

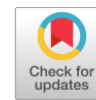


SOCIAL AND BEHAVIORAL SCIENCES. Psychology

ORIGINAL RESEARCH



# The Effect of Cognitive Behavioral Therapy Training Program on Reducing Emotional and Social Distress: Three Years Follow Up



Authors' Contribution:

- A – Study design;
- B – Data collection;
- C – Statistical analysis;
- D – Data interpretation;
- E – Manuscript preparation;
- F – Literature search;
- G – Funds collection

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Received: 10.05.2021; Accepted: 15.06.2021; Published: 30.06.2021

**Background and Aim of Study:**

**Abstract**

*This paper addresses the question: is a brief cognitive behavior therapy training program enhances psychologist's skills as reflected in scores on cognitive therapy skills scale and in helping students with emotional and social problems?*

*The aim of the study: to explore the impact of the effect of cognitive behavioral therapy training program on reducing emotional and social distress over 3 years.*

**Material and Methods:**

*Participants are 35 school psychologists (20 females and 15 males) have received intensive cognitive behavior therapy training for 6 days during two weeks followed by one to one supervision in school sittings for three months. Participants completed cognitive behavior therapy scale. Individual and group counseling sessions delivered to male and female (age mean is 13.7 years) students known of emotional and social problems during the current school year. Supervisors wrote a report in the end of three months practice, students and parent's feedback had collected.*

**Results:**

*Results show that differences between pre and post scores on cognitive behavior therapy scale are statistically significant ( $t=4.92$ ), supervisors reports and students feedback indicate improving therapeutic skills by the end of three months practice.*

**Conclusions:**

*Cognitive behavior therapy training program has positive influence in enhancing cognitive behavior therapy skills in school psychologists that reflected in providing effective counseling for students with emotional and social problems. Supervision based training optimizing the therapeutic outcome in both individual and group therapy sessions. Follow up of 3 years revealed continuous effect of the training and continuous supervision in improving counseling skills of school psychologists.*

**Keywords:**

*cognitive behavior therapy, emotional problems, social problems, cognitive behavior therapy skills, cognitive therapy scale*

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**DOI and UDC**

DOI <https://doi.org/10.26697/ijsa.2021.1.3> UDC 159.955:37.091.315.7

**Conflict of interests:**

*The authors declare that there is no conflict of interests*

**Peer review:**

*Double-blind review*

**Source of support:**

*This research did not receive any outside funding or support*

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## Introduction

Psychological services in the governmental schools face many challenges, since it established in 1990 side to side with the social services (Abousrea et al., 2009; Sherefeen & Abouhasana, 2011). School psychologist's jobs were limited to behavioral assessment of emotional and academic problems (Ismael, 2006). School psychologists are willing to offer better job by applying the counseling and therapeutic change with students who suffered because of emotional, interpersonal, or academic problems (Yousef, 2009). One of the barriers to achieve this goal is preparing the school psychologists to be competent in delivering a professional help with these problems (Albana, 1990; Elfeky, 1990; Ismael, 2006; Kamel, 1990; Taha, 1990; Yousef, 2009).

Psychotherapeutic competence is conceptualized as a therapist's general and treatment-specific knowledge level, skill level, and values or attitudes while implementing therapeutic interventions (Kühne et al., 2020). Assessment of psychotherapeutic competences are essential to training, supervision, clients care, quality control, and life-long practice (Kühne et al., 2019). Assessment of therapeutic competence may provide therapists with formative and summative feedback and may guide self-reflection (Muse & McManus, 2013).

