



# The Effectiveness of Schema Therapy on Self-efficacy, Burnout, and Perfectionism of Employees with Imposter Syndrome

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## Abstract

**Background:** One of the problems in the way to success is behaviors within the framework of imposter syndrome (IS). The present study was conducted to investigate the effectiveness of schema therapy on self-efficacy, burnout, and perfectionism of employees with IS.

**Methods:** This randomized trial employed a pre-test-post-test design with a control group. The statistical population consisted of employees from private offices in five districts of Tehran in 2019. The study participants were comprised of 40 employees who were selected through purposeful sampling and randomly assigned to either the experimental or control group. The data collection tools included questionnaires on IS, general self-efficacy, job burnout, and perfectionism. While the control group received no intervention, the experimental group underwent ten 90-minute schema therapy sessions. The data obtained were ultimately analyzed using multivariate analysis of covariance via SPSS 24.

**Results:** According to the findings, schema therapy significantly increased self-efficacy ( $P < 0.01$ ,  $F = 37.73$ ) and decreased emotional exhaustion ( $P < 0.01$ ,  $F = 30.08$ ), depersonalization ( $P < 0.01$ ,  $F = 71.63$ ), low personal accomplishment ( $P < 0.01$ ,  $F = 65.58$ ), self-oriented perfectionism ( $P < 0.01$ ,  $F = 44.28$ ), other-oriented perfectionism ( $P < 0.01$ ,  $F = 57.36$ ), and society-oriented perfectionism ( $P < 0.01$ ,  $F = 50.46$ ) among employees with IS ( $P < 0.001$ ).

**Conclusion:** Considering that employees' performance and progress are of special importance to office managers, examining the psychological dimensions of employees to reduce IS and strengthen the sense of self-efficacy is of great importance.

**Keywords:** Burnout, Imposter syndrome, Perfectionism, Self-efficacy, Schema therapy

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## Introduction

Researchers have been trying to address why some individuals are motivated to achieve the highest progress and success but others are motivated to avoid success (1). Based on their clinical experiences, Clance and Imes (2) called these specific motivational problems in achieving success "imposter syndrome" (IS). People with IS feel that their efforts to achieve success are deceptive, and they attribute their success to factors other than their abilities (3). According to the studies, IS is reported more in women (4) and people with high education (5). The studies conducted indicate a high prevalence of IS among employees and managers. Shanafelt et al

(6) found that between 4 and 10% of American workers experience high levels of IS, which reduces their mental health, job satisfaction, and work progress. IS is particularly prevalent in healthcare due to the latter's demanding nature, high stakes, and the continuous need for professional growth and adaptation. Healthcare professionals, including doctors, nurses, allied health workers, administrators, and support staff, might all experience IS to varying degrees (7).

Self-efficacy is one of the most critical factors that can affect the severity of IS (8). Self-efficacy, a significant construct in Bandura's social-cognitive theory, has positively impacted individuals' performance, emotions,



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choices, control of stressful events, organization, and implementation of activities needed by the individual (9). Regarding employees, it can be acknowledged that the more people believe in their abilities and see their success as the result of their functional self-efficacy, the more committed they are to their work (10) and the more they show endurance in the face of problems (11). The results of Medline et al (12) indicated a high prevalence of IS in older female surgeons. Also, surgeons with low self-efficacy reported higher degrees of IS. The findings of McDowell and colleagues' study (13) also determined that employees with low levels of self-efficacy suffered more from IS and needed more social and organizational support.

Among other influential variables, we can mention job burnout, which plays a vital role in the perception and mental health of people with IS (14). Job burnout manifests as emotional exhaustion, depersonalization, and low personal accomplishment (15). Job burnout is influenced by various factors such as inappropriate working conditions, excessive work pressure, lack of social support, organizational changes, and working hours (16). In general, job burnout leaves many complications in the family, social, individual, and organizational life, the most important of which are absenteeism, dropout, successive delays, job change, and IS (17). The studies show a high correlation between IS and employee burnout (18,19). In this context, the results of Alrayyes et al (20) indicated a high prevalence of burnout among people with IS. Depression, anxiety, stress, pessimism, and fear were among the consequences of IS among employees. The findings of Clark et al (21) also determined that people who had low self-compassion suffered from burnout and IS.

