A framework for the dissemination of research on depression via social media

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Abstract

Background/Aims Effective dissemination of research findings can help to ensure that information reaches the relevant stakeholders, informing evidence-based practice. However, the dissemination of mental health research via widely used channels, such as social media, can be challenging. This study explored the perspectives of researchers (experts) and research users (stakeholders) on the dissemination of depression-related research via social media, aiming to use these insights to create a framework to guide this process.

Methods Participants were identified using the lead author's professional network. Semi-structured interviews were conducted with five experts (including researchers and one communications officer) and five stakeholders (including mental health practitioners and a member of the public). Interviews were recorded and transcribed verbatim. Data were analyzed using thematic analysis.

Results Experts and stakeholder groups felt that social media could be a useful tool for disseminating research, although this was not always a priority for experts. Barriers to effective dissemination via social media included gaps in expertise, difficulties measuring impact, resource limitations, concerns about negative feedback and differences in stakeholder preferences. Suggestions to optimize dissemination included engaging stakeholders; building knowledge of stakeholders and working with communications teams. Participants generally felt that there was a need for guidance on these processes. The authors used this feedback to create a framework for the dissemination of depression-related research via social media.

Conclusions Mental health researchers and stakeholders are aware of the potential benefits of social media for the dissemination of depression-related research, but may require more guidance to overcome barriers to effective use of these platforms. A framework could be a useful way of providing this guidance and ensuring that research findings reach key stakeholders.

Key words

Depression; Interviews; Research dissemination; Social media

Introduction

Three in five individuals experiencing symptoms of mental health conditions, such as depression, do not seek treatment (Rethink Mental Illness, 2023). Commonly theorised reasons include traditional stereotypes, stigma and a lack of mental health literacy that results in knowledge gaps (McInnes et al, 2022). It is important to address these issues to improve both access to and efficacy of mental health care for depression (Waumans et al, 2022), which is one of the most common health conditions in the UK (Bashir, 2024) with 16% of adults experiencing moderate to severe symptoms (Office for National Statistics, 2022).

Government funded bodies and academic institutions, such as UK Research and Innovation, regularly invest in mental health research and networks that aim to collaboratively address issues related to levels of mental ill health (UK Research and Innovation, 2024). (). However, the practical implications of this kind of research will be limited if it cannot be accessed by the relevant people (National Institute for health care and Research, 2019). There is a gap between research findings and practice, reflected in knowledge levels, policy development and application of evidence, especially in health-related research (Brownson et al, 2018). Key stakeholders in depression-specific research include people experiencing mental ill health, government representatives, healthcare professionals and members of the public.

Effective communication of research findings (dissemination) can accelerate the process by which stakeholders receive and implement influential research findings (National Institute for Health and Care Research, 2019). Digital communication tools, such as social media, can act as a vehicle for this communication. However, dissemination methods on social media generally appeal more to academics than to stakeholders of depression-related research (Brownson et al, 2018). While National Institute for Health and Care Research (2019) guidelines provide a comprehensive approach to implementation, they are also based on comprehensive dissemination – in order to achieve impact, each of the principles stated must be present in dissemination. However, these measures are often expensive, time-consuming and frequently beyond the scope of a single researcher or communications officer, implying that certain recommendations are impractical in many settings. Such guidance may be more appropriate for marketing professionals (Chartered Institute for Marketing, 2019).

Research dissemination to influence outcomes of depression

Research has identified a strong relationship between time spent using digital media (such as social media) for leisure purposes and depressive symptoms (Bettmann et al, 2021). A survey conducted in 2023 showed that 26% of US teenagers used social media to address their mental health (Vankar, 2023). This suggests that social media could also be a powerful tool for positively influencing key stakeholders in the prevention and treatment of depression (Rice et al, 2014) by facilitating the timely discovery of information that can improve interventions (Brownson et al, 2018).

The use of social media for the dissemination of research has allowed academics and research faculties to reach audiences beyond the beneficiaries of initial publication, such as members of the public (Ross-Hellauer et al, 2020). The most popular platform for sharing scientific findings is X (previously known as Twitter). For example, The Mental Elf aims to keep people ‘up to date with the latest reliable mental health research’; this account has over 100,000 followers on X and is updated almost daily, whereas the Instagram profile for the same organisation is followed by only around 1500 accounts (The Mental Elf, 2024). On such platforms, approaches typically involve publishing a wide range of content, such as live tweeting symposia and producing podcasts, as well as posting articles, blogs, videos and infographics.

