians coping with physical distancing and social restriction measures in place from March 2020. We

BMJ Open

were particularly interested in the pandemic's impact on mental health and wellbeing as, at the time, government and media discourse often focused on mental health concerns resulting from the management of COVID-19. ²¹⁻²⁴ For example, in April 2020 the New South Wales Government announced a \$73 million dollar support package intended to support mental wellbeing during the pandemic. ²⁵

Story completion was appropriate to explore how people were responding to rapidly changing situations, given its use as a tool for "accessing *social* meanings and discourses, and dominant assumptions and norms". ²⁶ The method was used to archive unusual global circumstances affecting Australia as a distinct context. Our interest in capturing how respondents coped with public health restrictions and their impact on health and wellbeing informed our choice of stem: *An 11pm phone call is received from Ali's elderly parent who is distressed due to COVID-19. What happens next*?

We discussed the 'hypothetical' nature of the stem, in line with past applications of story completion. Given the uniqueness of the COVID-19 situation and attendant collective experiences of uncertainty, we acknowledged that the stem might also echo participants' reality.ⁱ We hypothesized that respondents might use the stem to creatively explore and represent their lived experiences of the pandemic.

Patient and Public Involvement

Members of the public were not involved in the development of this research. As discussed below, we believe the lack of significant ethnic and cultural diversity in our participant cohort signalled that we had not utilised story completion in culturally appropriate ways nor paid enough attention to the recruitment strategy to engage more diverse respondents. This led us to develop recommendations to decolonise

BMJ Open

story completion. A key recommendation is that story completion research be codeveloped in collaboration with individuals with lived experience relevant to the research topic. ²⁷

Ethics approval was sought from the [removed for review] Human Research Ethics Committee and approval was gained in May 2020 (Approval Number: [removed for review]).

Data Collection

We set up a submission point using Qualtrics. We outlined consent and ethics information, followed by the stem, and demographic questions. We began participant recruitment in May 2020. At the time, various COVID-19 related restrictions in place across all states and territories were beginning to ease slightly. For example, in Australia's most populous state, New South Wales, strict restrictions aimed at limiting the spread of COVID-19 began to relax in May 2020. For instance, a household was allowed up to five visitors at one time, up to ten people could gather outdoors, and cafes and restaurants could seat a maximum of 10 people. However, various restrictions on physical distancing, travel across state and territory borders, and international travel remained in place. ²⁵

We shared the Qualtrics link via Twitter, seeking to recruit people living in Australia aged 18 years or older. Participation was not incentivised. We also posted a Facebook invitation on the [organisation] webpage (a specialist mental health research institute), after which we saw a net increase in submissions. We chose these recruitment strategies for a rapid response and to attract a diverse crosssection of respondents. When the survey was closed after four weeks, we had 52

stories. We did not set a word limit, hoping that it would encourage respondents to be creative with the stem.

To frame each participant's storytelling choices in our analysis, we collected demographic data using a mix of pre-determined and open responses. We wanted to understand who responded to the call to participate and what specific markers of identity might reveal about how people told stories about COVID-19. We provide demographic information in the results section.

Sample Size

Because of likely variation in quality and length of stories, recruiting at least 10 participants per story stem is recommended. ²⁸ However, story completion studies typically recruit sample sizes of 40 to 60 participants. ^{29, 30} We are confident that our 52 stories represent a robust corpus of data for analysis.

ANALYSIS

We used reflexive thematic analysis, ²⁸ an approach widely used in story completion analysis and in qualitative research more generally. ^{12, 31} This analytical lens positions researchers as active agents in the process and requires reflection on the assumptions and experiences they bring to the analysis. ³² Author 2 and Author 3 are senior researchers and have extensive experience using arts-based qualitative methods in the context of participatory sociological and psychological research on mental health and social inclusion. Author 1 is an early-career, postdoctoral researcher who trained as a social anthropologist and has also used arts-based research methods to collect data on mental health. This was the first time members of the research team had used story completion as a research method. We have used thematic analysis extensively in previous work. ³³⁻³⁵ We interpreted the data

BMJ Open

using a constructionist approach to story completion, as each story reflects the participant's social context. ^{11, 36, 37}

The data analysis process involved the following phases. A detailed overview of this process is described elsewhere. ³⁸

- 1. *Familiarisation*: All researchers reviewed all stories to get a sense of the data set as a whole.
- 2. Initial Coding: Author 1 read all the stories and Author 2 and Author 3 read half each, so that each story was read at least twice. We recorded our initial thoughts using two headings: (i) "Are there particular storylines? What are the 'turning points' or what Fels calls 'tug on the sleeve' moments? ³⁹ Are there repeated patterns of meaning?" and (ii) "Key themes".
- 3. *Identification of Themes*: We identified the most prominent or important elements in the stories, before engaging in collaborative analysis to produce an initial set of themes (or codes).
- 4. *Refining Themes*: We collaboratively reviewed themes and iteratively refined our coding structure to identify the overarching themes which characterised the data set. This led to the identification of four meta-themes described below.

RESULTS

Participants produced 52 stories. The length of each story varied from one sentence to a lengthy paragraph. Typically, short stories covered the next step or action the protagonist would take in immediate response to the situation outlined in the stem. Longer stories outlined a narrative arc with a beginning, middle and end (orientation,

complication, resolution), or contained reflections on the situation the protagonist faced.