Cognitive behavior therapy (CBT) have been consistently shown to be effective across a wide range of disorders (Ho et al., 2016; Hofmann et al., 2012; Kobori et al., 2014). Previous CBT training evaluations indicate that trainees' clinical competence and knowledge improve over the training period (McManus et al., 2010). Measurement of cognitive behavioral therapy competency is designed to reveal how well therapists deliver CBT, the results of which can serve many important functions in research and clinical training contexts and has the potential to optimize training and dissemination of CBT (Rozek et al., 2018). Cognitive Therapy Scale developed by Young and Beck in 1980 for assessing CBT skills (Young & Beck, 1980a; 1980b). It is the most established measurement of therapist competence in the context of providing CBT (Weck et al., 2016).

This study is interested in investigating how far brief cognitive therapy training could enhance school psychologists CBT skills and offer better help for students known with emotional and social problems.

School psychologists are capable to help students with their psychological problems, as they spend relatively long time with them and know about their strengths and weaknesses as well.

Adjustment in school environment is very important and has a great impact on student's overall adjustment and psychological health.

For the study of psycho-adaptive and psychomaladaptive personality disorders, complexes of psychological and medical methods for diagnosing mental health are mainly used, which allows revealing psychological peculiarities of the subjects (Melnyk & Stadnik, 2018).

Cognitive behavior therapy is known as an effective treatment for many of the psychological problems

(Beck, 1967; 1976; 1991; 1993; 1995; 1997; 2005; Beck et al., 1979; 2004; Clark et al., 1999), but results depend on the therapists' skill and competences (Kazantzis et al., 2018). Training could enhance cognitive behavior therapy skills and enable those psychologists to help students to cope with their emotional and interpersonal problems. Supervision is essential in learning cognitive behavior therapy. Despite the divergence in systems of psychotherapy, their goals and varied training practices, supervision remains the one component considered essential to all (O'Donovan et al., 2011). Miller's hierarchical framework for assessing clinical skill, ranging from therapists' knowledge of CBT ("knows"), their practical understanding ("knows how"), their skill within artificial clinical simulations ("shows how"), and their skill within real clinical practice settings ("does") (Muse et al., 2017). In his definition of supervision Milne (2009) stated that the formal provision, by approved supervisors, of a relationship-based education and training that is work-focused and which manages, supports, develops and evaluates the work of colleague/s (precision). It therefore differs from related activities, such as mentoring and therapy, by incorporating an evaluative component (precision by differentiation) and by being obligatory. The main methods that supervisors use is corrective feedback on the supervisees' performance, teaching, and collaborative goal-setting (specification). The objectives of supervision are "normative" (e. g. case management and quality control issues), "restorative" (e. g. encouraging emotional experiencing and processing) and "formative" (e. g. maintaining and facilitating the supervisees' competence (Milne, 2009).

There is a growing body of literature showing that therapists receiving supervision have more positive clients' outcomes in therapy (O'Donovan et al., 2011). The importance of this study in one aspect is that, helping the psychologists to enhance their professional skills in counseling and therapy services. On other aspects it enables testing the actual results of the training in real life sittings within schools. By giving them the opportunities to refine their counseling skills under a close extended supervision and evaluation of client's outcome from various perspectives.

Few studies have examined multiple perspectives (i. e. independent observer, supervisor, trainee therapists and patient) of competency evaluation and few studies have examined all perspectives together (Rozek et al., 2018). Current study collects data from supervisors, students, teachers and parents, which enables considering multiple feedback of therapy outcome.

*The aim of the study.* To explore the impact of the effect of cognitive behavioral therapy training program on reducing emotional and social distress over three years.

## Materials and Methods

### *Participants and Supervisors*

School psychologists of total number 35 (20 females and 15 males) with mean age of 31.7 years, average of 5.4 years of experience. Table 1 shows participants' characteristics.



**Table 1**

*Participants Demographic Data*

Characteristics	Value
Total participants	35
Participants by gender ratio	15 males 20 females
Age mean	31.7
Experience years mean	5.4
Qualifications:	
- Bachelor's degree	31
- Master's degree	2
- PhD degree	2

Two Supervisors participated in the current study is a Clinical Psychologists (trained in CBT). Supervisor has served as trainers in psychotherapy training for 7, and 17 years. Supervisor (1) had 12 years of clinical experience and school counseling. He got his PhD degree in Counseling and Psychological Wellbeing. Supervisor (2) had 23 years of clinical experience and academic teaching of Clinical Psychology.