The success of communication methods varies across dimensions, which can be categorised into four influential factors:

- Research factors, such as quality of evidence, strategic control and measurement of implementation (Kreuter and Wang, 2015)
- Process factors, such as academic-centric processes (Brownson et al, 2018), role requirements (Sampogna et al, 2017), personal barriers (Chugh et al, 2021), time constraints, bureaucratic issues, regulatory constraints, funding and resources
- Social media factors, such as understandings of consumer behaviour and social media algorithms
- Stakeholder factors, such as stakeholder preferences (Sumner et al, 2020) and perceptions of value (Ofcom, 2022).

This study aims to develop key recommendations to address barriers to the effective dissemination of depression-related research via social media and to provide guidelines for the use of social media as a tool to improve the prevention, treatment and outcomes of depression.

Methods

An inductive, qualitative research approach was taken, using semi-structured interviews, based on previous health-based marketing research (Layeghiasl et al, 2020). The interviews aimed to explore the general procedures of social media communications regarding research and to gain in-depth insight into the factors impacting the dissemination of depression-related research.

Participant sampling and recruitment

This study was conducted in the UK, with all primary research taking place in July and August 2022. Convenience and snowball sampling techniques were used to select participants, who were either considered research 'experts' or 'stakeholders'. To be included as a research expert, an individual needed to have at least 5 years of experience in mental health research; these individuals were deemed to have 'comprehensive and authoritative knowledge in a particular area not possessed by most people' (Caley et al, 2014). Experts without direct experience in overseeing elements of dissemination, unless for a stipulated reason that may benefit the study, were not asked to participate.

To be included as a stakeholder, an individual needed to have significant experience in mental health service provision or have reported using online tools (e.g. social media) to access health information. Although lived experience of depression was considered potentially important (Banfield et al, 2018), this was not accounted for in the inclusion criteria because of the potential for safeguarding issues (Pinto et al, 2022). The sole criterion for exclusion amongst stakeholders was a disinterest in receiving mental health information online.

Potential participants who met the selection criteria were identified using the lead author's professional network (convenience sampling), with additional participants identified using a snowballing approach through these connections. Individuals were invited to participate via email.

The authors continued to recruit and interview participants until data saturation was reached. Data saturation in qualitative research can typically be reached with between four and eight interviews or discussion (Hennink and Kaiser, 2022), but in this study it was reached with 10 interviews. These included five experts and five stakeholders.

Data collection

The semi-structured interviews were conducted individually over video call (Microsoft Teams or Zoom). The interview guide was structured to align with the five objectives of the research, with interviews lasting an average of 30 minutes. Predetermined questions were selected based on their relevance to these objectives. The initial questions aimed to identify use cases for depression research on social media, assess efforts to disseminate research through this medium, and explore key barriers. Subsequent questions focused on evaluating the need for a framework to address these barriers and developing recommendations based on the experiences and preferences of the two groups.

Data analysis

Interviews were recorded and transcribed verbatim using transcription software. To ensure transcription validity, the transcripts were sent back to participants for review. Transcriptions were then anonymised assigning a code to each participant (expert 1–5 and stakeholder 1–5). Data were analysed using thematic analysis based on a hybrid coding process (Fereday and Muir-Cochrane, 2006). Analysis was undertaken independently by the lead author and involved assigning numbers to raw data based on relevance to the objectives of the study (e.g. discussions on the barriers to dissemination were assigned the number 3). These were then grouped by similarity into themes which were summarised by the claim that the data represented (i.e. a finding).

Such summary statements were coded numerically depending on the objective to which each finding belonged and the number of findings within that objective, in the order of which they emerged. For example, objective 3 was achieved via 3 key findings that were subsequently labelled 3.1., 3.2. and 3.3. Therefore, any information that supported the second finding within objective 3 was assigned the code 3.2., for example. This process applied to each result.

Ethical considerations

This study received ethical approval from the Devolved Ethical Approval Panel at the Cardiff School of Management, with approval code 2021DE985. The purposes of the study were clearly explained to participants both verbally and through written communication, who were informed about their right to withdraw from the study at any time through written consent in which participant understanding was confirmed via signature It is also worth noting that all data was anonymised using codes (e.g. Expert 1) and stored in a password protected folder on Microsoft OneDrive and any identifiable information was deleted.

