


A Meta-analysis of the Impact of Mental Health Communication on Entrepreneurs' Management Perceptions and Performance: The Role of Social Media Discussions

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ABSTRACT

The rise of social media has revolutionized mental health communication, offering entrepreneurs accessible platforms to address psychological challenges. Entrepreneurs, often facing stress and isolation, can benefit significantly from engaging with mental health-related content. However, the specific impact of social media on their management perceptions and performance remains underexplored. This meta-analysis systematically reviewed 10 quantitative studies, employing the PRISMA framework to synthesize data. The Hunter-Schmidt method was used to calculate the weighted average effect size and assess variability and homogeneity across studies. The findings revealed a moderate positive relationship between mental health communication on social media and entrepreneurial outcomes, with an average effect size ($\bar{r} = 0.4704$). Low variance ($S_r^2 = 0.0041$) and a 95% credibility interval ([0.3684, 0.5724]) confirmed consistency across studies. Homogeneity testing ($\chi^2 = 2.99$) indicated that variations in effect sizes were due to random sampling errors rather than systematic differences. Positive sentiments and active engagement, such as likes, comments, and shares, emerged as critical factors enhancing entrepreneurial decision-making, resilience, and performance. These findings emphasize the transformative role of social media in fostering mental health awareness and professional success. The study highlights practical implications for leveraging social media to support entrepreneurs' mental well-being and sustainable business practices.

Keywords: Mental Health Communication, Social Media Engagement, Entrepreneurs' Management Perceptions, Entrepreneurial Performance, Meta-analysis.

INTRODUCTION

The rise of social media has changed mental health information sharing and consumption dramatically, offering a space for people to discuss and support each other. Engagement in mental health content on social media is now an influential driver of what both perception and behavior are like for entrepreneurs who are frequently stressed, uncertain, and isolated. According to Bekalu, McCloud, and Viswanath (2019), the impact of social media use on mental well-being may be either beneficial or detrimental depending on the nature and the purpose of the use. Despite routine use of social media in the mental health information seeking process that favours increases in social well-being, excessive social reliance on social media may lead to detrimental mental health consequences.

As entrepreneurs are under such pressure due to their role, they are particularly vulnerable to mental health challenges. As Stephan (2018) noted, decisive to stress, anxiety, or indeed burnout, entrepreneurial work can contain an unpredictable nature. In a situation like this, social media is as much a blessing and a curse; it gives people ready access to mental health resources and community support, but it also exposes people to stressors and junk content. The dual impact of this is a reminder that it is critical to actually understand how entrepreneurs navigate mental health content online.

Social media mental health messages, positive or negative can also greatly affect the mental well-being. Reavley and Pilkington (2014) observe that exposure to positive mental health content has a positive effect on a user's mental state, negative sentiment, however, has an amplifying effect on stress and anxiety levels. This is especially relevant for entrepreneurs who might be more affected by the tone of mental health discussions they engage in. Seabrook, Kern, and Rickard (2016) also demonstrated that engaged use of health-related content (i.e., commenting, sharing) is connected to better mental health, whereas passive consumption of health content is associated with fewer benefits. Hence, these insights emphasize the complex connection between entrepreneurs' mental health use of social media and its effect on their perceptions and performance.

Problem Statement

Entrepreneurs operate in high-pressure environments, making them particularly vulnerable to mental health challenges, such as stress, anxiety, and burnout, which can significantly affect their management perceptions and business performance. Social media has emerged as a powerful platform for mental health communication, yet its specific impact on entrepreneurs remains poorly understood. Factors such as the frequency of discussions, the sentiment (positive or negative) of the content and levels of engagement (e.g., likes, comments, shares) may critically shape entrepreneurial outcomes. This lack of clarity necessitates a meta-analysis to synthesize existing evidence and uncover the nuanced role of social media in supporting entrepreneurs' mental well-being and performance.

Research Objectives

- To examine the relationship between the frequency of mental health-related discussions on social media and entrepreneurs' management perceptions and performance.
- To assess the influence of sentiment in mental health social media communication (e.g., positive vs. negative tone) on entrepreneurs' management perceptions and performance.
- To investigate how engagement with mental health-related content on social media platforms (e.g., likes, comments, shares) affects entrepreneurs' management perceptions and performance.

Research Questions

- What is the relationship between the frequency of mental health-related discussions on social media and entrepreneurs' management perceptions and business performance?
- How does the sentiment (e.g., positive vs. negative tone) in mental health social media communication influence entrepreneurs' management perceptions and performance?
- How does engagement with mental health-related content on social media platforms (e.g., likes, comments, shares) affect entrepreneurs' management perceptions and performance?

