### Research Paper





# Social Media: Stress Factors or Coping Strategies? A Pilot Study in a Sample of Italian Teachers

Amelia Rizzo<sup>1,2\*</sup>, Kavita Batra<sup>3</sup>, Murat Yıldırım<sup>4,5</sup>, Sefa Bulut<sup>6</sup>, Guendalina Tordonato<sup>1</sup>, Virginia De Maio<sup>1</sup>, Hicham Khabbache<sup>7</sup>, Łukasz Szarpak<sup>8,9</sup>, Mahmood Bahramizadeh<sup>10</sup>, Rezvaneh Namazi Yousefi<sup>11</sup>, Francesco Chirico<sup>12,13</sup>

- 1. Department of Clinical and Experimental Medicine, University of Messina, Messina, Italy.
- 2. Department of Cognitive Sciences, University of Messina, Messina, Italy.
- 3. Department of Medical Education, Kirk Kerkorian School of Medicine, University of Nevada, Las Vegas, United States.
- 4. Department of Psychology, Faculty of Sciences and Letters, Ağrı İbrahim Çeçen University, Ağrı, Turkey.
- 5. Department of Social and Educational Sciences, School of Arts and Sciences, Lebanese American University, Beirut, Lebanon.
- 6. Department of Counseling Psychology, Counseling Center, Faculty of Educational Sciences, Ibn Haldun University, Istanbul, Turkey.
- 7. Laboratory of Morocco, Department of Psychology, Faculty of Arts and Human Sciences Fès-Saïss, Sidi Mohamed Ben Abdellah University, Fez, Morocco.
- 8. Henry JN Taub Department of Emergency Medicine, Baylor College of Medicine, Houston, United States.
- 9. Department of Clinical Research and Development, LUXMED Group, Warsaw, Poland.
- 10. Department of Orthotics and Prosthetics, Faculty of Rehabilitation, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.
- 11. Research Center, Deputy of Research and Technology, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.
- 12. Faculty of Medicine and Surgery, School of occupational Health, Catholic University of the Sacred Heart, Rome Campus, Italy.
- 13. Department of Health Service, Italian State Police, Ministry of the Interior, Milan, Italy.



Citation Rizzo A, Batra K, Yıldırım M, Bulut S, Tordonato G, De Maio V, et al. Social Media: Stress Factors or Coping Strategies? A Pilot Study in a Sample of Italian Teachers. Iranian Rehabilitation Journal. 2024; 22(2):333-344. http://dx.doi.org/10.32598/irj.22.2.2288.1



**Article info:** 

Received: 10 Jan 2024 Accepted: 12 Feb 2024 Available Online: 01 Jun 2024

#### **ABSTRACT**

**Objectives:** The present study aims to address the psychological motivations behind social media use, focusing on its under-explored regulatory function in the context of coping strategies and emotional regulation among teachers. This exploratory research explores the relationship between social media engagement and its impact on educators' stress management and emotional regulation mechanisms.

**Methods:** To investigate this relationship, the study utilized two key instruments: The coping inventory for stressful situations and the Italian version of the difficulties in emotion regulation scale. These tools were administered to a sample of 214 Italian teachers, predominantly female (90.7%), with ages ranging from 25 to 65 years (Mean±SD 47.19±9.02 years). The study employed correlation analysis to assess the associations between social media use in addition to various coping and emotional regulation strategies.

**Results:** The correlation analysis revealed a nuanced relationship between the usage of certain social media platforms and a higher inclination toward a problem-oriented coping style, alongside a decreased sense of a lack of negative emotional control. Accordingly, while social media can serve as a tool for problem-oriented coping, it may also hinder the ability to disengage from negative emotional states.

**Discussion:** The results of this study shed light on the potential of social media as a resource and a challenge in the emotional and professional lives of teachers. By identifying specific coping strategies that are positively and negatively associated with social media use, the research points toward possible interventions that could mitigate the adverse effects of social media. This could include developing targeted support mechanisms to enhance teachers' ability to manage stress and regulate emotions effectively, thereby optimizing their use of social media in a way that supports their psychological well-being.

#### **Keywords:**

Social media, Coping, Teachers, Emotional regulation, Stress

#### \* Corresponding Author:

Amelia Rizzo, Professor.

Address: Department of Clinical and Experimental Medicine, University of Messina, Messina, Italy.

**Tel:** +39 (090) 6761

E-mail: amrizzo@unime.it



Copyright © 2024 The Author(s);

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC-By-NC: https://creativecommons.org/licenses/by-nc/4.0/legalcode.en), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

#### **Highlights**

- A plethora of research has predominantly concentrated on the utilization of social media platforms by students and adolescents, overlooking teachers.
- Educators may perceive social media as a dual-faceted phenomenon: A source of stress or a valuable resource.
- There are correlations between social media utilization and stress management strategies employed by teachers.
- This investigation marks the inaugural exploration of the significance of social media usage in the context of emotional regulation among educators.
- Comprehending the application of digital devices and social media as mechanisms for emotional and psychological regulation can facilitate identifying and enhancing psychological resources and preventive strategies.

#### Plain Language Summary

The psychological motivations for the use of social media have garnered great interest in the literature lately. However, its regulatory function has not yet been fully explained. This exploratory study investigates the relationship between social media, coping strategies, and emotional regulation among teachers. For the assessment, the coping inventory for stressful situations and the difficulties in emotion regulation scale, Italian version, were used as survey tools. A total of 214 Italian teachers participated in this study (90.7% female), aged between 25 and 65 years. Correlation analysis showed a relationship between the use of some social media with a greater propensity for problem-oriented coping style and less lack of control, in addition to a difficulty in distraction from negative emotions. The results indicate potential strategies for mitigating challenges associated with social media, offering effective interventions to assist teachers in coping with stress.