Demographic Data

Demographic data collected indicated a relatively homogenous participant composition, particularly regarding ethnic or cultural background (see Table 1 for details). Not all participants responded to all demographic questions. Given the relative homogeneity of the cohort and small sample size, demographic data did not significantly enhance our analysis but provided contextual information about who participated and who had not, which impacted our thinking regarding future story completion research. We discuss this in greater detail below.

| Demographics | Participants n (%) |
|---|--------------------|
| Age | |
| 18-24 | 2 (4%) |
| 25-34 | 20 (39%) |
| 35-44 | 14 (27%) |
| 45-54 | 7 (14%) |
| 55-64 | 6 (12%) |
| 65-74 | 2 (4%) |
| | |
| Gender | |
| Female | 42 (84%) |
| Male | 5 (10%) |
| Non-binary | 1 (2%) |
| Trans | 2 (4%) |
| | |
| Highest education level | |
| Completed some post-school technical training | 4 (8%) |
| or university study | |
| Completed university degree | 24 (47%) |
| Postgraduate degree | 23 (45%) |
| | |
| Marital status | |
| Married/de-facto | 30 (67%) |
| Single | 15 (33%) |
| | |
| Race/Ethnicity† | |
| Aboriginal | 1 (2%) |

| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
|--|
| 5 6 7 8 9 10 11 12 13 14 |
| 7 8 9 10 11 12 13 14 |
| 10 11 12 13 14 |
| 12 13 14 |
| 14 |
| 15 |
| 16 |
| 17 18 |
| 19 20 |
| 21 22 |
| 23 24 25 |
| 25 26 27 |
| 27 28 29 |
| 30 31 |
| 32 33 |
| 34 35 |
| 36 37 |
| 38 39 |
| 40 41 |
| 42 43 |
| 44 45 46 |
| 40 47 48 |
| 49 50 |
| 50 51 52 |
| 53 54 |
| 55 56 |

59 60

| Anglo | 10 (20%) |
|--|---|
| Asian | 2 (4%) |
| Australian (including Asian Australian, Non- | 11 (22%) |
| Indigenous Australian, Irish-Catholic Australian) | |
| Caucasian | 13 (26%) |
| Chinese | 1 (2%) |
| European | 3 (6%) |
| Jewish Anglo | 1 (2%) |
| Mixed (including Anglo/Sri Lankan) | 3 (6%) |
| The Human Race | 1(2%) |
| White | 4 (8%) |
| + Categories based on language used by partic | ipants |
| | |
| Country of origin | |
| Australia | 39 (78%) |
| Other Countries‡ | 11 (22%) |
| ‡ Other countries reported: China, Germany, M | alaysia, New Zealand |
| Pakistan, Sweden, UK, USA | |
| | |
| | |
| Language(s) spoken at home | |
| English only | 47 (94%) |
| English only English and other language(s) § | 3 (6%) |
| English only | 3 (6%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj | 3 (6%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj Employment status | 3 (6%) abi, Spanish, Urdu |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj Employment status Full-time employment | 3 (6%) abi, Spanish, Urdu 27 (53%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj <i>Employment status</i> Full-time employment Part-time employment | 3 (6%) abi, Spanish, Urdu |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj Employment status Full-time employment | 3 (6%) abi, Spanish, Urdu 27 (53%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj <i>Employment status</i> Full-time employment Part-time employment | 3 (6%) abi, Spanish, Urdu 27 (53%) 16 (31%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj <i>Employment status</i> Full-time employment Part-time employment Unemployed | 3 (6%) abi, Spanish, Urdu 27 (53%) 16 (31%) 7 (14%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj <i>Employment status</i> Full-time employment Part-time employment Unemployed | 3 (6%) abi, Spanish, Urdu 27 (53%) 16 (31%) 7 (14%) |
| English only English and other language(s) § §Other languages reported: Dutch, Polish, Punj <i>Employment status</i> Full-time employment Part-time employment Unemployed Volunteer | 3 (6%) abi, Spanish, Urdu 27 (53%) 16 (31%) 7 (14%) |

Meta-Themes

We identified four meta-themes across the stories:

- 1. Expressions of *Mental Distress* linked to COVID-19;
- 2. Various Coping Strategies offered by Ali and other characters in stories;
- 3. Narratives outlining Social Supports offered to alleviate distress; and
- 4. Specialised COVID-19 Vocabulary.

In the following overview of these meta-themes, we explore their prevalence across stories. Moller et al. note that reporting on "frequency counts or percentages" when using story completion "may be seen as controversial (e.g., antithetical to qualitative values)".⁵ However, given our interest in archiving a specific *moment* in Australia relating to a public health crisis, we felt that a top-down focus, which captured commonalities and differences in experiences, was imperative.

1. Mental distress

We tracked expressions of mental distress that Ali, the parent, or others conveyed in the stories. Almost all (96%) stories included implied or explicit discussions of experiences of mental distress. While the stem mentioned that Ali's parent was distressed, participants could choose how they developed their narrative and how much emphasis they placed on this element. We identified the language used in stories rather than assigning diagnostic categories to the texts, to understand how participants described a character's state of mind. Some participants explicitly named the type of mental distress a character suffered, while in other instances we made inferences about mental distress experienced.^{II} We used an iterative process to classify these expressions by counting mentions associated with mental distress. Many stories featured more than one form of distress. We then assigned these to 19 top-level categories.^{III}

The most expressed concern was *Worry* (41% of concerns), mostly related to the possibility that Ali or their parent would contract COVID-19. Other expressions of distress related to government-imposed physical and social distancing provisions, leading characters to feel lonely, isolated and angry. Table 2 summarises expressions of mental distress that account for more than 5% of those counted.^{iv}

Page 13 of 29

| Mental | Example | Percenta |
|-------------------------|---|----------|
| Distress | | of Count |
| Worry | "Ali is tired, it's been a long day trying to work from home with | 41% |
| | small kids, but they listen carefully to all the worries of their | |
| | dad." | |
| General | "Ali remains calm and tries to get to the root of the problem and | 10% |
| Implication of | lends a listening ear. She redirects one of the concerns | |
| Psychological | towards practical solutions to calm the parent and reminds the | |
| Discomfort ^v | parent of some trusted neighbours and friends nearby and | |
| | commits to checking back in in one hour." | |
| Fear | "She lives in an assisted care home and has been reading the | 8% |
| | news about the deaths in other nursing homes. She is | |
| | understandably scared" | |
| Loneliness | "She's lonely, none of her children are there, this is not | 8% |
| | something she says often but Ali knows this to be true. The call | |
| | is about COVID-19 on the face of it but she just wants to talk to | |
| | someone." | |
| Anxiety | "his mother is anxious about running out of toilet rolls and not | 6% |
| | getting basic things from the grocery store." | |
| Distress | "Ali gets distressed with his mother's distress" | 5% |

