



Integrating Big Five Personality Theory and Self-Determination Theory: A Conceptual Framework for FOMO and False News Sharing on Social Media

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Abstract. The spread of false news on social media has become a complex psychological and communicative phenomenon that cannot be fully explained by technical or algorithmic factors alone. Although previous studies have examined personality traits, social media motivations, and misinformation sharing, these factors have often been investigated separately. This conceptual paper proposes an integrated framework combining Big Five Personality Theory and Self-Determination Theory (SDT) to explain why individuals engage in unverified information sharing on social media. The framework argues that personality traits influence users' satisfaction or frustration of basic psychological needs, including autonomy, competence, and relatedness. When these needs are frustrated, users may experience Fear of Missing Out (FOMO), which increases impulsive and socially motivated false news sharing. Furthermore, self-esteem is proposed as a moderating psychological resource that buffers the effect of FOMO on false news sharing. By linking personality, motivation, emotion, and behavior, this paper develops a Personality–Motivation–Emotion framework and provides theoretical implications for understanding user-driven misinformation diffusion.

Keywords: big five personality, self-determination theory, fear of missing out, self-esteem, false news sharing, social media behavior.

1 Introduction

Social media has become a major channel for information production, circulation, and public discussion [1, 2]. However, its interactive and highly connected nature also facilitates the rapid spread of false news. False news can travel widely and quickly, affecting public trust, social stability, and the quality of the information environment [13, 18]. Therefore, understanding why users share false or unverified information has become an important issue in communication and media psychology.

Existing studies have explained false news sharing from different perspectives, including platform mechanisms, algorithmic amplification, fact-checking, content characteristics, political belief, cognitive reflection, and social media motivation [3, 6,

17]. However, these explanations often examine psychological factors separately. Less attention has been paid to how personality traits, psychological needs, emotional pressure, and protective psychological resources work together to shape false news sharing.

This paper proposes that false news sharing can be better understood through an integrated psychological framework. Big Five personality traits may influence how users experience social media and whether their psychological needs are satisfied or frustrated. According to Self-Determination Theory (SDT), individuals have basic needs for autonomy, competence, and relatedness [16]. When these needs are not satisfied, users may become more vulnerable to Fear of Missing Out (FOMO), which refers to the anxiety that others may be having rewarding experiences from which one is absent [14]. In social media contexts, FOMO may lead users to share trending or unverified information quickly in order to remain socially visible and connected.

However, not all users respond to FOMO in the same way. Self-esteem may act as a psychological buffer because individuals with higher self-esteem are usually less dependent on external validation and more capable of resisting social comparison pressure [5, 9]. Based on this logic, this paper develops a conceptual framework linking Big Five personality traits, psychological need satisfaction, FOMO, self-esteem, and false news sharing. The paper contributes to the literature by integrating dispositional, motivational, emotional, and protective factors into a single explanatory model.

2 Theoretical Background

Big Five Personality Traits and Social Media Behavior. Big Five Personality Theory identifies five broad personality dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience [12]. These traits provide a useful framework for understanding individual differences in online communication and information-sharing behaviour. Extraversion is generally associated with sociability, active interaction, and frequent online participation, while openness reflects curiosity and novelty-seeking, which may increase exposure to diverse or unconventional information [11]. Agreeableness may promote interpersonal harmony and socially considerate sharing, whereas conscientiousness is linked to self-control, caution, and more deliberate information evaluation. Neuroticism, by contrast, is associated with anxiety and emotional instability, which may increase users' vulnerability to socially driven or emotionally reactive sharing [6, 13].

In the context of false news sharing, personality traits should not be understood as simple direct determinants of behaviour. Rather, they may influence how users experience social media environments and how their psychological needs are satisfied or frustrated. For example, extraverted users may satisfy relatedness needs through social interaction, whereas neurotic users may experience stronger anxiety when they perceive social exclusion, insufficient feedback, or negative social comparison. Therefore, personality traits can be regarded as distal antecedents that shape motivational and emotional responses in digital environments.

Self-Determination Theory, Psychological Needs, and FOMO. Self-Determination Theory argues that individuals have three basic psychological needs: autonomy, competence, and relatedness [16]. Autonomy refers to the need to experience personal choice and self-direction; competence refers to the need to feel effective and capable; and relatedness refers to the need to feel connected with others. When these needs are satisfied, individuals are more likely to experience well-being and self-regulated behaviour. When these needs are frustrated, individuals may become more dependent on external validation and socially reactive forms of engagement.

Social media can both satisfy and frustrate these psychological needs. On the one hand, platforms allow users to express opinions, maintain relationships, and participate in public discussion. On the other hand, social comparison, feedback metrics, information overload, and constant connectivity may intensify users' dependence on external recognition [4, 19]. When users feel socially disconnected, excluded from conversations, or uncertain about their ability to evaluate information, they may become more vulnerable to FOMO [1].