The study used the following scales: the Cognitive Therapy Scale and the Cognitive Behavior Therapy Skills Scale.

The Cognitive Therapy Scale (CTS) was developed by Young and Beck (1980), and modified by Blackburn and colleagues (Blackburn et al., 2001; James et al., 2001). An Egyptian version of the CTS validated by Sabra (2017); Sabra and Daigham (2020), contains 11 items that evaluate specific aspects of therapist competence including agenda setting, dealing with problems/questions/objections, clarity of communication, pacing and efficient use of time, interpersonal effectiveness, resource activation, reviewing previously set homework, using feedback and summaries, guided discovery, focusing on central cognitions and behaviors, rationale, selecting appropriate strategies, appropriate implementation of techniques and assigning homework.

The CTS uses a 7-point rating scale format: 0 = poor, 1= barely adequate, 2= mediocre, 3= satisfactory, 4= good, 5= very good, and 6 = excellent.

In the current study, the inter-rater reliability of the CTS mean scores between the two raters was high (0.87).

The Cognitive Behavior Therapy Skills Scale (CBTS) consists of 40 items with 5 points Likert rating scale of 1= not use it at all to 5= use it most of the times. Alpha reliability is 0.92 (n=55) and test retest reliability is 0.74 (n= 20) with good validity indicators (Sabra, 2017).

Students' feedback after each session and behavioral observation of class mates included in sessions report that reviewed by supervisors.

Supervision is an educational process and, as such, benefits from using well-established principles that are known (from other contexts) to improve the likelihood of learning (Pilling & Roth, 2014, p. 26):

1. Written reports of psychological counseling sessions as a part of psychological activity plans during school

year. The reports include activity plan, intervention tools and evaluation notes.

2. Supervisors tasks is to help implementing and to evaluate the following items:

- agenda setting: suitable items, feasible agenda;
- CBT interventions: appropriate intervention targets, choosing suitable interventions, rationale for interventions, implementing interventions;
- homework: choosing suitable homework, reviewing homework, rationale for homework, planning homework;
- assessing change: choosing suitable measures;
- effective two-way communication: empathic understanding, collaboration, client feedback, reflective summaries.

#### *Procedures*

Participants attend 6 days training in cognitive behavior therapy. The training included basics and techniques of cognitive behavior therapy of Adolescents problems. Participants completed Cognitive Behavior Therapy Skills Scale before and after the training course.

A close supervision is established for the first stage implementation in eleven preparatory schools. General psycho educational plan for students of these schools have been set, and individual counseling for students with emotional and interpersonal problems conducted too.

Feedback from students who received individual and group CBT counseling sessions for emotional and interpersonal problems collected. Other teachers and parent's feedback about those students' behaviors collected too. Supervisors reports collected by the end of each 3 months.

Follow up during 36 months to evaluate and enhance the counseling service in the Beni Mazar district primary schools.

#### **Results and Discussion**

CBT training program has positive influence in enhancing CBT skills in school psychologists that reflected:

1. Results of t-test of paired samples, of CBTSS scores show that there are significant differences between pre and post mean scores as shown in Table 2-3.



**Table 2**  
 Paired Sample Statistics

CBTSS	<i>M</i>	<i>N</i>	<i>SD</i>	<i>SEM</i>
CBTSS post	168.85	33	27.373	5.211
CBTSS pre	157.76	33	29.933	4.765

*Note.* CBTSS post – scores on cognitive behavioral therapy skills scale after training; CBTSS pre – scores on cognitive behavioral therapy skills scale before training; *M* – the mean (average); *N* – participants; *SD* – the standard deviation; *SEM* – the standard error of the mean.

