Objective: In a world where the phenomenon of job loss is rapidly spreading, the desire to continuously invest in a protean career orientation is essential for it leads to saving human, social, and psychological capital. The purpose of this study is to compare the effectiveness of Schein’s theory-based counseling and constructivist counseling on the orientation of protean career orientations of contract employees of an industrial company.

Methods: The current research method was quasi-experimental with a pretest-posttest design with a control group. The participants of the present study included all contract employees of an industrial company, 36 of whom were selected by random sampling method and randomly assigned to two experimental groups and one control group (12 people in each group). The experimental groups underwent Schein’s theory-based counseling and constructivism-based training for 8 sessions per week. The data were collected using the various career attitude questionnaire and were analyzed by analysis of covariance and the Bonferroni pairwise comparison test.

Results: The findings showed that Schein’s theory-based counseling and the training based on the constructivist approach are effective in shaping various career orientations of contract employees. Also, there is no significant difference between the two types of intervention.

Conclusion: According to the findings of this study, both types of training, depending on the situation, can be used by organizations and industries to increase the orientation of various career orientations of employees.
1. Introduction

G
diven the current problems of the labor market and the continuation of this situation, it is likely that labor market conditions and employment status will see many changes in the future. The current traditional career orientations will lead to new career orientations, such as protean career attitudes in Iran (Amini and Nilforooshan, 2020). In the current unstable world, because of the prevalence of contract work and projects, reduction of permanent employment, job insecurity, and increase in unemployment a protean orientation model is a suitable solution to control and overcome this crisis. People with protean career orientation constantly pursue and manage their career success elements dynamically. Self-direction means managing a career orientation based on values and value arousal means potentially guiding one’s values. Career orientation for a person in an organization is an expression of the individual’s self-concept. Interventions could increase the dependent variable of the research. This finding could be because Schein’s theory-based counseling intervention and the constructivist consultation-based intervention arise from postmodern approaches with the same foundations. As a result, both demonstrated their impact effectively.

Plain Language Summary

It is likely that labor market conditions and employment status will experience many changes in the future. Because of the prevalence of contract work and projects, reduction of permanent employment, job insecurity, and increase in unemployment a protean orientation model is a suitable solution to control and overcome this crisis. People with protean career orientation constantly pursue and manage their career success elements dynamically. Self-direction means managing a career orientation based on values and value arousal means potentially guiding one’s values. Career orientation for a person in an organization is an expression of the individual’s self-concept. Interventions could increase the dependent variable of the research. This finding could be because Schein’s theory-based counseling intervention and the constructivist consultation-based intervention arise from postmodern approaches with the same foundations. As a result, both demonstrated their impact effectively.

Highlights

- Comparison of the effectiveness of Schein’s theory-based counseling and constructivist counseling;
- People with protean career orientations have two important meta-competencies;
- Protean career orientation is a component that is defined by personal and individual factors.

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1. Introduction

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Protean career orientation is a component that is defined by personal and individual factors rather than organizational factors and is involved in job decisions, job orientation, and adaptability (Wang & Wee, 2019). Protean career orientation has two dimensions of self-direction and value arousal (Li, 2018). Self-direction means managing a career orientation based on values, and value arousal means potentially guiding one’s values (Briscoe, & Hall, 2006). To raise the perspective of protean career orientation, various trials with traditional, modern, and postmodern methods such as problem-solving training, daring, reality therapy, biography-writing methods, value specifying, and narrative treatments have been performed (Master, La Vick, and Hartado, in press). The career construction theory is a method that focuses on the issue of various career orientations and their importance. It is a postmodern theory that confronts issues of career orientation and its adaptability through a context-oriented lens. This theory holds that people are motivated and formed by the environmental or contextual structures surrounding them, and human behavior cannot be studied outside the context in which it occurs. Human experiences and interpretations vary because their environments differ significantly at any point in time, and as a result, individuals’ life narratives are different (Tokar, Savikas, and Kaut, 2019). This method aims to help the individual rework their life story (Samiei, 2022).