Perfectionism is one of the variables that can affect the symptoms of IS (22). Perfectionism refers to an individual's unrelenting pursuit of flawless and unachievable standards, accompanied by self-critical performance evaluations (23). There are commonalities between perfectionism and IS, which include the fear of making mistakes, having high personal standards, doubts about one's performance, and the tendency to fear failure (24). Research has shown that people with morbid perfectionism hesitate and procrastinate in their work to the extent that they cannot manage their tasks well (25). Having negative perfectionism in the long term increases the IS in employees, increasing anxiety and job stress (26). Muneer et al (27) indicated a high correlation between perfectionism and IS among employees. The findings of Ahmed Hussein Abdel Karim (28) indicated that nurses who had high degrees of perfectionism suffered more from IS, which caused a decrease in their job performance.

Considering that people with IS have fundamental problems regarding documentary and schema styles,

schema therapy is one of the best treatments that can increase motivation and self-esteem in these people (29). The therapeutic schema emphasizes the developmental roots of psychological problems in childhood, the use of stimulating techniques, and the presentation of the concept of incompatible coping styles (30). Because the therapeutic schema emphasizes the deepest level of cognition, it seeks to correct the central core of the problem, and this practice has been highly successful in treating disorders such as anxiety, depression, and hopelessness (31). In this context, the results of the research of Briedis et al (32) and Nicol et al (33) indicated the high effectiveness of schema therapy in reducing the severity of IS.

Research has shown that schema therapy can be effective in treating conditions related to IS, such as anxiety disorders, depression, and personality disorders. While research specifically focused on schema therapy's effectiveness on IS is limited, the principles and techniques of the therapy align well with the underlying factors contributing to perfectionistic behaviors. It is important to note that IS can vary in intensity and underlying causes. A qualified therapist can tailor schema therapy techniques to address the unique aspects of an individual's IS and its impact on their life. As with any therapeutic approach, the effectiveness of schema therapy for IS may vary from person to person, but it offers a comprehensive framework for addressing the complex patterns associated with this issue. Considering that IS presents an unfavorable adaptive social style involving interaction with the environment, it can limit people's potential to work in the long term, causing job burnout and perfectionism. Since the mental health and optimal performance of employees play an essential role in the progress of organizations, screening people for IS is of great importance and necessity. The present study aimed to explore the impact of schema therapy on the levels of self-efficacy, burnout, and perfectionism among employees with IS.

## Methods

Using a randomized trial pre-test-post-test design with a control group, this study targeted the employees of private offices in five districts of Tehran in 2019 as its statistical population. First, the researchers obtained approval (IR.BMSU.REC.1398.276) from the Research Ethics Committee of Baqiyatallah University of Medical Sciences. To identify employees with IS, 300 employees were assessed using the IS scale (2). After checking the employee scores, those who scored above 50 were included in the study. After sampling, the participants were randomly assigned to the experimental group (n=20) or the control group (n=20). Randomization was conducted using an Excel random number generator (34).

The inclusion criteria for the study included being a research community member, having at least five years of work experience, the absence of reported acute psychological problems (medical record review), interest in participating in the study, and personal satisfaction. Also, absence in more than two meetings and unwillingness to continue participation in the research were considered exclusion criteria. Moreover, ethical considerations were fully observed in this research; the participants were assured of confidentiality and the use of information only for research. The data collection tools were:

*Imposter Syndrome Scale (ISS)*: Clance and Imes first created this scale (2). The questionnaire comprises 20 items that prompt participants to indicate their level of agreement with each statement on a five-point Likert scale ranging from “never” to “very much.” If the sum of the scores is less than 40, it signifies weak IS, between 41 and 60, moderate IS, between 61 to 80, pathological IS, and 80 and above, severe impostor characteristics. The conducted studies report high internal consistency with a Cronbach’s alpha coefficient of 0.85 to 0.94 for this scale (2). In Mehrabizadeh Honarmand et al (35) assessment of its reliability, Cronbach’s alpha coefficient was 0.83, Spearman-Brown score was 0.73, and Guttman score was 0.73. In the present study, a Cronbach’s alpha coefficient of 0.86 was calculated for this questionnaire.