Within the SDT framework, FOMO can be understood as an emotional response to frustrated psychological needs, especially relatedness. Users experiencing FOMO may frequently check social media, follow trending discussions, and participate in sharing behaviours to maintain social presence [14, 7, 8]. In misinformation contexts, this desire for immediate participation may reduce careful verification and increase the likelihood of sharing false or unverified news.

Self-Esteem as a Psychological Buffer. Self-esteem refers to an individual's overall sense of self-worth and psychological confidence [15]. In social media environments, self-esteem influences how users respond to social comparison, feedback, and perceived exclusion. Users with higher self-esteem are generally less dependent on likes, comments, and social approval to maintain their sense of belonging. By contrast, users with lower self-esteem may be more vulnerable to external validation and may rely more heavily on online feedback to regulate their self-worth [5, 9, 1].

For this reason, self-esteem may moderate the relationship between FOMO and false news sharing. When users experience FOMO, those with higher self-esteem may be more likely to pause, evaluate information, and resist impulsive sharing. Those with lower self-esteem, however, may be more likely to share trending or emotionally salient content in order to gain attention, maintain social presence, or avoid exclusion. Thus, self-esteem functions as a protective psychological resource in the proposed framework.

2.1 Methodological Approach: Conceptual Development

This study adopts a conceptual research approach aimed at theory development rather than empirical testing. Conceptual papers contribute to knowledge by integrating existing theories, clarifying relationships among constructs, and proposing new frameworks for future empirical examination. In this study, relevant literature on Big Five personality traits, SDT, psychological need satisfaction, FOMO, self-esteem, and false news sharing was synthesized to develop an integrated explanatory model.

The conceptual development follows a theory-synthesis logic. Big Five Personality Theory is used to explain stable individual differences in online behaviour, while SDT explains how psychological need satisfaction or frustration shapes users’ motivational states. FOMO is positioned as an emotional mechanism linking need frustration to false news sharing, and self-esteem is introduced as a moderating resource that may weaken the effect of FOMO on impulsive sharing. Although the framework is not empirically tested in this paper, it provides a theoretical basis for future studies using surveys, structural equation modelling, experiments, or digital trace data.

2.2 Conceptual Framework and Model Development

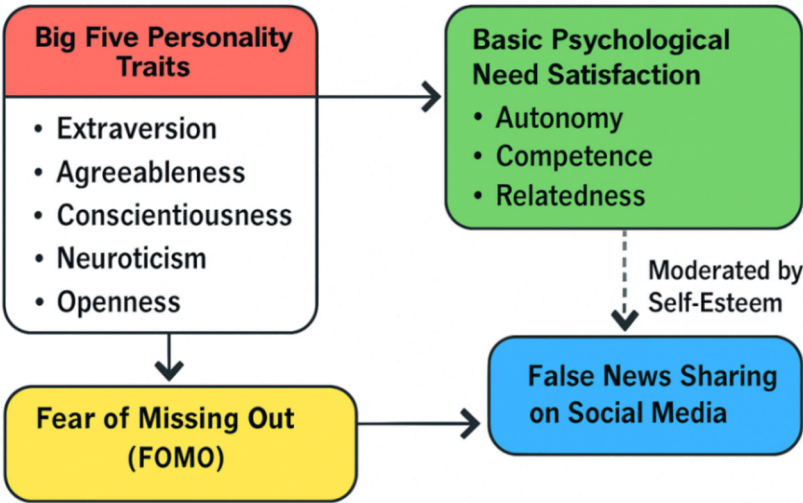


Fig. 1. Proposed conceptual framework linking Big Five personality traits, psychological need satisfaction, FOMO, self-esteem, and false news sharing.

Note: The framework proposes that personality traits influence false news sharing through psychological need satisfaction and FOMO, while self-esteem moderates the relationship between FOMO and false news sharing.

As shown in Figure 1, the conceptual framework of this study explains false news sharing on social media from four psychological mechanisms: personality, motivation, emotion, and behavior. Big Five personality traits are conceptualized as distal antecedents that influence the satisfaction or frustration of basic psychological needs. Psychological need frustration then increases FOMO, which encourages socially motivated and impulsive false news sharing. Self-esteem moderates this process by buffering the effect of FOMO on sharing behavior.

Personality Traits and Need Satisfaction. Personality traits shape users’ experiences on social media. Extraversion and openness may enhance need satisfaction by en-

couraging interaction, exploration, and self-expression. Agreeableness may support relatedness through interpersonal harmony, while conscientiousness may promote self-regulated online behaviour. Neuroticism, however, may increase sensitivity to social comparison, rejection, or lack of feedback, making users more likely to experience psychological need frustration [10, 11].

