

Article

Teaching during the Pandemic: A Comparison in Psychological Wellbeing among Smart Working Professions

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Abstract: Background: As a result of the COVID-19 pandemic, since March 2020, the Italian population was forced into lockdown to prevent the spread of the virus. The restrictive measures imposed forced many organizations and workers to work through online platforms and no longer in-person. Smart working, enjoyed by some workers for its flexibility, affected several professional categories. The purpose of this study was to investigate whether there are differences in the psychological variables related to four groups of professional categories (practitioners, managers, executive employees, teachers), particularly the teachers group. Methods: A total sample of 628 individuals was recruited through a random probability sample across Italy. Due to the lockdown, an online questionnaire was developed; several validated scales were chosen, and some ad hoc constructed items related to the smart working experience were included. Results: The results showed statistically significant differences between the four groups of examined smart workers. Conclusions: All workers have had to readjust to this new way of working, but our results show that teachers were the most affected, both in the perception of their psychological well-being and in the management of the smart working mode.

Keywords: coronavirus; psychological factor; remote working; coping strategies; stress; job shift; COVID-19

1. Introduction

On 30 January 2020, the World Health Organization (WHO) declared the COVID-19 outbreak an international public health emergency, and on 11 March 2020, a pandemic [1]. In Italy, on 9 March 2020, the government imposed lockdown restrictions on the entire nation to contain the spread of COVID-19. These restrictions forced families and people living together to spend entire days and weeks in the same place. Moreover, many companies and, as a result, many workers (including, in particular, teachers), have started working virtually using online platforms.

This new situation has changed long-established habits. For centuries, work took place in a different location from one’s home (e.g., hunting and fishing activities; agriculture and animal farming; craftsmanship) [2,3]. With industrialization, the workplace became even more separated from the home, and often even from the country of residence [4]. Educational institutions followed the same trend. Aside from young people from wealthy families, who were tutored by private teachers in their homes, teaching was always set up

in dedicated places where teachers and students met in order to create a community for learning and socializing. The first experiences of distance learning took place towards the end of the 19th century, using correspondence as a tool to send teaching materials in a short time and to a large number of final users; for example, *Institut Toussaint et Langenscheidt*, which was the first European institute for the study of languages at a distance, founded in 1856 in Berlin [5], or the *International Correspondence School*, founded in 1889 in Pennsylvania.

A new impetus to distance learning came with the use of radio, telephones, television and, more recently, personal computers and telematic networks [6]. Thus, new training products spread online as an alternative to classroom training and were often promoted by institutional rather than private organizations, aiming more at young people rather than adults.

Despite some significant experiences (*Centre National d'Enseignement à distance*; *British Open University*), the scholastic communities remain, however, firmly anchored in tradition, with the conviction that only the direct relationship between teacher and learner is capable of producing learning, socialization and personal growth. Moreover, even the business world has reacted lukewarmly to telework, a term coined in 1973 by Jack Nilles [7], a physicist and rocket scientist interested in facing the problems of commuting and the resulting consequences from an increasing number of organizations not producing goods but transferring information. Telework, which is appreciated by some workers for its flexibility, is instead opposed by managers who are accustomed to exercising power and control through the direct management of their employees. The professional practices of managers and school teachers, on the other hand, were unable to get out of the dichotomous trap between teaching in presence and at a distance, which has not allowed, until now, to identify a ground of integration and interdependence between the two forms of teaching [8].

Even the new remote working practices—called agile working or smart working—carefully defined by the European Union (<https://epale.ec.europa.eu>, accessed on 25 April 2021) and regulated in the labor laws of many countries, has not found any acceptance in the scholastic community.

The health emergency has overturned these established habits, forcing teachers to teach at a distance and students, and their families, to reorganize their home and work lives in the same place where work, school and social life are concentrated. This has led to two consequences: first, having to adapt home areas to workspaces, sometimes having to find more locations depending on the number of workers in the house; second, having to adapt their work skills to new and often never before experienced dynamics.

