# Application of structural equation modeling to develop a conceptual model for entrepreneurship for psychological service workers during the COVID-19 pandemic

# Boshra A. Arnout<sup>a,b</sup>

<sup>a</sup>Department of Psychology, King Khalid University, Abha, Saudi Arabia

<sup>b</sup>Department of Psychology, Zagazig University, Zagazig, Egypt Emails: prof.arnout74@gmail.com; beahmad@kku.edu.sa.

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#### Abstract.

**OBJECTIVES:** This study aimed to investigate entrepreneurship predictors among psychological service workers during the COVID-19 pandemic and detect the difference in entrepreneurship among psychological service workers due to sex and experience in work.

**METHOD:** A random sample of 321 workers in the field of psychological Services answered an online questionnaire that contained six scales (mental traits, psychological traits, success in work, effectiveness, creativity, and innovation, responsible decision). The data collected from the study participants were analyzed quantitatively by using a *t*-test, One-way ANOVA, Exploratory Factor Analysis EFA, Confirmatory Factor Analysis CFA, and Structural Equation Model (IBM SPSS statistics 21, and Amos v.25).

**RESULTS:** The findings showed the validity of the conceptual proposed model of entrepreneurship among the psychological service workers. The default model has goodness-of-fit indicators to predict the workers' psychological services' entrepreneurship in their professional practice. The results also indicated significant differences due to the years of work experience in work and responsible decision dimensions in favor of the sample members belonging to the experiences group with more than ten years. Simultaneously, there are no differences in entrepreneurship's total score, mental traits, psychological, effectiveness, and creativity and innovation. The results also showed that there are statistically significant differences between males and females in the success in work dimension in favor of males (males mean = 21.359, females mean = 19.461, t = 2.797, P < 0.05), also in responsible decisions in favor of males (males mean = 9.734, females mean = 6.927, t = 8.853, t = 2.797, t = 2.005).

**CONCLUSION:** Mental traits, psychological traits, success in work, effectiveness, creativity and innovation, creativity, and innovation make responsible decisions significant predictors of entrepreneurship among the workers in psychological services. Thus, we recommend adopting the six criteria for entrepreneurship in professional practice when evaluating the workers in psychological services' performance. These results indicate the need for plaining training programs to increase the entrepreneurship among workers in psychological services whose experience is less than ten years, especially female workers in psychological services.

Keywords: Entrepreneurship, workers in psychological services, work engagement, mental traits, psychological traits, success in work, effectiveness, creativity, responsible decisions, COVID-19, pandemic

#### 1. Introduction

The interest in psychological services research in the seventies of the twentieth century was mainly based on the results of the process; then the attention shifted to the issue of professional training for those workers in psychological service, then the search for the causes of the problems that appear during the psychological service providing process and the search for factors that make this process effective for creating change in the clients [1, 2].

Because of the successive changes that characterize this century in all aspects of life and the increasing stress and requirements placed on the human being during the COVID-19 pandemic, his/her need for professional assistance to develop the ability to face life changes was increased. We need workers in the field of psychological services who are skilled and effective. Still, we need influential work in psychological services to convince others of his/her new ideas and influence them and who can innovatively implement counseling services. The workers in psychological services live in an age in which success depends mostly on the ability to influence those around them and the beneficiaries of the services they provide to clients [3, 4].

Considering psychological services providing a professional relationship between two parties, a worker in psychological services and a client offers different individuals, families, and groups to achieve mental health, personal well-being, academic and professional compatibility [5]. The psychological service worker must provide various integrated services to achieve these aims; this can only be achieved by attaining professional practice entrepreneurship.

# 1.1. Influencing in the field of psychological services

Influencing others around us is a skill that depends on a group of different means and methods to influence others' behavior, attitudes, and opinions to match the desired opinion or viewpoint. This influence may change and correct others' views, modify existing behavior, and form new habits and behaviors. Since psychological counseling is a process of learning and modifying behavior, the worker in psychological services must have the ability to influence the client [3, 6].

Arnout [3] defined an influential worker in the field of psychological services as a worker in the field of psychological services who uses what (s)he possesses

in terms of skills, abilities, and characteristics in his/her work, achieve aims, communicate with others easily, quickly at the lowest cost, effort, leaves a good impression, and influences their clients. Likewise, a worker in psychological services with an influential personality is most present in clients' minds and possesses useful features that are interesting to them (p.328).

The work in the field of psychological services is painstaking and arduous for several reasons, including [2, 4, 7–11]:

- 1. The client is a person, and the nature of man is complicated, with many and varied factors and variables influencing him.
- 2. Individual differences between the guides and the differences between the sexes, and even within the individual from one situation to another and from time to time.
- Psychological service aims to bring about change. Human nature resists change and tries hard to stick to the current situation, and endures suffering to avoid adventure, experimentation, and growth.
- 4. The diversity of problems that come to counseling and the different causes of them.
- 5. The diversity of psychological service work theories methods, methods, and techniques.
- 6. The successive nature of change in the society
- 7. Massive technological change.
- 8. The negative trend of individuals and societies for the psychological services seeking.

All these factors emphasized the necessity for the worker in the field of psychological services to have an influential personality, to be able to overcome the work stress that may face him, especially during the COVID-19 outbreak and affect his/her performance and stand as a stumbling block in doing his/her work so that work stress does not accumulate on him. If the worker in psychological services reaches a psychological burnout stage, [his efficiency and capabilities to provide effective psychological services to their clients were reduced. The power of influence is everything. Therefore, if a worker in psychological services wants to succeed in his/her work, (s)he must influence the guides, leave a positive impression on them, and mark their minds [1, 2].

The worker in psychological services needs to influence the client from the first moment so that (s)he can form a good professional relationship to gain the client's confidence; so that the client can narrate his/her problem without fear, hesitation, or doubt,

and reveal what is inside him/her without concern [1, 2, 10].