Additionally, the objective of the constructivist counseling model is to elicit meaningful behaviors that eventually result in forming a self-created identity and revealing a career orientation (Tokar, et al., 2019). Clients in the constructivist approach first share their career stories about work-life, current transitions, and current problems and then move on to the next stage of their career plan by connecting the stories, making the transitions meaningful, and managing their emotions. Finally, these individuals will be motivated to take action to improve their lives (Savickas, 2016).

Schein first coined the term career orientation. Career orientation for a person in an organization is an expression of the individual’s self-concept, which consists of three main categories: 1) talents and abilities of self-perception, 2) basic and essential values and 3) evolved feeling toward the motivations and needs related to the career orientation (Abdolhosseini et al., 2015). The first two categories are rooted in real work experiences, while the third arises from an individual’s response to different norms and values in the face of work-related and social situations. Schein argued that individuals’ future career choices are influenced by the evolution and stabilization of their anchors. According to Schein, when people are matched between the anchors of their career orientation and their job, they are more inclined to achieve positive job results such as efficiency, satisfaction, and stability (Scent & Boes, 2014). However, because individuals are not always in a job that fits their job anchor, numerous fluctuations occur in the overall job results. Career-oriented individuals often achieve higher career outcomes. If an organization can meet two or three of Schein’s career preferences, the individual is likelier to stay in the organization.

Considering the nature of contemporary career orientations, the concept of protean and borderless career orientations has received more research attention than other career orientation structures (Gubler, Arnold, and Coombs, 2014). Still, there has been little research in this field in non-western societies. This concept is vital because theorists believe the global economy will require an increasing number of people with protean orientations toward their careers in the coming decades, and these individuals will be most satisfied in their jobs (Hirschi & Koen, 2021). Additionally, numerous national and international studies have established the efficacy of constructivist-based measures (Abdolhosseini, Nilforooshan, Abedi, and Hosseinian, 2015; Savikas and Profli, 2016; Savikas, Profli, and Hilton, 2018). The large percentage of interventions carried out in other countries, as well as all psychological interventions carried out in Iran, have collected data outside the workplace (Savickas & Porfeli, 2016).

To address these shortcomings, the current study will employ a group intervention method with contract employees, who would benefit from protean job orientation due to the functions provided by this method. Given the importance and necessity of developing protean career orientation among organizational employees, in addition to the relative lack of research on constructivist interventions, group acceptance, and commitment to the job and organizational structures, this study seeks to answer the following two questions:

1) does constructivism and Schein’s theory-based counseling impact the protean career orientation of contract staff?

2) is it possible to distinguish between the effectiveness of career counseling based on Schein’s theory and constructivist training?

2. Participants and Methods

This study used a pretest-posttest design with a control group. The statistical population consisted of 317 contract employees of an industrial company, from whom 36 individuals were randomly assigned to one of the three groups (two experimental groups and one control group) using simple random sampling. The inclusion criteria were being a contractor and being interested in participating in the sessions. The exclusion criteria were missing more than two sessions and making inaccuracies on the pretest questionnaires.

The research method followed this procedure. After coordinating with the university and obtaining the necessary permits from the industrial company, a list of all contract employees was obtained from the training unit, and a random sample was drawn from the list. These individuals were informed about the meeting’s quality and consented to participate in the research. We then contacted these individuals through the company’s training department and advised them to attend workshops instead of attending their workplaces. Because the training unit monitored these individuals’ participation, attendance was highly consistent during each session, thus increasing the participants’ commitment to the research.

Additionally, meeting attendance hours were regarded as working hours. This strictness and discipline ensured that no one left the prototype group. Following the pretest, the two experimental groups began their training.
sessions. They received 8 two-hour training sessions, as detailed in Table 1 and Table 2. The posttest was administered following the training sessions. The ethical considerations of this research included confidentiality, collective data analysis, anonymous questionnaires, non-disclosure of the name of the company where the research was conducted, informed consent from the participants, freedom to withdraw from the study, conducting intervention sessions for the control group following the intervention sessions for the intervention group. The data were analyzed via SPSS software version 23 using descriptive and inferential statistics, analysis of covariance, and the Bonferroni pairwise comparison test.