#### Introduction

ndividuals, in their everyday lives and especially in the workplace, strive to develop and increase their adaptability to cope with the continuous changes and updates in the world of work. This can lead to increased levels of stress [1, 2]. Work-related stress was defined in 2004 by the Italian National Institute for Insurance against Accidents at Work (INAIL) as a condition that can be accompanied by physical, psychological or social disorders or dysfunctions and is a consequence of some individuals who do not feel capable of meeting the demands or expectations placed on them [3].

Working as a teacher can provide numerous satisfactions but also high levels of stress. Recently, some studies have shown that the stress associated with teaching can be greater as opposed to other occupations [4, 5], making it the profession with the highest occupational stress. In particular, the literature on teacher stress indicates how this profession has become complex over time, lacking in certainties, recognitions, satisfactions and often also in protection, and how this leads to those who practice this

profession bearing heavy physical, psychological and behavioral consequences.

Teaching-related stress is defined as the teacher's experience of negative emotions, such as tension, frustration, anxiety, anger, and depression arising from certain aspects of teaching [6] or as any characteristic of the school environment that represents a threat to the teacher [7-9]. Within the educational and school context, there are multiple stressors that teachers face daily, such as inadequate support from the management [10], student behavior, the high number of students in the classrooms, excessive administrative load, and failure to communicate with colleagues and or students' parents [11], the lack of motivation and discipline on the part of the students, time pressure, and workload [12].

Factors associated with teacher stress can be distinguished as follows:

1) Systemic factors that include a lack of adequate resources and structure [12]; high administrative load; too many professional responsibilities [13]; limited participation in the decision-making process [6]; uncollabora-

tive management climate a high number of students in classrooms and schools [5]; poor motivation for about one's performance due to the role played and the limited opportunities for promotion [6]; integration of children with special needs [5]; continuous training courses; and continuous evaluations for teachers [14]; 2) Work environment stress factors that include inadequate working conditions, managerial problems, a lack of resources and support, or micromanagement by excessive authority; 3) Physical stress factors, such as noise, agitation, crowds, small classrooms or schools, lack of facilities, office supplies, teaching materials, and lack of structure suitable for safety [5].

In addition to environmental stress factors, individual factors, such as personality, gender, living environment, ability to establish and maintain interpersonal relationships, ability to manage environmental demands [5], low income [8], low social status, and lack of social support play an important role [10]. To cope with the multiple stressors that teachers encounter during the performance of their profession, they may subsequently adopt strategies to manage their stress, such as spending their time on social media.

The ramifications of these stressors are significant, impacting educators and the quality of education as a whole. The effectiveness of the coping mechanisms utilized by educators, the presence of support networks, and the institutional modifications implemented to alleviate stressors are crucial factors that influence the educational environment. The outcomes of these endeavors are evident in the scholastic and interpersonal growth of the students they mentor and in the welfare of the educators.

Through the cultivation of a nurturing and resourcerich atmosphere, educators can carry out their responsibilities with less psychological burden, thereby establishing a learning environment that is conducive to the growth of students as well as educators. Realizing and effectively managing the complex dimensions of teacher stress will serve as an investment toward the future of education and the teaching profession as a whole.

#### Social media: Stress factors and coping strategies

Nowadays, social media is an integral part of the lives of all individuals regardless of age. Social media has been extensively used among young adults and adolescents, particularly those in educational roles, are not exempt from such use, whether functional or dysfunctional. Social media are defined as Internet applications that allow users to create and share content [15]. The multiple

social media platforms on the internet include various social networking sites, marketing sites, gaming sites, and trading sites [16]. Some of the most well-known social media sites are Facebook, WhatsApp, YouTube, Instagram, TikTok, Twitter, Twitch, Tinder, LinkedIn, Pinterest, and TripAdvisor.

There are numerous studies in the literature that have highlighted the positive correlation between the use of social media and stress [17, 18] but also how stress leads people to use social media. In other words, social media, if used in a dysregulated manner, causes stress, and people tend to use social media to overcome stress. Moreover, it is worth noting that social media usage patterns frequently mirror latent stressors in an individual's life, indicating the existence of an intricate reciprocal association in which stress impacts social media behaviors, which subsequently may intensify stress levels. The use of social media can play three roles in stress and coping processes it can be a stress factor, a resource, or a coping strategy [19].

Social media's ubiquitous presence influences not only individual behavior but also the collective consciousness of educational institutions and workplaces. Educators frequently encounter challenges in distinguishing their professional and personal lives when utilizing social media. These challenges may arise from the need to handle online harassment, maintain a positive online reputation, or navigate the constant demands of connectivity [20]. Educators might encounter a paradoxical circumstance in which social media functions as an indispensable instrument for fostering engagement and communication, while concurrently accelerating the onset of stress and burnout.

Personal and professional difficulties may be exacerbated by the accessibility of social media, given that negative feedback or experiences can propagate swiftly and extensively. When individuals are required to reconcile the need for personal well-being with the desire for social media connectivity, this phenomenon can impose a significant psychological burden. Consequently, individuals, particularly those in the teaching profession who rely extensively on these platforms, must prioritize the development of digital resilience, the capacity to endure and recuperate from digital stressors.

