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Podcasts, Mental Health, and Stigma: Exploring Motivations, Behaviors, and Attitudes Among Listeners

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ABSTRACT

Podcasts are increasingly utilized in mental health contexts, such as communicating advice around improving wellbeing, guided meditations, psychoeducation, and translating research findings. This study aimed to explore demographics, motivations, behaviors, and attitudes of podcast listeners regarding podcasts dealing with content and themes related to mental health. Adult Australian podcast listeners ($N = 629$) completed a cross-sectional online survey including the Acquisition Questionnaire (AQ-9), the Mental Health Knowledge Schedule (MAKS) and the Internalised Stigma of Mental Illness scale (ISMI-9). Approximately one third had listened to a mental health-themed podcast in the last 12 months. Logistic regression models showed people who listened to a mental health-themed podcast held fewer stigmatizing attitudes toward people experiencing mental health issues on the AQ-9 (OR 1.0, 95% CI 0.9–1.0, $p < .001$), and had higher levels of mental health knowledge on the MAKS (OR 1.1, 95% CI 1.0–1.2, $p < .01$). However, there was no significant relationship with internalized stigma on the ISMI-9 (OR 1.4, 95% CI 0.9–2.3, $p = .2$). Future research is needed to determine if such podcasts indeed impact listeners' attitudes and behaviors, and, if they do, how podcasts can be used for effective communication around mental health content.

KEYWORDS

Podcast; mental illness stigma; mental health literacy; internalized stigma; health communication

Introduction

A podcast is an Internet-based audio file which can be streamed or downloaded to a computer or mobile device, typically available as a series of episodes. First introduced in the early 2000s amidst the iPod era (Berry, 2016), there are now an estimated two million podcast series and over 48 million individual podcast episodes available (Winn, 2021). More than 40% of US and more than 30% of Australians adults have listened to a podcast in the last month, with one in five listening weekly (Australian Broadcasting Commission, 2019; Edison Research, & Triton Digital, 2021). Market research has identified some listenership trends; younger people aged 12–34 make up two thirds of listeners, and listenership declines with age (Edison Research, & Triton Digital, 2021). Meanwhile, men and women listen at

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fairly equal rates, and most listeners are White, and have tertiary education (ABC, 2019; Edison Research, & Triton Digital, 2021).

Previous researchers have discussed podcasts in terms of *Uses and Gratifications Theory*, which investigates individual's reasons for media consumption based on the assumption that users actively, rather than passively, seek out media content based on their needs and their goals (Katz et al., 1973; Perks & Turner, 2018). Podcast listeners have highlighted the convenience of being able to access a wealth of interesting content, to control when and how they listen, and to multitask (Berry, 2016; Cho et al., 2017; Perks & Turner, 2018). Many of these uses and gratifications emerged with older technologies including radio, audiobooks, and mp3 players, but the proliferation of low-cost mobile streaming has increased accessibility to audio media, and in many instances replacing older formats in listeners' lives.

Many podcasts are a form of customizable "edutainment." Podcasts offer a platform for sharing diverse experiences and issues that might not otherwise be covered in mainstream, commercial media. They are perceived as more engaging and diverse than traditional broadcast radio (ABC, 2019; Perks & Turner, 2018; Perks et al., 2019), with listeners considering them a "productive" way to use their time during other tasks such as commuting or doing chores. In contrast to traditional radio, podcast communication is less linear (Berry, 2016); listeners connect with podcast hosts and other listeners over time, indicating community and intimacy (Meserko, 2014; Perks & Turner, 2018). Additionally, as listeners can pause, rewind, or listen multiple times, this can help with language or literacy barriers (Ruben, 2016).

Mental Health-Themed Podcasts

Podcast listeners may actively seek out podcasts for mental health-related reasons. Individuals and organizations are producing and releasing podcasts covering a range of topics relating to improving mental health and wellbeing (such as wellbeing tips, guided meditation, relaxation or mindfulness, psychoeducation, or coaching), clinical and counseling psychology (such as therapeutic content, information about living with mental health issues, and professional development), and research and advocacy (such as translating research findings, news, and policy updates). These podcasts vary in format but often include multiple presenters or guests who share first-person narratives through conversational-style interviews. While many are available to the general public, others may be used in private therapeutic settings, such as part of a multi-component psychological intervention (e.g., Chan et al., 2016; Shaygan et al., 2021; Voss, 2010). Podcasts themselves have therapeutic qualities; listeners have described podcast listening as a type of arousal moderation, even as background noise (Perks & Turner, 2018), with listeners tuning in for relaxation or even self-care.