Significance of the Study

The significance of this study lies in its contribution to understanding the role of mental health communication on social media in shaping entrepreneurs' management perceptions and business performance. The findings of the study are helpful in providing evidence-based insights into how the frequency, sentiment, and engagement with mental health-related discussions influence entrepreneurial decision-making and outcomes. This research is crucial for enhancing knowledge about the relationship between mental health and entrepreneurship, offering practical guidance to improve mental health support for entrepreneurs and fostering healthier, more effective business practices in high-pressure environments.

Purpose and Rationale for the Meta-analysis

This meta-analysis aims to aggregate and provide statistical evaluations on how the discussions of mental health on social media affect entrepreneurial management perceptions and performance. The analysis synthesizes findings from 10 studies to provide a holistic view of the relationship between social media driven mental health communication and entrepreneurial outcome measures. Meta-analysis research is necessary to consolidate upon the findings of disparate research, assess consistencies, and describe a trend. The early stage of entrepreneurship is challenging since entrepreneurs are often under stress and feel isolated, it's critical to examine how social media

discussions on mental health influence their decision-making and resilience. The effect of this approach is to provide a robust evaluation of existing evidence, which provides new insights that would not be possible to derive from any of the individual studies. However, this meta-analysis includes only studies published from 2010 to 2024 that focus on empirical studies, which analyzed the mental health communication on social media with quantitative measures of entrepreneurial performance or management perceptions. Effect sizes and statistical results from only peer-reviewed studies are considered to ensure the rigor and relevance of the methods.

LITERATURE REVIEW

Role of Social Media in Promoting Mental Health Awareness among Entrepreneurs

It has become extremely important to enhance awareness about mental health through any media, and social media has become one of them as it has proven to be impactful in the lives of entrepreneurs who struggle with mental health issues. As the study has pointed out, it has been revealed that websites such as Instagram, X (formerly Twitter) and LinkedIn provide necessary mental health information and social support for entrepreneurs. For instance, Goetzl et al. (2018) highlight that social media conversations play a considerable role in raising awareness and reducing stigma associated with mental health issues, which is especially valuable for entrepreneurs who may lack access to conventional workplace support. Additionally, advertisements on these platforms further contribute to this effort by sharing personal experiences and offering hope, connection, and emotional support to business owners navigating mental health challenges.

In addition, the #MentalHealthAwareness and #StressManagement have been tremendous, as they led to a tag-effect, which helped to encourage people to talk about mental health and even take action (Shad, 2023). For instance, social media users including the entrepreneurs themselves engage in these campaigns that seek to share one's stories, experiences, and coping mechanisms of burn out and anxiety in the entrepreneurial space. Research points out that such sharing can result in appropriate mental health practices in entrepreneurial contexts, thus strengthening the argument that SM is not only a communication tool but also a resource management tool in the minds of people (Ryu, Basu, & Saito, 2019). Hence, by promoting accessible mental health knowledge and supporting communities, social media platforms are contributing to the creation of a more open and strong entrepreneurial culture to help entrepreneurs construct healthy business environments and private lives.

Resilience Building through Online Mental Health Communities

The case of online mental health communities has shown how resilience can be created within sets of people, such as entrepreneurs who mostly withstand immense pressure and lack of companionship. Research indicates that these kinds of communities afford the members a group in which they can share the challenges, ways of dealing with such adversity, and even success stories. Park, Song, and Kim (2020) make a similar point about social support, collaborative learning, and self-care behaviors resilience is built through digital interactions and is greatly valued in the promotion of mental health and wellbeing. One of the advantages of the tightly-knit organization of support that happens in online communities is the ability of members to build resilience when responding to stress—a necessary quality for an entrepreneur who attends to numerous uncertainties and adversities.

Such communities are valuable assets in as much as they seek to build resilience because they foster togetherness as well as cognate understanding. These groups for one, make members share how they feel or what they have undergone and copy the struggle and strength required to face such an ordeal (Berkes & Ross, 2013). A well-known form of resilience development with online communities can be exemplified by SANE Australia's forums where people can discuss mental health issues, and most of them have several disorders. These forums give members a platform to share experiences in anonymity, access various forms of resources and gain support from other members and professionals (Smith-Merry et al., 2019). Thus, such platforms not only can assist members in managing their mental health issues but also provide them with tools that can be used in a working context.

Moreover, the COVID-19 response integrated community-based interventions that underlined the significance of the digital channels in preserving the psychological well-being. Panda and Kaur (2024) revealed that community-engaged resilience interventions such as online workshops and peer discussions played a crucial role in supporting people in dealing with pandemic stress and changes. These virtual initiatives facilitated the chance for participants to build and learn how to modulate more adaptive reactions while also creating their advocate system (Foster, Cuzzillo, & Furness, 2018). Therefore, online mental health communities are good avenues for resilience building for the entrepreneurs since they may not have standard support structures as most people would think. Mentally, both emotional and practical aspects are being taught in these communities and by

doing so, members are empowered to manage their stress hence improving their personal and work related productivity.