Results

Table 1 summarises the expertise and experience of participants

Table 1. Expertise and experience of participants

Participant code	Expertise and experience
Expert 1 (E1)	Clinical research fellow at a reputable mental health research institution, with 26 publications and >10 years of experience in conducting depression-related research. PhD holder
Expert 2 (E2)	Communications officer at one of the UK's leading young people's mental health research institutions with 18 months of experience in the dissemination of depression-related research

Expert 3 (E3)	Advanced research fellow at a reputable and influential research institution, with 30 publications and >10 year of experience in mental health research. PhD holder
Expert 4 (E4)	Head of innovation at a large integrated health board, with 28 publications and >10 experience of conducting research on young people's mental health. PhD holder
Expert 5 (E5)	Co-director of one of the UK's leading young people's mental health research institutions, with 114 publications and >25+ years of experience in conducting depression-related research. PhD holder
Stakeholder 1 (S1)	Psychotherapy practitioner with >5 years of experience in applying evidence-based practices to the treatment of depression and director of a mental health-based social enterprise. Professional registration with the BACP
Stakeholder 2 (S2)	Cognitive behavioural therapy practitioner with >10 years of experience in applying evidence-based practices to the treatment of depression. Professional registration with the BACP
Stakeholder 3 (S3)	Adult member of the public with >5 years of experience in operating multiple social media accounts across over four platforms for both personal and professional purposes. MSc holder in digital marketing
Stakeholder 4 (S4)	Senior service development manager at one of the UK's leading young people's mental health charities with national reach, with >10 years of experience in leading service design projects
Stakeholder 5 (S5)	Accredited counsellor, neuro-linguistic programming coach and owner of a young person's mental health training organisation, with >10 years of experience in providing education about young people's mental health
BACP=British Association of Counsellors and Psychotherapists	

Significance of social media dissemination to stakeholders

Four of the five participants in the stakeholder group (S1, S2, S3 and S5) stated that depression-related research is very important to their work or individual mental health management. Social media was seen as a key tool for the discovery of such information, although participants noted that this content must be relevant to the individual or their practices to be considered for implementation. For example, as a psychotherapist, S1 had a dominant interest in biological information that related to treatment options, while S2 had an interest in student-orientated tools and treatments, as young people represented the majority of their clients. Stakeholders had found relevant research on social media with the potential to improve how they worked with individuals experiencing depression:

'So many new techniques which have been coming out in the last 10 or 20 years or so, particularly around what areas are triggering the depression… there's always new and interesting ways of being able to treat the conditions.' (S2).

'There's lots of tips and stuff that I'll see online that I'll then try and put into practice. But also, when people come and speak to me about problems, it's that transferring of information to them and being able to transfer actual professional advice.' (S3).

Stakeholders reported seeing relevant depression research findings on social media in many ways across various platforms. Instagram was the most frequented platform among these participants

and was seen as a passive source of information. Alongside this, S1 used WhatsApp groups with colleagues to share research of interest and YouTube for seeking information directly. Facebook and TikTok were used by S1 and S3, who saw these as useful platforms for receiving relevant information. S5 used LinkedIn and Instagram, while S4 used X and LinkedIn for professional purposes.

Renowned organisations, charities, governing bodies, qualified individuals, peers and individuals with lived experience were all seen by participants as reliable publishers or disseminators of depression-related information. Notable organisations included Mind, Mental Health Matters, the BABCP and the BACP. S2 stated that having an open mind regarding the source of information was important:

'I tend to look more at things that I will have heard of, but there's so much out there, so I will look at new things. I will look at other things that maybe immediately don't say to me that I know this organisation, ' (S2).

Meanwhile, S1 noted that the access to full research via social media was limited, especially for those without an institutional affiliation that would grant them access:

'If you're not studying full time… the access to the research is a bit more limited. So you do really have to just be talking to people just to get access.' (S1).

Significance of social media dissemination to experts

The level of priority given to communicating research findings varied between expert participants. E2, a communications officer, stated that this was their main focus. They also believed that communication of results was receiving more attention from researchers, which was seen as positive:

'[It is] becoming more of a focus for researchers… it's definitely moving in the right direction.' (E2).

However, while the other expert participants did report considering the communication of results from the early stages of a research project, it was not their most significant consideration:

[quote] *'So I think, although the quality of the research and the quality of the project that you're doing is the primary thing that you're trying to think about when you're writing some of these proposals, [dissemination] has to be in the back of your mind as well.' (S1).*

Despite this, expert participants saw social media as a growing means of research dissemination, which was becoming an essential tool for experts to reach intended audiences:

'Social media is just part and parcel.' (E3).

'The main way I'm sharing research findings as and when they happen is social media.' (E2).