The protean career attitudes scale (PCAS) was used to collect the data. Briscoe and Hall (2006) developed this questionnaire to assess the attitudes toward various career orientations. It contains 14 items and two subscales: self-direction (items 1 to 8) and value arousal (items 9 to 14).

Each item’s response is scored on a 5-point Likert scale (from strongly agree=5 to strongly disagree=1).

As a result, a score of 14 was considered the minimum, and a score of 70 was the maximum. A low score indicates a more protean career attitude and orientation, while a high score indicates a more protean career attitude and direction. The Cronbach alpha coefficient for this scale is 0.81. (Briscoe and Hall, 2006). In Iran, the self-direction subscale has a reliability coefficient of 0.76, and the value arousal has a reliability coefficient of 0.83. The questionnaire had a total reliability coefficient of 0.77. The self-direction subscale had a reliability coefficient of 0.79, and the value arousal subscale had a reliability coefficient of 0.81 in the present study.

3. Results

Descriptive statistics, including mean and standard deviation of various career attitude scores in both pretest and posttest stages, are presented in Table 3, in which the mean scores of various employees’ career attitudes in the pretest-posttest stage in the first experimental group were 54.45 (72.90). In the second experimental group, the results of the BOX test analysis showed the homogeneity of the variance/covariance matrices and the permission to use the MANCOVA analysis method.

According to Table 4, the MANCOVA analysis shows that after neutralizing the pretest effect, group membership effectively made a difference between the scores of different career attitudes (P=0.001). Also, the Eta coefficient shows that the difference between the experimental and the control groups is 73% and significant (P=0.001) in the variable of career attitude.

According to Table 5, the change in the scores of various career attitudes between the experimental groups and the control group is significant (P=0.001). However, the difference in scores between the two experimental groups was not significant (P>0.05). In other words, both interventions, namely, the training based on career counseling based on Schein’s theory and based on constructivist counseling, have a positive and significant effect on the various career attitudes of contract employees. However, neither of these interventions is preferable to the other.

4. Discussion

This study aimed to determine the effectiveness of career counseling based on Schein’s theory in increasing the scores on various career attitudes in contract employees of an industrial company and to compare it to constructivism-based training. The findings indicate that both types of intervention, career counseling based on Schein’s theory and constructivist-based training, increased employees’ attitudes toward protean career orientation. The findings of this study regarding the effect of the constructivist intervention on variables associated with career orientations are consistent with the findings of Matoori, Abedi, and Nilforooshan (2021) and Abdolhosseini et al. (2015). Additionally, this study is compatible with the results of Rink and Ellemers (2007) in terms of the impact of postmodern approaches on adaptability and flexibility, as well as with the research of Rodriguez, Butler, and Guest in terms of the ability to change people’s views on their career orientation (2019).

Another finding indicates that constructivist counseling training, similar to Schein's counseling theory, positively affects a diversified career path attitude. The explanation could be that the idea of adaptation is derived from constructivism theory. This theory’s intervention structure is intended to improve adaptability. Adaptability exercises, on the one hand, increase curiosity (session 3), interest (session 4), control (session 5), and career path credibility (session 6); all of which are components of career adaptation. On the other hand, as stated in the intervention protocol above, with this sort of intervention, employees could modify the mental structures associated with their career path by recounting their life narrative, evaluating, and rebuilding what has happened in the seventh session. Narrating life stories may help us recognize inconsistencies, misconceptions, and ambiguities, which are prereq-
uisites for genuine transformation. The narrative offers perspective to the individual’s personality and pulls him toward new experiences. Understanding our background experience might help us choose how to conduct our lives. A good narrative about oneself inspires one to shift their career path while being genuine. Accordingly, the contract employees of Shazand Thermal Power Station learned that the key to success in the career path is not to have a permanent job for several years but to orient the career path and transform the business world by expressing their life narratives and emphasizing the current themes of their career path. Furthermore, as Savickas (2016) notes in career construction theory regarding the relevance of future objectives and the concern to reach the goals in question, one of the main axes is addressing values and advancing on the value-oriented path. Employees prioritized values revealed in their life narratives (sessions 3 and 7) and linked their career path objectives and expectations with the values. The aspects of career path attitude vary regarding self-direction and value motivation. As a result, training based on constructivist counseling could boost employees’ diversified career