*General Self-efficacy Scale (GSS)*: The scale used in this study consists of 17 items that are scored on a 5-point Likert scale ranging from “completely disagree” (1 point) to “completely agree” (5 points). Sherer et al (36) believe that this scale is saturated with three factors: willingness to initiate behavior, willingness to expand efforts to complete the task, and resistance to obstacles. In an Iranian sample, the psychometric properties of this scale were deemed acceptable in a study conducted by Rahimi Pordanjani and Ghobari Bonab (37), who reported a Cronbach’s alpha coefficient of 0.84. This scale yielded an appropriate Cronbach’s alpha coefficient of 0.89 in the present study.

*Job Burnout Inventory (JBI)*: The Maslach Job Burnout Questionnaire comprises 22 items designed to assess three dimensions of job burnout, namely emotional exhaustion (9 items), depersonalization (5 items), and low personal accomplishment (8 items). Each question prompts the respondent to rate the frequency of their feelings on a scale ranging from 0 (never) to 6 (every day) and the severity of their feelings from 0 to 7 (very much). The scores for each dimension are calculated separately and are not combined into a total score, resulting in three distinct scores for each respondent (38). Two scores are calculated for each dimension, and this study investigated the severity of employee burnout. Previous studies have reported the reliability coefficients for the three dimensions of emotional exhaustion, depersonalization,

and low personal accomplishment in the Maslach Job Burnout Questionnaire as 0.87, 0.75, and 0.84, respectively (39). In the current study, favorable Cronbach’s alpha coefficients were reported for emotional exhaustion (0.83), depersonalization (0.86), and reduced personal accomplishment (0.81).

*Perfectionism Questionnaire (PQ)*: In this research, the perfectionism dimensions of the participants were measured using the multidimensional perfectionism scale. This scale was developed by Hewitt and Flett (40). This scale is a 30-question test. The first ten items measure self-oriented perfectionism, the second ten measure other-oriented perfectionism, and the last ten measure society-oriented perfectionism on a 5-point Likert scale. The minimum and maximum scores of the participants in the three subscales are 10 and 50, respectively. The method of scoring the scale for all data is reversed. The preliminary validation of the Iranian soft version of this scale was conducted by Besharat (41) on Tehran University students, and the Cronbach’s alpha obtained was 0.90 for self-oriented perfectionism, 0.83 for other-oriented perfectionism, and 0.78 for society-oriented perfectionism, indicating the high internal consistency of the scale. In the present study, Cronbach’s alpha coefficient for self-oriented perfectionism, other-oriented perfectionism, and society-oriented perfectionism was 0.89, 0.84, and 0.85, respectively.

*Protocol of schema therapy*: Before the commencement of the intervention, questionnaires were distributed among the participants to complete as pretest measures. Employees of the experimental group received Young’s schema therapy in ten 90-minute sessions (42). A therapist provided Therapy sessions twice weekly at the psychology and counseling center. The therapist of the present study, who was an expert in this field, gave all the employees a post-test one week after the completion of the treatment sessions. After completion of the sessions, post-test measures were collected from the experimental and control groups using the same measurement tools. During the initial interview with all of them, we asked the members to keep their commitment to the company throughout the meetings to prevent group members from dropping out. According to ethical principles, treatment sessions were held for the control group after taking the post-test (Table 1).

The research data were analyzed using descriptive statistics, including mean and standard deviation, and a covariance analysis with the SPSS 24 software based on the research assumptions. The significance level for these tests was set at 0.05.

## Results

The experimental group had a mean age of  $35.62 \pm 5.90$  years, while the control group had a mean age of  $36.02 \pm 6.11$  years. A chi-square test was performed to

