The role of online counseling in promoting psychological capital of students in corona isolation

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Abstract

Background and aims: Over the last six months, the use of technology and the internet in Iran is significantly increased due to the coronavirus pandemic. This study aimed to investigate the effect of online career counseling on students' psychological capital (i.e., self-efficacy, resilience, optimism, and hope) during corona isolation.

Methods: The research design was quasi-experimental. The statistical population of this study included all students who were members of social media (i.e., WhatsApp, Telegram, Facebook, and LinkedIn). After the announcement and completion coronavirus anxiety questionnaire, 30 students who had obtained scores higher than the average level were selected and randomly assigned into experimental (15 students) and control (15 students) groups.

Results: The findings showed that after the online counseling course, the intervention group outperformed the control group in psychological capital components (i.e., self-efficacy, resilience, optimism, and hope).

Conclusion: According to the findings of this study, online counseling can be an effective source for career counselors, especially in developing countries. Besides face-to-face counseling, its services can help students increase their psychological capital.

Keywords: COVID-19, Online career counseling, Psychological capital, Online intervention, Self-efficacy

Introduction

Corona is a Latin word that means the crown (1). Coronavirus has caused fear and stress among people (2). For this reason, many people are quarantined in their houses, and universities and educational centers are closed due to the prevalence of this virus (3). In many countries, people are not allowed to walk in the cities. At this time, people have less access to services, and they use technology instead. Studies show that technology and information technology have a significant role in coronavirus prevention (4).

Nowadays, technology has penetrated all aspects of our life, and people can access the internet not only with their personal computers but with their phones, tablets, and other devices (5). With the introduction of the internet in the 1990s and the development of portable devices, and communication revolution started (6), relationships were expanded (7), and conditions were created for shy, isolated, or disabled people to look for more connections and support (8) because they can use the internet to find information (9), teaching and learning (10) and provide professional mental health services such as counseling (11) and psychotherapy (12,13). The results of different studies show that internet-based counseling tools can be

considered traditional career assessment tools (14,15), with this difference that they have more accuracy, speed, and performance (16,17).

The effect of the COVID-19 pandemic is not limited to physical health but also extends to various aspects of daily life. COVID-19 has affected people's lifestyles, stress, and mental performance. Stress occurs when a person thinks the demands of an external situation are beyond his ability to cope with them. Although stress exists in everyone's life (18), a high level of stress, such as the stress caused by COVID-19, can significantly negatively affect people's mental health (19,20). Studies show that each component of psychological capital has a negative relationship with stress (21,22).

The internet can increase the psychological capital components (23), the new concept introduced by Luthans and is taken from the positivist organizational behavior (24). Psychological capital is a realistic and flexible approach to life that includes four components: hope, resilience, optimism, and self-efficacy (25). Self-efficacy means confidence and trust in abilities to succeed in responsibilities (26). Resilience indicates hardiness and means how much people continue their efforts and efficiently cope under unpleasant circumstances, pass the

problematic life stages, and reach their goals (27).

Also, optimist people relate positive events to permanent and personal factors; on the other hand, they relate unpleasant events to external and temporary factors (28). Hope is a condition that enables people to specify accurate, challenging, attractive, accessible, and predictable goals for themselves and achieve them through efforts and taking advantage of their capacities (29). However, the internet and online interventions are designed purposefully to influence the psychological capital components such as self-efficacy (30) and hope (31), and they can lead to increased psychological capital. However, in developing countries, limited studies are conducted on psychological capital, and the studies in developed countries are almost concentrated on the psychological capital components in face-to-face mode.

Universities are trying to solve some students' problems through counseling centers. Psychological interventions and counseling increase self-efficacy, resilience, optimism, and hope. Now that students cannot access face-to-face facilities, an online counseling be efficient? Moreover, Can online career interventions increase students' psychological capital during the coronavirus pandemic?

Methods
Participants
Thirty students were selected to evaluate online career counseling performance, including two online groups (8 females and 7 males; Mage = 25.16 years; SD = 4.12), and control (7 females and males; Mage = 25.11 years; SD = 3.21).