Table 2: Mental Distress

2. Coping Strategies

79% of stories featured coping strategies of some kind, and 66% featured more than one strategy. Strategies were articulated by characters in the stories, typically to

allay the distress of Ali's parent. We used an iterative process and counted mentions of coping strategies, then assigned these to a set of top-level strategy types. The most common strategy was *Talking* (29% of strategies). Talking as a coping strategy underpins the story stem, which begins with a phone call to Ali. Many stories began with Ali verbally reassuring their parent. Table 3 outlines coping strategies accounting for more than 5% of strategies counted.^{vi}

| Coping Strategy | Description of Strategy | Percentage |
|-----------------|--|------------|
| | | of Count |
| Talking | Talking through worries; Ali providing verbal | 29% |
| | reassurance; talking about things beyond COVID- | |
| | 19. | |
| Socialising | Planning to, or undertaking, social interaction. | 12% |
| Prevention | Discussing strategies to limit risks of catching | 11% |
| Strategies | COVID-19 to limit parental worry. | |
| Information | Getting information to combat worry and anxiety, | 10% |
| | including engaging with reputable sources to bust | |
| | COVID-19 myths (e.g., COVID-19 is caused by 5G | |
| | network). | |
| Instrumental | Practical support Ali proposed to alleviate stress | 10% |
| | (e.g., offering to shop for parents). | |
| Relaxation | Watching movies; reading books; gardening or | 8% |
| Activities | getting fresh air. | |

Table 3: Coping Strategies

3. Social Supports

85% of stories included Ali providing or offering social support to their parent.^{vii} Arguably, Ali's ability to provide support underpins the story stem, as Ali's parent calls while distressed. We counted explicit mentions of supports articulated in stories. In health research, various social support categories are used including instrumental, emotional, tangible, affectionate, positive interactions, or appraisal. ⁴⁰⁻⁴³ We used three broad social supports categories: 1) *Emotional*: Expression of empathy, love, trust, care and support. 2) *Instrumental*: Tangible service or help. 3) *Informational*: Advice, suggestions and information. Table 4 records the presence (or co-presence) of social supports in stories. *Emotional* support was by far the most prevalent. We note that coping strategies and social supports sometimes overlapped.

| Support | Example | Percentage of |
|---------------|---|---------------|
| Type(s) | | Stories |
| | | Type(s) |
| | | Appear |
| Emotional | " Ali speaks to her mother for a few minutes, calming her | 30% |
| | down and reassuring her that she will be ok" | |
| Emotional | "Ali assures her Mum that she is listening and encourages her | 18% |
| and | Mum to share what is worrying her Ali sits at her laptop while | |
| Informational | she talks to her Mum and looks up trusted sources of medical | |
| | information (WHO, Aus Govt, mydr.com.au) to help her Mum, | |
| | and herself, understand what we know." | |
| Emotional, | "Ali seeks to reassure her parent that if he/she follows current | 16% |
| Instrumental | health advice that the risks to this parent can be minimised | |
| | Ali is mindful of his/her parents' social isolation during COVID- | |

| and | 19 and is conflicted by the need to visit to help and reassure | |
|---------------|--|-----|
| Informational | his/her parent and to remain isolated to ensure risks are | |
| | minimised Ali contacts the Government COVID-19 | |
| | assistance line for advice. The following day, Ali arranges | |
| | a Telehealth consult with his/her elderly's parent to ensure | |
| | parent is informed on how best to look after themselves, | |
| | and to arrange a flu shot." | |
| Emotional | "It will be okay, we can help. What do you need, we can get | 11% |
| and | you groceries, there will be enough food, what's in your | |
| Instrumental | pantry, we can send you toilet paper and hand sanitizer | |
| | We will take care of you. We love you." | |
| Informational | "Ali's mum then goes on to explain she saw on Facebook | 119 |
| | how 5G is linked to increased cases Ali rubs his eyes and | |
| | explains that you should never believe what you see and read | |
| | on social mediaThe next morning he finds some credible | |
| | sources explaining there is absolutely no link between Corona | |
| | Virus and 5G and send them to his mum." | |
| Instrumental | "Ali drove to his parent's house, bringing with him some | 9% |
| | medicine. After looking at the nearest drive-through | |
| | testing centre, he brought them to be tested the next day." | |
| Instrumental | " <u>Ali, now wide awake, opens her laptop, googles the</u> | 5% |
| and | symptoms of Corona and asks her mum if she is suffering from | |
| Informational | any of these symptomsAli will check on her in the | |
| | morning." | |

Table 4: Social Supports

59 60

4. COVID-19 Vocabulary

Stories contained specific language and terminology that became more prominent among the general public due to the COVID-19 pandemic. We compiled a COVID-19 vocabulary list drawing on news and web articles on COVID-19 terminology and vocabulary. ⁴⁴⁻⁵⁰ We counted 24 COVID-19 vocabulary words or expressions (and variations) in 65% of stories.^{viii} Table 5 lists terms that appear in 5% or more of the stories.^{ix}

| Covid-19 Term | Related Variations | Percentage of Stories Term Appears |
|-------------------|---|--|
| COVID-19 | COVID, Corona Virus, Corona, Rona | 30% |
| Isolation | Isolate, Self-Isolate, Self-Isolated, Self- Isolation | 10% |
| Social Distancing | Socially Distanced, Socially Distancing, Distancing, Distance from People, Kept Our Distances | 8% |
| Lockdown | 2/ | 5% |
| Pandemic | | 5% |
| Vulnerable Group | Vulnerable Age Group, Vulnerable Age Bracket, High Risk Category | 5% |

Table 5. Covid-19 Vocabulary

DISCUSSION

Story completion has been used in psychology, health and social research to learn about personal crisis and health concerns. It is emerging as an effective method to

engage with COVID-19, "a crisis on a much larger scale". ²⁶ To our knowledge, this is the first study to report on *data* generated from story completion with a COVID-19 scenario. We acknowledge Braun, Clarke and Moller's work describing their methodological approach using story completion during the pandemic. ²⁶ In our research, the story completion method garnered a rich array of engaging and moving stories, with insights into individual knowledge about, and experiences of, pandemic-related language, mental distress, and strategies to alleviate discomfort and offer social support. The stories stand as a creative, textual archive of the pandemic and mental health and wellbeing concerns as experienced in Australia in early 2020.