X was the most used platform by experts to disseminate research findings; it was mentioned 19 times by experts, compared to only three times by stakeholders, two of whom stated that they did not use this platform. This suggests that there may be a discrepancy between how much research is put on social media and how much is actually accessed by stakeholders. Experts also mentioned using videos, blogs, infographics, graphics, images and digital zines to present research information on social media. They were keen to involve stakeholders in planning and to coproduce content for dissemination:

'I think it's vitally important to involve the people who the researchers is about in all of those conversations, and in every stage of the research that happens.' (E2).

However, there was also an awareness that these tools are underused, with some experts reporting limited use:

'I think social media is where we fall down and I fall down. Social media isn't really a huge part of the dissemination or implementation planning from my perspective apart from, maybe if we're lucky, tweeting out [via X] the results.' (E5).

'I don't use Facebook or Twitter [X] to really communicate about my research findings.' (E4).

All experts were aware of the importance of reaching stakeholders with their research findings and the potential impact of good communication of results on policy and practice. The strength of social media was recognized as a potentially useful tool for this:

'I think if you look at the potential reach of it and the rapidity of it as well, social media is an easy way to reach people.' (E4)

Dissemination of research via social media was described as an increasing priority as maximizing the impact of research had become a funding requirement for external bodies. E1 described how experts needed to consider:

'Who are the important people to tell, and how you're going to do it, and how that's going to make an impact.' (E1).

Social media was seen as a crucial component of creating impact. Both E2 and E3 both noted that dissemination via social media may have increased during the pandemic when in-person events were not possible. These more traditional methods of research dissemination were also seen as potentially limiting reach:

'You've got things like going to conferences, presenting your research findings, publishing in papers, and that's all dissemination, but I guess it limits the audience a little bit.' (E1).

Barriers to effective dissemination via social media

In terms of potential disparities between research dissemination processes and stakeholder needs, the data yielded five themes: gaps in expertise, difficulties measuring impact, resource limitations, concerns about negative feedback and differences in stakeholder preferences.

<u>Gaps in expertise</u>

One issue with disseminative processes for depression research appeared to be lack of knowledge among experts regarding how to use the social media platforms preferred by the relevant stakeholders. There was a strong sense among expert participants that they were not well qualified to use social media:

'I'm not an expert in doing it at all… Having somebody else to drive it, who's good at it, who knows the different platforms, who knows how to do it is, I think, really, really helpful, actually.' (E1).

'I would absolutely accept that I'm probably not the best person to write something… in public communication. There's other people who do that better than me.' (E4).

Lack of knowledge regarding the role of communications in research was also recognised as a barrier to effective research dissemination via social media. Participants felt that strengthening connections between researchers and communications teams would be appropriate:

'I would speak to other colleagues who are based in research communications as well and it is difficult to remind people that we [communications teams] are here to help and to share what we're doing.' (E2).

'I would find it useful to have a communications person sit in on a research proposal and help with the planning of the pathway to impact how to write the research.' (E1).

Difficulties measuring impact

Expert participants mentioned various potential ways of measuring engagement with content, including citations, retweets, quote tweets, likes, comments, shares, reach and general engagement. However, they also expressed uncertainty about the meaningfulness of these metrics:

'I don't really measure, or I don't even think about how to measure, how successful that dissemination is actually… And they can really look at the activity and how many people have watched things or retweeted or looked at that. I wouldn't have an easy way of doing it, and I wouldn't really know how to actually.' (E1).

'I don't think anyone really smoothly measures the impact of their dissemination activities. And I think that's a real problem.' (E5).

Participants also felt that topical and relevant research was more likely to generate impact irrespective of efforts to disseminate it as it is likely to be shared and discussed anyway:

'I think the usual rules for media probably apply in that if something is shocking, if something is surprising, then it's more likely to, I don't know if do well is the right word, it's more likely to get attention.' (E4).

For example, both S1 and E1 mentioned an article by Moncrieff et al (2023) regarding the longstanding serotonin theory of depression, that they described as 'groundbreaking' and 'big'.

'Peers already share really useful stuff if they have access to some interesting journals that I may not have access to and there's always more and more research coming out, especially now, with the groundbreaking research about serotonin.' (S1).

Research that addressed issues that already had a high level of interest was also seen to have more of an impact:

'So anything to do with COVID-19 and you put [a] COVID-19 hashtag, the reach was a lot.People are really interested in young people's mental health during COVID-19'. (E3).

Resource limitations

Research projects are usually time consuming and may already involve some dissemination procedures. More elaborate dissemination would add to the workload of both researchers and communications officers:

'Capacity for me is just a nightmare in general, like I urgently need a research assistant… I'm doing a lot on my own… it's hard to do with everyone's time and capacity.' (E3).