While some previous research has explored how radio can be used for mental health-related communication (e.g., Blood et al., 2007; Cocksedge et al., 2019; Hugelius et al., 2019), podcast research in this area is emerging. Research so far is promising, as podcast-based interventions have been found to reduce performance anxiety, improve self-compassion, and reduce body image concerns (Albertson et al., 2015; Hamzaoğlu & Koçoğlu, 2016). Other studies have found high levels of interest

and acceptability, and feasibility, for podcast-based interventions (e.g., Bui et al., 2018; Voss, 2010).

Podcasts as a Medium for Attitude Change

Negative attitudes and behaviors toward people experiencing mental health issues are commonly referred to as "mental illness stigma." This includes negative and damaging stereotypes and emotional responses relating to the experience of mental health issues, with the central theme being that one is flawed, undesirable or threatening because of such experiences (Fox et al., 2018). Unfortunately, the general public hold high levels of stigmatizing beliefs and engage in high levels of discriminatory behaviors in this context (Walsh & Foster, 2021). Impacts of stigma and discrimination are profound; people living with mental health issues have reported anticipating discrimination from others, withdrawing from educational and workplace opportunities, receiving inappropriate or ineffective healthcare, and difficulties in personal and professional relationships (Groot et al., 2020). People living with mental health issues may also begin to personally endorse these negative beliefs and feelings, thereby experiencing internalized stigma (Hammer & Toland, 2017).

Like many forms of media, podcasts have the potential to facilitate attitude change around social issues. For example, episodes centering around mental health have the potential to educate listeners and increase their awareness, as seen in educational literature (Blum, 2018; Riddell et al., 2020). The intimacy of podcast listening (Berry, 2016; Meserko, 2014; Spinelli & Dann, 2019), such as listening by oneself at home or with headphones in a public space, can allow listeners to engage with sensitive or challenging topics in a safe and reflective way. Sharing information and personal experiences around social issues in a podcast format may also increase listeners' understanding and empathy (Dowling & Miller, 2019; Perks et al., 2019). Immersive audio storytelling strategies such as vocal tone, music, and sound effects can make episodes engaging and interesting (Dowling & Miller, 2019). When understood in the context of the Elaboration Likelihood Model (Petty & Briñol, 2011), a model explaining how people can be persuaded to change their attitudes, these data suggest that mental health-themed podcast messages could involve both listeners' "central" and "peripheral" routes of processing. Hence, podcasts have potential to reduce listeners' stigmatizing attitudes toward others, as well as potential to reduce listeners' internalized stigma.

To date, limited research has explored the potential for podcasts to influence attitudes toward individuals who experience mental health issues. An experimental study by French et al. (2011) involved a podcast featuring an interview with a clinician about psychosis, paranoia, and hearing voices, finding listeners' stigmatizing attitudes decreased after listening to the podcast episode. Another experimental study (Dure, 2020) found that listening to an audio vignette delivered in a brief audio podcast format could negatively impact upon listeners' stigma; listeners who heard a brief news story describing a thief who experienced mental illness were more likely to attribute the crime to mental illness. In a cross-sectional study (Nathan, 2018), the researcher surveyed people who listen to the popular weekly American podcast "Mental Illness Happy Hour," which features conversations with guests on topics such as mental health issues, trauma, and therapy. The study identified that people who had listened to the podcast for longer periods of time experienced more positive

feelings about others with mental health issues, more positive feelings about others seeking therapy for mental health issues, and lower levels of internalized stigma.

Although these studies are promising, more research is needed to understand more about relationships between stigmatizing attitudes, knowledge, and podcast listening more broadly. Research is also needed to understand how and why mental health-themed podcasts are currently being listened to, and who is likely to listen, to inform the development of engaging and evidence-informed podcasts – especially around complex topics such as mental health.

Aims and Hypotheses

The present study aimed to identify demographic characteristics of people who choose to listen to mental health-themed podcasts, as well as their behaviors and motivations for listening. It also aimed to identify whether people who listen to mental health-themed podcasts hold different levels of stigmatizing attitudes and mental health knowledge, compared to general podcast listeners.

Hypotheses were:

H1. Listening to a mental health-themed podcast would be associated with younger age, female gender, Australian/New Zealand/European/North American ancestry, and having lived experience of mental health issues.

H2. Listening to a mental health-themed podcast would be associated with lower levels of stigmatising attitudes and higher mental health knowledge, controlling for socially desirable response style.