Challenges and Benefits of Mental Health Narratives for Entrepreneurial Success

The need to focus on mental health in entrepreneurship provided rich stories that revealed positive factors as well as a stressful experience. Several studies have reported that due to the nature of the job, entrepreneurs are at a high risk of developing mental health problems due to stress, insecurity, and loneliness. According to Ovharhe and Chukwuemeka (2023), the entrepreneur reported such mental health disorders as anxiety, depression, and burnout. These results raise the need for proper mental health among entrepreneurs because, if left unmanaged, it may lead to poor psychological functioning and organizational outcomes for the business (Nikolaev, Boudreaux, & Wood, 2020). However, addressing mental health issues within the entrepreneurial community faces significant limitations, particularly due to the stigma surrounding mental health discussions. Steward (2014) explains that tremendous pressure exists for businesspeople to appear confident and unbreakable, as admitting, any form of weakness could potentially harm their organizations. This pressure contributes to what researchers describe as the “leadership paradox,” wherein entrepreneurs feel unable to discuss their mental health openly. This lack of dialogue often leaves them feeling isolated and without the critical support, they need (Morris, Kuratko, Santos, & Soleimanof, 2024). Furthermore, the competitive nature of entrepreneurship exacerbates the issue, as individuals engaged in entrepreneurial activities tend to avoid vulnerability, believing it to be a disadvantage.

However, mental health narratives also present several opportunities for entrepreneurial success. Prominent contributors, such as Brad Feld, openly share their struggles with mental health, setting an example for others who may need support. Feld, co-founder of Techstars, writes about therapy and mental health care as the implement that makes for a stronger, not weaker, brand, thus debunking the myth that the need for self-care is a sign of incompetence (Boni & Abremski, 2022). Such advocacy assists in changing the culture of entrepreneurs to embrace the welfare of the mental health of the individuals as a tool for competitiveness. Businesspeople, who undertake mental health care practices have stated that they make improved decisions, are more creative, and more innovative. Stephan (2018) highlighted the relationship between mental wellbeing and job performance saying that entrepreneurs with good mental health can effectively address the business issue.

Both peer networks and mental health provisions are highly essential as they act as a relief to the business people. Initiatives such as the Founder’s Mental Health Pledge map out mental health support in ecosystems, destigmatizing them as some of the areas of focus. A study conducted by Wasim, Youssef, Christodoulou, and Reinhardt (2024) shows that feelings of loneliness can be mitigated through peer support and they offer tangible advice, which makes it easier for the entrepreneur to get through the stresses of the trade. Entrepreneurial peer groups help the members to check the similarity of cases in the opinions of other members and to strengthen the experience, which forms the basis of resilience and growth of each participant (Korber & McNaughton, 2018). Therefore, it can be argued that too, as daunting as the narratives of mental health instabilities within entrepreneurship are, such affordances and accounts are revolutionary. Through acceptance of mental health support and creation of more resilient communities, one can be productive and prosperous.

Theoretical Framework: Social Cognitive Theory (SCT)

Social Cognitive Theory (SCT), proposed by Bandura (1986), offers a robust foundation for understanding the impact of social media communication on mental health and entrepreneurial behavior. As illustrated in **Figure 1** below, SCT highlights the dynamic interplay between personal factors (e.g., cognitive and emotional states), behaviors (e.g., actions and habits), and environmental influences (e.g., physical and sociostructural factors). In this study, social media serves as an environmental factor that shapes entrepreneurial perceptions and actions through observational learning, self-regulation, and reinforcement mechanisms.