'I think if there was just free time, free money, that sort of thing, it would be bringing policymakers and practitioners into every study I did, from the start, and be able to truly coproduce with all key stakeholders.' (E3).

'Time, skills, and experience are the barriers, I think.' (E4).

Stakeholders' capacity to absorb information seen online was also seen as potentially limiting the retention of research findings shared on a social media, especially as the amount of content available is very high. S2 stated that there are 'a billion things out there' while S1 described a sense of 'overwhelm' caused by social media content. One of the expert participants agreed with this, stating:

'I don't like social media for the fact that it can be quite overwhelming, for academic purposes anyway. There's so many things going. So it is hard to know what's important versus what's not.' (E3).

Negative feedback on social media

Experts expressed concern about the likelihood of negative feedback regarding the promotion of their study or findings:

'I see also the responses that people have to research stuff, or researchers putting stuff on Twitter [X], it's not always very positive, or people don't agree and people have their opinions. And personally, I am not that keen on having people have a go at me for putting something on that I've worked hard for.' (E1).

'If you're on the radio and on Twitter [X] then you have to be really careful that you don't say things or communicate things that are misinterpreted.' (E4).

E1 described responses to research on social media as 'rude', 'strong' and 'aggressive'. Meanwhile, E3 felt that, although this kind of respond may be more likely on social media, disagreement is 'just part of academia in general'. Therefore, these concerns may vary between researchers.

Differences in stakeholder preferences

Variations in preferences for the communication of depression-based information between stakeholders was identified as limiting the success of dissemination. As well as the variation between experts and stakeholders in terms of platforms used, experts also noticed that there may be variation the type of content required:

'Some stuff that works well on Twitter [X] might not be as appropriate for Instagram. So it's just navigating that and adapting as needed.' (E2).

Meanwhile, stakeholders' preferences regarding the type of research content they consumed. For example, some highlighted that a solid evidence base was required before they would consider the study findings for implementation, while one participant (a member of the public) stated that they preferred content based on lived experience:

'I'd need more of an evidence-base for it. The bits that I take are the bits that link in with the things that I've already learned.' (S5)

'I think there's an automatic defense mechanism where you go, well, that's a therapist talking, they're trying to get inside your head kind of thing. Whereas if you're hearing it from like a mate or someone you look up to that are having that kind of issue, then I think it makes it a bit more relatable.' (S3).

Recommendations for social media dissemination

Participants gave multiple ideas on how to optimize the dissemination of depression-based research on social media. These could be grouped into four themes: engaging stakeholders; knowledge of stakeholders; working with communications teams; and a need for guidance.

Engaging stakeholders

The need to capture the audience's attention on social media through intrigue and the prioritisation of visual elements was indicated, with participants describing ideal content as 'catchy' (S1), 'eye catching' (E2) and 'fresh' (S4). They also mentioned the need to cater for short attention spans on social media and proposed that any framework for research dissemination via these platforms should encourage 'short' (E3, S4), 'small' (S1), 'bite-sized' (E2), 'basic' (S1) and 'engaging' (S3, S4) content, without 'too much text' (E3), perceiving an aversion for reading on social media unless the information is 'extremely relevant and extremely useful' (S1).

Both stakeholders and the communication officer expert (E2) recommended the use of jargon-free information, or the inclusion of glossaries, stating that academic language could be overwhelming. Similarly, clear statements of the information's value to stakeholders was seen as important:

'I think anything that is posted on social media should give value to its consumer… Because if there's information or imagery that has no value to me, you're probably going to get unfollowed.' (S3).

It was noted that a method of signifying value could be to use personal stories alongside the research itself:

'I think, make it personal, whatever you're trying to do on social media, there should be a story behind it.' (S3).

'We make sense of our experiences through storytelling and my clients make sense of their experiences through telling their story to me. So I think if somebody's telling their story, in whatever form, as long as it's not loads and loads of blocked text, then I think I'm open to that.' (S5).

Collaborating with external organisations was seen as an effective way to increase the success of research dissemination on social media, with implications for engagement and reach:

'Tagging in key organisations. So like YoungMinds, for example, or the Mental Elf, for example, the traction and engagement in those blogs are just really, really high. So as soon as you do that… and they retweet, you've got a higher engagement.' (E3).