H3. Listening to a mental health-themed podcast would be associated with lower levels of internalised stigma, among listeners with lived experience of mental health issues, controlling for socially desirable response style.

Materials and Methods

Design

This study involved a cross-sectional, online survey. Procedures were approved by the University of Melbourne Human Research Ethics Committee (2020-20331-13253-3).

Participants and Recruitment

Participants were aged 18 years and older who had listened to at least one podcast (on any topic) in the previous 12 months, who reported living in Australia. The sampling strategy was informed by the National Stigma Report Card, which surveyed nearly 2000 Australian participants who reported living with complex mental health issues (Groot et al., 2020). The Report Card identified several settings where stigma and discrimination were frequent; in the last 12 months, nearly 80% of participants reported experiencing stigma or discrimination in employment, over 87% in healthcare, and nearly 90% in mass media. Hence, the present study aimed to over-sample people who had experience working and/or studying in these three settings, as they may be targeted in future interventions: workplace management and Human Resources; healthcare; and media. In addition, people with lived experience of

mental health issues were over-sampled to explore the relationship between podcast listening and internalized stigma. Remaining participants were general podcast listeners who did not necessarily identify with any of these groups.

A power analysis was conducted based on anticipated unequal sample sizes between those who had listened to mental health-themed podcasts, and those who had not (Dobson & Gebski, 1986). This analysis identified a minimum sample size of $N = 420$ required to detect a proportional difference of 20% in a two-sided test, based on the conservative assumption that only a minority (estimated 15%) of the sample would have listened to a mental health-themed podcast, with power =.08 and alpha =.05. The final subgroup size was larger than estimated, hence sufficient to detect a smaller proportional difference than planned for, approximately 13%.

Recruitment occurred through social media, newsletters, and sharing with organizational and personal contacts. A flyer, social media images, and written text advertising the "Podcasts and Mental Health Study" were provided to a range of stakeholders including podcast hosts/producers, healthcare and mental healthcare peak bodies, media organizations, and workplace organizations. The advertisements did not mention stigma. Due to initial slow recruitment, recruitment was opened to first year psychology students completing studies as part of a Research Experience Program for course credit at The University of Melbourne (approved through an ethical amendment; 2021–20331 -15,972-5).

Measures – Demographics

Questions included year of birth, gender, and postcode. Participants were asked to self-identify "What is your ancestry?" and could select up to two ancestries from a list, or type in up to two options. The wording of this question, and response options, were based on how the Australian Census categorizes ancestry for population-level data collection (Australian Bureau of Statistics, 2016). Additionally, participants were asked if they identified as a person who experiences distress, trauma or mental health issues, and if yes, asked "Have you ever been told by a doctor or mental health professional that you have any of the following conditions?" followed by a multiple selection list of diagnoses. They were also asked to indicate if they identified as a carer of somebody who experiences distress, trauma or mental health issues. Participants were also asked to select current or former area(s) of employment or study, with a range of industries listed, in order to identify those with experience in the industries of media and communications, healthcare, and Human Resources (HR). They were also asked if they were a manager or responsible for supervising others in their current role.

Measures – Podcast Listening

Questions were asked about general podcast listening in the last month, including how many individual podcast episodes they had listened to (ranging from "none" to "11 or more"), number of podcast series listened to (ranging from "none" to "11 or more"), and how much of an episode they listened to on average (ranging from "under half" to "all of it"). They were also asked to select from a range of options around types of podcasts listened to in the last 12 months (e.g., "True crime," "News," "Mental health") and reasons for listening to podcasts in general (e.g., "To entertain me," "To pass time"). Question choices

were informed by market research into Australian podcast listeners (ABC, 2019). Participants who selected "Mental health" were asked why they listen to mental health-themed podcasts specifically (e.g., "To understand mental health issues better"), and types of mental health-themed podcasts listened to (e.g., "Interviews with people with lived experience"). The survey ascertained interest in a new podcast on the topic of stigma experienced by people living with mental health issues. These findings will be presented in a subsequent publication, in the context of developing a new podcast (Carrotte et al., in press).

Measures – Stigma, Knowledge and Response Style

The survey included two validated scales which were chosen based on a review and comparison of stigma concepts and measures (Fox et al., 2018). First, the Attribution Questionnaire – Short Form (AQ-9; Corrigan et al., 2014) measured stigmatizing attitudes and discriminatory intentions. This 9-item scale presents a scenario of "Harry," a man living with schizophrenia, and asks participants to rate their emotional response to Harry, how likely they would be to blame him for his experiences, and how likely they would be to avoid him on a 9-point Likert scale. This scale has acceptable psychometric properties, and is a brief version of the widely-used AQ-27 (Corrigan et al., 2014). Cronbach's alpha for the present sample was 0.78. All participants completed this measure.