As global COVID-19 pandemic struck, workers' workloads have been complicated by a rapid and unprepared shift to (almost) exclusively online work. The impact of COVID-19 was widely investigated through stress, coping strategies and time prospective measures among different professionals [9–13]. For instance, it has been noted that smart working has an impact on employees' mental and physical health [14,15]; moreover, while mandatory smart working was associated with higher stress and fatigue, non-mandatory smart working appeared as a protective factor and a more general improvement of employees' quality of life was observed [16]. Therefore, smart working may be a stressful experience for different kinds of non-health workers, which reported lower perception of mental well-being and more stress than those working away from home, and greater difficulty in balancing work and life [17–21].

Chang and colleagues [22] examined the relationship between proactive coping, future time orientation and perceived work productivity based on the smart working experience of Taiwan and US employees. The authors found that proactive coping enhanced employees' perceived work productivity, with future time orientation acting as a mediator. These results have some important implications for the study of smart working during the pandemic, demonstrating the importance of improving employees' coping strategies and the beneficial effect of individuals' future time orientation.

Balancing personal and professional roles has been a challenge for many categories of workers, and particularly for teachers, who have experienced a lack of physical, temporal

and even psychological boundaries between home and school [23], in addition to the difficulty of conducting classes while sharing the same space with others (e.g., children who need their attention). Teachers' work has been exclusively online due to the school closures and, as a result, there has been a shift from "face-to-face" classroom teaching to exclusively online and at distance, using both synchronous and asynchronous methods, and in most cases, teachers have had no specific training to supplement this teaching method with digital technologies [24].

According to Tuominen and Leponiemi [25], the COVID-19 pandemic has been and will continue to be a huge challenge for the global education community and, indeed, the situation has been correctly described as "emergency online homeschooling" [26–28]. Regardless of the COVID-19 pandemic, teachers have often been ranked among the most stressful professions [29] due to various factors, including heavy workloads, excessive administrative obligations, strained relationships with colleagues and school leaders and difficult work–life balance [30].

In addition to the difficulties mentioned above, there were additional pandemic-related stressors for teachers in their relationships with students and parents; in fact, neither parents nor teachers were well prepared to handle the numerous challenges these changes imposed on them. For instance, students who were very anxious and lonely had great difficulty concentrating and were worried about the end of the school year [31]; parents were overwhelmed and unprepared to support their children with digital tools and innovative educational practices [31] and reported a lack of feedback from teachers [32]; students, teachers and parents were challenged to maintain a positive relationship in the context of collaborative learning [31]; additionally, the possible gap in student achievement between high and low socioeconomic status families expanded due to differences in material and educational resources, living space or time availability [33,34].

Study Aim and Hypotheses

Even though many studies have focused on teachers' stress, burnout and general psychological well-being during the COVID-19 outbreak [35–37], to our knowledge, no studies have compared these variables among different professional categories and teachers. Because smart working occupations are extremely different, the focus of the present study is on comparing teachers with three professional groups: managers, practitioners, and executive employees.

From the theoretical background above presented, we developed the following research question and hypotheses:

Research Question 1 (RQ1). *Since different professional categories had to change their habits in order to work from home, their psychological well-being on several dimensions, such as coping strategies, perceived stress, time perspective and the evaluation of the new "working-from-home" situation, are explored.*

Hypothesis 1 (H1). *Differences among the different working groups are expected with regards to the perception of smart working; particularly, it is hypothesized that teachers are more critical of smart working than the other professionals, as they are not used or expected to work from home.*

Hypothesis 2 (H2). *Since teaching seem to be among the most stressful professions, a greater impact on teachers' stress due to the sudden change of working methods is expected.*

2. Materials and Methods

2.1. Participants

A non-probabilistic and convenience sampling was used, and a total of 710 participants joined the research. Inclusion criteria were: being at least 18 years old, being currently employed and doing "smart work." Professionals working from their office or working both from home and from office have been excluded. Following these criteria, a total number of 628 "smart workers" represented the final sample of the study (female = 77.9%; male = 22.1%); the age ranged from 21 to 70 years ($M = 42.25$; $SD = 10.50$). With respect

to the educational degree, 2.2% had a middle school diploma, 1.1% had a professional diploma, 17.2% had a high school diploma, 10.7% had a bachelor's degree, 38.2% had a master's degree, 30.3% had a postgraduate degree and 0.3% had a different degree.

