The role of informational, normative, and avoidance identity styles in prediction of social anxiety in medical science students

Farideh Daneshniya¹, Sharareh Zarabi², Zahra Karimiyan³

Abstract

Social anxiety is a psychological disorder affected by cognitive aspects of person. The aim of study was to investigate the role of informational, normative, and avoidance identity styles in predicting the variance of social anxiety amongst Iranian medical science students. Using stratified sampling method, one hundred and twenty students were selected from each of the colleges of medicine, pharmacy, nursing, and public health. Berzonsky identity style questionnaire, and Liebowitz et al social anxiety test were used for data collection. According to obtained results informational, normative, and avoidance identity styles can predict the variance of social anxiety. Moreover, there was a significant and negative correlation between social anxiety and informational style and normative identity style; Meanwhile, there was a positive significant correlation between social anxiety and avoidant identity style. With respect to findings of current study, providing more opportunities in the colleges and faculty is recommended in order to improve informational and normative identity styles among students, and reduce social anxiety consequences.

Keywords: Identity, Social Anxiety, Student

Introduction

Anxiety disorders are the most common psychiatric disorders both in primary care and in clinical medicine. Studies constantly have shown that anxiety disorders cause many complications and problems such as disruption in educational attainment at school or university and disrupt in job performance and social development. Spending high levels of healthcare on their own dramatically can reduce the quality of life and function in a person [1]. Social anxiety is recognized by a continuous panic of one or several social; situations in which people think their performances and behaviors are monitoring by other people, thus, they refrain from social situations. Social anxiety is recognized by some physiological traits (red cheeks, perspiration dried mouth and trembling bodies when attending in a stressful social situation) psychological traits (sham, embarrassment, panic of possible mistake sand negative judgment and criticism by other people), and behavioral traits (aloofness,
refraining from visual contacts, panic of self-expression and talking in a social situation or being addressed by other people) [2].

Social Anxiety Disorder (SAD) is the third psychiatric disorder with a prevalence of 2.4% up to 16% [3]. It is obvious that without treatment, social anxiety can significantly disturb occupational, educational, and social abilities of people [4].

This disorder is linked with disruption in emotion, professional and interpersonal relations [5,6], quality of life [7], friendships and romantic relationships [8,9], and it start before other anxiety disorders, mood disorders and disorders caused by drug abuse [10]. Therefore, it is essential that before disorder becomes chronic, reasons of it should be identified. One of the psychological factors associated with social anxiety, is identity styles. Lack of confidences to create identity and doubt could be cause of anxiety disorder, Because of social anxiety disorder, patients spot fear of negative evaluation as a threat to their personal capacity and thus experience stress and anxiety. However, someone with established identity, these evaluations don’t endanger their personalities; consequently, they don’t afflict to consternation and phobic [11].

Erikson defines the identity as a relative stable feeling of isolation, thus, in spite of behaviors, thoughts and feelings; personal perception is always same [12].

Berzonsky [13] said that identity is personal frame for explanation experiences. He believed that identity style is differences between persons in making decisions, solving problem and discover information. Therefore, he presents informational styles, normative styles and avoidant styles. Informational styles is related to self reflection, focus on the issues, epistemology, need to cognition, make decision, caution and openness to experiences [14]. People have normative styles conform to value and exceptions of important persons [15]. People have avoidant styles react to demands of position continually. There is hypothesis about self that said they will have to neglect and avoid from conflicts and personal decisions [16].

Similar investigations and studies about the matter are considered;

Study of Stein et al showed that people with social anxiety in compared to people non-anxious suffering from disruptions in academic and professional performance [17]. Results of study of Rahiminejad et al showed that informational style and normative style have negative effect on anxiety through identity, and avoidant style has positive effect on social anxiety through identity [18]. Results of research of Vaziri & Lotfi Kashani showed that psychosis have negative relation with informational style and normative style and positive relation with avoidant style [19]. Results of study’s Aghamohammadian & Sheikh Roohani showed that people haven’t commitment in ideological and interpersonal aspects suffering from higher levels of anxiety [11]. Research of Sterling & Vanhom showed that anxiety has positive correlation with identity confusion [20]. There are many challenging during studying in university for students, that for faced to stressful situations and proper adjustment to achieve academic and professional prosperity, it is essential to make high level of mental health in social group [21].