Second, the Internalised Stigma of Mental Illness – short form (ISMI-9) measured internalized stigma (Hammer & Toland, 2017). This 9-item scale asks participants to rate how strongly they agree with a series of statements regarding their views about living with mental health issues on a 4-point Likert Scale. This scale has strong psychometric properties and is a shortened version of the widely used ISMI-29 (Hammer & Toland, 2017). This scale was only completed by participants who endorsed having lived experience of mental health issues earlier in the survey. Cronbach's alpha was 0.81.

Further, the Mental Health Knowledge Schedule (MAKS) measured mental health knowledge, a key aspect of mental health literacy (Evans Lacko et al., 2010) and was completed by all participants. This is one of the shortest mental health knowledge scales available that has adequate psychometric properties (Wei et al., 2016). The MAKS contains 12 items relating to mental health knowledge; participants rate how strongly they agree with items on a 6-point Likert scale. In the present study, only the first six items of the scale were used, which ask questions about stigma-related topics such as help-seeking, employment, and recovery. Questions 7–12, which ask respondents if they classify certain experiences and behaviors as "mental illness," were excluded as they were irrelevant to the study aims; these questions are designed to understand a participant's conceptualization of mental illness diagnoses, and how broad this may be (Evans Lacko et al., 2010). Other studies have also excluded these items depending on their aims (e.g., Hansson & Markström, 2014; Robinson & Henderson, 2019). In the present study, Cronbach's alpha for the six included items was low (0.47). However, the scale authors caution against using internal consistency as an indicator of the quality of responses since the MAKS does not measure a unified construct (Evans Lacko et al., 2010), so this was not a concern and the scale was retained in analyses.

Finally, the Balanced Inventory of Desirable Responding – Short Form (BIDR-16; Hart et al., 2015) was used to measure of socially desirable response style and was also completed

by all participants. The BIDR-16 is a 16-item scale containing a variety of statements assessing impression management (bias toward pleasing others) and self-deceptive enhancement (honest but overly positive responding); the full-scale score was used to indicate response style. Items are scored on a 7-point Likert scale. The scale is considered valid and reliable and was developed based on the 40-item original BIDR (Hart et al., 2015). Cronbach's alpha for the present study was 0.78.

Procedure

The survey was available to the public via Qualtrics for four months (January 2021–May 2021) and to first-year psychology students for six weeks (April – May 2021). Surveys included a short introductory video followed by a plain language statement and consent form, and took a median 13.2 minutes to complete. First-year psychology students received study credit. Other participants could opt into a prize draw to win one of five AUD $50 digital vouchers.

Data Analysis

Data were analyzed using SPSS version 25. Responses with over 70% complete data were maintained in the dataset, and pairwise deletion was used to manage missing data. Data integrity checking included reviewing for straight-line responding, time taken to complete the survey, a ReCAPTCHA score and an attention check measure (Kung et al., 2018).

Descriptive statistics were generated for all variables including means, standard deviations, and valid percentages for categorical variables. Three logistic regression analyses were carried out to answer the hypotheses, with variables entered in only one block as recommended by Field (2017). For these analyses, age was derived from year of birth and used continuously, whereas other demographic variables were dichotomized (for example, "major city" versus "regional, rural or remote" postcode based on the Accessibility/Remoteness Index of Australia; Australian Bureau of Statistics, 2001). Dichotomous variables were also created to identify those who worked in management and/or HR; healthcare and/or mental healthcare; and/or media and communications.

To test H_1, the first logistic regression model was run with the dependent variable being mental health-themed podcast listening (*listened to mental health podcast in last year* vs *not listened*) with demographic independent dummy variables: age, gender, ancestry, lived experience, healthcare professional, manager/supervisor, media/comms, while controlling for source of recruitment (first-year psychology student vs general public). Originally, a one-way MANCOVA was planned to assess the second hypothesis, but the assumptions of sphericity and homogeneity of variance were not met for AQ-9 scores. Instead, a second logistic regression was run with AQ-9, MAKS, and BIDR scores as continuous independent variables, and mental health-themed podcast listening as the dependent variable. To test H_3, a third logistic regression was run, only including participants with lived experience of mental health issues, and included the same continuous variables alongside the ISMI-9. Assumptions were met for all logistic regression models as per Field (2017).