The sample has been divided into four groups according to profession: 26% ($N = 163$) were practitioners (lawyer, psychologist, accountant etc.); 19.9% ($N = 125$) were managers; 29% ($N = 182$) were executive employees; 25.2% ($N = 158$) were teachers. Further information about the demographic characteristics of the sample is shown in Table 1.

Table 1. Descriptive statistics on the professional groups.

		Practitioners	Managers	Executive Employees	Teachers
Gender	Male	36	44	44	15
	Female	127	81	138	143
Geographic Area	North Italy	42	43	69	29
	Central Italy	91	71	101	91
	South Italy	30	11	12	38
Marital Status	Single	85	43	87	49
	Married	66	55	72	84
	Civil Union	3	6	11	8
	Legal Separation	6	12	5	6
	Divorced	3	8	6	11
	Widow	0	1	1	0
Total		163	125	182	158

2.2. Procedure and Materials

Data have been collected, throughout Italy, using the Qualtrics Platform online survey. This study was launched during lockdown in Italy, from 1 to 30 April 2020.

All study procedures were carried out in accordance with the Declaration of Helsinki. The Institutional Review Board of Department of Psychology, University of Rome "Sapienza" (protocol number 584/2020) approved the procedures and accompanying consent forms.

An ad hoc online questionnaire was designed in order to collect data on socio-demographic variables (gender, age, education, living conditions), and was distributed through different channels, such as the authors' official working platforms, by word of mouth and through social networks. The questionnaire included the measures described in the next sections.

2.2.1. Attitudes and Moods about the New Coronavirus

Eight items were developed by the authors in order to investigate the attitudes and moods of participants about the new coronavirus through items such as, for example, "The Coronavirus is a mysterious and highly lethal virus capable of decimating the world's population" or "The mass media have generated exaggerated claims about the real dangers of the Coronavirus." The items were evaluated on a five-point Likert scale, from "Completely disagree" (1) to "Completely agree" (5) [9].

2.2.2. Attitudes and Opinions on Smart Working

Five items were developed by the authors to assess attitudes of participants toward smart working conditions, concerning both the quality and the amount of smart working, through items such as "Despite the functionality of smart working, the quality of work is less than in the office," which were evaluated on a five-point Likert scale ranging from "Completely disagree" (1) to "Completely agree" (5).

2.2.3. Perceived Stress Scale (PSS)

This scale is one of the most widely used measures to investigate the stress perception and assess how individuals perceive their lives as unpredictable, uncontrollable and

overloaded, including questions about their experienced stress levels. The 10 items of the PSS examine the last month's feelings and thoughts; participants are asked how often they have felt in a particular way and all the answers are on a five-point Likert scale ranging from "never" (0) to "very often" (4) [38,39]. The reliability coefficients were $\alpha = 0.86$ for PSS total, $\alpha = 0.75$ for the Perceived Self-Efficacy subscale and $\alpha = 0.81$ for the Perceived Helplessness subscale.

2.2.4. Coping Orientation to Problems Experienced—New Italian Version (COPE-NVI)

This scale measures coping styles by asking participants to rate how often they perform a specific coping strategy in difficult or stressful situations [40]. The instructions ask participants not to refer to a specific episode, but rather to think about how they usually behave in stressful situations. In this study, only 8 out of the original 25 items were selected, according to Emotion-Oriented and Problem-Oriented coping strategies; the response alternatives of the chosen items were on a five-point scale ranging from "never" (0) to "very often" (4). The reliability coefficients were $\alpha = 0.50$ for the Emotion-Oriented subscale and $\alpha = 0.75$ for the Problem-Oriented subscale.

2.2.5. Stanford Time Perspective Inventory (STPI-Short Form)

This questionnaire allows to assess different temporal perspectives of individuals and relies on the theory that examines the emotional, social, cognitive and motivational processes which contribute and in turn are influenced by the functioning of the temporal perspective itself (e.g., Future subscale "When I want to achieve something, I set goals and consider specific means for reaching those goals," Present Hedonistic subscale "I take risks to put excitement in my life" and Present Fatalistic subscale "It does not make sense to worry about the future since there is nothing to do about it anyway"). All the answers were given on a five-point Likert scale ranging from "never" (0) to "very often" (4) [41]. The reliability coefficients were $\alpha = 0.51$ for the Future subscale, $\alpha = 0.51$ for the Present Hedonistic subscale and $\alpha = 0.47$ for the Present Fatalistic subscale.