The worker in psychological services also needs to influence the client when (s)he explains the importance of counseling for the individual and the work style to solve his/her problem. Thus, the worker in the field of psychological services' ability to influence the client allows the formation of a positive direction towards the counseling. Also, through the worker in the field of psychological services influence on the client, the client can convince him/her of the importance of adhering to the rules of work and the obligation to attend sessions on time and carry out the activities and duties required of him/her so that the worker in the field of psychological services can help him/her solve his/her problem for which (s)he came to counseling [3].

Through persuasion and influence, the worker in psychological services can increase the client's motivation towards positive change and the need to get rid of the malicious behavior, and the importance of preserving this chance to enjoy his/her life in a better way than before. Still, suppose the worker in psychological services fails to convince the client and cannot influence. In that case, this may lead to the counseling relationship's termination from the first moment (s)he meets with the client because (s)he did not convince him/her of his/her abilities and skills to help him/her and his/her keenness on his/her interest. The psychological service providing process may continue ineffectively. The necessary change is not achieved despite the worker in psychological service attending the sessions without success [1, 3].

Hence, psychological services' ability and effectiveness to meet the workers in psychological services' needs decreases due to the worker in the field of psychological servicer's reduced ability to persuade and influence. Thus, the psychological servicer's ability to influence and persuade is like gears that turn the counseling process wheel, move it quickly towards achieving the required aims. Thus, the worker in psychological services must have self-belief, self-confidence, strength, calmness, sobriety, positive ideas, and beliefs, which pushed the process towards more progress and greater chances of success achieving aims.

# 1.2. Descriptive estimate of workers in the field of psychological services' performance

According to Arnout [3] and Al-Walidi and Arnout [6], a worker in psychological services performs

his/her work and tasks, and (s)he may innovate in its implementation. Many workers in psychological services wish to be the first to perform these works and duties involved in the psychological service process. There are many qualities to give a descriptive estimate of workers in the field of psychological services' performance in their work, such as an executive working in the field of psychological services, an effective worker in the field of psychological services, a creative worker in the field of psychological services, and an entrepreneurial worker in the field of psychological services.

# 1.2.1. An executive worker in the field of psychological services

An executive worker in the field of psychological services is the worker who performs their traditional role required of him/her from the works, activities, and tasks included in the counseling work, in terms of establishing a counseling relationship, gathering information on the client's case, identifying his/her problem, determining the method and techniques that are suitable for solving and implementing this problem, terminating the provision of these services promptly, evaluate the effectiveness of the intervention in satisfying the client's needs and following up on his/her case.

# 1.2.2. An effective worker in the field of psychological services

An effective worker in psychological services is the worker in psychological services who expects his/her/ability to carry out his/her tasks and duties in all stages of the process, enabling him/her to effectively and proficiently solve the client's problem.

# 1.2.3. A creative worker in the field of psychological services or therapist

A creative worker in the field of psychological services is the worker in the field of psychological services who is not satisfied with performing the role required of him/her at the traditional level, but has the ability to creativity and innovation and encourages his/her colleagues to creativity and innovation in the process's performance in all its stages. In other words, exceeding the level of sufficiency to the level of excellence and creativity and inventing new methods in performing the roles and tasks required of it.

# 1.2.4. An entrepreneurial worker in the field of psychological services

According to Gelda and Abbawi [12], Cassan [13], and Shane [14], we can define an entrepreneurial worker in the field of psychological services as a worker in the field of psychological services who desires to obtain the first rank in occupational performance and has supernatural capabilities, skills, and adaptive flexibility in dealing with a high degree by conforming to rapid cognitive, specialized and technological developments and changes, as well as with various clients and their problems and volunteering them in the interest of psychological service work, to enable it to achieve entrepreneurship in providing counseling and therapeutic services to its beneficiaries and to continue success in career.

# 1.3. Entrepreneurship in the field of psychological services

Because of the rapid successive changes in all aspects of life and the increased stress we face during the COVID-19 pandemic, entrepreneurship has become an essential and necessary requirement in all professions, so there has become what is known as entrepreneurship to achieve comprehensive quality in our work, institutions, and even our lives, in all their fields [12, 15, 16].

Entrepreneurship generally refers to the set of characteristics and behavior related to business selection, planning, organization, and risk-taking and needs creativity in managing it [16, 17]. Kuratko and Aurdretsch [18] defined entrepreneurship as a dynamic process of vision, change, and innovation. It requires the presence of energy and passion for creating, implementing new ideas and innovative solutions. The core components of entrepreneurship include willingness to face risks, a successful project team, mobilizing the necessary materials, building a clear business plan, and building a vision to identify the opportunity in which others see chaos, contradiction, and confusion.

In the psychological service field during the COVID-19 outbreak, we need workers to strive to enhance their personal and professional development, who is firm in their professional practice and can face challenges and difficulties, confront and overcome them in light of the profession's ethical framework and the standards culture of society. Also, we need a worker in the field of psychological services who is proficient in his/her work and can solve clients' prob-

lems and manage any crises (s)he faces while trying to help them, protect their interests and preserve the reputation of the profession, which increases the respect of others for his/her work and raises the appreciation of the counseling work following a system of ethical values of the job [3, 15].

Arnout [3] determined the following traits of an entrepreneurship worker in the counseling process:

- The entrepreneurial worker in psychological services must be characterized by awareness, independent and creative thinking, and openness to society, culture, and others, and even to the world because (s)he has an open, conscious mind.
- 2. The entrepreneurial worker in the psychological services must have a specific vision in his/her work that motivates him/her from time to time, especially when facing difficulties and challenges in his/her counseling or therapy work because the presence of this vision makes him/her strive with all energy and enthusiasm towards achieving his/her goals, the aims of his/her clients, and even his/her profession.
- The entrepreneurial worker in psychological services is characterized by having courage, courage, adventure, risk-taking, belief in his/her principles and values, defends them, acknowledges his/her mistakes, and even learns from them.
- 4. Likewise, the entrepreneurial worker in psychological services must be trustworthy to others, clients, and colleagues in the profession. It is distinguished by integrity, providing assistance and assistance to others, and even being at their service, giving them his/her attention and sharing them emotionally.
- 5. The entrepreneurial worker in psychological services possesses administrative, professional, and creative skills to perform their counseling and therapeutic work in a distinctive, innovative way with minimal capabilities.
- The entrepreneurial worker in psychological services distinguished by making informed, responsible and realistic decisions regarding his/her clients.
- 7. The entrepreneurial worker in psychological services is characterized by having visions and aims and knowing when to move counseling work from one step to another or when to finish it. (S)he also has strong motivation and enthusiasm for work, and their opinion is sound

- and understand the needs and demands of their clients, and are open-minded to the other.
- The entrepreneurial worker in the field of psychological services has an idea for growth and development.
- The entrepreneurial worker in psychological services possesses creativity and the ability to innovate and professional skills. These two elements achieve entrepreneurship in counseling work, success, and continuity despite all difficulties.