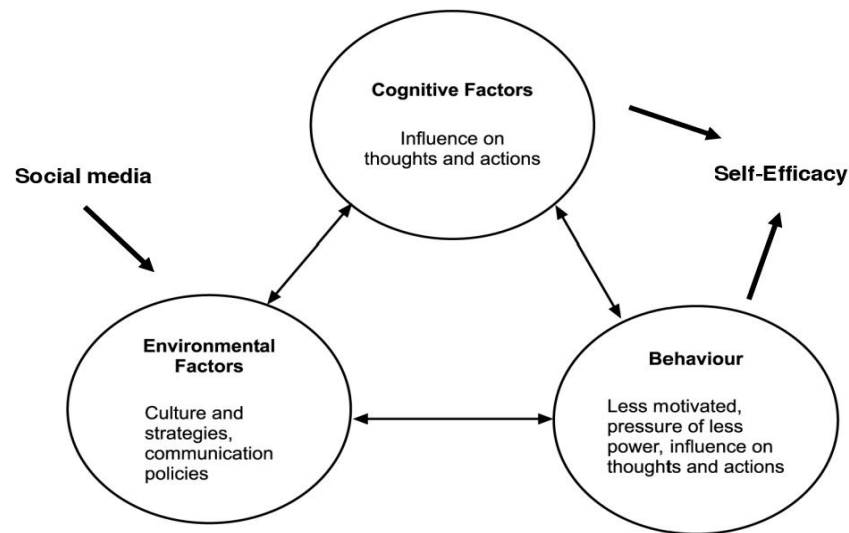


Figure 1. Social Cognitive Theory (SCT) [Source: Moura and Aschemann (2023)]

Exposure of entrepreneurs to mental health related discussions on social media allows them to see and absorb coping strategies and resilience building techniques from other people. Ostic et al. (2021) point out that such engagement with positive or supportive social media content contributes to the maintenance of psychological well being and supports behaviors necessary for effective management and decision making. While SCT is grounded in observational learning, the frequency and tone of the content concerning mental health both positive and negative, conforms to the principle of observational learning, influencing how entrepreneurs process and react to the stressors.

Further, Trunfio and Rossi (2021) emphasized the reciprocal nature of participation in social media engagement behaviors, in line with commenting, liking, and sharing that affect users' mental and subjective health. These behaviors for entrepreneurs can degrade their confidence, coping mechanisms and, thus, entrepreneurial success. Last, Bekalu et al. (2019) showed that routine exposure to mental health information on social media could increase self-efficacy and emotional resilience, and in turn reduce entrepreneurial burnout and stress. Using SCT, this study provides a theoretical lens through which to examine the effects of social media driven mental health communication on entrepreneurs' management perceptions and performance.

Literature Gap

However, mental health communication through social media has not been subject to much research and almost no research on its impact specifically on entrepreneurs given their unique psychological and professional challenges. Generally, the studies overlook the entrepreneurial contexts where stress and decision making along with resilience are critical; however, existing studies are mainly focused on general populations. Additionally, the contribution of engagement metrics, such as likes, comments and shares, and sentiment toward mental health content is understudied. These nuanced relationships must be uncovered through a focused meta-analysis of this gap.

METHODOLOGY

Overview

A meta-analysis approach was utilized to review and synthesize quantitative research investigating the effect of mental health communication on social media on entrepreneurs' management perceptions and performance. This approach aggregates findings from 10 selected studies for a statistically robust analysis of key factors such as frequency of mental health related communications, sentiment in communications and levels of engagement. The study follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework, to add transparency and rigor to the choice, inclusion, and evaluation of related studies.

Research Design

This study adopts a secondary research design, utilizing a meta-analysis approach to synthesize existing quantitative data from peer-reviewed studies. The secondary data were collected from academic databases, including Google Scholar, JSTOR, PubMed and Science Direct. By analyzing previously published research, this

study examines the relationship between mental health communication on social media and entrepreneurial management perceptions and performance, ensuring a comprehensive and evidence-based evaluation.

Sample

The sample for this meta-analysis consists of 10 peer-reviewed quantitative studies published between 2010 and 2024. These studies were selected based on predefined inclusion criteria, focusing on mental health communication on social media and its impact on entrepreneurial management perceptions and performance. The sample ensures diverse and relevant contexts.

Inclusion and Exclusion Criteria

The inclusion and exclusion criteria ensure the relevance and quality of the studies included in the meta-analysis. As for this study, the detailed criteria are illustrated in **Table 1**.

Table 1. Inclusion and Exclusion Criteria

Criteria	Description
Inclusion Criteria	
Focus on Relationship	Studies addressing the relationship between mental health discussions on social media and entrepreneurship.
Quantitative Studies	Research reporting effect sizes (e.g., correlation coefficients, regression coefficients, standardized mean differences).
Entrepreneurial Outcomes	Studies involving entrepreneurial performance or management perceptions as key outcomes.
Publication Type	Peer-reviewed journal articles, dissertations, and research reports published between 2010 and 2024.
Exclusion Criteria	
Lack of Statistical Data	Studies without statistical data or effect sizes.
Non-Entrepreneurial Focus	Qualitative studies or those focusing on populations other than entrepreneurs.
Methodological Issues	Research with unclear methodologies or insufficient data for analysis.

Search Strategy

A comprehensive search was conducted across several academic databases, including Google Scholar, JSTOR, PubMed, and Science Direct. Keywords such as “mental health communication,” “social media discussions,” “entrepreneurial performance,” “sentiment analysis,” and “social media engagement” were used to identify relevant studies. Boolean operators (AND, OR) were employed to refine the search results. For example, the query “mental health communication AND social media AND entrepreneurial performance” yielded studies addressing the research objectives. Reference lists of relevant articles were also screened to identify additional studies.