Table 1. Training based on the constructivism approach

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Meeting Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introducing the participants and the establishment of relationships, familiarity with the significance and necessity of the position of adaptability and adaptation at work, the importance of paying attention to the current world events, motivation to attend the meetings and complete the assigned work, Pretest.</td>
</tr>
<tr>
<td>2</td>
<td>Follow-up on the first session's feedback, the continuation of the discussion of protean career orientation and adaptation, types of adaptation, task presentation.</td>
</tr>
<tr>
<td>3</td>
<td>The second session’s feedback, a review of the previous session’s task, understanding the concept of career concern, the ability to generate concern with an eye toward the future, optimism in the concern, the ability to present the task.</td>
</tr>
<tr>
<td>4</td>
<td>The third session’s feedback, a review of the previous session’s task, familiarity with the concept of curiosity, a review of unique ways for members to use curiosity, presentation of the task.</td>
</tr>
<tr>
<td>5</td>
<td>Feedback from the fourth session, review of the task of the previous session, familiarity with the concept of control and problem-solving methods, self-regulation and decision-making, assessment of general ways of individuals to use the control, presentation of the task.</td>
</tr>
<tr>
<td>6</td>
<td>Feedback from the fifth session, a review of the previous session’s task, familiarity with the concept of trust, discussion of strategies for increasing trust, task presentation.</td>
</tr>
<tr>
<td>7</td>
<td>Feedback from the fifth session, a review of the previous session’s task, familiarity with the concept of trust, discussion of strategies for increasing trust, and task presentation.</td>
</tr>
<tr>
<td>8</td>
<td>Feedback from the sixth session, reviewing the previous session’s assignment, reviewing the last session’s concepts and soliciting feedback from members; answering questions, administering a posttest.</td>
</tr>
</tbody>
</table>

Table 2. Content of career counseling sessions based on shein’s theory

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Meeting Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introducing the consultant and the members; stating the goals of the meetings, stating the expectations from the members, conducting the Pretest, stating the rules, announcing the agreement of the members with the rules, feedback</td>
</tr>
<tr>
<td>2</td>
<td>Reminders and review of homework, review of various career orientations and talk about people who have a technical or functional competency orientation, homework presentation, feedback</td>
</tr>
<tr>
<td>3</td>
<td>Content reminder and task review, the introduction of career orientation based on managerial competence, task presentation, feedback</td>
</tr>
<tr>
<td>4</td>
<td>Content reminder and homework review, introduction to creativity-based career orientation, homework presentation, feedback</td>
</tr>
<tr>
<td>5</td>
<td>Content reminder and homework review, the introduction of career orientation based on independence and autonomy, homework presentation, feedback</td>
</tr>
<tr>
<td>6</td>
<td>Reminders and review of homework, the introduction of career orientation based on service and self-sacrifice, homework presentation, feedback</td>
</tr>
<tr>
<td>7</td>
<td>Content reminder and homework review, introduction to career orientation based on pure challenges, homework presentation, feedback</td>
</tr>
<tr>
<td>8</td>
<td>Content reminder and task review, introducing a career orientation based on lifestyle feedback, posttest implementation</td>
</tr>
</tbody>
</table>

It is worth noting that both interventions successfully increased the study’s variables. This result might be because Schein-based intervention theory and constructivist consulting intervention are founded on postmodern methods and third-wave treatments that address the individual from an equal philosophical standpoint. In other words, both approaches, on the one hand, highlight the importance of human life and, on the other hand, recognize human beings’ unique skills, experiences, knowledge, cognition, organization, and action as the foundations for developing their methods of intervention. These methods’ lessons are also built on developing personal degrees of flexibility and adaptation. As a result, both theories concentrate on strengthening the psychological environment of the career path; therefore, it is reasonable to predict that two techniques of a similar kind will have the same effect on the formation of distinct career attitudes or orientations.