2.3. Data Analysis

Participants were divided into four groups (i.e., Practitioners, Managers, Executive Employees, Teachers) and were compared across some different scales, such as perceived stress, coping strategies, time perspective and some ad hoc constructed items related to the smart working experience and attitude and mood about Coronavirus. Descriptive statistics on demographic variables were collected. Differences between four groups were examined using a one-way analysis of variance (ANOVA), and statistical significance in post-hoc analysis was determined using Bonferroni correction.

The distributions of all data were verified for normality. Statistical tests were conducted using IBM SPSS software version 26 (Chicago, IL, USA).

3. Results

3.1. Between-Group Comparison (ANOVAs) on the "Attitudes and Moods about the New Coronavirus"

A one-way ANOVA was conducted to compare the four groups with regard to the attitudes and mood about the new Coronavirus. Statistically significant differences emerged in three items (shown in Table 2). Pairwise comparisons showed, on the item "The Coronavirus is a mysterious and highly deadly virus capable of decimating the world's population," significant higher mean differences in teachers ($M = 3.72$, $SD = 1.08$) compared to the "practitioners" ($M = 3.26$, $SD = 1.28$) and "managers" ($M = 3.31$, $SD = 1.17$).

Table 2. Differences between groups on “Attitudes and moods about the New Coronavirus.”

Item	Group	M (SD)	F	ANOVA			Multiple Comparisons	Mean Difference	Std. Error	Sig.
				df	Sig.	η_p^2				
The Coronavirus is a mysterious and highly deadly virus capable of decimating the world’s population	T	3.72 (1.08)	4.97	3627	0.01 **	0.023	T vs. P T vs. M	0.464 0.410	0.129 0.139	0.01 ** 0.05 *
	P	3.26 (1.28)								
	M	3.31 (1.17)								
	E	3.46 (1.10)								
The corona virus is certainly a flu epidemic with lung complications, but it has created an unwarranted collective panic	T	2.26 (1.12)	0.569	3627	0.636	-	-	-	-	-
	P	2.37 (1.14)								
	M	2.38 (1.07)								
	E	2.25 (1.09)								
The mass media conducted timely and rigorous reporting and analysis of the virus outbreak	T	2.85 (1.18)	5.18	3627	0.01 **	0.024	T vs. P T vs. E	0.437 0.404	0.124 0.121	0.01 ** 0.01 **
	P	2.42 (1.09)								
	M	2.54 (1.13)								
	E	2.45 (1.05)								
The mass media have generated exaggerated claims about the real dangers of the Coronavirus	T	2.53 (1.02)	1.62	3627	0.184	-	-	-	-	-
	P	2.77 (1.13)								
	M	2.66 (1.16)								
	E	2.75 (1.09)								
Authorities were delayed in intervening to restrain the spread of the virus	T	3.33 (1.11)	0.824	3627	0.481	-	-	-	-	-
	P	3.43 (1.18)								
	M	3.38 (1.20)								
	E	3.52 (1.11)								
The authorities were right in closing bars, restaurants and shops and advising the population to stay at home	T	4.67 (0.70)	1.23	3627	0.298	-	-	-	-	-
	P	4.63 (0.67)								
	M	4.55 (0.87)								
	E	4.53 (0.72)								
The medical and nursing staff has performed and continues to perform in an exemplary manner	T	4.62 (0.67)	0.596	3627	0.618	-	-	-	-	-
	P	4.53 (0.66)								
	M	4.58 (0.62)								
	E	4.59 (0.58)								
The Italian population behaved responsibly by respecting the limitations imposed on them by the authorities	T	3.42 (0.93)	4.76	3627	0.01 **	0.022	M vs. P M vs. E	0.382 0.373	0.123 0.121	0.05 * 0.05 *
	P	3.18 (1.15)								
	M	3.56 (0.99)								
	E	3.19 (1.05)								

Note. * $p < 0.05$; ** $p < 0.01$. T = Teachers; P = Practitioners; M = Managers; E = Executive Employees.

With respect to the item “The mass-media conducted timely and rigorous reporting and analysis of the virus outbreak,” teachers showed significantly higher mean differences ($M = 2.85$, $SD = 1.18$) than both “practitioners” ($M = 2.42$, $SD = 1.09$) and “executive employees” ($M = 2.45$, $SD = 1.05$).