Thus, the entrepreneurial worker in psychological services can manage the counseling process in various stages and with different clients and cultures. Many specialists have confused the concept of effectiveness, creativity, influence, and entrepreneurship. Also, in the counseling programs implantation, we need entrepreneurship; that is, we need initiative and concerted efforts from members of the executive team of the program, work and achievement to achieve the aims of the counseling program and to provide integrated services to clients, skills, talents of team members together, devote time and effort, responsibilities, risks, threats, and consequences. Thus, we achieve superior management of the counseling or therapy process in full, directing and supervising the beneficiaries in all sessions and activities required. As well as strength and speed in the program's decision-making and budget management [3, 19].

Many problems may take place through the psychological services providing process. One of them is that the psychological service providing plan may be skewed due to the precise definition of the intervention aims. The intervention process is also fraught with many changes, most of which fall on the responsibility of the worker in the field of psychological services in terms of directing the client for the intervention, reviewing the aims, evaluating the effectiveness of the psychological services providing method, providing homework assignments, taking into account the nuances of psychological services providing, taking into account issues of race, culture, personality dynamics and experiences of childhood, what the client does not reveal during sessions, body language, and anxiety signals the client shows. Psychological services providing process success depends on the client's ability to work for change, face uncomfortable feelings, and honest communication about the intervention's progress. The client is the expert in his/her life, here, another

problem may arise when the client seeks help and does not intend to change, and here the role of the worker in the field of psychological services appears in motivating the client. This is in addition to the problem of violations by some workers in psychological services of the ethical standards for work and the consequent ethical issues that harm clients and counter-transference management [3, 4, 6, 15, 20, 21].

McLeod [4], in his book "Introduction to Counseling," mentioned the issue that counseling might have negative side effects like that of drug therapy. He said that the effectiveness of psychological counseling is relative, not absolute, and consistently positive. McLeod presented several cases in which the results of the counseling intervention were negative. McLeod argued that the stress on the counseling and psychotherapy professionals, from governments and health insurance providers, asserted that interventions have resulted in a lack of attention because counseling can harm their clients. Thus, McLeod invited the researchers to investigate the side effects of counseling interventions and how they can be mitigated. From my point of view, Mcleod has a call for the development of counseling and professional practice. Thus, we need entrepreneurial psychological workers in psychological services to lead the counseling intervention to overcome the problems that may arise during the counseling work with clients and may cause the counseling interventions' adverse side effects.

Therefore, entrepreneurship in workers' professional practice in psychological services is considered a developmental approach that links theory, research, and practice to develop the counseling work and overcome its problems. And to respond to the critics of the counseling profession, Feltham [5], Miller [22], Slife et al. [11], and Smail [23–26] discussed many controversies of critics in psychotherapy and counseling.

Entrepreneurship is achieved when the psychological services providers provide innovative counseling services and programs that contribute to the development of the psychological well-being of the individual and society so that the individual and society occupy a distinguished place, as well as absorb and predict the risks facing the provision of psychological services and invest them as positive opportunities, and have a proactive role in the progress and development that clients and the community. The entrepreneurship in psychological services during crisis and disasters is a future vision for the works in this field, to achieve

their primary function, which is personal, social, and economic development, so that psychological services providing becomes a pioneering profession according to its new roles, to provide and publish outstanding psychological services and invest the psychological service work to become an essential factor in the personal, social and economic growth of the individual and society in particular in light of the disasters facing communities, such as the COVID-19 pandemic, as a model.

## 2. Objectives

It is worth noting that the literature has scarce information on entrepreneurship in psychological services. There is a lack of studies interested in studying entrepreneurship predictors in counseling and therapy professional practice. Therefore, in the present study, we try to answer these questions:

- 1. What are the predictors of entrepreneurship among the psychological services providers?
- 2. Are there differences in entrepreneurship in psychological services practice due to work experience?
- 3. Are there differences in entrepreneurship in psychological services practice due to sex?

## 3. Method

## 3.1. Participants

An online link of the study tool was sent to a large random sample (480) of workers providing psychological services in Saudi Arabia's Kingdom and their request to answer the tool after their approval. The number of respondents who re-sent the study tool was 321 (128 males and 193 females) workers in the psychological services in Saudi Arabia. The sample was distributed over three professional experience levels, less than five years' experience (30.84%, N = 99), from five to less than ten years' experience (27.72%, N = 89), and 41.43% (N = 133) with more than ten years' experience in counseling and psychotherapy work).

#### 3.2. Procedures

This study was applied as a cross-sectional descriptive method to detect entrepreneurship's predictors

of the psychological services providing practice. All study samples agreed to participate in this study after they were informed about this study, and signed an online informed consent form.

#### 3.3 Instruments

# 3.3.1. Entrepreneurship in the psychological services scale (EPSS-37)

No previous studies examined entrepreneurship in psychological services through a review of the theoretical literature. They are no longer tools to measure entrepreneurship in the psychological services field, so the researcher prepared a self-report scale of entrepreneurship in the psychological service based on what Arnout [3] presented from the theoretical literature on entrepreneurship in the counseling and psychotherapy field. This scale consisted of 37 items. The participant response with a 5-point Likert scale (fully agree = 5 to not agree = 1).