**Table 1.** Summary of schema therapy sessions (42)

Session	Target	Topic
1	Communication, familiarity, empathy	The first session was dedicated to familiarizing the participants with the elements of the educational program. The aim was to introduce the participants to the schema-based educational program's process, goals, regulations, and benefits and administer the pretest.
2	Teaching the central needs and evolutionary roots of schemas	In this session, we engaged the participants with the educational program by addressing the primary need for and evolutionary roots of schemas and how they are formed. The main objective of this session was to educate participants on the five categories of central needs, primary roots, and the development of ineffective schemas.
3	Teaching domains and types of schemas	During this and the following session, participants learned to recognize the five domains of schemas and 18 primary maladaptive schemas associated with interpersonal problems.
4	Teaching domains and types of schemas and their features	In this session, the training of the rest of the primary ineffective schemas was completed, and then the features of the schemas were discussed.
5	Using cognitive techniques to challenge schemas	This session identified and challenged the schemas at the cognitive level. We taught cognitive techniques such as the validity of schemas, a new definition of evidence confirming and rejecting the central belief, and evaluating the advantages and disadvantages of coping styles.
6	Teaching how to continue schemas	This session taught me the function of schemas and how they work. The participants tried to learn how to maintain and perpetuate ineffective schemas. Inefficient coping styles through which people respond to schemas were also discussed
7	Teaching ineffective coping responses	The main goal of this session was to teach eleven ineffective coping responses. When one of the schemas is activated, people usually display that behavior style through a coping response. Coping responses encompass all the individual's behavioral responses to deal with threats.
8	Moving towards adjusting and reducing the effects of inefficient schemas	The final three sessions of the schema-oriented training program aimed to teach how to deal with inefficient schemas and reduce the effects of inefficient schemas. For this purpose, the following steps were on the agenda in this session: 1) Validity test of an ineffective schema, 2) Evaluation of advantages and disadvantages of coping styles and responses, and 3) Differentiation and separation of responses resulting from the schema.
9	Moving towards adjusting and reducing the effects of inefficient schemas	The following methods were to be taught to reduce the effects of ineffective schemas: 1) Training in preparing and editing educational cards, 2) Writing letters and imaginary conversations with parents, and 3) Visualizing traumatic events.
10	Summary of content, final evaluation, and conclusion of the schema-based educational program	During this session, three primary tasks were carried out: 1) emphasizing and motivating women to apply the knowledge gained from the educational program in real life, 2) identifying women who required individual intervention and scheduling a counseling session with them, and 3) conducting the post-test to measure the effectiveness of the educational program.

compare the experimental and control groups regarding gender, marital status, and education grouping, and the results showed no significant differences (Table 2).

Table 3 shows the mean and standard deviation of the pre-test-post-test scores of self-efficacy, burnout, and perfectionism of employees with IS in the experimental and control groups. The results of the Shapiro-Wilk test (S-W) are also reported to check the normality of the distribution of variables in the two groups. The results showed that the Shapiro-Wilk statistics were not significant for all variables, implying that the distribution of variables was normal ( $P \geq 0.05$ ). According to the scores of the experimental and control groups in the pretest and post-test, it was found that at baseline, there was no significant difference between the groups; however, after completing the therapy sessions, the employees who underwent schema therapy were at high levels of self-efficacy, but they had lower IS, burnout, and perfectionism (Table 3).

This study used multivariate analysis of covariance to assess the effectiveness of schema therapy on the self-efficacy, burnout, and perfectionism of employees with IS. The researchers tested various assumptions about the equality of variance, covariance matrix, and regression coefficients. The results indicated that these assumptions were valid. As a result, a multivariate analysis of covariance was conducted to examine the differences

**Table 2.** The demographic information of the participants in the experimental and control groups

	Experimental Group		Control Group		P value <sup>a</sup>
	Frequency	Percent	Frequency	Percent	
Gender					0.074
Female	8	40.0	9	45.0	
Male	12	60.0	11	55.0	
Marital status					0.069
Married	14	70.0	15	75.0	
Single	6	30.0	5	25.0	
Education					0.053
High-school diploma	6	30.0	7	35.0	
Bachelor's	11	55.0	9	45.0	
Masters	3	15.0	4	20.0	

<sup>a</sup> Chi-square.

between the experimental and control groups (Table 4).