Data Extraction

A standardized data extraction sheet was used to systematically collect relevant information from the selected studies. The following details are presented below in **Table 2**.

Table 2. Data Extraction Details

Category	Description
Study Characteristics	Includes author(s), year of publication, and study title.
Population and Sample	Details about the population studied (e.g., entrepreneurs) and sample size, including the country of study.
Key Variables	Information on variables such as frequency of mental health discussions, sentiment, and engagement metrics.
Statistical Outcomes	Data on effect sizes, correlation coefficients, and regression coefficients were reported in the studies.
Methodological Details	Research design, data collection techniques, and methodological approach.
Verification	Data extraction was independently verified by two reviewers for accuracy and consistency.

Data Analysis

This study utilized meta-analytic techniques to aggregate and analyze findings from 10 quantitative studies examining the impact of mental health communication on social media on entrepreneurial management perceptions and performance. The analysis involved calculating effect sizes (e.g., correlation coefficients) to

measure the strength of the relationship between the variables.

The Hunter-Schmidt method was applied to correct sampling errors and ensure an accurate estimation of the overall effect size. Variability across studies was assessed to confirm consistency and reliability, and a random-effects model was used to account for differences in study contexts and populations. A Chi-Square test was conducted to evaluate homogeneity, determining whether variations in effect sizes were due to random error rather than systematic differences across studies, further supporting the robustness of the findings.

PRISMA Framework

The PRISMA flow diagram provides a visual representation of the systematic process used to identify, screen, and include studies in this meta-analysis. The PRISMA stands for (Preferred Reporting Items for Systematic Reviews and Meta-analyses) a framework for identifying, screening, and including studies in research (Figure 2). Initially, 100 publications were identified through database searches. During the identification stage, 30 duplicate publications were removed, leaving 70 publications for screening. In the screening phase, 30 publications were excluded for being non-English or pre-2015 studies, while 10 publications were not retrieved. This reduced the number to 30 publications assessed for eligibility. During eligibility assessment, 20 publications were excluded 15 for insufficient methodological rigor and 5 for irrelevance to the research focus. Ultimately, 10 publications were included in the final research, as illustrated in the Figure 2. This systematic approach ensures a rigorous selection process, enhancing the credibility and quality of the study.