Stakeholders described how they often passively engaged with actionable information without searching for it on social media, using terms such as 'comes across' (S1), 'comes to me' (S1), 'pops up' (S2), 'come through' (S2) and 'if I see something' (S2) to describe the process of content discovery. This implies that engaging with relevant research is often haphazard and/or governed by algorithms, in which case academics may need to consider the impact of algorithmic echo chambers that can limit reach (Reviglio and Agosti, 2020)

Knowledge of stakeholders

Reaching a target audience was frequently cited by experts as a component of effective research dissemination. Therefore, any framework to guide this process should allow academics to 'tap the right people from the start' (E3). Regular consultation with stakeholders was seen as a method of achieving this, as reaching specific audiences would require knowledge regarding their preferences and 'adapting' (E2) communication strategies accordingly. These strategies could include using 'the right hashtags' (E3) on X to engage academics, promoting an 'evidence base' (S2), infiltrating online peer networks (S1) to reach practitioners and 'using TikTok' to reach members of the public (S3).

To be considered for implementation, stakeholders indicated that the research content they saw on social media needed to meet certain criteria, first to engage them and then to demonstrate applicability. Stakeholders needed to 'feel comfortable with the information' (S2) and advised that experts avoid content that is 'overgeneralised' (S1), 'over-emotive' (S2), 'negative' (S3), unnecessary (S1) or from an unknown source (S1; S2).

Working with communications teams

Each expert identified a need for improvement in terms of the working relationships between communications teams and researchers. Strengthening these relationships was seen as potentially allowing gaps in knowledge to be addressed and competence in research dissemination being improved.

'I think people are starting to realise, but there's a need for it to be much more at the front of their minds about the importance of engagement, and the role that comms can play in supporting that. I think it's a kind of eternal struggle.' (E2).

'I would draw on the expertise and help of other people. And I think in any study the reason you collaborate with other people is not because they do the same as you but because they compliment you. Sharing skills and strengths. And I think this is exactly the same as working together with someone whose expertise is in communicating to the audience you're interested in.' (E4).

Participants also felt that having clear criteria could help to address issues related to measuring the impact of research content disseminated on social media. Such criteria could include narrowing the range of methods to those genuinely aligned with stakeholder needs or preferences, for example.

'So passively we'll write a paper. It will be out there for people to find if they want to, and we might read about it. Or we might, you know, do a webinar, but active dissemination and implementation is much more about; Who is our target audience? Who do we need to get this message out to? How do we want our results to influence their practice? I mean, what ways then do we need to match our dissemination strategies to their needs? Which I don't think is thought about really at all in our field.' (E5).

Especially due to limited communications between teams in what success for a research paper looks like. As evidenced by E2, the communications officer:

'I imagine success might look a bit different for me than it does for researchers. I can only kind of say about my understanding of what it would be. So I think for me, it's engagement. So whether that's likes, comments, shares, retweets. It's seeing that it's made a connection with somebody enough for them to want to engage with whatever post I've made. I suppose from a researcher perspective. I'll have to try and put my researcher hat on, not that I've got one. But I guess it's similar, isn't it? But perhaps engagement in a different way.' (E2).

A need for guidance

When asked whether a set of guidelines on the dissemination of research via social media would be helpful, all experts agreed, expressing that this could help them to overcome identified barriers, particularly around knowledge:

'Yeah, without a doubt. With some easily digestible usable framework or guidance or toolkit or something like that, you'll know how to maximize or optimize your research results through social media, to make a difference to people who it needs to reach. Yeah, that would be very helpful.' (E5).

'Absolutely. I think something that others can follow, and to know that you're going to make a bigger impact at the end, I think, how can that not be useful?... ... So yeah, I just feel like there's a real potential for it.' (E2).

As well as more effective collaboration between researchers and those involved in dissemination:

'I think some sort of guide would be really valuable for people in comms, but also for academics to be like, this is what you should do when you publish a paper. And these are the people that can help you share it, so contact them.' (E2).

Discussion

Social media is frequently used as a platform for communication between researchers and the beneficiaries of their work, and can facilitate streamlined approaches to research application (Robinson et al, 2016). The results of this study suggested that, despite differences the challenges, the experts were generally aware of the potential of social media and were interested in using it as a tool to reach wider audiences.

However, the success of research dissemination via social media was limited by a number of factors. A key issue was the variation between experts and stakeholders in terms of the social media platforms used; experts were mainly using X to share research, but most stakeholders were not using this platform to consume content. This is aligned with a large scale study by Di Cara et al (2022), which found that young adults in the UK frequently use Instagram, YouTube and Facebook, while X was used far less by this group.