With regard to the item “The Italian population behaved responsibly by respecting the limitations imposed on them by the authorities,” managers showed higher mean differences ($M = 3.56$, $SD = 0.99$) than both “practitioners” ($M = 3.18$, $SD = 1.15$) and “executive employees” ($M = 3.19$, $SD = 1.05$).

3.2. Between-Group Comparison (ANOVAs) on the “Attitudes and Opinions on Smart Working”

Statistically significant differences emerged in all items on “Attitudes and opinions on smart working” (shown in Table 3). Pairwise comparisons showed on the first item, i.e., “Smart working is a valid way that should also be used in other circumstances for mutual benefit,” significantly lower mean differences in teachers ($M = 3.11$, $SD = 1.14$) compared to “practitioners” ($M = 3.81$, $SD = 1.10$), “managers” ($M = 4.02$, $SD = 0.95$) and “executive employees” ($M = 4.09$, $SD = 1.04$).

As for the item “Despite the functionality of smart working, the amount of work performed is less than in the office,” the mean of practitioners was significantly higher ($M = 2.81$, $SD = 1.38$) than “managers” ($M = 2.18$, $SD = 1.26$), “executive employees” ($M = 2.09$, $SD = 1.23$) and “teachers” ($M = 2.03$, $SD = 1.21$).

The third item, i.e., “Despite the functionality of smart working, the quality of work is less than in the office,” showed significantly higher mean differences in teachers ($M = 3.07$, $SD = 1.47$) than in “practitioners” ($M = 2.43$, $SD = 1.21$), “managers” ($M = 2.05$, $SD = 1.12$) and “executive employees” ($M = 2.12$, $SD = 1.23$).

The item “Smart working allows you to save time and money compared to going to the office” showed significantly lower mean differences in teachers ($M = 3.48$, $SD = 1.20$) compared to “practitioners” ($M = 4.26$, $SD = 0.81$), “managers” ($M = 4.28$, $SD = 0.81$) and “executive employees” ($M = 4.46$, $SD = 0.80$).

The last item, i.e., “Smart working is convenient for the company and the employer,” showed significantly lower mean differences in teachers ($M = 3.07$, $SD = 1.03$) than in “practitioners” ($M = 3.70$, $SD = 0.902$), “managers” ($M = 3.99$, $SD = 0.941$) and “executive employees” ($M = 3.92$, $SD = 0.922$).

3.3. Between-Group Comparison (ANOVAs) on Psychological Attitudes on Managing Stressful Situations

With respect to the total PSS score and the Perceived Self-Efficacy subscale, calculated from the positive item, there were no significant results. For the Perceived Helplessness subscale, calculated from the negative item, there was a statistically significant result (shown in Table 4). The pairwise comparison showed a significantly higher mean difference in teachers ($M = 11.07$, $SD = 3.90$) than in “managers” ($M = 9.79$, $SD = 3.81$) (shown in Table 4).

There was a statistically significant result with respect to the Emotion-Oriented subscale of Coping Orientation to Problem Experienced. Pairwise comparison showed higher mean differences in teachers ($M = 7.37$, $SD = 2.78$) than “practitioners” ($M = 5.78$, $SD = 2.84$), “managers” ($M = 6.32$, $SD = 2.95$) and “executive employees” ($M = 6.31$, $SD = 2.60$).

Significant results also emerged as regards Present Hedonistic of Zimbardo Stanford Time Perspective Inventory. No significant differences were found between groups.

Table 3. Differences between groups on “Attitudes and opinions on smart working.”