#### Social media as a source of stress

Social media can be configured as stress factors [20, 21] due to their intrinsic characteristics. Firstly, social media can induce approval anxiety, as users seek to

provide an idealized image of themselves by publishing photos and content [21, 22]. Since the photos posted on their profile can be viewed by a vast and diverse audience, this can lead users to have uncertainty about the reactions of others to their profile [23].

Secondly, social media can induce the fear of missing out as the fear that others may have gratifying experiences from which one is absent [24]. For instance, people tend to post mainly positive moments of their lives on their social media, users can consequently get the impression that their friends have more gratifying experiences [25, 26]. Social media can also act as stress factors due to the high level of misinformation, their high availability, the request always to be online, and information overload [27, 28]. These last two stress factors can derive not only from social media notifications but also from notifications of other applications or work e-mails [19].

#### Social media as resources

Social media can also serve as a resources. For instance, these can be used as tools for social support by facilitating connections with friends and relatives, allowing them to receive emotional support, participate in the online community, and provide useful information and learning opportunities. Moreover, social media can represent both stress factors and resources. It all depends on how they are used by people [19]. Additionally, people can use social media as coping mechanisms and coping tools to deal with stress [19]. In particular, social media can be used to seek social support after experiencing a stressful situation [29, 30] and alleviate negative emotions caused by stress; therefore, they can be used as an emotion-focused coping strategy [31]. Meanwhile, social media can be used to distract from stressful experiences, thereby acting as an avoidance-oriented coping strategy, and also they can be used to solve the problem that caused the stress, as problem-focused coping [32-34].

Returning to the transactional model of stress by Lazarus and Folkman [31], the effectiveness of using social media depends on how much the chosen coping strategy adapts to the situational circumstances. For example, a coping strategy might be effective in one situation but not in another [19].

#### **Emotional regulation of teachers**

Emotions represent an important aspect of the teaching profession and can be defined as a true emotional and personal commitment [35]. For example, when a teaching objective is achieved, teachers feel happy. They feel

proud due to the achievements of their students. However, they may also experience negative emotions, including anger due to the inappropriate behaviors of students or frustration when the latter fail to understand concepts [35].

Most of the strategies employed by teachers to regulate their emotions are based on reducing negative emotions, for example, by focusing on positive thoughts and the daily joys of teaching, increasing the intensity or duration of the experience, or over-regulating the positive emotion, a strategy defined as up-regulation. However, sometimes they use the opposite strategy, down-regulation, which consists of reducing negative emotions like anger to maintain a positive climate in the classroom and positive relationships with students [35].

Teaching is a very demanding job. Many educational figures highlight the risk of not always being able to regulate their emotions. Teachers, like others, need to possess good and functional emotional regulation skills to adapt to their daily and work circumstances.

To the best of our knowledge, studies on coping with stress and emotional regulation concerning social media are scarce. Against this backdrop, the purpose of the current pilot is to investigate the relationship between social media, coping strategies, and emotional regulation in a sample of Italian teachers.

#### **Materials and Methods**

#### Study participants

The sample included a total of 214 Italian teachers, of whom the majority (90.7%) were females and the remaining (9.3%) were males. In terms of educational qualifications, a larger proportion of teachers (85.5%) held a degree, and a small percentage (14.5%) had pursued postgraduate studies. The Mean±SD of participants was 47.19±9.023 years, indicating a relative variety in the ages of the respondents. The ages of the participants ranged from a minimum of 25 years to a maximum of 65 years.

#### **Ethical considerations**

Data collection was conducted through the completion of two self-report questionnaires. They were independently completed online via an invitation link on Google Forms. Participation was completely voluntary, and efforts were made not to collect any personal identifiers to preserve the anonymity of those who agreed to par-

ticipate in this study. The form included the following parts, in addition to the sections dedicated to the questionnaires: A first section that presented and outlined the objectives of the research; a second section, consisting of the informed consent where information on the use of data for statistical or scientific purposes for the same research and the utmost confidentiality of personal data were explained; a third section for the acquisition of sociodemographic information; and a fourth section dedicated to acquiring information about the preference for social media and frequency of use.

#### **Survey instruments**

#### Difficulties in emotion regulation scale (DERS)

The DERS [36] is one of the most frequently used tests to assess difficulties in emotion regulation in the adult population. DERS is a self-report questionnaire aimed at evaluating difficulties, in a clinical sense, in the regulation of negative emotions. The test allows the assessment of difficulties present in various aspects: a) Awareness and understanding of emotions; b) Acceptance of emotions; c) Ability to control impulsive behaviors and act following one's goals; d) An ability to use flexible emotional regulation strategies congruent with environmental demands and context [36]. Meanwhile, DERS consists of 36 items that assess the presence of specific individual patterns of emotional regulation, to which participants will respond with a score based on a 5-point Likert scale from 1 (almost never) to 5 (almost always) points. The instrument is composed of six scales as follows:

#### Non-acceptance

This subscale includes the non-acceptance of emotional responses. This scale is characterized by items that assess the propensity to have denial reactions toward one's discomfort or the tendency to have a secondary negative emotional reaction.

#### Goals

This subscale assesses the difficulty in implementing goal-directed behaviors and distraction. Items assess difficulties in paying attention and performing a task during the perception of negative emotions.

#### **Impulse**

This section examines the difficulty in impulse control. This scale evaluates the presence of difficulties in controlling one's behavior when experiencing negative emotions.