Proposition 1 (P1): Big Five personality traits influence users' psychological need satisfaction on social media. Extraversion and openness are likely to enhance need satisfaction, whereas neuroticism is likely to increase need frustration.

Need Satisfaction and FoMO. According to SDT, frustration of autonomy, competence, and relatedness needs can increase emotional imbalance and dependence on external validation [16]. In social media environments, relatedness frustration is especially important because users often rely on online interaction to maintain social connection. When users feel disconnected or excluded, they may experience stronger FOMO [4, 14].

Proposition 2 (P2): Lower psychological need satisfaction is associated with higher FOMO. In particular, frustration of relatedness needs increases users' fear of missing out.

FOMO and False News Sharing. FOMO may increase false news sharing because it encourages users to prioritise immediacy and social participation over accuracy. Users who fear missing out may feel pressure to respond quickly to trending topics, align with group discussions, or maintain visibility within their social networks. Under such pressure, verification may become less important than social connection [13, 17]. Therefore, false news sharing may result not only from poor information evaluation but also from emotional compensation and the desire to remain connected.

Proposition 3 (P3): FOMO mediates the relationship between psychological need satisfaction and false news sharing. Users with higher FOMO are more likely to share false or unverified news on social media.

Moderating Role of Self-Esteem. Self-esteem may influence how strongly FOMO leads to sharing behaviour. Users with high self-esteem are less dependent on external approval and may be better able to resist impulsive sharing. Users with low self-esteem may be more vulnerable to FOMO because they rely more on online feedback and social approval [5, 9]. Thus, self-esteem may buffer the effect of FOMO on false news sharing.

Proposition 4 (P4): Self-esteem moderates the relationship between FOMO and false news sharing. High self-esteem weakens the positive effect of FOMO on false news sharing, whereas low self-esteem strengthens this relationship.

3 Discussion

This paper develops an integrated Personality–Motivation–Emotion framework to explain false news sharing on social media. The main theoretical contribution lies in linking Big Five Personality Theory with SDT. Rather than treating personality traits as direct predictors of sharing behavior, this framework suggests that personality shapes users' psychological need satisfaction, which subsequently influences FOMO and false

news sharing. This perspective extends prior research by explaining how stable individual differences are translated into emotional and behavioral responses in digital environments.

The framework also contributes to misinformation research by repositioning FOMO as a central emotional mechanism. Previous studies have often understood false news sharing as a result of cognitive failure, lack of accuracy attention, or poor information verification. While these explanations are important, they do not fully capture the social and emotional pressures embedded in social media use. The present framework suggests that users may share false news not only because they fail to detect inaccuracy, but also because they seek social connection, visibility, and belonging. In this sense, false news sharing can be understood as an emotionally driven and socially motivated behavior.

Another contribution of this paper is the inclusion of self-esteem as a moderating factor. This addition highlights that users do not respond to FOMO in identical ways. Individuals with higher self-esteem may be more resilient to social comparison and less dependent on external validation, whereas those with lower self-esteem may be more likely to engage in impulsive sharing to maintain social presence. This insight is important because it moves misinformation research beyond general user behavior and toward more personalized psychological explanations.

The proposed framework also has practical implications. First, digital literacy interventions should not only teach users how to verify information but also address the emotional and social pressures that encourage rapid sharing. Second, platform design could reduce features that intensify FOMO, such as excessive visibility of trending topics, popularity metrics, or social feedback cues. Third, interventions aimed at strengthening self-regulation and self-esteem may help reduce anxiety-driven misinformation sharing, especially among users who are highly sensitive to social comparison.

4 Conclusion

This conceptual paper integrates Big Five Personality Theory and Self-Determination Theory to explain false news sharing on social media. The proposed framework suggests that personality traits influence psychological need satisfaction, which shapes FOMO and subsequently affects false news sharing behaviour. Self-esteem is introduced as a moderating psychological resource that may weaken the effect of FOMO on impulsive and unverified sharing. By connecting personality, motivation, emotion, and behaviour, this paper provides a coherent explanation of the psychological mechanisms underlying user-driven misinformation diffusion.

This study has several limitations. First, as a conceptual paper, the proposed framework has not yet been empirically tested. Future research should examine the model using quantitative methods such as structural equation modelling, experiments, or digital trace data. Second, the framework is based on existing literature and may require further validation across different cultural and platform contexts. Third, other factors such as media literacy, algorithmic exposure, political ideology, and social

network structure are not included in the current model and could be incorporated in future research. Despite these limitations, the framework offers a useful theoretical foundation for future studies on false news sharing and supports a more human-centred approach to misinformation governance.

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