## 3.4. Data analysis

Exploratory Factor Analysis (EFA) was used to extract the factors of each scale prepared in this study (IBM SPSS statistics 21), and then Confirmatory Factor Analysis (CFA) was used to validate this factor (IBM SPSS Amos 25). The Structural Equation Model was used to test the direct and indirect effects of entrepreneurship in psychological services.

## 4. Results

In this study, the researcher has developed a conceptual model of entrepreneurship based on Arnout's [3] perspective about entrepreneurship in the counseling process (Fig. 1). This proposed model was tested by applying structural equation modeling to detect entrepreneurship factors in psychological services.

# 4.1. Results of the reliability of entrepreneurship in the psychological services

The correlations between (EPSS-37) and the scale's total score were calculated, and the correlation coefficients ranged from 0.195 to 0.650 (see Table 1) and were statistically significant at 0.01 level (2-tailed). Cronbach's Alpha for the EPSS-37 was .905, and for dimensions were (.908,.875,.860,.805,.843,.806). These results indicated that EPSS-37 is validated and reliable.

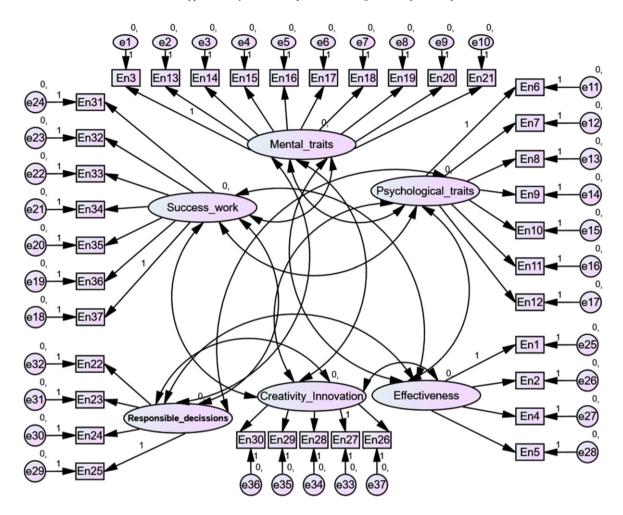


Fig. 1. Conceptual model of entrepreneurship in the field of psychological services (Based on Arnout's [3] theoretical perspective about entrepreneurship).

 $Table \ 1$  Correlation coefficients between items and the total score of the entrepreneurship

Item	R								
1	0.584	9	0.599	17	0.635	25	0.208	33	0.361
2	0.573	10	0.573	18	0.537	26	0.368	34	0.365
3	0.639	11	0.608	19	0.669	27	0.330	35	0.351
4	0.552	12	0.496	20	0.636	28	0.393	36	0.336
5	0.608	13	0.590	21	0.582	29	0.420	37	0.249
6	0.573	14	0.650	22	0.195	30	0.364		
7	0.416	15	0.430	23	0.305	31	0.386		
8	0.645	16	0.614	24	0.235	32	0.271		

# 4.2. Results of the validity of entrepreneurship in the psychological services

EFA and the Principal Components Analysis (PCA) method were used to derive (EPSS-37) factors. The results of the EFA of entrepreneurship in the counseling process are shown in Table 2.

The results shown in Table 2 indicated that the saturation of all items on (6) factors, the underlying root of which is greater than the integer one, and explained (60.679%) of the total variance, can be explained as follows:

1. *The first factor*: This factor is mental traits polarized (13.891%) of the total variance, with

Table 2 Factor analysis exploratory for entrepreneurship psychological services scale

Items			Compor	nents		
	1	2	3	4	5	6
En1				0.748		
En2				0.779		
En3	0.524			0.632		
En4				0.564		
En5						
En6		0.661				
En7		0.650				
En8		0.521				
En9		0.650				
En10		0.650				
En11		0.748				
En12		0.732				
En13	0.565					
En14	0.583					
En15	0.524					
En16	0.704					
En17	0.849					
En18	0.789					
En19	0.604					
En20	0.673					
En21	0.634					
En22						0.861
En23						0.696
En24						0.640
En25						0.877
En26					0.769	
En27					0.700	
En28					0.701	
En29					0.714	
En30					0.700	
En31				0.656		
En32				0.635		
En33				0.538		
En34				0.674		
En35				0.703		
En36				0.809		
En37				0.720		
Total of Variance	13.891	10.554	10.207	9.525	8.978	7.524

Extraction method: Principal Component Analysis. Rotation method: Varimax with Kaiser Normalization.

a latent root (9.623) and saturated with it (10) items, whose saturations were limited to between (0.524 and 0.849), and the expressions revolved around awareness, independent and creative thinking, and openness to society, culture and others, and even to the world because (s)he has an open and conscious mind, and have a specific vision in his/her work that inspires and motivates him/her from time to time, especially when facing difficulties and challenges in his/her counseling or therapy work because the presence of this vision makes him/her strive with all energy and enthusiasm towards achieving his/her goals, the aims of his/her clients, and even his/her profession. Therefore, the

researcher proposes to call this factor "mental traits."

- 2. *The second factor*: Psychological traits polarized (10.554) from the total variance, with a latent root (6.095), and (7) items were saturated with it, the saturation of which was limited to between (0.521 and 0.748), and the expressions revolved around energy and enthusiasm towards achieving counseling and psychotherapy aims. Therefore, the researcher suggests calling this factor "psychological traits."
- 3. *The third factor*: This factor is success in work polarized (10.207) from the total variance, with a latent root (2.518) and saturated with (7) items, whose saturations were limited

to between (0.538, 0.809), and the expressions revolved around the achieved when the worker in the field of psychological services or the psychotherapist performs the tasks, jobs, and duties assigned to them, which are stipulated in the ethical charter for the profession of psychological services and which were defined and agreed upon in the counseling contract concluded with the worker in the field of psychological services. Therefore, the researcher suggests calling this factor "Success in work".