#### **Awareness**

This subscale evaluates the absence of emotional awareness. The scale is characterized by items that highlight the attitude of paying attention to and recognizing one's emotions.

#### **Strategies**

This section includes emotional regulation strategies, such as being able to effectively control emotions when they manifest.

#### Clarity

This subscale examines the absence of emotional clarity. The items assess people's ability to understand the emotions they are experiencing. In previous studies, the questionnaire has been shown to present high internal consistency, good test-retest reliability, and good construct and predictive validity [36].

#### Coping inventory for stressful situations (CISS)

The CISS [37] is a self-report instrument that is easy to administer and is used to measure different coping styles, that is, the various ways in which individuals react to and deal with stressful situations. Initially, this tool was named the multidimensional coping inventory [37], and its first work began in 1986. Today, the current version for adults is the sixth iteration of the original scale. CISS offers several advantages over other instruments for assessing coping. Firstly, the scales are derived from theoretical and empirical notions used in various fields of research and application, which allows for interpreting the test results and correlating them with other variables related to health and personality. The instrument is multidimensional as it assesses and measures different coping styles, allowing for greater accuracy in predicting these styles, understanding them, and the multiple relationships between coping styles and personality variables. The CISS consists of a total of 48 items divided into three scales: Task-oriented coping, emotion-oriented coping, and avoidance-oriented coping. Each of the scales consists of 16 items. Meanwhile, the scales are explained as follows:

#### The task-oriented coping

The task-oriented coping scale outlines efforts made to find a solution to a problem by trying to reorganize it at the cognitive level or change the situation. The focus is on the task and problem-solving abilities.

#### The emotion-oriented coping

The emotion-oriented coping scale describes various emotional reactions aimed at reducing stress.

#### The avoidance-oriented coping

The avoidance-oriented coping scale outlines the implementation of behaviors or cognitive changes to avoid the stressful stimulus. The last scale includes two subscales. Firstly, the distraction subscale which consists of eight items concerns the tendency to avoid stressful situations by focusing on other circumstances or tasks. Secondly, social diversion which consists of five items concerns the tendency to avoid stressful situations by turning not to another task but to a person. To mitigate the effect due to the order, the items just described are distributed in a random order. People who are administered the CISS are asked to respond to each item by rating it on a four-point frequency scale, from 1=not at all to 4=very much. The questionnaire takes about 10 min to complete.

#### Reliability of the instruments

In the current study, DERS demonstrated excellent internal reliability with a Cronbach  $\alpha$  value of 0.894 (N items=36), indicating that the questionnaire items are highly consistent in measuring difficulties in emotion regulation. Similarly, CISS showed significant internal reliability, with a Cronbach  $\alpha$  value of 0.913 (N items=48), highlighting the consistency of the items in assessing coping strategies in stressful situations.

#### Data analysis

The data were analyzed using the SPSS software, version 27.0. All numerical variables were represented as Mean±SDs. Skewness and kurtosis statistics were used to describe the distribution of the numeric variables. Categorical variables were described as counts and proportions. Where possible, correlations among numeric or linear variables were calculated using the Pearson correlation test, while for ordinal variables, the Spearman Rho test was used. Statistical significance was set at P<0.05.

#### Results

#### Frequency of social media use

Among the participants, Facebook emerged as the most used social media platform, with a clear majority of subjects (78.4%) stating they use it (21.6% do not use it). YouTube follows as the second platform, albeit

with a slightly more balanced distribution, being used by 64.3% of participants (35.7% do not use it). With a usage percentage of 53.1% (46.9% do not use it), just over half of the respondents chose Instagram. Conversely, TripAdvisor, Twitter, LinkedIn, Snapchat, Tinder, TikTok, and Twitch show significantly lower usage levels, with non-usage percentages ranging from 90.6% to 99.1%. Pinterest was in the intermediate range, with 29.6% of users (70.4% do not use it). These data reflect a clear preference for certain platforms over others within this particular group of participants (Figure 1).

Facebook usage was widespread with 11.2% of respondents using it alone and many other combinations that include Facebook. YouTube and Instagram are also popular, often used together or in combination with Facebook. A total of 13.1% of respondents use Facebook, YouTube, and Instagram together, while 12.1% use Facebook and YouTube together. Meanwhile, a significant percentage of individuals use multiple social media platforms simultaneously, reflecting a trend toward diversified social media consumption. In particular, many of the listed combinations included three or more platforms. Most respondents used two to four social media platforms, peaking at 21.3% for those using three platforms. However, there was also a small percentage of individuals who use a single platform (14.9%), preferring to focus on a single network. This may reflect a preference for a specific type of social interaction or content.

Furthermore, some users demonstrated a high level of engagement with social media, using a wide range of different platforms. A total of 53.3% of participants reported using social media for <1 h/day, highlighting a rather contained and perhaps more conscious approach to their use. On the other hand, 40.7% indicated an engagement between 1 to 3 h/day, suggesting moderate and regular use. Only a small fraction of users reported more intense use as follows: 3.7% between 3 and 6 h/day, and 2.3% for more than 6 h/day. These data may reflect a growing awareness of the risks associated with excessive social media use, but also the central role they play in many people's daily lives to stay in touch with friends and family, for work, or entertainment.