Procedure
The research design was quasi-experimental, with the pretest, the posttest, and the control group.

The statistical population of this study included all students who were members of social media (i.e., WhatsApp, Telegram, Facebook, and LinkedIn). After the announcement and completion coronavirus anxiety questionnaire, 30 students who had obtained scores higher than the average level was selected and randomly assigned into experimental (15 students) and control (15 students) groups. Fifteen students in the online group received 5 sessions of the online counseling and the control group received no intervention.

In order to avoid contact between the control group and the experimental group, both groups were asked to refrain from participating in any other course during the training course and to inform the researchers if they participated in any other course.

The research groups completed the psychological capital questionnaire before and after the course and completed the questionnaire as the posttest. After a month, the research groups completed the questionnaire again for consistency of the effects. The collected data were analyzed using SPSS. In this study, to observe the ethics, it was explained that they are participating voluntarily and can stop their cooperation whenever they want. The information remains confidential and will be discarded after the course. Also, the control group received 5 sessions of free online counseling sessions. In the end, the participants received gifts.

A summary of the sessions is presented (32)

Session 1: introduction of the group leader, members, objectives, encouragement, creating concerns for students to participate in the course, pretest administration; Session 2: identification and setting the career desires of students, introducing the environment and career types; Session 3: determining the efforts to achieve goals, planning to achieve career goals, identification of career personality of students; Session 4: identification of career personalities, values, and talents; Session 5: facilitating career personality correspondence, values, and talents of students consistent with the available career environment in Iran, posttest administration and setting the follow-up test. In all sessions and consistent with the session, educational films, sounds, pictures, and PowerPoint were used; for example, in session 3, documentaries about successful people were exhibited.

Instruments
Standard questionnaire was used to investigate psychological capital. This questionnaire includes 4 subscales and 24 questions (resilience, optimism, hope, self-efficacy) designed by Luthans et al (33), and its reliability and validity were confirmed. This questionnaire examines psychological capital based on a 6-point Likert scale. This questionnaire has been used by different researchers in Iran (34) and its reliability and validity have been confirmed.

Coronavirus anxiety scale
This questionnaire was designed by Lee (2) and includes 5 questions that are scored by a 5-point Likert scale from "not at all" to "over the last two weeks." Higher scores mean having more anxiety.

This questionnaire has been validated and used in Iranian research. For example, the face validity of this questionnaire and its internal consistency (0.85) have been confirmed in Daniali and Eskandari's study (35). The reliability of this questionnaire in the present study using Cronbach's alpha was obtained equal to 0.81

Results
For data analysis, after investigating data normality, repeated measures were used. Table 1 presents descriptive characteristics (standard deviation and mean) of the psychological capital components.

The results of online counseling and its effects on self-efficacy, resilience, optimism, and hope showed that a significant difference regarding self-efficacy, resilience, optimism and hope exists between the two groups of the study.

In Table 2, the control and online groups are compared

Table 1. Descriptive characteristics of research variables

	Group	Self-efficacy	Resilience	Optimism	Hope
		Mean±SD	Mean±SD	Mean±SD	Mean±SD
Pretest	Online	26.27±2.71	24.93±2.60	24.80±1.78	27.13±1.84
	Control	26.93±1.66	25.73±1.53	25.13±2.03	27.47±1.18
Posttest	Online	30.53±2.74	28.80±2.80	27.93±2.18	30±2.1
	Control	26.80±1.82	25.47±1.45	24.87±1.72	27.40±1.35
Follow up	Online	30.80±2.56	28.93±2.37	28.20±2.30	30.40±1.68
	Control	26.67±2.22	25.27±1.79	24.87±1.95	27.33±1.23