Participants felt that working with stakeholders was essential to tailor communications and to effectively disseminate research. This is aligned with recommendations from the National Institute for Health and Care Research (2019), where coproduction is said toincrease the likelihood of research findings being implemented, as it ensures that content is relevant and understandable to stakeholders. The variance identified in this study between the preferences of different stakeholders for social media content and use makes this especially pertinent. It is also important to highlight that stakeholders in this study described passive engagement with social media content, as opposed to active searching, as well as narrow windows for engagement caused by oversaturation of content and short attention spans.

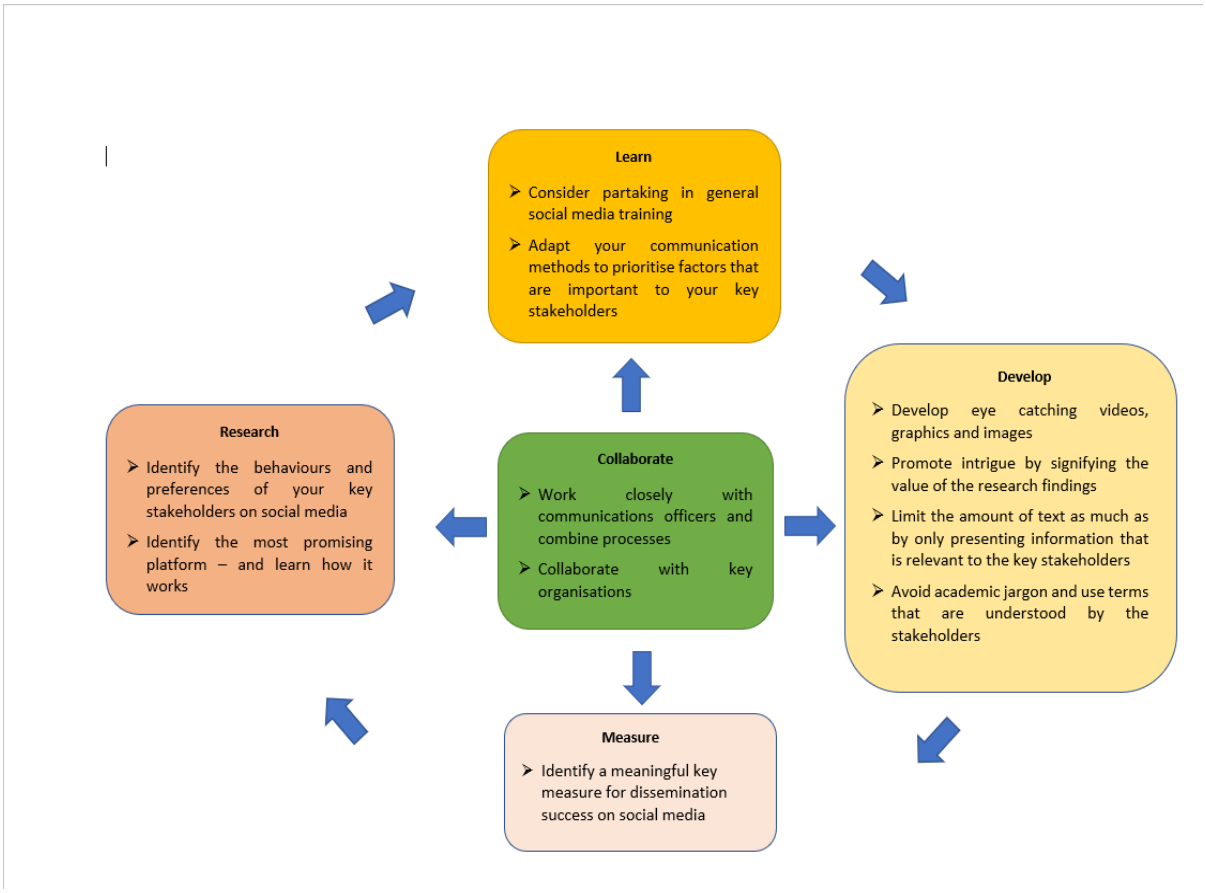
Reaching stakeholder groups with research-related content therefore requires the use of a range of different methods, including videos, images and graphics that are short, eye catching and promote intrigue. This may be beyond the skillset of many researchers, who may also perceive a lack of importance of this channel of dissemination. A lack of skills may even prevent researchers from using social media at all (Chugh et al, 2021). This could prevent research findings from reaching stakeholders effectively on social media, particularly if researchers also feel concerned about negative responses, as was mentioned in this study.