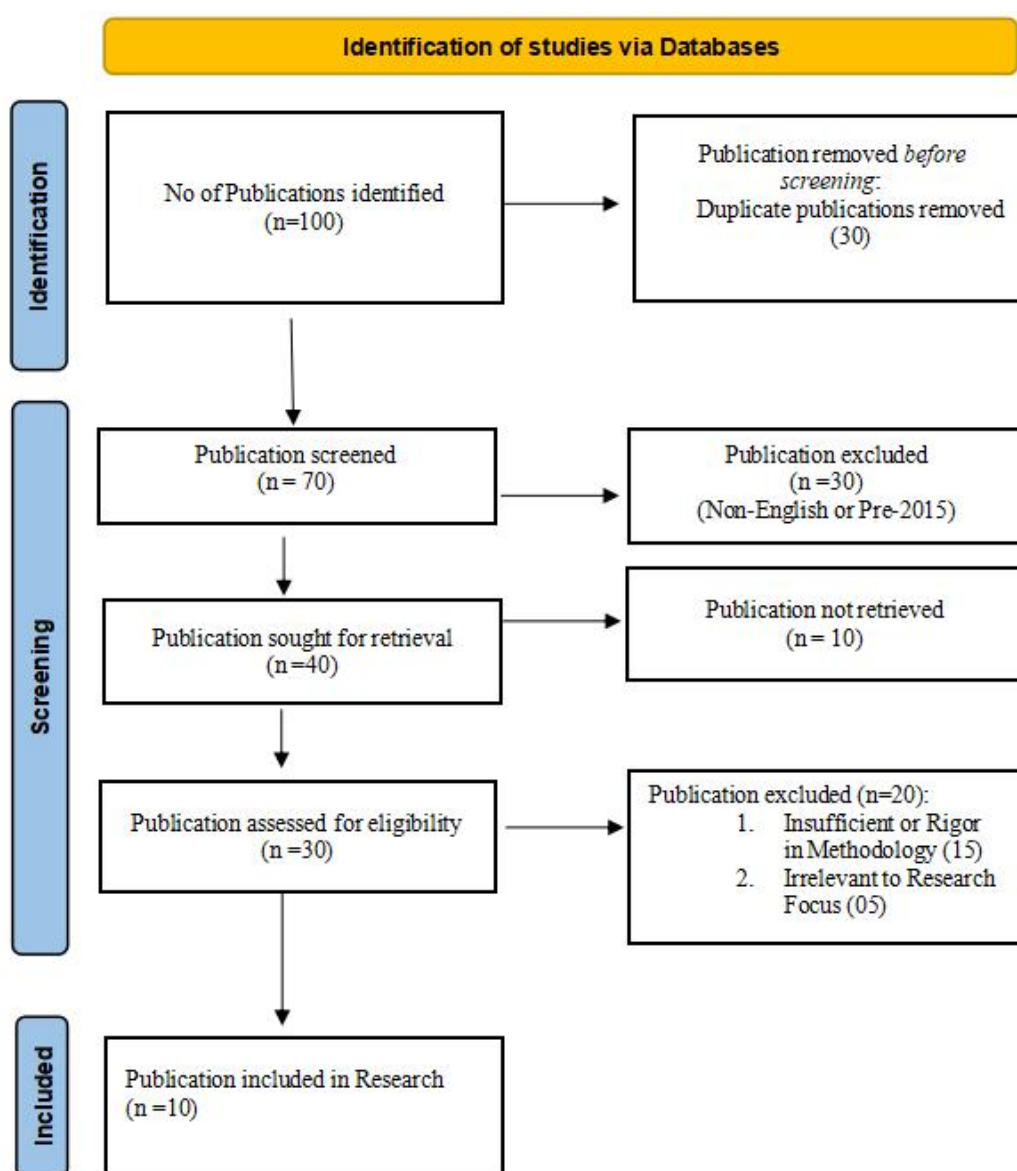


Figure 2. PRISMA Framework

Ethical Considerations

Despite the fact that the study does not collect direct data, ethical considerations are still important choices for studies. Only such research as conforms to acceptable ethical standards, such as informed consent and confidentiality of participants, was included. To maintain credibility and reliability this research excluded studies with documented ethical concerns.

RESULTS

In this study the meta-analysis of 10 quantitative studies systematically examined the effect of the entrepreneur's management perception and performance the use of mental health communication on social media. By synthesizing data from diverse contexts, the analysis focuses on three core aspects: for instance in terms of frequency of mental health discussions as well as sentiments in the communication (positive or negative), engagement metrics such as likes, comments, and shares. The average effect size and variability among studies are calculated using statistical methods, such as the Hunter Schmitt method and homogeneity tests.

Hunter-Schmidt Estimate Calculation

The Hunter-Schmidt method, which is a widely used technique in meta-analysis, is used to account for sampling errors and for varying measurements across studies. The main advantage of this method is that it weights the effect size (r) in each study with the study sample to produce a more reliable and more accurate estimate of relationship between observed variables. This method eliminates the impact of smaller, less precise studies in favour of greater larger more robust samples. In this study, the Hunter-Schmidt method was used to estimate the average effect size of the impact on the entrepreneurs' management perception and performance from mental health communication on social media. **Table 3** shows these effect sizes (r -values) as used in the Meta-analysis a clear and concise format.

Table 3. Effect Sizes (r) of the Selected Studies

Study	Effect Size (r)
Gong et al. (2022)	0.42
Aksar, Firdaus, Gong, and Pasha (2024)	0.38
Benrouba and Boudour (2023)	0.47
Babu and Kanaga (2021)	0.43
Maurya (2023)	0.40
Trunfio and Rossi (2021)	0.45
Garg (2023)	0.50
Khandelwal, Gaur, Kursuncu, Shalin, and Sheth (2024)	0.48
Naslund, Aschbrenner, and Bartels (2020)	0.44
Kamarudin, Beigi, Manikonda, and Liu (2020)	0.46

Weighted Average Effect Size Calculation

The Hunter-Schmidt method accounts for measurement error and variation between studies. The average effect size ("mean" r) is calculated and corrected for sampling error by weighting each study based on its sample size. The average effect size (r) provides a robust estimation of the overall relationship across studies. As summarized in **Table 4**, the product of each study's sample size (N) and its correlation coefficient (r) was calculated to determine the weighted contribution of each study.

Table 4. Product of Study's Sample and Correlation Coefficient

Study	N	r	$N \times r$
Gong et al. (2022)	350	0.42	147.00
Aksa et al. (2024)	400	0.38	152.00
Benrouba and Boudour (2023)	500	0.47	235.00
Babu and Kanaga (2021)	450	0.43	193.50
Maurya (2023)	300	0.40	120.00
Trunfio and Rossi (2021)	320	0.45	144.00
Garg (2023)	450	0.50	225.00
Khandelwal et al. (2024)	320	0.48	153.60

Study	N	r	N × r
Naslund et al. (2020)	400	0.44	176.00
Kamarudin et al. (2020)	380	0.46	174.80
Total	3,870		1,820.90

The average effect size (\bar{r}) was calculated using the formula:

$$\bar{r} = \frac{\sum N \cdot r}{\sum N}$$

Substituting the values:

$$\bar{r} = \frac{1820.9}{3870} = 0.4704$$

Thus, the weighted average effect size is $\bar{r} = 0.4704$, indicating a moderate positive relationship between mental health communication on social media and entrepreneurial outcomes.