Item	Group	M (SD)	ANOVA				Multiple Comparisons	Mean Difference	Std. Error	Sig.
			F	df	Sig.	η_p^2				
Smart working is a valid way of working that should also be used in other circumstances for mutual benefit	T	3.11 (1.14)	27.71	3622	0.001 ***	0.117	T vs. P	−0.693	0.119	0.001 ***
	P	3.81 (1.10)					T vs. M	−0.901	0.128	0.001 ***
	M	4.02 (0.95)					T vs. E	−0.979	0.116	0.001 ***
	E	4.09 (1.04)								
Despite the functionality of smart working, the amount of work performed is less than in the office	T	2.03 (1.21)	12.80	3622	0.001 ***	0.058	P vs. M	0.630	0.152	0.001 ***
	P	2.81 (1.38)					P vs. E	0.714	0.138	0.001 ***
	M	2.18 (1.26)					P vs. T	0.776	0.143	0.001 ***
	E	2.09 (1.23)								
Despite the functionality of smart working, the quality of work is less than in the office	T	3.07 (1.47)	20.67	3622	0.001 ***	0.090	T vs. P	0.641	0.143	0.001 ***
	P	2.43 (1.21)					T vs. M	1.02	0.153	0.001 ***
	M	2.05 (1.12)					T vs. E	0.954	0.139	0.001 ***
	E	2.12 (1.23)								
Smart working allows you to save time and money compared to going to the office	T	3.48 (1.20)	35.68	3622	0.001 ***	0.146	T vs. P	−0.777	0.103	0.001 ***
	P	4.26 (0.81)					T vs. M	−0.798	0.111	0.001 ***
	M	4.28 (0.81)					T vs. E	−0.974	0.100	0.001 ***
	E	4.46 (0.80)								
Smart working is convenient for the company and the employer	T	3.07 (1.04)	29.82	3622	0.001 ***	0.125	T vs. P	−0.626	0.107	0.001 ***
	P	3.70 (0.90)					T vs. M	−0.922	0.114	0.001 ***
	M	3.99 (0.94)					T vs. E	−0.853	0.104	0.001 ***
	E	3.92 (0.92)								

Note. *** $p < 0.001$; T = Teachers; P = Practitioners; M = Managers; E = Executive Employees.

Table 4. Differences between groups on psychological attitudes on managing stressful situations.

Item	Group	M (SD)	ANOVA				Multiple Comparisons	Mean Difference	Std. Error	Sig.
			F	df	Sig.	η_p^2				
PSS_TOT	T	16.94 (5.46)	2.42	3627	0.064	-	-	-	-	-
	P	15.89 (5.35)								
	M	15.17 (5.39)								
	E	16.27 (6.23)								
PSS_NEG	T	11.07 (3.90)	2.73	3627	0.05 *	0.012	T vs. M	1.28	0.467	0.05 *
	P	10.26 (3.63)								
	M	9.79 (3.81)								
	E	10.58 (4.20)								
PSS_POS	T	10.13 (2.14)	1.10	3627	0.348	-	-	-	-	-
	P	10.36 (2.26)								
	M	10.62 (2.12)								
	E	10.31 (2.49)								
COPE_E	T	7.37 (2.78)	9.12	3618	0.001 ***	0.042	T vs. P	1.59	0.312	0.001 ***
	P	5.78 (2.84)					T vs. M	1.05	0.333	0.01 **
	M	6.32 (2.95)					T vs. E	1.06	0.304	0.01 **
	E	6.31 (2.60)								
COPE_P	T	12.63 (2.18)	1.75	3620	0.155	-	-	-	-	-
	P	12.36 (2.55)								
	M	12.32 (2.60)								
	E	12.01 (2.61)								
STPI_FUT	T	7.63 (1.87)	2.53	3607	0.056	-	-	-	-	-
	P	7.46 (1.83)								
	M	7.97 (1.80)								
	E	7.40 (1.95)								
STPI_HED	T	5.83 (1.45)	2.65	3607	0.05 *	0.012	-	-	-	-
	P	5.46 (1.33)								
	M	5.84 (1.50)								
	E	5.83 (1.40)								
STPI_FAT	T	5.47 (1.68)	1.64	3607	0.179	-	-	-	-	-
	P	5.01 (1.94)								
	M	5.35 (2.83)								
	E	5.18 (1.82)								

Note. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; T = Teachers; P = Practitioners; M = Managers; E = Executive Employees; PSS_TOT = Perceived Stress Scale total score; PSS_NEG = Perceived Helplessness; PSS_POS = Perceived Self-Efficacy; COPE_E = Emotion-Oriented Coping Strategies; COPE_P = Problem-Oriented Coping Strategies; STPI_FUT = Time Orientation Future dimension; STPI_HED = Time Orientation Hedonistic dimension; STPI_FAT = Time Orientation Fatalistic dimension.