- 4. The fourth factor: This factor is effectiveness polarized (1.661) from the total variance, with a latent root (9.525) and saturated with it (4) items, whose saturations were limited to between (0.518, 0.779), and the expressions revolve around the worker in the field of psychological services or therapist's ability to carry out his/her counseling work and provide counseling services that meet the needs of the clients and be effective in solving his/her problems and investing his/her energy and capabilities. Therefore, the researcher suggests calling this factor "effectiveness".
- 5. *The fifth factor*: Creativity and innovation were polarized (8.978) from the total variance, with a latent root (1.295), and (5) items were saturated with it, whose saturations were limited to between (0.700, 0.769), and the expressions revolved around the worker in the field of psychological services or psychotherapist's ability to solve client problems in new ways and through innovative, unconventional methods. Therefore, the researcher suggests calling this factor "creativity and innovation".
- 6. *The sixth factor*: Responsible decisions were polarized (7.524) from the total variance, with a latent root (1.259), and (4) items are saturated with it, the saturation of which are limited to between (0.696 and 0.877), and the expressions revolve around the worker in the field of psychological services can make informed, responsible and realistic decisions regarding his/her work with clients. Therefore, the researcher proposes to call this factor "responsible decisions".

Also, the researcher verified the confirmatory validity of the entrepreneurship scale using the AMOS.25 program. The results of the confirmatory factor validity were found to match the model with the data collected from the study sample, where the value of CMIN/DF was (1.873), which is not statistically

significant, and the value of the square root index of the mean squares of approach error (RMSEA) of the model was (0.05); It is a matching value less than (0.08), and the Quality of Match Index (GFI), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) and Standard Match Index (NFI) of the model are (0.845, 0.917, 0.905, 0.939), respectively. They are values located in the acceptance limit (greater than 0.80). All of the entrepreneurship observed variables had statistically significant (p < .001) loadings on the respective latent variables (see Fig. 2).

4.3. The results about the differences in entrepreneurship in psychological services practice due to work experience: one-way ANOVA calculated to detect the differences. The findings are shown in Tables 3, 4, 5

The results shown in Table 4 indicated significant differences due to work experience in work and responsible decisions. Simultaneously, there are no differences in entrepreneurship's total score, mental traits, psychological, effectiveness and creativity, and innovation. While, there are significant differences in success in work (f=4.06, P>.05) and responsible decision (F=40.684, P<.0001). To determine the direction of these differences, a Scheffe test was used. The results in Table 5 indicate that the differences in work and responsible decisions favored the sample members belonging to the experiences group with more than ten years of experience in psychological service work.

4.4. The results about the differences in entrepreneurship in psychological service work due to sex: An independent samples t-test was calculated to detect the difference between males and females in the dimensions and total score of the entrepreneurship in work practice (see Table 6)

The results shown in Table 6 indicated that there are significant statistical differences between males and females in the success in work in favor of males (males mean = 21.359, females mean = 19.461, t = 2.797, P < 0.05), also in responsible decisions in favor of males (males mean = 9.734, females mean = 6.927, t = 8.853, P < 0.05).

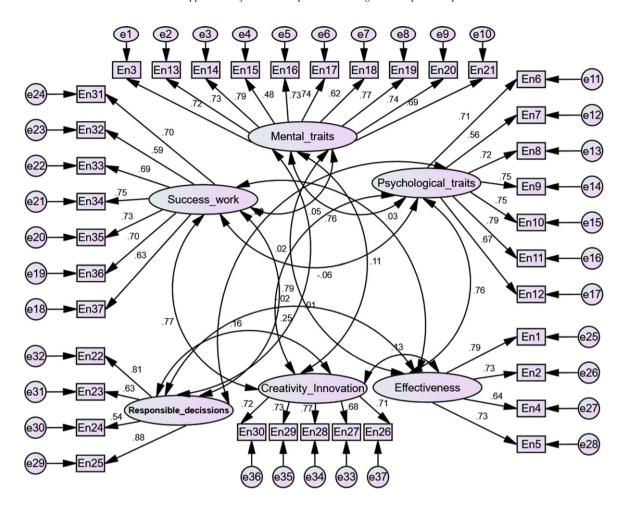


Fig. 2. Confirmatory factor analysis for entrepreneurship in the field of psychological services standards proposed model.

## 5. Discussion

This study was contributed to developing a conceptual model to address entrepreneurship in the counseling process. The present study applied an advanced analysis technique of the Structure Equation Modeling (SEM) to examine and validate the conceptual model of entrepreneurship in counseling. The findings showed the validity of the conceptual proposed model of entrepreneurship in the counseling process. The default model has goodness-of-fit indicators to predict a worker's psychological servicer's entrepreneurship in his/her professional practice.

These findings mean that mental traits, psychological traits, success in work, effectiveness, creativity and innovation, creativity, and innovation make responsible decisions significant predictors of entrepreneurship in the counseling process among psychological workers in the field of psychological

services. These results indicate the importance of plaining training programs to increase the worker in the field of psychological servicer's entrepreneurship among workers in the field of psychological services whose experience is less than ten years, especially females' workers in the field of psychological services. These results consisted of entrepreneurship's importance in professional practice to achieve creativity and innovations [12–14].