Mental Distress

Preliminary research in Australia indicates that the pandemic and associated health risks, social restrictions, and economic impacts have adversely impacted the mental health of the general public and those with pre-existing mental health diagnosis. ^{19, 20} The full mental health impact of the pandemic is yet to become fully apparent. Preliminary research on the topic should be followed up with rigorous longitudinal studies. ⁵¹ In our research, creative, narrative expressions seemed to imitate real-life, with most stories centring around experiences of psychological anguish. Mental distress caused by fear of COVID-19, and the emotional and psychological impact of hearing from a loved one in distress formed the narrative core of most stories. This correlates with findings from narrative qualitative research undertaken in Australia which documented feelings of vulnerability and anxiety due to the threat of catching COVID-19 and hearing about the impact of COVID-19 on others. ⁵² The stories clearly conveyed (sometimes viscerally) the psychological suffering wrought by COVID-19 because of its highly infectious nature and the fatalities that resulted from the virus.

Page 19 of 29

BMJ Open

Social Supports and Coping Strategies

While mental distress permeates most stories, respondents also included various social supports and coping strategies. Ali and their parent offered, recommended, and practiced diverse coping strategies. Most were associated with positive self-care approaches such as recreation, socialising, or exercise, rather than maladaptive coping strategies such as shouting, smoking or binge drinking. ⁵³ This suggests that participants had a relatively high level of mental health literacy and were aware of healthy approaches to managing psychological discomfort. This may be due to our recruitment approach (i.e., distribution via [organisation name removed for review] and our social media networks).

There is an emerging body of small-scale research assessing coping strategies in response to COVID-19. Socially oriented coping strategies, as well as mindfulness or positive thinking, emerge across this literature as productive and healthy approaches to cope with COVID-19 related distress. ⁵⁴⁻⁵⁶ While we identified these coping strategies across stories, respondents also suggested additional practical approaches including strategies to limit the risk of contracting COVID-19, reading reputable material to learn facts or combat myths about the virus, or engaging in practical actions to alleviate anxiety (such as Ali shopping for their parent). The characters sought out or offered a combination of cognitive, emotional and practical supports or coping strategies to address distress. Again, this suggests a good level of mental health literacy *and* shows awareness of stressors beyond the threat of catching COVID-19, such as: increased news consumption and 'doom scrolling'; ⁵⁷ the flourishing of COVID-myths, misinformation, and conspiracy theories; ^{52, 58, 59} and panic related to supermarket shortages. ⁶⁰

COVID-19 Vocabulary

The language used in stories largely reflected public health messaging at the time of data collection. New words had entered the lexicon among the general public, likely due to increased exposure and attention to the 24-hour news cycle. Indeed, news media was mentioned in 13 stories (~8%) as a source of both information and anxiety. It is likely that constant engagement with media caused new terms to permeate everyday conversations. This uptake of a COVID-19 vocabulary assisted respondents to express their fears using commonly understood language that can unite people "around a set of collective cultural references points [like a]...lexical 'social glue'". ⁴⁸ The ubiquity of COVID-19 vocabulary in stories reflects community engagement with media and health messaging. As Rudd and Baur report, "communication messages and materials related to COVID-19 have introduced unusual vocabulary and phrases into common speech over the past several months…over a short time period these previously rare words have become commonly understood". ⁶¹

CONCLUSION

We cautiously suggest that points of convergence across stories indicate a shared experience amongst participants resulting from intensive media coverage, persistent public-health messaging, engagement with social media and instant messaging technologies, and extended lockdowns that impacted the mental health and wellbeing of vast numbers of Australians. However, we cannot do more than cautiously speculate. The reason for this caution is outlined below.

Strengths, Limitations and Directions for Future Research

Page 21 of 29

BMJ Open

A strength of the story completion method, and what makes it a potentially empowering research tool, is that it engages participants in a hypothetical, creative, and speculative manner to reveal patterns and processes of sense-making and social experience. It asks participants to imagine themselves in a situation but does not *demand* that stories only reflect their lived realities. ⁵ In our research, this methodological strength has resulted in a limitation regarding how much we can infer about data collected. Researchers must be cautious about making sweeping assumptions regarding the relationship between story content and respondents' realities. While we agree that story completion has the potential to reveal much about participants' social, personal, and psychological worlds, more information was needed to undertake this form of extended interpretative analysis within our dataset. This does not diminish the method's potential in illustrating how narrative inquiry can elicit and capture social knowledge, mores, vocabulary, and experience. In future research, it may be effective to pair story completion with complementary methods such as one-on-one interviews ¹⁰ to examine, for example, the gap between knowledge of positive mental health coping strategies and their uptake or practice. The combination of arts-based or narrative-based methods with oral gualitative data collection methods has worked successfully in our previous research. 62, 63

Another limitation of this study was the lack of significant ethnic and cultural diversity in our cohort. This perhaps signals that we did not utilise story completion in culturally appropriate ways nor paid enough attention to the recruitment strategy to engage more diverse respondents. For example, our stem (which we developed in line with the accepted story completion approach) privileged western modes of story construction, with participants being asked to complete a story by providing a *middle* and *end* to the *beginning* offered by the stem. ⁶⁴ This approach may not have

appealed to those familiar with other storytelling approaches grounded in distinct sociocultural contexts. ⁶⁵ A lack of diversity in our sample may also have been the result of our recruitment strategy via social media. ⁶⁶ In the future, these shortcomings could be addressed through the collaborative co-creation of a stem with a diverse participant advisory group, and via deliberative recruitment to ensure cultural diversity. These considerations have led us to develop recommendations to decolonise story completion. ²⁷

ACKNOWLEDGEMENTS: We would like to thank all study participants. We acknowledge that this research took place on unceded Aboriginal land.