After analyzing the Mean±SDs of the subscales of the DERS among teachers and the general population, some points for reflection emerge (Table 1). Teachers tended to have greater difficulty accepting their emotional responses (Mean±SD 12.31±5.805) and showed a significant lack of confidence in their emotional regulation abilities (Mean±SD 23.13±3.122), compared to the general population (Mean±SD 11.59±4.89 for non-acceptance,

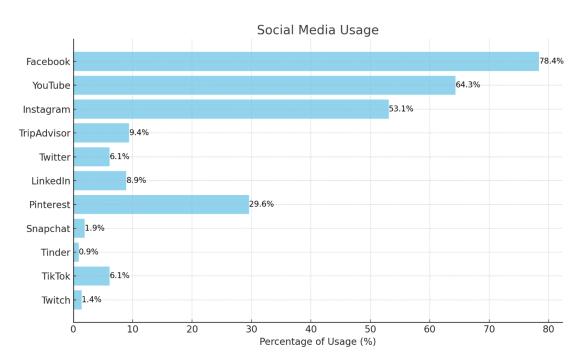


Figure 1. Percentage of social media preferences in the sample of Italian teachers (n=214)

and Mean±SD 10.89±3.71 for the lack of confidence). On the other hand, the general population has more difficulty with distraction (Mean±SD 12.83±4.61) and less emotional self-awareness (Mean±SD 5.80±2.76), compared to teachers (Mean±SD 12.07±4.931 for the difficulty of distraction and Mean±SD 4.84±2.192 for limited awareness). However, the differences between the two groups are not significant and suggest that both

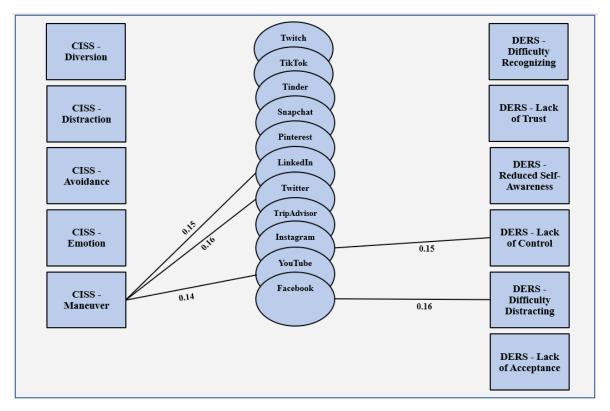
share similar challenges in terms of emotional regulation, albeit in different areas.

After analyzing data on coping strategies between teachers and the general population, the general population tended to rely more consistently on all coping strategies compared to teachers, showing more frequent use of problem-solving (Mean±SD 54.22±9.12), emo-

Table 1. Descriptive statistics of coping strategies and emotional regulation in the sample of teachers (n=214)

Items	Mean±SD	Skewness	Kurtosis
Lack of acceptance	12.31±5.805	0.944	0.344
Difficulty of distraction	12.07±4.931	0.534	-0.382
Lack of control	10.92±4.661	1.133	1.042
Reduced self-awareness	4.84±2.192	1.434	2.061
Lack of confidence	23.13±3.122	0.325	2.093
Difficulty in recognition	8.41±3.241	0.688	-0.715
Maneuver (task-oriented coping)	48.56±7.801	-0.482	0.280
Emotion (emotion-oriented coping)	34.75±10.117	0.369	-0.329
Avoidance	41.34±9.313	-0.089	-0.469
Distraction	19.69±5.108	0.078	-0.644
Diversion	14.10±3.778	-0.556	-0.152

Iranian Rehabilitation Journal



∏ranian Rehabilitation Journal

Figure 2. Correlations between social media and coping strategies and emotional regulation in the sample of teachers (n=214)

tional (Mean±SD 45.62±11.21), avoidance (Mean±SD 48.27±11.49), distraction (Mean±SD 21.67±6.55) and social diversion (Mean±SD 17.39±4.73). On the other hand, teachers showed lower mean scores on all subscales, with problem-solving (Mean±SD 48.56±7.801), emotion (Mean±SD 34.75±10.117), avoidance Mean±SD 41.34±9.313), distraction (Mean±SD 19.69±5.108), and social diversion (Mean±SD 14.10±3.778).

## Relationship between social media use, coping, and emotional regulation

There are strong links between using certain social media sites, DERS, and CISS scales (Figure 2). Specifically, frequent use of YouTube, Twitter and LinkedIn was correlated with the adoption of problem-solving coping strategies (YouTube: r=0.137, P<0.05; Twitter: r=0.157, P=0.024; LinkedIn: r=0.150, P=0.032). Similarly, more frequent use of Instagram was associated with fewer difficulties in behavioral control in response to negative emotions, as shown by the negative correlation with the DERS's lack of control (r=-0.147, P=0.032). Conversely, the use of Facebook was linked to greater difficulties in distraction when experiencing negative emotions, as evidenced by the positive correlation with the DERS's difficulty of distraction (r=0.164, P=0.017). These re-

sults suggest how specific social media platforms can be associated in different ways with difficulties in emotion regulation and the coping strategies adopted.

In comparing DERS and CISS, there was a strong link between having trouble controlling your emotions and the ways teachers deal with stress (Table 2). In particular, those who have difficulties accepting their emotions, maintaining behavioral control in the presence of negative emotions, and recognizing their emotions tended to use fewer problem-focused coping strategies, as indicated by the negative correlations with the CISS's task scale (r=-0.194, P=0.005; r=-0.255, P<0.001; r=-0.292, P<0.001, respectively). Likewise, less emotional awareness was associated with less recourse to problemfocused coping strategies (r=-0.318, P<0.001). On the other hand, those who have difficulties in emotion regulation tended to use more emotion-based coping strategies, as indicated by the positive and significant correlations with the CISS's emotion scale, respectively, for non-acceptance, difficulty of distraction, lack of control, limited awareness, lack of confidence, and difficulty in recognition (P<0.001). Lastly, the lack of confidence was found to be positively correlated with the use of distraction-based coping strategies (r=0.202, P=0.003).