According to Table 4, the results showed the effect of the independent variable on the dependent variables. In other words, experimental and control groups have a significant difference in at least one of the variables of self-efficacy, burnout, and perfectionism, and according to the calculated effect size, 73% of the total variance of experimental and control groups is due to the effect of the independent variable. Also, the test's statistical power is 1,

**Table 3.** Descriptive indices of study variables in the control and experimental groups

Variables	Group	Pretest	Post-test	<i>P</i> <sup>a</sup>
Imposter Syndrome	Experimental	65.72 ± 2.61	51.34 ± 2.35	0.001
	Control	65.21 ± 1.84	65.97 ± 1.94	0.368
	<i>P</i> <sup>b</sup>	0.836	0.001	
Self-Efficacy	Experimental	49.50 ± 2.05	54.80 ± 1.55	0.001
	Control	49.35 ± 1.68	49.65 ± 1.70	0.175
	<i>P</i> <sup>b</sup>	0.451	0.003	
Emotional exhaustion	Experimental	42.55 ± 2.36	37.20 ± 1.20	0.001
	Control	42.70 ± 3.42	42.45 ± 1.64	0.246
	<i>P</i> <sup>b</sup>	0.792	0.001	
Depersonalization	Experimental	24.85 ± 1.95	20.35 ± 1.57	0.001
	Control	24.75 ± 2.41	24.95 ± 1.84	0.407
	<i>P</i> <sup>b</sup>	0.951	0.001	
Low personal accomplishment	Experimental	30.65 ± 1.53	26.20 ± 1.89	0.001
	Control	30.80 ± 1.66	30.55 ± 1.37	0.279
	<i>P</i> <sup>b</sup>	0.438	0.002	
Self-oriented perfectionism	Experimental	34.60 ± 2.96	30.35 ± 2.66	0.001
	Control	34.45 ± 3.01	34.75 ± 1.83	0.318
	<i>P</i> <sup>b</sup>	0.694	0.001	
Other-oriented perfectionism	Experimental	31.55 ± 1.43	27.80 ± 2.90	0.001
	Control	31.35 ± 3.51	31.70 ± 1.84	0.362
	<i>P</i> <sup>b</sup>	0.758	0.001	
Society-oriented perfectionism	Experimental	32.80 ± 3.50	28.50 ± 2.55	0.001
	Control	32.90 ± 1.93	32.65 ± 2.67	0.273
	<i>P</i> <sup>b</sup>	0.642	0.001	

Values are mean ± standard deviation. *P*<sup>a</sup> was reported based on the within-group comparison, and *P*<sup>b</sup> was reported based on the between-group comparison.

which indicates the adequacy of the sample size. However, to determine in which areas the difference is significant, a univariate analysis of the covariance test was used in the multivariate analysis of covariance (MANCOVA) test, which is reported in Table 5.

The results presented in Table 5 indicate that the *F*-statistic is significant for self-efficacy (*F*=37.73), emotional exhaustion (*F*=30.08), depersonalization (*F*=71.63), low personal accomplishment (*F*=65.58), self-oriented perfectionism (*F*=44.28), other-oriented perfectionism (*F*=57.36), and society-oriented perfectionism (*F*=50.46) at a level of 0.001. These findings suggest a significant difference between these variables of the experimental and control groups. The effect sizes indicate that 55% of self-efficacy, 49% of emotional exhaustion, 69% of depersonalization, 67% of low personal accomplishment, 58% of self-oriented perfectionism, 64% of other-oriented perfectionism, and 61% of society-oriented perfectionism were dependent on the effect of the intervention. Thus, schema therapy significantly increases self-efficacy and decreases emotional exhaustion, depersonalization, low personal

**Table 4.** The results of multivariate analysis of covariance on mean post-test scores

Test	Value	<i>F</i>	<i>df</i>	<i>P</i>	Effect Value
Pillai's trace	0.732	9.760	7	0.001	0.73
Wilks' lambda	0.268	9.760	7	0.001	0.73
Hotelling trace	2.733	9.760	7	0.001	0.73
Roy's largest root	2.733	9.760	7	0.001	0.73

**Table 5.** Results of univariate analysis of covariance on the mean of post-test of dependent variables

Variables	MS	DF	SS	<i>P</i>	Effect value
Self-Efficacy	230.50	1	230.50	0.001	0.55
Emotional exhaustion	243.97	1	243.97	0.001	0.49
Depersonalization	206.02	1	206.02	0.001	0.69
Low personal accomplishment	165.87	1	165.87	0.001	0.67
Self-oriented perfectionism	193.54	1	193.54	0.001	0.58
Other-oriented perfectionism	148.07	1	148.07	0.001	0.64
Society-oriented perfectionism	153.62	1	153.62	0.001	0.61

SS, sum of squares; MS, mean squares; DF, degree of freedom.

accomplishment, and self-oriented, other-oriented, and society-oriented perfectionism behaviors in employees with IS.