Because of importance of identity formation in people's lives and its role in the mental health, it is essential to survey the role of formation of identity and lack formation identity with related disorders in period of life. Although there are quantitative research in this field but, students of medical science have important role in mental health of society, therefore, it is necessary to review the level of disorder and style of identity among them. Thus, investigation on social anxiety which is an effective factor to mental health and related factors can improve significantly mental health amongst the students. One the other hand, because of more exposure with patients and clinical cases, students of medical science encounter with a variety of social anxiety. Therefore, by considering the importance of the topic, we conducted an investigation to detect the correlation identity styles together
Identity styles and social anxiety

with social anxiety amongst the medical science students of Isfehan University (Iran). Thus, this research yields an investigation to the assumption below:

Informational, normative, and avoidant identity styles can predict the variance of social anxiety.

Method

The method of this study was descriptive–correlation type. The populations of this research were all medical science students of Isfehan University during 2015 & 2016. For select students who have social anxiety, we used questionnaire of Liebowitz et al. Thus, students who achieve two standard deviation higher of the mean in this scale, have chosen for this study. Then, they filled out identity styles questionnaire. The samples are 120 students selected by stratified random sampling. From each of the faculty Medicine, Pharmacy, Nursing & Public Health, thirty students were selected.

The inclusion criteria included:
- The participants had discretion to cooperate and their consent was obtained orally.
- The social anxiety scale score of two standard higher of the mean.
- The ages of students were between 20-40 years.

The exclusion criteria included:
- Unwillingness to cooperate in research.
- Physical illnesses.

The following instruments were used to gather information:

Social anxiety questionnaire: This questionnaire was designed by Liebowitz et al [22], and including 24 items to investigate anxiety in social counter actions (11 items) and social situations (13 items). In section evaluating panic, score (0) was assigned for never (lack of panic) and score (3) was assigned for intense (intense panic). In section that evaluating refrainment, score (0) means never (no refrainment) and score (3) means normally (intense refrainment). This questionnaire reports the social anxiety at four levels, middle (55 to 65), considerable (65 to 80), intense (80 to 95), and very intense (over 95). To evaluate the scientific validity of the tool, casual validation and content method were used and was verified by specialists and Chronbach Alpha coefficient was 0.97 [23]. In this study, the reliability was calculated using Cronbach's Alpha 0.70

Berzonsky identity styles questionnaire in 1992: This questionnaire includes 40 questions and evaluates the level of obligation and identity styles. 11 out of 40 items relate to the informational identity, 9 items to the normative identity style, 10 items to the diffuse avoidant style, and 10 items evaluate the level of personal obligation used for secondary analysis which is not an identity style; therefore, it was not used in this research. The answers include Five-Degree Lickret spectrum including completely, completely agree, no idea, disagree & completely disagree. Items of 9, 11, 14 & 20 were scored inverse other items in this scale. White et al. checked the validity of this questionnaire and the findings were as follow: informational identity style correlation was 81%, normative identity style was 85%, perplexed identity style was 85%, and obligation was 86% [24]. Vaziri & Lotfi Kashani reported the general stability of scores in informational identity style; 0.84, normative identity style; 0.69, and avoidant style; 0.53 [19]. The reliability was calculated using Cronbach's Alpha (r=0.81).

To analyze data, SPSS (V-19) were used and Pearson correlation coefficient test and simultaneously multiple regressions were run to determine the correlation between variables.

Results

According to the study, 60% of students were single and 40% were married. Average age of students was 25.5 ±3.

Mean and standard deviation of social anxiety 41.51 ± 28.8, informational style 32.52 ± 5.22, normative style 26.64 ± 3.99 and avoidance style 30.35 ± 4.5.

Results showed that 30% of students had anxiety minor, 60% had considerable anxiety, 9% had middle anxiety, and 1% had severe anxiety.

There was a negative and significant
correlation between social anxiety and styles of informational identity \((r=0.789)\), and normative identity \((r=0.824)\). There was a positive and significant correlation between social anxiety and avoidant identity style \((r=0.838)\), \((p<0.001)\), (Table 1).

### Table 1 The correlation of social anxiety and identity styles

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient correlation</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational Style</td>
<td>-0.789</td>
<td>0.001</td>
</tr>
<tr>
<td>Normative Style</td>
<td>-0.824</td>
<td>0.001</td>
</tr>
<tr>
<td>Avoidance Style</td>
<td>0.838</td>
<td>0.001</td>
</tr>
</tbody>
</table>

As it is clear from Table 2, observed \(F(=222.109, p<0.001)\) was significant and 85.2\% of variance of the social anxiety was predictable by various identity styles \((R^2=0.852)\).