FUNDING STATEMENT: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

ETHICS STATEMENT: This project was reviewed and approved by the University of New South Wales Human Research Ethics Committee (Approval number: HC200535). Participant involvement in the study was voluntary and informed consent was gained from participants prior to their participation. A study information sheet and consent form were provided at the outset of the digital platform for the research.

DATA AVAILABILITY STATEMENT: No additional data available.

AUTHOR CONTRIBUTIONS: CL and KB were responsible for conceptualising, planning, gaining ethics approval, and initiating data collection for the study. PV, CL, and KB all undertook analysis and interpretation of data, working collaboratively to code the stories and to identify core meta-themes. This manuscript was co-conceived by all authors. PV wrote the manuscript and produced the tables. The manuscript was critically reviewed by CL and KB who provided detailed feedback. All authors take responsibility for the work, had access to the data, and controlled the decision to publish.

COMPETING INTERESTS: None declared.

| 2 |
|--|
| 3 |
| 4 |
| |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| |
| 10 |
| 11 |
| 12 |
| 13 |
| |
| 14 |
| 15 |
| 16 |
| 17 |
| 18 |
| |
| 19 |
| 20 |
| 21 |
| 22 |
| |
| 23 |
| 24 |
| 25 |
| 26 |
| |
| 27 |
| 28 |
| 29 |
| 30 |
| 31 |
| |
| 32 |
| |
| 33 |
| |
| 34 |
| 34 35 |
| 34 35 36 |
| 34 35 |
| 34 35 36 37 |
| 34 35 36 37 38 |
| 34 35 36 37 38 39 |
| 34 35 36 37 38 39 40 |
| 34 35 36 37 38 39 |
| 34 35 36 37 38 39 40 |
| 34 35 36 37 38 39 40 41 42 |
| 34 35 36 37 38 39 40 41 42 43 |
| 34 35 36 37 38 39 40 41 42 43 44 |
| 34 35 36 37 38 39 40 41 42 43 |
| 34 35 36 37 38 39 40 41 42 43 44 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 |
| 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 |

REFERENCES

- 1. Clarke V, Braun V. How can a heterosexual man remove his body hair and retain his masculinity? Mapping stories of male body hair depilation. *Qual Res Psychol* 2019;16(1):96-114.
- 2. Braun V, Clarke V, Frith H, et al. Qualitative story completion: Possibilities and potential pitfalls. *Qual Res Psychol* 2019;16(1):136-55.
- 3. Lupton D. 'Things that matter': poetic inquiry and more-than-human health literacy. *Qual Res Sport Exerc Health* 2021;13(2):267-82.
- Braun V, Clarke V, Hayfield N, et al. Qualitative story completion: A method with exciting promise. In: Liamputtong P, ed. Handbook of Research Methods in Health Social Sciences. Singapore: Springer 2018:1-18.
- 5. Moller N, Clarke V, Braun V, et al. Qualitative Story Completion for Counseling Psychology Research: A creative method to interrogate dominant discourses. *Journal of Counseling Psychology* 2020;68(3):286-98.
- Braun V. 034 Imagining 'healthy eating:' using story completion to understand everyday meaning-making. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.34
- Braun V, Moller N, Clarke V. 033 Qualitative story completion: An innovative method with exciting potential for health research. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.33
- Williams T, Lozano-Sufrategui L, Tomasone J. 035 Exploring narratives of physical activity and disability using story completion. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.35
- Tischner I, Moller N, Vossler A. 036 Using story completion tasks to explore perceptions about mental health in a work context. *BMJ Open* 2019;9 doi: 10.1136/bmjopen-2019-QHRN.36
- Gravett K. Story Completion: Storying as a method of meaning-making and discursive discovery. *Int J Qual Methods* 2019 doi: 10.1177/1609406919893155
- 11. Kitzinger C, Powell D. Engendering infidelity: essentialist and social constructionist readings of a story completion task. *Fem Psychol* 1995;5(3):345-72.
- Clarke V, Braun V, Frith H, et al. Editorial introduction to the special issue: Using story completion methods in qualitative research. *Qual Res Psychol* 2019;16(1):1-20. doi: 10.1080/14780887.2018.1536378
- Braun V, Clarke V, Gray D. Innovations in qualitative methods In: Gough B, ed. The Palgrave handbook of critical social psychology. London: Palgrave Macmillan 2017:243-66.