Thus, the term entrepreneurship in psychological services is not a term that can be given to any success achieved by the worker in psychological services in professional practice. Instead, it is a word that means the permanence of success. It is the success required to maintain the counseling process's level of stability, especially in conditions of danger and difficulties, and move from a stable position to expanding and developing work with clients. Entrepreneurship in psychological service work means the worker in the

Table 3
Descriptive analysis

Measurements		N	Mean	Std. deviation
Mental traits	1.00	133	34.9398	8.08549
	2.00	89	34.4045	9.76627
	3.00	99	33.6061	9.75079
	Total	321	34.3801	9.09011
Psychological traits	1.00	133	20.0526	5.98523
	2.00	89	20.7640	7.37937
	3.00	99	18.9091	6.77795
	Total	321	19.8972	6.65902
Success in work	1.00	133	21.3308	5.36928
	2.00	89	19.6404	5.71332
	3.00	99	19.2424	6.87066
	Total	321	20.2181	6.01891
Effectiveness	1.00	133	13.6466	4.25369
	2.00	89	13.9326	5.15399
	3.00	99	14.1212	4.58763
	Total	321	13.8723	4.61037
Creativity and innovation	1.00	133	14.3459	4.02839
	2.00	89	14.0449	4.55998
	3.00	99	15.0909	4.75757
	Total	321	14.4922	4.41808
Responsible decisions	1.00	133	9.5940	3.50765
	2.00	89	7.6517	2.84486
	3.00	99	6.3232	1.06740
	Total	321	8.0467	3.09955
Entrepreneurship	1.00	133	113.9098	19.95960
-	2.00	89	110.4382	22.63894
	3.00	99	107.2929	22.14159
	Total	321	110.9065	21.52362

Table 4 ANOVA

		Sum of squares	df	Mean square	F	Sig.
Mental traits	Between groups	101.039	2	50.520	0.610	0.544
	Within groups	26340.593	318	82.832		
	Total	26441.632	320			
Psychological traits	Between groups	166.749	2	83.375	1.891	0.153
	Within groups	14022.858	318	44.097		
	Total	14189.607	320			
Success in work	Between groups	288.615	2	144.308	4.060	0.018
	Within groups	11304.120	318	35.548		
	Total	11592.735	320			
Effectiveness	Between groups	13.231	2	6.616	0.310	0.734
	Within groups	6788.532	318	21.348		
	Total	6801.763	320			
Creativity and innovation	Between groups	56.138	2	28.069	1.442	0.238
	Within groups	6190.092	318	19.466		
	Total	6246.231	320			
Responsible decisions	Between groups	626.365	2	313.183	40.684	0.000
•	Within groups	2447.934	318	7.698		
	Total	3074.299	320			
Entrepreneurship	Between groups	2511.864	2	1255.932	2.741	0.066
	Within groups	145733.332	318	458.281		
	Total	148245.196	320			

field of psychological servicer's ability to perform his/her work with creativity and innovation by using the skills and initiatives necessary to provide specialized professional assistance to clients and investing all opportunities for continuous professional growth [3].

There is a correlation between a worker in a psychological servicer's entrepreneurship and his/her

Table 5
The results of multiple comparisons (Scheffe) in entrepreneurship due to years of work experience

Dependent variable	(I) Experience	(J) Experience	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
Mental traits	1.00	2.00	0.53536	1.24639	0.912	-2.5299-	3.6006
		3.00	1.33379	1.20809	0.544	-1.6373-	4.3049
	2.00	1.00	-0.53536-	1.24639	0.912	-3.6006-	2.5299
		3.00	0.79843	1.32943	0.835	-2.4711-	4.0679
	3.00	1.00	-1.33379-	1.20809	0.544	-4.3049-	1.6373
		2.00	-0.79843-	1.32943	0.835	-4.0679-	2.4711
Psychological traits	1.00	2.00	-0.71141-	0.90941	0.737	-2.9479-	1.5251
		3.00	1.14354	0.88147	0.432	-1.0243-	3.3113
	2.00	1.00	0.71141	0.90941	0.737	-1.5251-	2.9479
		3.00	1.85495	0.97000	0.162	-0.5306-	4.2405
	3.00	1.00	-1.14354-	0.88147	0.432	-3.3113-	1.0243
		2.00	-1.85495-	0.97000	0.162	-4.2405-	0.5306
Success in work	1.00	2.00	1.69038	0.81651	0.119	-0.3177-	3.6984
		3.00	2.08840*	0.79142	0.032	0.1421	4.0348
	2.00	1.00	-1.69038-	0.81651	0.119	-3.6984-	0.3177
		3.00	0.39803	0.87091	0.901	-1.7438-	2.5399
	3.00	1.00	-2.08840-*	0.79142	0.032	-4.0348-	-0.1421-
		2.00	-0.39803-	0.87091	0.901	-2.5399-	1.7438
Effectiveness	1.00	2.00	-0.28597-	0.63275	0.903	-1.8421-	1.2702
		3.00	-0.47460-	0.61330	0.741	-1.9829-	1.0337
	2.00	1.00	0.28597	0.63275	0.903	-1.2702-	1.8421
		3.00	-0.18863-	0.67490	0.962	-1.8484-	1.4712
	3.00	1.00	0.47460	0.61330	0.741	-1.0337-	1.9829
		2.00	0.18863	0.67490	0.962	-1.4712-	1.8484
Creativity and innovation	1.00	2.00	0.30092	0.60421	0.883	-1.1850-	1.7869
,		3.00	-0.74504-	0.58565	0.446	-2.1853-	0.6952
	2.00	1.00	-0.30092-	0.60421	0.883	-1.7869-	1.1850
		3.00	-1.04597-	0.64447	0.269	-2.6309-	0.5390
	3.00	1.00	0.74504	0.58565	0.446	-0.6952-	2.1853
		2.00	1.04597	0.64447	0.269	-0.5390-	2.6309
Responsible decisions	1.00	2.00	1.94230*	0.37996	0.000	1.0078	2.8768
r		3.00	3.27075*	0.36829	0.000	2.3650	4.1765
	2.00	1.00	-1.94230-*	0.37996	0.000	-2.8768-	-1.0078-
		3.00	1.32845*	0.40528	0.005	0.3317	2.3252
	3.00	1.00	-3.27075-*	0.36829	0.000	-4.1765-	-2.3650-
	3.00	2.00	-1.32845-*	0.40528	0.005	-2.3252-	-0.3317-
Entrepreneurship	1.00	2.00	3.47157	2.93171	0.497	-3.7385-	10.6816
2 opreneuromp	1.00	3.00	6.61685	2.84162	0.068	-0.3716-	13.6053
	2.00	1.00	-3.47157-	2.93171	0.497	-10.6816-	3.7385
	2.00	3.00	3.14527	3.12703	0.603	-4.5451-	10.8356
	3.00	1.00	-6.61685 <del>-</del>	2.84162	0.068	-13.6053-	0.3716
	5.00	2.00	-3.14527-	3.12703	0.603	-15.0055-	4.5451

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

creative and innovative abilities. The worker's possession in the field of psychological services or psychotherapist of these abilities is an essential requirement to make him/her the first in every work (s)he does or activity (s)he performs with clients [6]. Thus, we can say that entrepreneurship in counseling work can only be achieved by investing in these capabilities. Entrepreneurship is an investment of the worker in psychological servicer's qualifications, knowledge, skills, creativity, and innovation during his/her professional practice.