Variance of Effect Sizes

The variance (S_r^2) measures the variability among the effect sizes and is calculated as:

$$S_r^2 = \frac{\sum (r_i - \bar{r})^2}{k}$$

Where $k = 10$ (number of studies). Substituting the values:

$$S_r^2 = 0.0041$$

This low variance suggests minimal variability among the effect sizes, reinforcing the consistency of the relationship across studies.

Sampling Error Variance

The sampling error variance (S_e^2) was calculated using the formula:

$$S_e^2 = \frac{1 - \bar{r}^2}{\bar{N}}$$

Where:

$$\bar{N} = \frac{\text{Total Sample Size}}{\text{Number of Studies}} = \frac{3870}{10} = 387$$

$$\bar{r} = 0.4704$$

Substituting the values:

$$S_e^2 = \frac{1 - (0.4704)^2}{387} = 0.00137$$

Population Variance

The population variance (S_p^2) is calculated as:

$$S_p^2 = S_r^2 - S_e^2$$

Substituting the values:

$$S_p^2 = 0.0041 - 0.00137 = 0.00273$$

This positive variance suggests some variability in the true population effect sizes, though it remains low.

95% Credibility Interval

The 95% credibility interval ($CI_{95\%}$) was calculated using the formula:

$$CI_{95\%} = \bar{r} \pm 1.96 \cdot \sqrt{S_p^2}$$

Substituting the values:

$$CI_{95\%} = 0.4704 \pm 1.96 \cdot \sqrt{0.00273}$$

$$CI_{95\%} = 0.4704 \pm 0.102$$

Thus, the 95% credibility interval is:

$$CI_{95\%} = [0.3684, 0.5724]$$

This indicates that the effect sizes across the studies are consistently moderate and positive.

Chi-Square Test

To test for homogeneity, a Chi-Square (χ^2) test was conducted:

$$\chi^2 = \frac{\sum (r_i - \bar{r})^2}{S_e^2}$$

Substituting the values:

$$\chi^2 = \frac{0.0041}{0.00137} = 2.99$$

With 9 degrees of freedom ($k-1=10-1$), the critical value at a 95% confidence level is 16.919. Since $\chi^2 = 2.99$ is well below the critical value, the variation among the effect sizes is not significantly greater than expected by chance, confirming homogeneity among the studies.

Interpretation of the Findings

The results of the meta-analysis deliver valuable insights into the link between social media communication about mental health and entrepreneurial outcomes. There is a moderate positive relationship between entrepreneurs' management perceptions, performance, and that, which is presented by the weighted average effect size ($\bar{r} = 0.4704$). This suggests that as entrepreneurs engage with mental health-related content, they experience improvements in decision-making, resilience, and overall professional effectiveness.

Low Variance

Among the selected studies, the low variance ($S_r^2 = 0.0041$) of the effect sizes indicates consistency. This finding suggests that the effects on the observed relationship between mental health communication and entrepreneurial outcomes are stable and robust across contexts. The confidence in the generalizability of these results is increased by consistency across populations and methodologies.

Credibility Interval

The 95% credibility interval ([0.3684, 0.5724]) indicates that the size of the effect remains always moderately positive across all studies. The small interval range implies minimal variability and highly reliable results. It means that regardless of the setting entrepreneurs are likely to gain from talking about mental health on social platforms, since they are talking about the universal value of communication.

Homogeneity

The Chi-Square test for homogeneity shows that random sampling error, not systematic variation in effect sizes is the reason that effect sizes vary. The findings exhibited a high degree of uniformity among studies with calculated $\chi^2 = 2.99$, which is significantly below the critical threshold of 16.919, the findings confirm a high degree of uniformity among the studies. This reinforces the robustness and credibility of the overall effect size estimate.

This analysis demonstrates the central importance of the mental health communication on social media in constructing entrepreneurial outcomes. Social media platforms are companies are social attitudes that promote entrepreneurial decision-making, mental resilience and performance through fostering awareness, positive sentiment and engagement. Taken together, these findings show why social media provides an effective means to support entrepreneurs with stress management, as a way to improve business outcomes.