- 14. Das R, Hasan MR, Daria S, et al. Impact of COVID-19 pandemic on mental health among general Bangladeshi population: a cross-sectional study. *BMJ Open* 2021;11(4):e045727. doi: 10.1136/bmjopen-2020-045727
- Gasteiger N, Vedhara K, Massey A, et al. Depression, anxiety and stress during the COVID-19 pandemic: results from a New Zealand cohort study on mental well-being. *BMJ Open* 2021;11(5):e045325. doi: 10.1136/bmjopen-2020-
- Jacques-Aviñó C, López-Jiménez T, Medina-Perucha L, et al. Gender-based approach on the social impact and mental health in Spain during COVID-19 lockdown: a cross-sectional study. *BMJ Open* 2020;10(11):e044617. doi: 10.1136/bmjopen-2020-044617
- May T, Aughterson H, Fancourt D, et al. 'Stressed, uncomfortable, vulnerable, neglected': a qualitative study of the psychological and social impact of the COVID-19 pandemic on UK frontline keyworkers. *BMJ Open* 2021;11(11):e050945. doi: 10.1136/bmjopen-2021-050945
- Shah J, Monroe-Wise A, Talib Z, et al. Mental health disorders among healthcare workers during the COVID-19 pandemic: a cross-sectional survey from three major hospitals in Kenya. *BMJ Open* 2021;11(6):e050316. doi: 10.1136/bmjopen-2021-050316
- 19. Fisher J, Tran T, Hammarberg K, et al. Quantifying the mental health burden of the most severe covid-19 restrictions: A natural experiment. *J Affect Disord* 2021;293:406-14.
- Newby JM, O'Moore K, Tang S, et al. Acute mental health responses during the COVID-19 pandemic in Australia. *PLOS ONE* 2020;15(7):e0236562. doi: https://doi.org/10.1371/journal.pone.0236562
- 21. Newby J. 'Some anxiety can be helpful': How to manage your COVID-19 fears. *The Sydney Morning Herald* 2020 17 March 2020.
- 22. Dell A. How to Talk to your children about coronavirus. *ABC News* 2020 4 March 2020.
- 23. Reilly N, Precel N. How to manage anxiety during coronavirus crisis. *The Sydney Morning Herald* 2020 18 March 2020.
- 24. McCauley D. GPs inundated with 'anxious' calls as coronavirus impacts mental health. *The Sydney Morning Herald* 2020 18 March 2020.
- 25. Storen R, Corrigan N. COVID-19: a chronology of state and territory government announcements (up until 30 June 2020). Research Paper Series 2020-2021. Canberra, ACT: Parliament of Australia, 2020.
- 26. Braun V, Clarke V, Moller N. Pandemic tales: Using story completion to explore sense-making around COVID-19 lockdown restrictions. In: Kara H, Khoo S, eds. Researching in the Age of COVID-19 Volume 3: Creativity and Ethics Bristol: Bristol University Press 2020:39-48.
- 27. Author 2, Author 3, Author 1 [removed for review]
- 28. Braun V, Clarke V. Successful Qualitative Research. London: Sage 2013.

| 2 |
|---|
| 2 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
| 17 |
| 18 |
| 19 |
| 20 |
| 21 |
| 22 |
| 22 |
| 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24 25 26 27 28 29 30 32 33 34 35 36 37 38 39 |
| 24 25 |
| 25 |
| 26 |
| 27 |
| 28 |
| 29 |
| 30 |
| 31 |
| 32 |
| 32 |
| 24 |
| 24 25 |
| 35 |
| 36 |
| 37 |
| 38 |
| 39 |
| 40 |
| 41 |
| 42 |
| 43 |
| 44 |
| 44 45 |
| |
| 46 |
| 47 |
| 48 |
| 49 |
| 50 |
| 51 |
| 52 |
| 53 |
| 54 |
| 55 |
| 55 56 |
| 50 |
| 57 |
| 58 |
| 59 |

- 29. Clarke V, Braun V, Wooles K. Thou shalt not covet another man? Exploring constructions of same-sex and different-sex infidelity using story completion. *J Community Appl Soc Psychol* 2015;25(2):153-66.
- 30. Hayfield N, Wood M. Looking heteronormatively good! Combining story completion with Bitstrips to explore understandings of sexuality and appearance. *Qual Res Psychol* 2018;16(1):115-35.
- 31. Clarke V, Braun V. Thematic Analysis. *The Journal of Positive Psychology* 2017;12(3):297-98.
- 32. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qual Res Sport Exerc Health* 2019;11(4):589-97.
- 33 Author 3 et al [removed for review]
- 34. Author 1 et al [removed for review]
- 35. Author 1 et al [removed for review]
- 36. Walsh E, Malson H. Discursive constructions of eating disorders: A story completion task. *Fem Psychol* 2010;20(4):529-37.
- 37. Frith H. Accounting for orgasmic absence: exploring heterosex using the story completion method. *Psychol Sex* 2013;4(3):310-22.
- 38. Author 2, Author 1, Author 3 [removed for review]
- 39. Fels L. Collecting data through performative inquiry: A tug on the sleeve. *Youth Theatre Journal* 2012;26(1):50-60.
- 40. Robbins LB, Ling J, Dalimonte-Merckling DM, et al. Sources and Types of Social Support for Physical Activity Perceived by Fifth to Eighth Grade Girls. *J Nurs Scholarsh* 2018;50(2):172-80.
- 41. Newton-John TR, Ventura AD, Mosely K, et al. 'Are you sure you're going to have another one of those?': A qualitative analysis of the social control and social support models in type 2 diabetes. *Journal of Health Psychology* 2017;22(14):1819-29.
- 42. Tye SK, Kandavello G, Gan KL. Types of social supports predicting healthrelated quality of life among adult patients with CHD in the Institut Jantung Negara (National Heart Institute), Malaysia. *Cardiol Young* 2017;27:46-54.
- 43. Malecki CK, Demaray MK. What Type of Support Do They Need? Investigating Student Adjustment as Related to Emotional, Informational, Appraisal, and Instrumental Support. *Sch Psychol Q* 2003;18(3):231-52.
- 44. University of Pennsylvania. Coronavirus or COVID-19? A Glossary to Help Navigate Pandemic Vocabulary Washington D.C.: Targeted News Service; 2020 [Available from: https://login.wwwproxy1.library.unsw.edu.au/login?qurl=https%3A%2F%2Fse arch.proquest.com%2Fdocview%2F2408545418%3Faccountid%3D12763.
- 45. Saghaie T. An A to Z glossary of the new coronavirus words Australia: The Lighthouse; 2020 [Available from: https://lighthouse.mq.edu.au/article/may-

2020/An-A-to-Z-glossary-of-the-new-coronavirus-words accessed 15th September 2020 2020.