Looking at the components of creativity and innovation, we find that it includes three types of workers in psychological services thinking that is urgently needed and necessary to achieve entrepreneurship in the counseling process. Synthetic thinking consists of the worker in psychological services or psychotherapists' ability and skills to see the client's problem in an integrated manner and in a new and innovative way and away from traditional thinking. Therefore, it needs a profound vision and a comprehensive analysis of the information (s)he gathered on the client's

				r	,	
	Sex	N	Mean	Std. deviation	t-test	Sig. (2-tailed)
Mental traits	Males	128	34.6172	8.05700	0.380	0.704
	Females	193	34.2228	9.73220		
Psychological traits	Males	128	19.9688	6.04046	0.157	0.876
	Females	193	19.8497	7.05434		
Success in work	Males	128	21.3594	5.31042	2.797	0.005
	Females	193	19.4611	6.34673		
Effectiveness	Males	128	13.5156	4.25743	1.129	0.260
	Females	193	14.1088	4.82653		
Creativity and innovation	Males	128	14.3125	4.03479	0.593	0.554
-	Females	193	14.6114	4.66137		
Responsible decisions	Males	128	9.7344	3.50137	8.853	0.000
-	Females	193	6.9275	2.17824		
Entrepreneurship	Males	128	113.5078	19.95151	1.769	0.078

109.1813

22.38985

Females

193

Table 6
Results of *t*-test between males and females in entrepreneurship in the psychological services

problem. Analytical thinking refers to the worker in the field of psychological servicer's skill or therapist in developing several alternatives to solve the client's problem and determine the best solution among them. (S)he sets the psychological services process's objectives with the client with the highest return and the lowest costs in light of this. (S)he chooses innovative new unconventional methods and techniques, implements them, achieves success, and pioneers his/her work. Practical thinking includes a worker in the field of psychological services' ability to convince clients or coworkers of his/her creative and innovative ideas and methods in his/her counseling or therapeutic work, and (s)he invests this in the face of challenges, stress, and difficulties of professional practice [1, 6].

From an administration perspective, such as [14, 27, 28], to achieve entrepreneurship, professional practice, success, effectiveness, creativity, and innovation must be performed. Because the psychological service provider needs to analyze reality, know its problems and collect sufficient information from various sources about these problems, then plan to solve and overcome them by designing and building development, preventive and remedial programs in light of the determinants of reality and the culture of the environment and the resources available in it to achieve the desired success by investing the skills and achieving a head start in solving these problems are scientifically structured, holistic.

The current study results indicated significant differences due to the years of work experience in success in work and responsible decisions in favor of the sample members belonging to the experiences group with more than ten years of experience in psychological services providing work. Simultaneously,

there are no differences in entrepreneurship's total score, mental traits, psychological, effectiveness and creativity, and innovation. The results also showed significant statistical differences between males and females in favor of males and responsible decisions in favor of males. These findings agree with that emphasized by Gelada and Abbawi [12] and Shane and Venkataraman [19]. Corey [10] stated that beginning worker in psychological services faces anxiety while meeting clients, have doubts about their ability to perform the work, want to work without making mistakes, have concerns about the client's acceptance of them, and are concerned about their inability to achieve the work required of them, discomfort with a therapeutic alliance, lack of use of humor in the counseling process. Theriault et al. [29] also added that beginning workers in psychological services have feelings of incompetence and professional concerns, fear of running into moral dilemmas, anxiety over client problems, low salary, insufficient training for psychological services providing work, etc. These results also agree with the findings of previous studies that found the workers in the field of psychological services face professional problems and challenges such as salaries, lack of psychological awareness, lack of job opportunities, and so on, such as [6-8, 17, 30, 31].

Recently, Pereira and Rakhas [21] found that workers in the field of psychological services such as training and application, stigma, awareness, and understanding of counseling, recognition of counseling profession, stress and burnout, pay/salary, ethical issues, absence of licensing and the national body of workers in the field of psychological services, network/directory of workers in the field of psychological services and other mental health pro-

fessionals, professional development of workers in the field of psychological services and personal and family problems, face many problems. These problems may decrease the effectiveness, creativity, and success in the workers in psychological services' performance with their clients and their entrepreneurship in the counseling process.

The current study results found statistically significant differences between males and females in work and making responsible decisions in favor of males. This may be attributed to the nature of work in providing psychological services and the many stresses that place the burden on workers in this field [1, 2, 20, 31]. Women who are working in the field of providing psychological services, in addition to work stress, face family and social burdens [1, 20], which affect their ability to perform work, and some of them may reach the stage of psychological exhaustion, and this is why we find the superiority of males over females in success in work, especially in the field of providing psychological services. With their strong thinking, resilience, and ability to solve problems, we find that they have surpassed females in making responsible decisions in providing psychological services.

## 6. Conclusion

This study developed a conceptual model of entrepreneurship in the psychological services process among workers in psychological services. The statistical analysis showed that mental traits, psychological traits, success in work, effectiveness, creativity and innovation, creativity and innovation, responsible decisions were significant predictors of entrepreneurship in the psychological services process among psychological workers in the field of psychological services. The current study results also found differences in entrepreneurship due to gender and the number of work experience. The results were in favor of males and those with more than ten years of work experience. These results indicate the importance of plaining training programs to increase entrepreneurship among workers in psychological services whose experience is less than ten years, especially female workers in psychological services.