Results

There were 732 respondents to the survey. Through data screening and integrity checks, 11 were removed who had not listened to a podcast in the last 12 months. Nine were removed due to failing the ReCAPTCHA item, 2 were removed due to being duplicate responses, 22 were removed who completed under 70% of the survey, 33 were removed who completed the survey under the 10th percentile (approximately 5.7 minutes, too fast to accurately respond to items), and 26 who failed the attention check measure and/or visual inspection of their data response pattern indicated straight-lining or other response quality issues.

Demographic information for the final sample of 629 valid participants is presented in Table 1. Mean age was 28.6 years (SD = 11.4 years) and 71.1% participants were female, 27.0% male, and 1.9% reported non-binary identity or did not disclose their gender. The majority reported Australian, European, North American or New Zealand ancestry (65.0%), were living in a major city at the time of completing the survey (83.1%), and had post high-school education (57.1%). Over one third (39.7%) were first-year psychology students.

Podcast Listening Behaviors

Most participants (62.3%) listened to at least four individual podcast episodes in the last month, and most participants (60.6%) listened to one to three separate podcast series in the last month. Most popular genres were *society and culture*, and *comedy*, listened to by 46.4% and 38.0% of participants respectively. Detailed data about general podcast listening behaviors are presented in an appendix.

Approximately one third (34.3%) reported listening to a podcast on the topic of mental health in the last 12 months. The most popular types of mental health-themed podcasts were *interviews with people with lived experience* (of mental health issues), *mindfulness/meditation/relaxation*, closely followed by *strategies for coping with mental health issues*. Most popular listening motivations were *to understand mental health issues better*, *to learn strategies to support my mental health*, and *because it's a topic I care about* (see Table 2).

H_1: Demographics of Mental Health-Themed Podcast Listeners

In total, 606 participants were included in the first binary logistic regression model to test H_1 (participants who reported non-binary gender and/or did not state their ancestry were excluded from this analysis). The model (Table 3) was a significant fit of the data ($p < .001$), successfully fitting 66.0% of cases. Only two variables were significantly and independently associated with the dependent variable (having had listened to mental health-themed podcasts): lived experience of mental health issues, and age. People with lived experience were nearly twice as likely to listen to a mental health-themed podcast compared to those without lived experience (OR 1.8, 95% CI 1.2–2.6, $p < .00$). When examining cross-tabs, 43.5% (134/308) of those with lived experience had listened to a mental health-themed podcast, compared to 25.5% (82/321) of those without lived experience. People who were older were also more likely to listen to mental health themed podcasts (OR 1.1, 95% CI 1.0–1.1, $p < .001$); the mean age of participants who had listened to a mental health-themed podcast was 32.3 years (SD = 0.9), whereas the mean age of people who had not listened was 26.7 years (SD = 0.5). H_1 was partially supported, as listening to a mental health-themed

Table 1. Demographics of survey participants (N = 629).

Variable	Response option	*n*	%
Gender*	Female	447	71.1
	Male	170	27
	Non-binary	9	1.4
	Unsure	7	1.1
	Agender	3	0.5
	Gender-fluid	2	0.3
	Trans	2	0.3
	Prefer not to say	2	0.3
	Other gender identity	2	0.3
	Bigender	1	0.2
Location	Major city	523	83.1
	Multiple classifications	62	9.9
	Inner regional	34	5.4
	Missing or unclassified	6	1
	Outer regional	4	0.6
Education	Year 12 or equivalent	266	42.3
	Undergraduate degree	162	25.8
	Postgraduate degree	161	25.6
	Diploma	23	3.7
	Trade certificate	13	2.1
	Year 10 or equivalent	3	0.5
	Year 11 equivalent	1	0.2
Ancestry*	Australian	335	53.3
	Other ancestry 1	146	23.2
	Chinese	96	15.3
	English	96	15.3
	Indian	28	4.5
	Irish	28	4.5
	Other ancestry 2	28	4.5
	Italian	27	4.3
	New Zealand	20	3.2
	Scottish	14	2.2
	Prefer not to say	12	1.9
	Vietnamese	11	1.7
	Maltese	8	1.3
	Sri Lankan	7	1.1
	Filipino	5	0.8
	Turkish	5	0.8
	Maori	1	0.2
Lived experience*	A person who experiences distress, trauma or a mental health issue	308	49
	Neither of these	305	48.5
	A carer of a person who experiences distress, trauma or a mental health issues	45	7.2
Diagnosis among those with lived experience ($N = 308$)*	Depressive disorder (e.g. depression, dysthymia)	154	50
	Generalised anxiety disorder	154	50
	Social anxiety disorder	53	17.2
	Panic disorder (panic attacks)	50	16.2
	Post-traumatic stress disorder	50	16.2
	Other mental health issue	39	12.7
	None of these	29	9.4
	Obsessive compulsive disorder	28	9.1
	Bipolar disorder	24	7.8
	Anorexia nervosa	17	5.5
	Borderline personality disorder	17	5.5
	I don't wish to say	17	5.5
	Bulimia nervosa	6	1.9
	Post-natal depression	6	1.9
	Psychosis	5	1.6
	Dissociative identity disorder	4	1.3