Table 2. Comparison of variables in time

Variables	Parameter	B	Standard error	t	P value	Partial eta squared	Observed power
Self-Efficacy	Pretest	-0.667	0.822	-0.811	0.424	0.023	0.123
	Posttest	3.733	0.851	4.386	0.000	0.407	0.988
	Follow-up	4.133	0.878	4.710	0.000	0.442	0.995
Resilience	Pretest	-0.800	0.780	-1.025	0.314	0.036	0.168
	Posttest	3.333	00.817	4.081	0.000	0.373	0.976
	Follow-up	3.667	0.768	4.774	0.000	0.449	0.996
Optimism	Pretest	-0.333	0.697	-0.478	0.636	0.008	0.075
	Posttest	3.067	0.719	4.263	0.000	0.394	0.984
	Follow-up	3.333	0.781	4.267	0.000	0.394	0.984
Hope	Pretest	-0.333	0.567	-0.588	0.561	0.012	0.088
	Posttest	2.600	0.646	4.026	0.000	0.367	0.973
	Follow-up	3.067	0.539	5.693	0.000	0.537	1.000

in terms of self-efficacy, resilience, optimism, and hope.

According to Table 2, no significant difference exists between the research groups in the pretest, but a significant difference exists in the posttest between the intervention group and the control group.

In Figure 1, the mean of the research variables in the time test is presented.

Figure 1 shows that the online group received a larger mean in the posttest and the follow-up test compared with the pretest, and the control group and the control group show a relatively steady mean.

Discussion

The results showed that online counseling increased the psychological capital and its components (i.e., self-efficacy, resilience, optimism, and hope). The most significant effects were related to self-efficacy, hope, optimism, and resilience. In explaining the findings of this study, it can be said that since teenagers and adolescents are interested in online services, the internet cannot only be considered as a tool that can prevent coronavirus, but it has to be taken into consideration as an indispensable part of the society that provides a context in which there are opportunities for psychological capital growth, especially for the youth.

The reasons for increased self-efficacy scores in online career counseling include four primary sources active experiences, representative experiences, social encouragements, and physiological/emotional moods (36). Three sources (active experiences, representative

experiences, and social encouragement) are created in online career counseling. In active experiences, the person reaches self-efficacy according to the direct experiences in a particular situation. If failure is experienced, self-efficacy decreases, and success is experienced, self-efficacy is promoted in the online career website; successfully identifying values, personality, and abilities, the person obtains self-awareness; This increased self-awareness and successful identification further increase the person's self-efficacy.

The learning process through observing social models is called observatory learning, which is known as an essential and effective self-efficacy source (37). The findings of this section are consistent with Hsia et al (38), who investigated the effect of different methods of online feedback on performance, incentives, and self-efficacy of students; Watson (39), who conducted a study on the role of technology and its impact on the self-efficacy of teachers; Parsons (40) who studied improving preceptor self-efficacy using an online program; Long and Stevens (41) who studied the role of technology in increasing self-efficacy of students.

In explaining the effect of online counseling on resilience, with increased self-awareness, people accept their weaknesses easily. Due to this change, the person passes the personal development process and obtains the ability to use the internal potential to change spirits and emotions. Therefore, identification and awareness of personality traits make the person have suitable

Figure 1. Comparing the means of the research variables in the pretest, the posttest, and the follow-up test.

reactions to problems, manage emotions, and show more flexibility. On the online career counseling website, self-awareness sources such as psychological tests (talent, values, interests, personal types), scientific interpretation, and access to multimedia information (film, sound, animation, news, books) increase self-awareness of people. In face-to-face counseling, it is not easy to provide these services. The findings of this part of the study are consistent with Mueller et al (42), who investigated the effect of an online intervention on empathy, resilience, and work engagement.

Regarding the effect of online counseling on the hope and optimism of students, hope and optimism are based on positive expectations that the person can achieve. Indeed, the thoughts of the person function as motivations. The internet can classify information and provide support through online groups to create a sense of self-efficacy in the successful use of resources, change the person's thoughts, and create optimism and hope. For example, by giving films related to the lives of successful people or people involved in problems at the beginning of their work, it is possible to influence the negative thoughts of students and increase hope. Patterson and McDonald (43) studied online mental health for youth with cancer; Im and Chang (44) studied web-based interventions in nursing.

Limitations and future directions
This study suffers from limitations. This study was conducted under specific circumstances when people and students were using technology more than ever. For this reason, it is necessary to give more attention to the effect of technology on online career counseling effectiveness in future studies.

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