**Table 3**  
 Results of Paired Sample T-Test (*N*=33)

CBTSS	Paired differences			<i>T</i>	<i>DF</i>	<i>Sig.</i>
	<i>M</i>	<i>SD</i>	<i>SEM</i>			
Pair 1, CBTSS post & CBTSS pre	11.091	12.93	2.251	4.927	32	0.000

*Note.* CBTSS post – scores on cognitive behavioral therapy skills scale after training; CBTSS pre – scores on cognitive behavioral therapy skills scale before training; *M* – the mean (average); *SD* – the standard deviation; *SEM* – the standard error of the mean; *T* – the t-test statistic; *DF* – the degrees of freedom; *Sig.* – significance level.

2. Providing effective counseling for students with emotional and interpersonal problems as indicated of reporting that:

- reduced complaints of student's problematic behaviors;
- increasing involvement in counseling activities and sessions;
- parents reports show that kids became able to listen and conduct calmer communication between each other's;
- kids became more comfortable communicating with teachers and adults in their social network;
- kids are more motivated to participate in school activities and more likely to follow school rules.

3. Supervision helped in optimizing the therapeutic outcome in both individual and group therapy sessions:

- after 3 years of follow up, supervisor report shows that, psychological counseling became an established process in school year activity plan;
- more schools became included in CBT counseling systematically. Psychologists became more familiar with CBT structure and use it in their routine counseling work with students.

4. Efforts to communicate with students and their families during pandemic are continuing to help students cope with educational and evaluation method change since March 2020.

5. Psychologists participated in enhancing awareness and protection of COVID-19 for students and their families.

6. Psychologists provide brief useful psych education on anxiety symptoms that are widely spread during pandemic time through telehealth techniques.

7. In the beginning of the 2018-2019 school year total of 105 school psychologist finished the cognitive behavior therapy training and were ready to establish the cognitive therapy and positive thinking program in all preparatory schools in Beni Mazar district.

8. The cognitive therapy and positive thinking program considered as a standard psychological activity programme to be repeated each semester during the time between September 2018–March 2020.

### Conclusions

Cognitive behavior therapy training program has positive influence in enhancing cognitive behavior therapy skills in school psychologists that reflected in providing effective counseling for students with emotional and social problems. Supervision based training optimizing the therapeutic outcome in both individual and group therapy sessions. Follow up of 3 years revealed continuous effect of the training and continuous supervision in improving counseling skills of school psychologists.

Research limitations and recommendations for future studies:

- Data collection in this research focused on client outcome and supervisors' reports. Need for collecting data on supervisees' competence, that include supervisors systematically sampling supervisees' in-session behaviour as O'Donovan and colleagues (O'Donovan et al., 2011) recommended.
- Future research should continue to work on validating and refining competency measures in order to enhance training and, allowing for better clients' outcomes.
- Future studies needed to replicate these findings with a larger sample and a wider variety of counselor's experience.
- More tools are needed to improve tele-counseling processes.

### Acknowledgements

We would like to express our deepest gratitude to Dr. Ahmed Gamal Alshereef, for his efforts in organizing and supervising activities during the program and the following 3 year while the CBT counseling was delivering to students at schools.

We would like to express our deepest gratitude to Dr. Yuriy Melnyk for introducing this prestigious Journal to us and encouraging us to publish our paper in the aforementioned Journal.





### Ethical Approval

The study protocol was consistent with the ethical guidelines of the 1975 Declaration of Helsinki as reflected in a prior approval by the Institution's Human Research Committee.

### Funding Source

This study did not receive any outside funding or support.

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#### Cite this article as:

Sabra, Z. E. I., & Daigham, A. I. (2021). The effect of cognitive behavioral therapy training program on reducing emotional and social distress: three years follow up. *International Journal of Science Annals*, 4(1), 16–21. <https://doi.org/10.26697/ijisa.2021.1.3>

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