(*Continued*)

Table 1. (Continued).

Variable	Response option	*n*	%
	Schizoaffective disorder	2	0.6
	Obsessive compulsive personality disorder	0	0
Current or former area of employment/ study*	Psychologist, counselor or other mental health professional	154	24.5
	Other area	143	22.7
	Doctor, nurse or other healthcare professional	125	19.9
	Teacher or educator	91	14.5
	N/A	90	14.3
	Retail or sales associate	87	13.8
	Artist, musician or other creative professional	67	10.7
	Journalist, media or other communications professional	50	7.9
	Accountant or financial professional	31	4.9
	Human Relations (HR) professional	24	3.8
Manager/supervisor in current role	No	459	73
	Yes	99	15.7
	N/A	71	11.3

* Participants could select multiple options so percentage does not add up to 100%.

Table 2. Types of mental health-themed podcasts and motivations for listening (N = 216).

Variable	Response option	*n*	%
Types of mental health-themed podcasted listened to in last 12 months	Interviews with people with lived experience	161	74.5
	Mindfulness/meditation/relaxation	117	54.2
	Strategies for coping with mental health issues	113	52.3
	Educational	80	37
	Professional development	44	20.4
	Other interviews	39	18.1
	Policy/advocacy	30	13.9
	Other type	13	6
Reasons endorsed for listening to mental health-themed podcasts	To understand mental health issues better	161	74.5
	To learn strategies to support my mental health	154	71.3
	Because it's a topic I care about	140	64.8
	To learn new things	115	53.2
	To inspire or motivate me	91	42.1
	To learn strategies to support somebody else	86	39.8
	To see how other people live or what they think	83	38.4
	To support my professional development	73	33.8
	Because I have interest in the guests	47	21.8
	Because I have interest in the host	45	20.8
	To help me wind down or relax	43	19.9
	To help me fall/stay asleep	23	10.7
	Other reason	10	4.6
	To feel like I'm not missing out	4	1.9
	None of these	0	0

N.B. Participants could endorse multiple items so percentages do not add up to 100.

podcast was associated with having lived experience of mental health issues, but the other demographic variables were not statistically significant, and age was significant in the opposite direction to what was hypothesized.

Table 3. Logistic regression model 1 – demographic variables associated with whether a participant has listened to a mental health-themed podcast.

		95% CI for odds ratio				
Variable	OR	Lower	Upper	*B*	*SE*	*p*
Age*	1.1	1.0	1.1	0.1	0.0	<0.001
Gender						
Female	1.5	1.0	2.3	0.4	0.2	0.05
Male	1.0					
Experience of distress, trauma or mental health issues						
Lived experience	1.8	1.2	2.6	0.6	0.2	<0.01
No lived experience	1.0					
Media/communications professional						
Yes	1.2	0.7	2.3	0.2	0.3	0.53
No	1.0					
Healthcare professional						
Yes	1.1	0.7	1.6	0.1	0.2	0.70
No	1.0					
Manager/supervisor						
Yes	1.1	0.7	1.7	0.1	0.2	0.73
No						
Source						
First-year psychology student	1.5	0.9	2.4	0.4	0.2	0.09
General public	1.0					
Ancestry						
Australian, New Zealand, European or North American ancestry	0.8	0.5	1.2	−0.2	0.2	0.28
Other ancestry	1.0					
Constant	0.1			−2.8	0.4	0.00

R^2 = .07 (Hosmer & Lemeshow), .08 (Cox & Snell), .11 (Nagelkerke). Model chi square(8) = 52.25, $p < .001$.
*Denotes continuous variable.

Table 4. Logistic regression model 2 – stigma and mental health knowledge scores associated with whether a participant has listened to a mental health-themed podcast, controlling for socially desirable response.