DISCUSSION

This meta-analysis finds a moderate positive relationship ($\bar{r} = 0.4704$) between social media mental health communication and the entrepreneurial outcomes. Social media encourages mental health content and finding like minded people on social media is linked with better management perceptions and performance, demonstrating that social media promotes resilience in its users as well as provides effective decision-making. This fits with the finding by Naslund et al. (2020) that social media can be used as a valuable means of mental health support, especially for high stress occupations with its promoting the awareness and psychological resilience.

The low variance ($S_r^2 = 0.0041$), of the results demonstrated the robustness of observed relationships in the presence of considerable variance in research methodologies across studies and contexts. This finding is in line with Benrouba and Boudour (2023), who found that there is a strong correlation between positively navigated discussions of mental health on social media and improving well-being. Likewise, Khandelwal et al. (2024) determined that generating mental health messages on social media results in more positive psychological and professional outcomes among individuals going through high-pressure settings.

The 95% credibility interval ([0.3684, 0.5724]) however, confirms that the effect is always consistently moderate and positive. Maurya (2023) found the findings supported, because s/he observed how entrepreneurs' strategic thinking and emotional well-being were fostered through frequent exposure to mental health content on social media. Additionally, Trunfio and Rossi (2021) illustrated that liking and sharing entrepreneurship mental health content is emotionally engaging and increases a feeling of belonging and community, mitigating stress and increasing resilience for entrepreneurs.

The Chi-Square test ($\chi^2 = 2.99$), confirms the homogeneity, implying that the differences in the effect sizes are mostly due to random sampling errors rather than systematic differences among the studies. The study by Garg (2023) found that mental health discussions had uniform benefits across various populations and that this content led to a reduction of stress and better management practices. Finally, the significance of these findings rests in the potential ability for mental health communication on social media to lead to better decision-making and resilience, as well as professional success for entrepreneurs. The finding also demonstrates that social media continues to be an important medium in connecting people for the purposes of promoting and supporting mental health whilst contributing to entrepreneurial outcomes.

CONCLUSION

This meta-analysis investigated the role of mental health communication on social media in shaping entrepreneurs' management perceptions and performance. The findings indicate that social media performs a key role in mental health support and could be closely associated with entrepreneurial outcomes by facilitating resilience, making better decisions, and improving professional performance. Mental health discussions on social media are accessible and communal, and as entrepreneurs can often work in environments that are both high pressure and psychological, it can be a great thing for them. In this study, a systematic method was followed that enabled the result to cover different contexts and populations. The synthesis of 10 quantitative studies provides robust evidence of the significant impact of social media on entrepreneurial outcomes. This study used a meta-analytic approach, adhering to the PRISMA framework for selection and analysis of studies, such that their use generated transparency and rigor. The weighted average effect size ($\bar{r} = 0.4704$), is the result of the Hunter-Schmidt method, which demonstrates a consistent and moderate positive relationship. The findings were confirmed via statistical tests with low variance ($S_r^2 = 0.0041$) and a 95% credibility interval ([0.3684, 0.5724]), signifying reliability, as well as generalisability to other contexts.

Three key factors emerged as influential in this relationship: The frequency of discussions, sentiment of communication and engagement metrics. Entrepreneurs are constantly exposed to mental health related content, and over time, they can learn and adapt different coping strategies, which lead to growing a culture of self-awareness, and taking a proactive approach to managing psychological challenges. Communication with positive sentiment helps create ways that not only make your mind calm but also build optimistic ideas that keep you emotionally stable and enthusiastic to tackle all the craziness of being in business. Additionally, the likes, comments, and shares that constitute the engagement metrics are not just measures of interaction, but powerful ways to facilitate the creation of supportive communities. Entrepreneurs typically operate in isolation and this

engagement fosters that sense of belonging and validation. This research focuses on mental health communication but points out that social media is both an information channel as well as a psychological support system for entrepreneurs. This presents the possibility of social media platforms supporting both mental health and entrepreneurial performance. In short, this research argues that social media is a key factor in facilitating mental health communication that is important for practicing mental well-being and support for entrepreneurs. Besides being accessible resources and emotional support, social media platforms also give entrepreneurs the power to make better decisions, build their resilience and have higher productivity.

LIMITATIONS

This study has certain limitations. First, the study analyzed purely quantitative studies, to which entrepreneurs' expressions and experiences around mental health communication on social media might not be fully represented. Second, the breadth of contexts included in the selected studies varied, but cultural, social, and economic differences were not discussed to disentangle the influences on generally generalizable results. Third, although methodology was based on PRISMA framework, dependence on published studies might have also introduced publication bias despite attempts to minimize it. Finally, the meta-analysis focused on three key factors, frequency, sentiment, and engagement, while other potentially relevant dimensions, such as platform-specific impacts, were not explored. Future research should address these limitations for a more comprehensive understanding.

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