Table 2. Intercorrelation matrix between difficulties in emotion regulation scale and the coping inventory for stressful situations scale among teachers (n=214)

Difficulties in the Emotion Regulation Scale									
	Constructs	Lack of Acceptance	Difficulty of Distraction	Lack of Control	Low Self- Awareness	Lack of Trust	Difficulty in Recognizing		
Coping inventory for stressful situations	Maneuver	-0.194*	-0.118	-0.255**	-0.318**	0.119	-0.292**		
	Emotion	0.554**	0.557**	0.549**	0.186*	0.290**	0.396**		
	Avoidance	-0.008	-0.004	-0.028	-0.134	0.186*	-0.034		
	Distraction	0.079	0.076	0.074	-0.116	0.202*	0.030		
	Diversion	-0.086	-0.064	-0.125	-0.107	0.132	-0.071		

\*P<0.05, \*\*P<0.001.

■ranian Rehabilitation ■ournal

#### Discussion

In this exploratory study, we investigated the dynamics of social media use, coping strategies, and emotional regulation mechanisms in a selected sample of teachers. The quantitative analysis of social media use revealed a marked predilection for Facebook, YouTube, and Instagram, suggesting a tendency for teachers to gravitate toward established and widely adopted digital platforms. Conversely, platforms like Twitter, LinkedIn, and Tik-Tok showed lower levels of use. According to Fox and Bird [38], teachers, similar to other members of society. exhibit different attitudes towards social media such as Facebook, Twitter, and LinkedIn: Some avoid them, others explore them, and some adopt them with great enthusiasm. As accessible communication tools in contemporary society, social media poses a challenge for teachers and other professionals, pushing them to decide on the use of these tools and, if affirmative, to establish the basis on which to use them, both personally (as individuals) and professionally (as teachers). Although educational institutions have established rules and codes of conduct, it is up to the individual teachers to decide whether to use social media to enrich or improve their students' learning.

Teachers showed greater difficulty accepting their emotional responses and less confidence in their abilities to manage emotions than the general population. These results suggest that the pressures and challenges related to the professional role of teachers might negatively impact their ability to regulate emotions. On the other hand, the general population seems to have greater difficulty with distraction and less emotional self-awareness compared to teachers. This could indicate that, while teachers might have developed better strategies to manage dis-

tractions and greater awareness of their own emotions due to the demands of their job, the general population might not have the same skills in these areas. A study by Mérida-López et al. (2017) [39] showed that teachers' ability to regulate emotions is significantly associated with lower levels of depression, anxiety, and stress, playing a protective role against the development of mental health problems and work-related stress. In the observed sample, teachers also showed reduced coping strategies. Many studies have demonstrated how coping resources can protect school staff from developing work-related stress and burnout [40]. The scientific literature highlights a negative correlation between stress and burnout on the one hand and job satisfaction and the intention to remain in one's job on the other, especially in the context of the teaching profession. Studies have shown that many teachers experience high levels of stress comparable to those in highly stressful professions like ambulance operators, police, and prison guards. However, coping resources can mediate the relationship between stress and burnout [41]. Demirtepe-Saygili (2020) [42] argues that on one hand, social media use can represent a source of stress for users due to the content displayed in posts, fear of being negatively evaluated, a dependency on their social accounts and cyberbullying. On the other hand, social media can serve as a problem-focused coping strategy, providing useful information, or as an emotion-focused strategy, offering distraction and social support. Furthermore, social media can influence overall well-being by acting as predictors, moderators, or mediators in the relationship between coping strategies and well-being. Although problematic use of social media can result in dysfunctional coping strategies and deterioration of well-being, conscious and positive use can help to tackle stress and promote greater well-being.

#### Conclusion

The relentless evolution of the digital landscape has radically transformed interpersonal, professional, and social dynamics, infiltrating various aspects of everyday life. Among the professions impacted by this transformation, teaching emerges as a field particularly sensitive to the challenges posed by the digital age. Teachers, being at the center of the educational process, find themselves navigating in an ever-changing environment where the integration of technology and the use of social media have become indispensable elements. The relationship between social media use and stress in teachers is a topic of increasing relevance, drawing the attention of the scientific and educational communities. Social media, while offering platforms for resource sharing, collaboration, and professional networking, can also act as catalysts for stress. The pressure arising from the need to maintain an online presence, managing interactions with students and parents through these platforms, and exposure to social comparisons and online criticism are all factors that can contribute to elevated stress levels among teachers. This work aims to lay the groundwork for a comprehensive understanding of the mechanisms underlying social media-related stress in teachers, exploring the psychosocial dynamics, professional implications, and effects on mental health. Through an analysis based on scientific evidence, it intends to outline mitigation strategies and effective interventions to support teachers in navigating the challenges posed by social media, promoting conscious use, and protecting their psychological well-being.

#### Study limitations

Although the present study makes important contributions to the research and practice in the field of social media, it is essential to acknowledge its limitations. The majority of participants were female (90.7%), limiting the generalizability of the findings to other subgroups. Future research should aim for a more balanced gender representation, including both male and female teachers, and explore diverse demographic characteristics, such as teachers from various educational levels. Additionally, the descriptive nature of the results precludes the establishment of causal relationships between variables of this study. To address this limitation, longitudinal studies are recommended to examine potential causal links between difficulties in emotion regulation and coping strategies.