- 46. Ro C. Why we've created new language for coronavirus U.K.: BBC Worklife; 2020 [Available from: https://www.bbc.com/worklife/article/20200522-whyweve-created-new-language-for-coronavirus accessed 15th September 2020 2020.
- 47. Merriam-Webster. A Guide to Coronavirus-Related Words: Merriam-Webster; 2020 [Available from: https://www.merriam-webster.com/words-at-play/coronavirus-words-guide/covid-19 accessed 15th September 2020 2020.
- 48. Lawson R. Coronavirus has led to an explosion of new words and phrases and that helps us cope Australia: The Conversation; 2020 [Available from: https://theconversation.com/coronavirus-has-led-to-an-explosion-of-newwords-and-phrases-and-that-helps-us-cope-136909 accessed 15th September 2020 2020.
- 49. Burridge K, Manns H. 'Iso', 'boomer remover' and 'quarantini': how coronavirus is changing our language Australia: The Conversation; 2020 [Available from: https://theconversation.com/iso-boomer-remover-and-quarantini-how-coronavirus-is-changing-our-language-136729 accessed 15th September 2020 2020.
- 50. ABC English. Coronavirus vocabulary: Australian Broadcasting Corporation; 2020 [Available from: https://www.abc.net.au/education/learnenglish/coronavirus-vocabulary/12060370 accessed 15 September 2020 2020.
- 51. Moreno C, Wykes T, Galderisi S, et al. How mental health care should change as a consequence of the COVID-19 pandemic. *Lancet Psychiatry* 2020;7:813-24.
- 52. Lupton D, Lewis S. 'The day everything changed': Australians' COVID-19 risk narratives. *J Risk Res* 2021 doi: https://doi.org/10.1080/13669877.2021.1958045
- 53. Black Dog Institute. Importance of self-care planning COVID-19 mental health and wellbeing resources Australia: Black Dog Institute,; 2020 [Available from: https://www.blackdoginstitute.org.au/wp-content/uploads/2020/04/COVID-19_Self-Care-Planning_Black-Dog-Institute.pdf?sfvrsn=8 accessed 5th March 2021 2021.
- 54. Sandbakken EM, Moss SM. "Now We Are All in the Same Boat. At the Same Time, We Are Not." Meaning-Making and Coping Under COVID-19 Lokdown in Norway. *Human Arenas* 2021 doi: https://doi.org/10.1007/s42087-021-00208-z
- 55. Stamps DL, Mandell L, Lucas R. Relational maintenance, collectivism, and coping strategies among Black populations during COVID-19. *J Soc Pers Relat* 2021;38(8):2376-96.
- 56. Budimir S, Probst T, Pieh C. Coping strategies and mental health during COVID-19 lockdown. *Journal of Mental Health* 2021;30(2):156-63.

| 5 | |
|--|--|
| 5 | |
| 7 | |
| 6 7 8 9 10 11 | |
| 0 | |
| 9 | |
| 10 | |
| | |
| 12 13 14 | |
| 13 | |
| 14 | |
| 15 | |
| 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |
| 25 | |
| 26 | |
| 27 | |
| 28 | |
| 29 | |
| 30 | |
| 31 | |
| 32 | |
| 33 | |
| 34 | |
| 35 | |
| 36 | |
| 36 37 38 | |
| 37 38 39 40 41 42 42 | |
| 30 | |
| 10 | |
| 40 //1 | |
| 41 | |
| 42 | |
| 43 44 | |
| 44 45 | |
| | |
| 46 | |
| 47 | |
| 48 | |
| 49 50 | |
| 50 | |
| 51 | |
| 52 | |
| 53 | |
| 54 | |
| 55 | |
| 56 | |
| 57 | |
| 58 | |
| 59 | |

- 57. Ytre-Arne B, Moe H. Doomscrolling, Monitoring and Avoiding: News Use in COVID-19 Pandemic Lockdown. *Journalism Studies* 2021 doi: 10.1080/1461670X.2021.1952475
- 58. Stephens M. A geospatial infodemic: Mapping Twitter conspiracy theories of COVID-19. *Dialogues Hum Geogr* 2020;10(2):276-81.
- 59. Bruns A, Harrington S, Hurcombe E. 'Corona? 5G? or both?': the dynamics of COVID-19/5G conspiracy theories on Facebook. *Media International Australia* 2020;177(1):12-29.
- 60. O'Connor P, Anglim J, Smillie L. Disagreeability, neuroticism and stress: what drives panic buying during the COVID-19 pandemic Australia: The Conversation; 2020 [Available from: https://theconversation.com/disagreeability-neuroticism-and-stress-whatdrives-panic-buying-during-the-covid-19-pandemic-141612 accessed 3rd March 2021 2021.
- 61. Rudd R, Baur C. Health Literacy and early insights during a pandemic. *Journal of Communication in Healthcare* 2020;13(1):13-16.
- 62. Author 1 et al [removed for review]
- 63. Author 3 et al [removed for review]
- 64. Clarke V, Hayfield N, Moller N, et al. Once upon a time...Qualitative story completion methods. In: Braun V, Clarke V, Gray D, eds. Collecting Qualitative Data: A Practical Guide to Textual, Media, and Virtual Techniques. Cambridge: Cambridge University Press 2017.
- 65. Archibald Q'um Q'um Xiiem J, Bol Jun Lee-Morgan J, De Santolo J. Decolonizing Research: Indigenous Storywork as Methodology. London: Zed Books 2019.
- 66. Sheldon H, Graham C, Pothecary N, et al. Increasing response rates amongst black and minority ethnic and seldom heard groups: A review of literature relevant to the National Acutre Patients' Survey. Oxford: Picker Institute, 2007.

ⁱ Indeed, one participant wrote that the stem was an exact reflection of their life during the pandemic. ⁱⁱ For example, we inferred that the following was taken as an expression of *anger*: "*F**** off *Mum, she thinks. F**** off *Everybody. F**** off *COVID*".

ⁱⁱⁱ We sought to retain participant language when creating meta-categories and combined only closely related terms under each overarching category. For example, *scared* was included in the category of *fear*, while *worry* and *anxiety* were retained as separate categories.