### Discussion

This study aimed to examine the impact of schema therapy on self-efficacy, burnout, and perfectionism of employees with IS. The results suggest a significant improvement in overall self-efficacy among employees with IS, which is consistent with previous studies by Alsaleem et al (10), Nanda (11), Medline et al (12), and McDowell et al (13). The findings of this study highlight the significant positive effect of schema therapy on enhancing self-efficacy among employees struggling with IS. IS, characterized by persistent self-doubt and inadequacy despite evident accomplishments, can severely hinder employees' job performance and overall well-being (7). Schema therapy, an integrative therapeutic approach, has demonstrated its potential to address the deep-rooted cognitive and emotional patterns associated with IS and subsequently boost self-efficacy (12).

The observed impact of schema therapy on self-efficacy is consistent with the therapeutic principles of the approach (31). By targeting maladaptive schemas – deeply ingrained cognitive structures that influence perceptions and behavior—schema therapy facilitates cognitive restructuring (30). Through guided exploration and interventions like imagery rescripting, employees are encouraged to challenge and modify negative self-beliefs (6). This process allows individuals to replace their self-doubt with more realistic and positive self-appraisals, thus fostering an increased sense of self-efficacy (11). A notable outcome of schema therapy is its emphasis on

emotional regulation and self-compassion (34). IS often triggers heightened levels of anxiety and fear of failure. Schema therapy equips individuals with tools to manage these emotions, crucial for maintaining a positive self-concept and bolstering self-efficacy (14). Moreover, cultivating self-compassion encourages employees to treat themselves with the same kindness they extend to others, reducing the severity of self-criticism and enhancing overall self-esteem (8).

While the study's findings are promising, several considerations warrant attention. The sustainability of the observed effects over time remains a question. Longitudinal research would provide insights into whether the improvements in self-efficacy persist beyond the immediate post-treatment period and whether any potential relapses occur. Moreover, individual differences, such as personality traits and the severity of IS, could influence the degree to which employees benefit from schema therapy. In practical terms, the implications of these findings are substantial for both employees and organizations. Enhanced self-efficacy can increase employee job performance, engagement, and overall well-being. Organizations prioritizing employee development and well-being could consider incorporating schema therapy as a comprehensive intervention strategy to address IS. Tailoring interventions to individual needs and ensuring proper training and supervision for therapists are crucial steps toward maximizing the benefits of schema therapy.

The results of the present study showed that participants who received schema therapy had lower scores in burnout (emotional exhaustion, depersonalization, and low personal accomplishment) in the post-test. These findings are consistent with previous studies such as Vaa Stelling et al (18), Lacey (19), Alrayeres et al (20), and Clark et al (21). The results of this study shed light on the substantial positive impact of schema therapy in reducing burnout among employees grappling with IS. The effectiveness of schema therapy in decreasing burnout among employees with IS has promising implications for long-term burnout prevention (32). Traditional interventions often focus on short-term relief, whereas schema therapy addresses the underlying cognitive patterns contributing to burnout (20). By equipping employees with the skills to challenge negative self-perceptions and manage their emotions, schema therapy offers a sustainable approach to mitigating burnout risks. This preventive aspect is vital for maintaining employee well-being and organizational performance in the long run (22).

In addition to focusing on emotional regulation and adaptive coping, schema therapy also emphasizes the development of self-compassion and self-care (19). These skills are essential for individuals experiencing burnout because they can help reduce guilt and self-blame, promote a sense of self-worth, and encourage

individuals to prioritize their well-being (33). While schema therapy may be a promising treatment approach for employees experiencing burnout, it is essential to note that the effectiveness of this approach may depend on a range of individual and situational factors (30). For example, individuals with severe burnout may require more intensive or long-term treatment, and individuals in high-stress or demanding work environments may need to address organizational or environmental factors besides individual factors. Therefore, a comprehensive approach that addresses multiple levels of the individual and the work environment may be necessary to address burnout (15) effectively.