	Not listened		Listened					95% CI for odds ratio		
Variable	*M*	*SD*	*M*	*SD*	*B*	*SE*	OR	Lower	Upper	*p*
MAKS score*	24.0	2.9	25.1	2.8	0.1	0.0	1.1	1.0	1.2	**<0.01**
AQ9 score*	29.5	10.1	25.5	8.4	−0.0	0.0	1.0	0.9	1.0	**<0.001**
BIDR score*	64.4	12.8	64.7	13.3	−0.00	0.0	0.1	1.0	1.0	0.80
Constant	24.0	2.9	25.1	2.8	−1.9	1.0	0.2			0.07

R^2 = 0.05 (Hosmer & Lemeshow), 0.06 (Cox & Snell), 0.08 (Nagelkerke). Model chi square(3) = 36.4, $p < .001$. *Continuous variables.

H_2: Podcast Listening, Stigma and Mental Health Knowledge

In total, 619 participants were included in the second binary linear regression model to assess H_2. The model (Table 4) successfully fitted 66.4% of cases ($p < .001$). Both variables of interest (stigmatizing attitudes and mental health knowledge) were significantly associated with the dependent variable, when controlling for socially desirable response style: MAKS score (OR 1.1, 95% CI 1.0–1.2) and AQ-9 score (OR 1.0, 95% CI 0.9–1.0). H_2 was supported, as people who scored higher on the MAKS, thereby demonstrating higher mental health knowledge, were more likely to listen to a mental health-themed podcast compared to those with lower scores. Also supporting H_2, people who scored lower on the AQ-9, and thereby had lower levels of

Table 5. Logistic regression model 3 – stigma, internalized and mental health knowledge scores among people with lived experience, associated with whether a participant has listened to a mental health-themed podcast, controlling for socially desirable response.

	Not listened		Listened					95% CI for odds ratio		
Variable	*M*	*SD*	*M*	*SD*	*B*	*SE*	OR	Lower	Upper	*p*
MAKS score*	24.6	2.7	25.4	2.7	0.1	0.1	1.1	1.0	1.2	0.05
AQ9 score*	28.3	9.9	24.2	7.9	−0.1	0.0	1.0	0.9	1.0	**<0.01**
BIDR score*	61.4	11.9	63.1	13.2	0.0	0.0	1.0	1.0	1.0	0.2
ISMI-9*	2.0	0.5	2.0	0.5	0.4	0.3	1.4	0.9	2.3	0.2
Constant					−2.8	1.7	0.1			0.1

$R^2 = 0.05$ (Hosmer & Lemeshow), .07 (Cox & Snell), .09 (Nagelkerke). Model chi square(4) = 20.8, $p < .001$. *Continuous variables.

stigmatizing attitudes, were more likely to listen to a mental health-themed podcast compared to those with higher scores.

H_3: Podcast Listening and Internalised Stigma

In the third and final binary logistic regression, to assess H_3, 303 participants with lived experience of mental health issues were included in the analysis; five of the 308 participants with lived experience were excluded due to missing data. The model was a significant fit ($p < .001$), successfully fitting 60% of cases (Table 5). Only one variable of interest was independently and significantly associated with the dependent variable: AQ-9 score (OR 1.0, 95% CI 0.9–1.0). People who scored lower on the AQ-9 and thereby had lower levels of stigmatizing attitudes were more likely to listen to a mental health-themed podcast. There was no significant association observed for either ISMI-9 or MAKS scores in this model. H_3 was not supported, as there was no significant association observed between listening to a mental health-themed podcast and internalized stigma.

Discussion

This study explored demographics, attitudes, and behaviors and motivations of Australian podcast listeners regarding mental health-themed podcasts. The study also aimed to identify the relationships between listening to these podcasts and demographic variables, stigmatizing attitudes, mental health knowledge, and internalized stigma. This is the first known study to explore these variables among general podcast listeners, across a range of mental health-themed podcasts. Hypotheses were partially met.