### Table 2 Summary of regression model and results of analysis of variance

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>(F)</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression Informational style</td>
<td>3</td>
<td>43625.88</td>
<td>14541.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual Normative style</td>
<td>116</td>
<td>7594.78</td>
<td>65.47</td>
<td>222.109</td>
<td>0.001</td>
</tr>
<tr>
<td>Total Avoidance style</td>
<td>119</td>
<td>51220.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Informational and normative styles could predict variance of social anxiety negatively in level of \(p<0.001\), but, avoidant style could predict variance of social anxiety positively in level \(p<0.001\):  

### Table 3 Identifying the role of each style in prediction of social anxiety

<table>
<thead>
<tr>
<th>Model</th>
<th>(B)</th>
<th>Beta</th>
<th>(T)</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>168.77</td>
<td>-</td>
<td>30.58</td>
<td>0.001</td>
</tr>
<tr>
<td>Informational style</td>
<td>-1.237</td>
<td>-0.312</td>
<td>6.137</td>
<td>0.001</td>
</tr>
<tr>
<td>Normative style</td>
<td>-1.675</td>
<td>-0.323</td>
<td>5.75</td>
<td>0.001</td>
</tr>
<tr>
<td>Avoidance style</td>
<td>1.852</td>
<td>0.406</td>
<td>7.50</td>
<td>0.001</td>
</tr>
</tbody>
</table>

### Discussion

This study showed that informational, normative, and avoidance identity styles can predict the social anxiety. The results of this research are consistent with studies conducted by Rahiminejad et al [18], and Aghamohammadian & Sheikh Roohani [11]. Using normative and informational styles lead to receiving unification and distinction from information sources and subsequently suffering from lower level of social anxiety. In avoidant identity styles, because of refraining from social situations, and no social anxiety was experienced.

Results revealed a negative and significant correlation between informational style and social anxiety, which was consistent with the results of Rahiminejad et al [18], Vaziri & Lotfi Kashani [19], and Aghamohammadian & Sheikh Roohani [11]. Existence informational identity style made persons to focus on topic and problem directly. On the other hand, using rational style brought about decision making based on the wisdom, and innovative ideas in dealing with anxiety. These participants could reduce anxiety in social situations, because they had appropriate relationships with others. Participants with informative identity style were thoughtful and introspective and cognitively functioned very well in stressful situations. They judged according to their criteria, and were less dependent to opinions of others for their decisions which led to experiencing less anxiety in social situations.

There was a significant and negative correlation between normative identity style and social anxiety is consistent with the results of Rahiminejad et al [18], and Vaziri & Lotfi Kashani [19], and Aghamohammadian & Sheikh Roohani [11]. Participants used
their normative identity style, in dealing with anxiety, tended to consult with powerful people in solving problem and choosing the solutions, therefore, they encountered with anxiety by eluding the events or situations that did not endorse their view or support their views, in order to reduce their anxiety in social situations. They were conscientious and purposeful, but they were highly structured, that, this help them for protect against anxiety.

Furthermore, a positive and significant correlation was observed between avoidant and social anxiety. This finding was consistent with results held by Rahiminejad et al [18], Vaziri & Lotfi Kashani [19], Aghamohammadian & Sheikh Roohani [11], and Sterling & Vanhorn [20]. Participants with avoidant identity style tried to delay conflict situations requiring decisions, Sometimes they resorted to decisions considering environmental implications, had sense of fear and anxiety in determinant important decision, and used maladaptive strategies such as avoidance, excuse, and rationalization, depended on the position, and didn’t have antiseptic pattern. This identity style correlated with emotion-oriented style, poor decision-making strategies, self-limited, and usage of inefficient cognitive strategies; therefore, level of anxiety in these subjects was high. When they were forced to make decisions, they acted based on situation-emotional style, and were affected by its immediate consequences. Subsequently, social anxiety was very high among them.

**Conclusion**

Since student’s identity is shaped during education, providing opportunities for growing informational and normative identity styles with less social anxiety consequence is recommended in the colleges and faculty. Further studies are suggested to examine identity styles accompanied with a variety of anxiety disorders. Because this study was conducted on a limited number of students, the results can’t not be generalized for all students. On the other hand, this study was a correlative study and the association between cause and effect cannot be extracted.

**Contribution**

Study design: FD  
Data collection and analysis: SZ  
Manuscript preparation: ZK

**Conflict of Interest**

"The authors declare that they have no competing interests."

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