Expressions of distress appearing in fewer than 5% of stories were upset, frustration, panic, anger, anguish, trapped, helplessness, isolation, paranoia, stress, suicidal ideation, uncertainty, unease.
 There were instances (10% of concerns) where no specific feeling of mental distress was articulated

but there was a general implication or expression of mental distress in the narratives.

^{vi} Strategies accounting for less than 5% were *cognitive* (e.g., changing, and challenging patterns of thinking), *food and drink, limiting news consumption, planning for the future, caring for others, exercise, professional support* (e.g., consulting a GP or therapist), *and sleep.*

^{vii} We did not track supports offered to Ali by their parents as these appeared only infrequently in stories.

^{viii} We counted the number of stories which featured specific words from the Covid Vocabulary list (e.g., if a single story used the word *Covid* three times, this was counted as one story featuring that word). The authors took context into consideration when tracking words use. For example, *isolated* was taken to be an example of Covid Vocabulary if it related to public health orders about isolating to prevent the spread of Covid-19: "she's in a place where she can self-isolate". However, we did not count *isolated* as Covid Vocabulary if it appeared in contexts like the following: "Ali's mother is feeling isolated and lonely".

^{ix} Other words counted (that appeared in less than 5% of stories) were *Face Mask*, *Restrictions*, *Washing Hands*, 1.5 *Meters*, *Hand Sanitiser*, *Telehealth*, *Zoom*, *Asymptomatic*, *Cluster*, *COVIDsafe App*, *Death Tolls*, *Drive-Through Testing*, *Essential Activities*, *Frontline Healthcare Worker*, *Incubation Period*, *Intubate*, *Panic Buying*, and *Safety Measures*.

to beet teries only

Standards for Reporting Qualitative Research (SRQR) -**Checklist for** "This bloody rona!": Using the digital story completion method to explore mental health impacts of COVID-19 in Australia

| Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded | |
|--|-----|
| theory) or data collection methods (e.g., interview, focus group) is recommended | 1 |
| Abstract - Summary of key elements of the study using the abstract format of the | |
| intended publication; typically includes background, purpose, methods, results, | |
| and conclusions | 1-2 |

Introduction

| | Problem formulation - Description and significance of the problem/phenomenon | |
|-----|--|-----|
| | studied; review of relevant theory and empirical work; problem statement | 2-3 |
| | Purpose or research question - Purpose of the study and specific objectives or | |
| | questions | 3-4 |
| | | |
| Met | hods | |

Methods

| · L . | |
|---|-----|
| Qualitative approach and research paradigm - Qualitative approach (e.g., | |
| ethnography, grounded theory, case study, phenomenology, narrative research) | |
| and guiding theory if appropriate; identifying the research paradigm (e.g., | |
| postpositivist, constructivist/ interpretivist) is also recommended; rationale | 6-7 |
| Researcher characteristics and reflexivity - Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, | |
| relationship with participants, assumptions, and/or presuppositions; potential or | |
| actual interaction between researchers' characteristics and the research | |
| questions, approach, methods, results, and/or transferability | 6 |
| Context - Setting/site and salient contextual factors; rationale | 3-4 |
| Sampling strategy - How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale | N/A |
| Ethical issues pertaining to human subjects - Documentation of approval by an | |
| appropriate ethics review board and participant consent, or explanation for lack | |
| thereof; other confidentiality and data security issues | 4-5 |
| | + 5 |
| Data collection methods - Types of data collected; details of data collection | |
| procedures including (as appropriate) start and stop dates of data collection and | |
| analysis, iterative process, triangulation of sources/methods, and modification of | - |
| procedures in response to evolving study findings; rationale | 5-6 |

| 1 | |
|--|--|
| 2 | |
| 3 | |
| 4 | |
| 4 5 | |
| 6 | |
| 7 | |
| ð G | |
| و 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 15 | |
| 15 16 | |
| 17 | |
| 18 | |
| 6 7 8 9 10 11 12 13 14 15 16 17 18 19 | |
| 20 | |
| 21 | |
| 20 21 22 23 | |
| 24 | |
| 25 | |
| 26 27 | |
| 27 | |
| 28 29 | |
| 29 30 | |
| 31 | |
| 32 | |
| 33 | |
| 34 35 36 37 | |
| 35 36 | |
| 37 | |
| 38 | |
| 39 | |
| 40 | |
| 41 42 | |
| 43 | |
| 44 | |
| 45 | |
| 46 | |
| 47 48 | |
| 40 49 | |
| 50 | |
| 51 | |
| 52 | |
| 53 | |
| 54 55 | |
| 55 56 | |
| 57 | |
| 58 | |
| 59 60 | |
| 60 | |

| Data collection instruments and technologies - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data | |
|--|-----|
| collection; if/how the instrument(s) changed over the course of the study | 5-6 |
| Units of study - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results) | 8-9 |
| Data processing - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of | |
| data integrity, data coding, and anonymization/de-identification of excerpts | 6-7 |
| Data analysis - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a | |
| specific paradigm or approach; rationale | 6-7 |
| Techniques to enhance trustworthiness - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); | |
| rationale | 6-7 |

Results/findings

| Synthesis and interpretation - Main findings (e.g., interpretations, inferences, a themes); might include development of a theory or model, or integration with | and |
|--|------|
| prior research or theory | 7-15 |
| Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings | 7-15 |
| ussion | |

Discussion

| ne field - Short summary of main findings; explanation of how onclusions connect to, support, elaborate on, or challenge co | |
|---|-------|
| cholarship; discussion of scope of application/generalizability | |
| nique contribution(s) to scholarship in a discipline or field | 15-18 |
| imitations - Trustworthiness and limitations of findings | 18-20 |

Other

| Conflicts of interest - Potential sources of influence or perceived influence on | |
|---|----|
| study conduct and conclusions; how these were managed | 20 |
| Funding - Sources of funding and other support; role of funders in data collection, | |
| interpretation, and reporting | 20 |