#### **Ethical Considerations**

#### Compliance with ethical guidelines

The study was approved by the Ethics Committee of the Polish Society of Disaster Medicine (Code: 12.01.2023. IRB).

#### **Funding**

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

#### Authors' contributions

Conceptualization and study design: Amelia Rizzo and Francesco Chirico; Methodology: Amelia Rizzo, Murat Yıldırım and Hicham Khabbace; Data collection: Guendalina Tordonato; Virginia De Maio; Formal analysis: Amelia Rizzo; Writing: Amelia Rizzo, Guendalina Tordonato, Murat Yıldırım, Kavita Batra, Łukasz Szarpak, Sefa Bulut, Mahmood Bahramizadeh and Rezvaneh Namazi Yousefi; Final approval: All authors.

#### Conflict of interest

The authors declared no conflict of interest.

#### Acknowledgments

The authors thank all participants who voluntarily contributed to this study.

#### References

- [1] Chirico F, Taino G, Magnavita N, Giorgi I, Ferrari G, Mongiovì MC, et al. [Proposal of a method for assessing the risk of burnout in teachers: The VA. RI. BO strategy (Italian)]. Giornale Italiano di Medicina del Lavoro ed Ergonomia. 2019; 41(3):221-35. [PMID]
- [2] Chirico F, Capitanelli I, Bollo M, Ferrari G, Acquadro Maran D. Association between workplace violence and burnout syndrome among schoolteachers: A systematic review. Journal of Health and Social Sciences. 2021; 6(2):187-208. [Link]
- [3] The Istituto Nazionale Per L'assicurazione Contro Gli Infortuni Sul Lavoro. [Risk of work-related stress (Italic)] [internet]. 2004. [Updated 2023 May]. Available from: [Link]
- [4] Travers CJ, Cooper CL. Teachers under pressure: Stress in the teaching profession. London; Routledge: 1995. [DOI: 10.4324/9780203059975]
- [5] Clipa O. Teacher stress and coping strategies. LUMEN Proceedings. 2017; 2:120-8. [DOI:10.18662/lumproc.icsed2017.14]

- [6] Sandilos LE, Goble P, Rimm-Kaufman SE, Pianta R. Does professional development reduce the influence of teacher stress on teacher-child interactions in pre-kindergarten classrooms? Early Childhood Research Quarterly. 2018; 42:280-90. [DOI:10.1016/j.ecresq.2017.10.009]
- [7] Albu G. The teacher's worries and concerns (or what takes place in his inner world). Journal of Educational Sciences and Psychology. 2012; 2(1): 57-65. [Link]
- [8] Popa C, Laurian S, Fitzgerald C. An insight perspective of Finland's educational system. Procedia-Social and Behavioral Sciences Journal. 2015; 180:104- 12. [DOI:10.1016/j.sbspro.2015.02.092]
- [9] Sutton R I. Job stress among primary and secondary schoolteachers: Its relationship to III-Being. Work and Occupations. 1984; 11(1):7-28. [DOI:10.1177/0730888484011001002]
- [10] Cozolino L. The social neuroscience of education: Optimizing attachment and learning in the classroom. New York: WW Norton & Company; 2013. [Link]
- [11] Blase JJ. A qualitative analysis of sources of teacher stress: Consequences for performance. American Educational Research Journal. 1986; 23(1):13-40. [DOI:10.3102/00028312023001013]
- [12] Aldrup K, Klusmann U, Ludtke O. Does basic need satisfaction mediate the link between stress exposure and well-being? A diary study among beginning teachers. Learning and Instruction. 2017; 50:21-30. [DOI:10.1016/j. learninstruc.2016.11.005]
- [13] El Helou M, Nabhani M, Bahous R. Teacher's views on causes leading to their burnout. School Leadership & Management. 2016; 36(5):551-67. [DOI:10.1080/13632434.2016.124 7051]
- [14] Masari GA, Muntele D, Curelariu V. Motivation, workstress and somatic symptoms of Romanian preschool and primary school teachers. Procedia - Social and Behavioral Sciences. 2013; 84:332-5. [DOI:10.1016/j.sbspro.2013.06.561]
- [15] Kaplan AM, Haenlein M. Users of the world, unite! The challenges and opportunities of Social Media. Business Horizons. 2010; 53(1):59-68. [DOI:10.1016/j.bushor.2009.09.003]
- [16] Dijk V, Poell T. Understanding social media logic. Media and Communication. 2013; 1(1). [DOI:10.12924/mac2013.01010002]
- [17] Wolfers LN, Festl R, Utz S. Do smartphones and social network sites become more important when experiencing stress? Results from longitudinal data. Computers in Human Behavior. 2020; 109:106339. [PMID]
- [18] Brailovskaia J, Rohmann E, Bierhoff HW, Schillack H, Margraf J. The relationship between daily stress, social support and Facebook addiction disorder. Psychiatry Research. 2019; 276:167-74. [DOI:10.1016/j.psychres.2019.05.014] [PMID]
- [19] Wolfers LN, Utz S. Social media use, stress, and coping. Current Opinion in Psychology. 2022; 45:101305. [DOI:10.1016/j.copsyc.2022.101305] [PMID]
- [20] Steele RG, Hall JA, Christofferson JL. Conceptualizing digital stress in adolescents and young adults: Toward the development of an empirically based model. Clinical Child and Family Psychology Review. 2020, 23(1):15-26. [DOI:10.1007/s10567-019-00300-5] [PMID]