4. Discussion

The results of the present study allow several considerations to be drawn about the impact that the COVID-19 pandemic had on different smart working modalities among different groups of professionals. Balancing both personal and professional roles has been challenging for many workers; psychological research has explored perceptions of general remote work satisfaction [10] and stress or burn-out in specific occupations, such as healthcare professionals [11,12], physicians [13] and executive employees [15]. Several studies investigated the general stress perceived by teachers [29,42,43], particularly during this home-schooling period, when teaching methods have suddenly changed [23,30]; moreover, teachers not only needed to adapt their working methods to a new context, but also needed to learn new communication strategies and how to use distance-learning tools in a context they were not prepared for [44]. The present study showed that teachers perceive smart work as non-functional for carrying out their work when compared to other professionals, not believing smart working can be useful besides in emergency situations, such as a pandemic event. In addition, the quality of work was judged to be poor by teachers, in contrast to the other professionals participating to the study, who believed that smart working is better than or equal to office-based work; however, practitioners reported that the amount of smart work is lower than office-based work.

Compared to the other professionals, teachers believe that working from home saves them less time and money and that there is a reduced convenience for the employers and the companies; it can be hypothesized that this result is either a consequence of the well-defined timeframe of the lessons compared to other types of works (e.g., executive works, projects, help professions) or due to the absence of unforeseen expenses during the working day (e.g., lunch provided by school dining services).

As far as the Perceived Stress is concerned, teachers showed the highest scores on the Negative subscale of PSS, confirming the original assumption [23], particularly when compared to managers. This finding could be because of the difficulty in using digital tools, as mentioned above, but also because of the new structure of the classroom, which did not allow a face-to-face relationship, interaction and feedback. In addition, shared space and the presence of family members could also affect the individual attentiveness [9] of both students and teachers, leading to a sense of frustration and powerlessness.

According to a recent study carried out in Italy [45], teachers play an important role in emotional support as a protective factor for students' emotional burnout. That is, the more responsive and empathetic teachers were with the emotional needs and concerns of students, the less the students experienced burnout during the school year. It could be hypothesized that teachers' caregiving role, in addition to the lockdown context, increased the risk of perceiving higher levels of stress. Furthermore, in managing stressful situations, teachers were found to have higher Emotion-Oriented Coping Strategies compared to other groups of workers. A recent study on emotion regulation reported the impact of emotions on the individuals' ability to engage in goal-directed behaviors [46] in order to reduce negative emotional responses [40]. The emotional climate of the school seems to play a pivotal role in influencing both students' and teachers' emotion regulation [47,48]; therefore, the sudden change of the school environment due to the COVID-19 pandemic exacerbated this emotional relationship.

These results cannot be generalized due to several limitations, such as the reduced number of participants and the gender imbalance within the sample, although having a sample consisting only in smart workers is a strength of the research due to the difficulties in recruiting participants. Lastly, it should be noted that data were collected via online survey, which has inherent limitations despite being the safest recruitment method available during the pandemic. Moreover, it is worth noting the presence of some potential biases related to the social desirability of participants and to the one-time survey conducted in the acute phase of the pandemic [49]; it would have been interesting to be able to conduct a follow-up measure one year after the first survey.

5. Conclusions

This study tries to fill a gap in the field; while a number of studies focused on teachers' stress, burnout and general psychological well-being during the COVID-19 pandemic [35–37,50–53], even among different countries [54–59], to the best of our knowledge, no studies have compared teachers' and other professionals' stress and psychological well-being in respect of smart working conditions.

These findings may have important practical implications considering the consequences of pandemic and emergency situations; the required adaptive strategies and behaviors to be implemented are not yet clear. Therefore, since lockdown led to intense stress, fatigue and anxiety [60,61], it is important to understand the impact of the sudden switch to smart work on different groups of workers on certain psychological attitudes. The present study highlights the need to deploy programs for teachers with the purpose of facilitating educational management in emergency situations. Moreover, according to Toscano and Zappalà [10], perception of stress and smart working-related satisfaction are also influenced by social support; thus, it would be necessary to both investigate how social support affects teachers' perception of smart working and develop focused measures for psychological well-being through social interventions. Future research may include a comparison among European countries on smart working perception and psychological well-being.

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