## 6.1. Limitations and future directions

The present study applied a descriptive design method to identify the predictors of entrepreneurship in psychological services professional practice. Still, it was not interested in studying the relationships between entrepreneurship in workers' professional practice in psychological services. Another limitation is that this study did not examine the impact of training interventions to develop entrepreneurship among workers in psychological services. A third limitation is that the study sample consisted of counselors and psychotherapists; it did not address other professional groups working in providing psychological services such as psychiatrists, psychologists, social workers, and others. The fourth limitation of this study is that it used quantitative design and did not use qualitative design to reach a deeper interpretation of entrepreneurship among psychological service providers, such as using case study design or a grounded theory approach; especially since there are no previous studies that have dealt with the entrepreneurship variable among workers in the field of providing psychological services. The fifth limitation of the current study that the differences found concern perceptions of the respondents. This study's results benefit from increasing the professional engagement of workers in psychological services and their self-efficacy in performing their tasks with clients. It also increases creativity in their work. Therefore, future studies must investigate the correlations between entrepreneurship and other variables related to the psychological services process. Future studies can also direct to design interventions to develop entrepreneurship in professional psychological practice.

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## **Conflict of interest**

The author declares that there is no conflict of interest.

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#### References

- Arnout B, Almoied A. A structural model relating gratitude, resilience, psychological well-being, and creativity among psychological counsellors. Counseling & Psychotherapy Research. 2020;1-20.
- [2] Arnout B. Predicting psychological service providers' empowerment in the light of the COVID-19 pandemic outbreak: A structural equation modelling analysis. Counseling and Psychotherapy Research. 2020b;20(3):406-4018.
- [3] Arnout B. The Integrated Encyclopedia of Counseling and Psychotherapy, part One. Cairo: Madboly Library, 2019.
- [4] Mcleod M. An introduction to counseling. 4<sup>th</sup> edition. Open University Press: New York, USA. 2009.
- [5] Feltham C. Controversies in Psychotherapy and Counselling. London: Sage. 1999.
- [6] Al-Walidi A, Arnout B. Self-disclosure and its relation to the counseling creativity of psychologists in the Kingdom of Saudi Arabia in the light of some demographic variables. Journal of Psychological Counseling, Ain Shams University. 2017;50:1-64.
- [7] Arowolo DO. Workers in the field of psychological services' perception of problems facing guidance and counseling services in Nigerian schools. Journal of Education and Practice. 2013;4(24):115-8.
- [8] Bain S. School counsellors: a review of contemporary issues. Research in Higher Education Journal. 2012;18:1-7.
- [9] Borgen FH. Counseling Psychology. Ann Rev Psychol. 1984;35:579-604.
- [10] Corey G. Theory and practice of counseling and psychotherapy (6th ed.). Belmont, CA: Thomson Brooks/Cole 2005.
- [11] Slife BD, Williams R, Barlow S. Critical Issues in Psychotherapy: Translating New Ideas into Practice. Thousand Oaks, CA: Sage. 2001.
- [12] Gelda S, Abbawi Z. Innovation and Creativity Department. Dar Kunooz Al Maarifa for Publishing and Distribution: Jordan. 2006.
- [13] Cassan M. The Entrepreneur: An Economic Theory, second edition", Edward Elgar Publishing 2003.
- [14] Shane S. A general theory of entrepreneurship: the individual-opportunity nexus in New Horizons in Entrepreneurship series, Edward Elgar Publishing 2003.
- [15] Neukrug E. The World of the Worker in the field of psychological services: An Introduction to the Counseling Profession. 4<sup>th</sup> edition. Brooks/Cole, Cengage Learning: USA, 2017.

- [16] Thornberry N. Lead Like an Entrepreneur. McGraw Hill books. New York. 2006.
- [17] Agrawal G. Psychology in India: A career with uncertain opportunities. Online Journal of Multidisciplinary Research. 2015;1(2):1-7.
- [18] Kuratko D, Audretsch D. Strategic Entrepreneurship: Exploring Different Perspectives of an Emerging Concept. Entrepreneurship Theory and Practice. 2009;1-17.
- [19] Shane S, Venkataraman S. The Promise of Entrepreneurship as a Field of Research. Academy of Management Review. 2000;25(1):217-26.
- [20] Arnout B, Counseling and Psychotherapy Programs. Scholars Press, Germany. (2020a).
- [21] Pereira M, Rekha S. Problems, Difficulties and Challenges Faced by Counsellors. The International Journal of Indian. 2017;4(3):65-72.
- [22] Miller SD. Losing faith: arguing for a new way to think about Therapy. Psychotherapy in Australia. 2004;10:44-51.
- [23] Smail D. Illusion and Reality: The Meaning of Anxiety. London: Dent. 1984.
- [24] Smail D. Towards a radical environmentalist psychology of help. The Psychologist. 1991;2:61-5.
- [25] Smail D. Why Therapy Doesn't Work: And What you Should Do about it. London: Robinson. 2001.
- [26] Smail D. Power, Interest, and Psychology: Elements of a Social Materialist Understanding of Distress. Ross-on-Wye: PCCS Books. 2005.
- [27] Covin JG. Entrepreneurial versus conservative firms: A comparison of strategies and performance. Journal of Management Studies. 1991;28:439-62.
- [28] Stevenson H, Jarillo J. A paradigm of entrepreneurship: Entrepreneurial management. Strategic Management Journal, 11, Summer. 1990;17-27.
- [29] Theriault A, Gazzola N, Richardson B. Feelings of incompetence in novice therapists: Consequences, coping, and correctives. Canadian Journal of Counselling. 2009;43(2):105-19.
- [30] Anagbogu MA, Nwokolo CN, Anyamene AN, Anyachebelu FE, Umezulike RQ. Professional challenges to counseling practice in primary schools in Anambra State, Nigeria: The way forward. International Journal of Psychology and Counselling. 2013;5(5):97-103.
- [31] Babamiri M, Alipour N, Heidarimoghadam R. Research on Reducing Burnout in Health Care Workers in Critical Situations Such as the COVID-19 Outbreak'. Work. 2020;66(2):379-80.