Areas for development included the measurement of engagement with research content disseminated on social media. Expert participants (including the communications officer) identified difficulties in measuring the success of a social media post sharing research. Engagement metrics such as the number of likes, comments and shares can be used, but participants noted that these measures do not provide much detail regarding the actual impact of implementation of the research. Both academics and communications officers also have substantial workloads and may have limited access to funding or other resources to support dissemination, which was highlighted as a barrier by experts. This is aligned with previous research by Tchuenche et al (2021) who identified the high expenditure associated with a co-produced disseminative campaign, with the case study in this research costing roughly £35,000

A framework for the dissemination of research via social media

Based on the results of this study, the researchers created a set of 11 guidelines and presented them as a framework for the dissemination of depression-related research on social media (*Figure 2*). Collaboration is a central element of all 11 guidelines – the present study has shown just how crucial this is, both in terms of internal collaboration within organisations and external collaboration with key stakeholders. When developing the framework, the authors aimed to provide genuine applicability. The framework, while developed in the context of depression-related research, may also be applicable to the dissemination of other common health issues. Participants did not identify any variables that were specific to depression. However, applying this framework to other areas of health research would require further testing and validation.

Figure 1. Framework for the dissemination of depression-related research via social media, based on interviews with five experts and five stakeholders.



The framework describes five core stages: research, learn, develop, measure and collaborate. The dissemination process starts with research regarding the social media behaviours of key stakeholders and identification of the most promising social media platform. This is followed by learning how to use the selected platform effectively. Eye-catching, surprising and jargon-free messages should then be developed and disseminated, with success measured by meaningful key performance indicators that relate to the aims of the project. Such as stakeholder reach, citation metrics or implementation outcomes similar to the number of stakeholders that have adopted new practices based on the results of a study, for example All of this should be underpinned by collaboration between researchers and communications officers, as well as with key organisations.

The aim of this framework is to provide a tool for the effective dissemination of depression-related research on social media. As part of this, the framework aims to improve expertise and instill confidence in researchers, encourage stakeholder understanding and enable adequate measurement of success.

Implications for practice

This study indicated that the dissemination of depression-related research is of considerable importance to experts and stakeholders, as research findings can be used to inform treatment practices and increase knowledge related to mental health. Previous research has suggested that research on depression can improve depression outcomes (Tambling et al, 2023), while effective dissemination of information can accelerate this process (National Institute for Health and Care Research, 2019). However, research by the National Institute for Health and Care Research (2019) and Ross-Hellauer et al (2020) have indicated that the dissemination of mental health-related research has been limited. The barriers identified by participants in this study support this finding and provide an indication of what researchers may need to overcome these challenges. Based on this,

the authors created a set of guidelines for the dissemination of depression-related research, which expert participants stated would be helpful.

Limitations

While data saturation was reached in this study, a wider sample may have also led to a wider range of themes and perspectives. A wider range of stakeholders, such as other academics, government representatives, commissioners and charity leads, may have outlined distinct preferences for the receipt and implementation of depression-based research. Future studies should consider quantitative analysis of the preferences of stakeholders regarding social media, to produce insights into the efficacy of various dissemination techniques. It is important to acknowledge that the framework presented in this study requires testing and validation before it is widely applied to practice.

Conclusions

A framework to guide the dissemination of depression-related research on social media could help to support researchers to share key findings with relevant stakeholders, to encourage the application of research to practice. Although further research is needed to test and validate the framework developed based on the findings of this study, use of these guidelines could help to address the factors that currently limit the success of research dissemination on social media.

Key points

- The study identified several key barriers to effective dissemination of depression-related research via social media, including gaps in expertise, difficulties measuring impact, resource limitations, concerns about negative feedback and differences in stakeholder preferences.
- Adapting communications based on stakeholder needs and preferences is crucial to effective dissemination, with co-production being a useful method of building this understanding.

A framework for dissemination via social media would be advantageous to academics that seek to maximise the impact of their research and must be underpinned by 5 core stages; research, learn, develop, measure and collaborate.

Author contribution statement

Conceptualization – NJ, AC

Data curation - NJ

Formal analysis - NJ

Funding acquisition

Investigation - NJ

Methodology - NJ

Project administration – NJ, AA, AC

Resources - NJ

Software – NJ

Supervision – AC, AA

Validation – AC, AA

Visualization – NJ, AC, AA

Writing – original draft – NJ, AC, AA

Writing – review & editing NJ, AA, AC

Conflicts of interest

/// N/A

Declaration of funding

/// N/A

Data sharing statement

All data are available from the corresponding author on reasonable request.

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