As noticed, the effectiveness of career counseling based on Schein’s theory could improve employees’ attitudes toward various career orientations. Job adaptation refers to an individual’s capacity to change, adapt, and accept new and changing circumstances (Savikas, 2016). It assists employees in identifying job overlap and articulating and accepting their values in a context devoid of job blends. They could increase their commitment to the values and goals of their careers by practicing the fifth and eighth sessions. Furthermore, training based on the acceptance and commitment approach assisted organization employees in identifying activities that helped them realize their values while engaging in those activities as a task. They also identified impediments to the realization of values as they worked. Indeed, there were times when it was necessary to alter the individual’s behavior. Schein’s theory-based counseling may improve employees’ attitudes toward protean career orientations. The reason for this is that during half of the training sessions, the employees’ values were emphasized, and the value-focused exercises instilled a sense of value arousal in them, consistent with the attitude associated with a protean career orientation.

Another finding from the study was that constructivist counseling training, like acceptance and commitment training, positively affected various career attitudes. This could be because the concept of protean orientation is derived from postmodern theories, one of which is the constructivism theory. The intervention structure based on this theory is intended to increase adaptability. Exercises have been designed in this intervention to help increase anxiety (session 3), curiosity (session 4), control (session 5), and career orientation trust (session 6), all of which are components of career orientation adaptability. Employees could change the mental structures related to their career orientation in this type of intervention by telling their life stories, reviewing and reconstructing what happened in the seventh session, and realizing that the key to success in their career orientation was not a steady job for a few years, but a career orientation and change in the current business world. Also, when discussing future goals and concerns for achieving the goals, one of the emphasized axes is addressing the values and moving

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of Change</th>
<th>df</th>
<th>SS</th>
<th>F</th>
<th>P</th>
<th>Eta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protemp career attitude</td>
<td>Group</td>
<td>2</td>
<td>5.30</td>
<td>42.61</td>
<td>0.001</td>
<td>0.731</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>32</td>
<td>225.84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
in the value-oriented direction (Savikas, 2016). When employees discovered values embedded in their life stories (sessions 3 and 7), they prioritized them and aligned their career orientation goals and expectations with the values. The dimensions of career attitude differ in terms of self-direction and value motivation. As a result, training based on constructivist counseling increased employees’ protean career orientation.

5. Conclusion

Both interventions could increase the dependent variable of the research. This finding could be because Schein’s theory-based counseling intervention and the constructivist consultation-based intervention arise from postmodern approaches with the same foundations. As a result, both demonstrated their impact effectively. One of the limitations of this study is that it was conducted on contract employees in an industrial company in Shazand. Therefore, it is essential to undertake caution in generalizing the results to other employees, organizations, and cities. Based on the study’s findings, we recommend that industry managers consider acceptance and commitment interventions in their organizations, as well as constructivist counseling as in-service training for employees, to contribute to the welfare, efficiency, and greater adaptability of employees and their work.

Study limitations

This research had some limitations. First, the study participants were chosen from contract employees at an industrial company in Arak. Therefore, we should be careful in generalizing the findings to other employees, companies, and locations. Another limitation of this study was that the researcher performed the training sessions, which may impact the study findings.

Generalizability of the results

Given that the study samples were male contract employees, generalizations are constrained. However, with caution, the findings of this study and the provided solutions may be used in comparable manufacturing units.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Difference</th>
<th>SD</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>-9.19</td>
<td>0.91</td>
<td>0.001</td>
</tr>
<tr>
<td>Career counseling based on Schein’s theory</td>
<td>-8.19</td>
<td>0.93</td>
<td>0.001</td>
</tr>
<tr>
<td>Constructivist training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>1.17</td>
<td>2.15</td>
<td>0.098</td>
</tr>
</tbody>
</table>

Study suggestions

According to the study’s findings, we suggest that industry managers give treatments based on Schein’s analytical approach and training-based constructivist approach as an in-service training course to their employees. These approaches may help employees change their attitudes and increase their well-being, efficiency, and flexibility.

Ethical Considerations

Compliance with ethical guidelines

All participants were informed about the study and the confidentiality protocols. Written informed consent was obtained from all participants.

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Authors’ contributions

All authors equally contributed in preparing this article.

Conflict of interest

The authors declared no conflict of interest.

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