Around one third of the sample had listened to a mental health-themed podcast in the last 12 months. This study provided new insight into who listens to mental health-themed podcasts, and motivations for listening. Hypothesis 1 was partially met, as people with lived experience were nearly twice as likely to be listeners of mental health-themed podcasts compared to those without experience of mental health issues. These individuals are likely to have vested interest in the topic. Further, some of the most popular motivations for listening were around strategies to cope with mental health issues, aligning with research into usage of podcasts in clinical contexts (e.g., Chan et al., 2016; Shaygan et al., 2021; Voss, 2010). Furthermore, the popularity of interview-style podcasts implies that people with

lived experience value listening to and learning from their peers. This conclusion is supported by research around the value of peer support in the mental health context, including positive effects on hope, recovery, and empowerment (Lloyd-Evans et al., 2014). However, age was significant in the opposite direction that was hypothesized, with older participants more likely to listen to mental health themed podcasts than younger participants. This suggests that mental health-podcast listening is not necessarily reflective of general age-related podcast listening trends (ABC, 2019; Edison Research, & Triton Digital, 2021).

Meanwhile, the findings highlight the potential of podcasts for effective communication around mental health. First, the findings highlight the potential for education: mental health podcast listeners reported education- and information-based motivations for listening, and over a third of these listeners reported listening to educational mental health-themed podcasts. This suggests that many listeners are actively seeking out information which meets their interests and needs (Perks et al., 2019), also aligning with the "central" route of processing from the Elaboration Likelihood Model (Petty & Briñol, 2011). That is, listeners are exposed to educational content requiring focused thought and concentration, an important component of attitudinal change. Yet, podcast listeners also reported emotion-based motivations and podcast types that align with a "peripheral" route of processing (Petty & Briñol, 2011), with common motivations including "because it's a topic I care about" and "to inspire or motivate me." Furthermore, the most popular type of mental health-themed podcast was "interviews with people with lived experience." These findings are aligned with literature around the sense of intimacy and connection associated with podcast-based storytelling (Perks et al., 2019), as well as empathy, a set of emotions and cognitions associated with prosocial behaviors (Ding & Lu, 2016). Of note, it is well established that contact with people with lived experience of mental health issues is an effective element of stigma reduction intervention (Thornicroft et al., 2016).

An important finding related to stigma: hypothesis 2 was met, as participants who had listened to a mental health-themed podcast held lower levels of stigmatizing compared to those who had not listened, aligned with previous research (French et al., 2011; Nathan, 2018). They also had higher levels of mental health knowledge. These relationships were present despite controlling for socially desirable response style, a key strength of the present study. It is possible that people who have listened to mental-health themed podcasts experience a change in stigmatizing attitudes because of listening, a relationship demonstrated previously in experimental studies (Dure, 2020; French et al., 2011). Future stigma reduction interventions could explore using podcasts. However, the current study cannot infer causality. It is also possible that participants are were drawn to listen to these podcasts – and this style of storytelling – already have low levels of stigma and high levels of knowledge. This relationship is worthy of further study.

Though the relationship between podcast listening and stigmatizing attitudes was significant even among those with self-reported lived experience, hypothesis 3 was not supported; no significant relationship was observed between internalized stigma and listening to a mental health-themed podcast. This was unexpected, as prior research would suggest this relationship is possible (e.g., Nathan, 2018). Perhaps no relationship was found because the present study did not explore how frequently participants listened to these types of podcasts, or for how long they had been listening. Nor did the binary dependent variable allow for in-depth exploration of types of podcasts that are most likely

to be associated with reduced internalized stigma. For example, people who listened to meditation podcasts to support their mental wellbeing would not necessarily be expected to experience a reduction in internalized stigma. Other limitations are explored below.

Limitations

The generalizability of this study is limited. To run subgroup analyses, the study purposefully oversampled certain groups, and thereby the sample is unlikely to represent trends among general podcast listeners. Notably, over a third of participants were first-year psychology university students, though testing for H_1 involved controlling for this variable. It is likely that the level of interest in mental health-themed podcasts may be different in the Australian adult population at large. Market research is needed to comment on population-level trends around mental health-themed podcast listening. The researchers also could not infer causality due to the cross-sectional design.

Other limitations relate to measurement. Only short form scales were used; these were all psychometrically sound, but were unable to measure all aspects of stigma and discrimination. Furthermore, there was a large variety in the types of podcasts that could be subjectively categorized under "mental health-themed podcasts," including variation in podcast aims, messages, formats, and quality.

Conclusion

This study identified that people who listen to mental health-themed podcasts tend to be older, and were more likely to have lived experience of mental health issues, compared to general podcast listeners. Participants reported a variety of reasons for listening, and associations were found between listening to a mental health-themed podcast, lower levels of stigmatizing attitudes, and higher mental health knowledge. This study provides rationale for future research to determine if these podcasts indeed impact listeners' attitudes and behaviors, and, if they do, how such podcasts can be made engaging, impactful, and marketable.

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