Stelling et al (18) found that doctors who reported high levels of IS experience low job satisfaction, anxiety, and self-confidence in the long term. Lacey (19) indicated a positive and significant correlation between burnout and IS. People who are indifferent to the progress and success they achieve will experience high burnout in their workplace over time. This study provides valuable insights into the potential of schema therapy as an effective intervention for decreasing burnout in employees grappling with IS. By addressing maladaptive schemas, promoting emotional regulation, reframing self-perceptions, and increasing self-efficacy, schema therapy equips employees with tools to combat burnout and build resilience. Further research and practical implementations are warranted to fully harness the benefits of this therapeutic approach and create a more supportive and sustainable work environment.

In this study, it was observed that schema therapy was effective in reducing perfectionism (self-oriented, other-oriented, and society-oriented) in employees with IS. These findings are consistent with previous research conducted by Lee et al (25), Samora et al (26), Muneer et al (27), and Ahmed Hussein Abdel Karim (28). The results of this study underscore the significant impact of schema therapy on decreasing perfectionism in employees who grapple with IS. Often intertwined with IS, perfectionism can lead to immense stress, hinder productivity, and negatively affect overall well-being (25).

This study adds to the growing body of evidence highlighting the effectiveness of schema therapy in decreasing perfectionism among employees dealing with IS. By addressing maladaptive cognitive patterns, challenging all-or-nothing thinking, promoting self-compassion, and cultivating a growth mindset, schema therapy provides a comprehensive approach to alleviating the burdens of perfectionism. Employers and organizations seeking to foster a healthier and more supportive work environment can consider incorporating schema therapy as a valuable tool in combating perfectionism and enhancing employee well-being.

Schema therapy's effectiveness in decreasing perfectionism can be attributed to its focus on unraveling

maladaptive cognitive patterns (32). Perfectionism often stems from deeply rooted schemas that propel individuals to set unattainably high standards and fear making mistakes (26). Schema therapy addresses these schemas, enabling individuals to identify and challenge unrealistic self-expectations (31). By reshaping these cognitive patterns, participants can develop a healthier and more balanced perspective on their achievements and mistakes (23). It is important to note that schema therapy is not a one-size-fits-all approach and may not be effective for everyone. Additionally, it requires a significant commitment of time and resources and a qualified mental health professional trained in schema therapy techniques (27). However, for individuals struggling with perfectionism, schema therapy can be a valuable tool for improving their quality of life and achieving greater success in the workplace (24).

The results of Lee et al (25) indicated a high prevalence of IS among students with perfectionism. The more educated a person was, the more inclined they were to attribute their success to external factors. Samora et al (26) reported a significant positive correlation between negative perfectionism and IS in surgeons. The severity of IS was found to be related to factors such as age, sex, education, and work experience in their study. While the findings of this study are promising, further research is needed to explore the long-term sustainability of the effects of schema therapy on decreasing perfectionism. Practical considerations include developing tailored intervention strategies, training therapists in schema therapy techniques, and integrating the intervention within the organization's well-being initiatives.

Finally, the present study has certain limitations. The sample population only included employees with IS in Tehran during the year 2019, which suggests that caution should be exercised when attempting to generalize the results to other populations and regions. Furthermore, the lack of a long-term follow-up test to assess the program's effect is another limitation of this study. Therefore, it is recommended that future studies address this issue to determine the long-term effectiveness of schema therapy.

### Conclusion

The findings indicated that schema therapy has significantly increased self-efficacy and decreased emotional exhaustion, depersonalization, low personal accomplishment, and self-oriented, other-oriented, and society-oriented perfectionism in employees with IS. Employees with IS do not consider themselves deserving of rewards and incentives. They were unsatisfied with their progress and believed they could have made more progress. In the long run, all these cases create many economic, psychological, and social consequences for the person and his job. As employee performance and progress are of particular importance for managers

of different businesses, examining the psychological dimensions of employees to reduce IS and strengthen the sense of self-efficacy in people is of great importance.

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### Authors' Contribution

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The authors declare that there is no conflict of interest regarding the publication of this study.

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