- [21] Fox J, Vendemia MA. Selective self-presentation and social comparison through photographs on social networking sites. Cyberpsychology, Behavior and Social Networking. 2016; 19(10):593-600. [DOI:10.1089/cyber.2016.0248] [PMID]
- [22] Bayer JB, Trieu P, Ellison NB. Social media elements, ecologies, and effects. Annual Review of Psychology. 2020; 71:471-97. [DOI:10.1146/annurev-psych-010419-050944] [PMID]
- [23] Marwick AE, Boyd D. I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. New Media & Society. 2011; 13(1):114-33. [DOI:10.1177/ 1461444810365313]
- [24] Chua THH, Chang L. Follow me and like my beautiful selfies: Singapore teenage girls' engagement in self-presentation and peer comparison on social media. Computers in Human Behavior. 2016, 55:190-7. [DOI:10.1016/j.chb.2015.09.011]
- [25] Spottswood EL, Hancock JT. The positivity bias and prosocial deception on facebook. Computers in Human Behavior. 2016, 65:252-9. [DOI:10.1016/j.chb.2016.08.019]
- [26] Toma CL, Hancock JT. Self-affirmation underlies face-book use. Personality and Social Psychology Bulletin. 2013; 39(3):321-31. [DOI:10.1177/0146167212474694] [PMID]
- [27] Hall JA, Steele RG, Christofferson JL, Mihailova T. Development and initial evaluation of a multidimensional digital stress scale. Psychological Assessment. 2021; 33(3):230-42. [DOI:10.1037/pas0000979] [PMID]
- [28] Reinecke L, Klimmt C, Meier A, Reich S, Hefner D, Knop-Huelss K, et al. Permanently online and permanently connected: Development and validation of the Online Vigilance Scale. Plos One. 2018; 13(10):e0205384. [DOI:10.1371/journal.pone.0205384] [PMID]
- [29] Frison E, Eggermont S. The impact of daily stress on adolescents' depressed mood: The role of social support seeking through Facebook. Computers in Human Behavior. 2015; 44:315-25. [DOI:10.1016/j.chb.2014.11.070]
- [30] Nabi RL, Prestin A, So J. Facebook friends with (health) benefits? Exploring social network site use and perceptions of social support, stress, and well-being. Cyberpsychology, Behavior and Social Networking. 2013; 16(10):721-7. [DOI:10.1089/cyber.2012.0521] [PMID]
- [31] Lazarus RS, Folkman S. Stress, appraisal, and coping. New York: Springer Publishing Company; 1984. [Link]
- [32] Veer E, Ozanne LK, Hall M. Sharing cathartic stories online: The internet as a means of expression following a crisis event. Journal of Consumer Behaviour. 2016; 15(4):314-24. [DOI:10.1002/cb.1569]
- [33] Ammari T, Schoenebeck S. Understanding and supporting fathers and fatherhood on social media sites. Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems. 2015; 1905-14. [Link]
- [34] Neubaum G, Rösner L, Rosenthal-Von Der Pütten AM, Krämer NC. Psychosocial functions of social media usage in a disaster situation: A multi-methodological approach. Computers in Human Behavior. 2014; 34:28-38. [DOI:10.1016/j. chb.2014.01.021]

- [35] Sutton RE, Harper E. Teachers' emotion regulation. In: Saha LJ, Dworkin AG, editors. International handbook of research on teachers and teaching. Springer International Handbooks of Education. vol 21. Boston: Springer; 2009. [DOI:10.1007/978-0-387-73317-3\_25]
- [36] Sirigatti S, Stefanile C. [Coping inventory for stressful situation (Persian)]. Florence: Giunti O.S. Special Organization: 2009. [Link]
- [37] Sighinolfi C, Pala AN, Chiri LR, Marchetti I, Sica C. Difficulties in Emotion Regulation Scale (DERS): Traduzione e adattamento italiano [Difficulties in Emotion Regulation Scale (DERS): The Italian translation and adaptation]. Psicoterapia Cognitiva e Comportamentale. 2010; 16(2):141-70. [Link]
- [38] Fox A, Bird T. The challenge to professionals of using social media: Teachers in England negotiating personal-professional identities. Education and Information Technologies. 2017; 22:647-75. [DOI:10.1007/s10639-015-9442-0]
- [39] Mérida-López S, Extremera N, Rey L. Emotion-regulation ability, role stress and teachers' mental health. Occupational Medicine. 2017; 67(7):540-5. [DOI:10.1093/occmed/kqx125] [PMID]
- [40] Skaalvik E, Skaalvik S. Job satisfaction, stress and coping strategies in the teaching profession-what do teachers say? International Education Studies. 2015; 8(3):181-92. [DOI:10.5539/ies.v8n3p181]
- [41] Woods S, Sebastian J, Herman KC, Huang FL, Reinke WM, Thompson AM. The relationship between teacher stress and job satisfaction as moderated by coping. Psychology in The Schools. 2023; 60(7):2237-56. [DOI:10.1002/pits.22857]
- [42] Demirtepe-Saygili D. Stress, coping, and social media use. In: Desjarlais M, editor. The psychology and dynamics behind social media interactions. Pennsylvania: IGI Global; 2020. [DOI:10.4018/978-1-5225-9412-3.ch010]