# Development And Role Of The Cigarette Smoking Addiction Scale In The Prediction Of Social Phobia

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## ABSTRACT

Cigarette smoking is the world's leading cause of deaths and many other diseases. A person suffering from social phobia disorder may resort to smoking. The aim of this study is to develop a measurement tool to determine the levels of nicotine dependence, in addition to identify the relative contribution of the Cigarette Smoking Addiction Scale to the prediction of social phobia. The researcher adopted the quantitative method, prepared 45 items and then sent them to 8 experts to give their opinion, then the validity of the draft was tested using SPSS (Statistical Package for Social Sciences) by conducting factor analysis tests such as KMO and Bartlett's test, with the alteration of the main components, and using logistic regression analysis to verify The relative contribution of the Cigarette Smoking Addiction Scale to the prediction of social phobia. A draft scale was formed, which consisted of 20 items that were chosen of the initial 45 items. Then a number of analysis and alteration of the basic components was carried out, the value of KMO was high, and the reliability of the scale also high. The Cronbach alpha value of this scale and simple and multiple regression analysis, showed that the social phobia could be predicted through the addiction to cigarette smoking. Also, the dimensions of cigarette smoking addiction contributed to the prediction of social phobia. Hence, the Arabic version of the Cigarette Smoking Addiction Scale is a valid and reliable tool. It consists of 20 items distributed to three dimensions. The results also indicated the possibility of predicting social phobia through cigarette smoking addiction and the sub-dimensions of nicotine dependence.

Keywords: Cigarette Smoking Addiction Scale, cigarette, smoking, addiction, scale development.

## 1) Introduction

Cigarette smoking is the world's leading cause of deaths and many other diseases. (DiSilvio, Baqdunes, Alhajhusain, & Cheema, 2021). Nevertheless, we find that most smokers experience nicotine craving in many situations in their daily life (Hughes, 2010). Previous scientific literature has indicated many attempts to develop a scale that assesses the level of the addiction of cigarette smoking. One of the most widely used measures to assess Nicotine Dependence is the Fagerstrom (FTND) test for nicotine dependence (Rahman, et al., 2020). In addition, this scale consists of six questions that evaluate one dimension of addiction (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991). This is what prompted the researcher to develop a scale for cigarette smoking addiction that includes nicotine dependency dimensions and contributes to predicting mental disorders. In the same context, despite the progress made in tobacco control measures since 2000 and the resulting decrease in the prevalence of cigarette smoking, smoking is still significantly more common among those who suffer from common mental disorders (Smith et al., 2020).

In light of these indications, a person suffering from social phobia disorder may resort to smoking. Despite the negative consequences associated with smoking, most smokers find it difficult to quit, and this applies especially to smokers who suffer from high anxiety and social phobia, thus smoking plays a role in increasing

anxiety in the long term (Buckner, Zvolensky & Lewis, 2020). Therefore, anxiety during social interactions is an important factor in relying on cigarette smoking (Izadpanah, Najafi, & Khosravani, 2021). It also should be noted that cigarette smoking can be predicted through several indicators, the most important of which are: low education level of the parents, dysfunctional family, and lack of self-respect (Joffeer et al., 2014).

Not only that, but also the symptoms of social phobia, a term synonymous with social phobia, predicted eagerness to smoke cigarettes in the case of placebo treatment, and did not predict it in the case of using nicotine patches on the subjects (Kimbrel et al., 2014). In the same context, the studies also note that smokers who suffer from a high level of social phobia show a decrease of the negative impact of social pressures such as stress and anxiety after smoking a cigarette (Dahne et al., 2015). Likewise, it was found that the psychological factors most closely related to smoking craving, which are among the symptoms of social phobia, were stress and psychological pressure (Ra & Cho., 2017). There is a significant effect of social phobia on the perception of the smoker, and this effect appears negatively in the behavior of the smoking addict (Bakhshie et al., 2018). They are at risk of continue tobacco smoking , and then relapsing resulting from craving to smoke during stressful social situations (Watson, Demarree & Cohen, 2018).

## 2) Literature review

### Development of the Smoking Scale

A study (Moreno & Villaobs, 2017) evaluated the psychometric properties of the FTND nicotine dependence scale that was developed by Fagerström for Spanish speakers, and the study found that the internal consistency of the scale for the original version is lower than the translated one. The results of the binary logistic regression analysis show that the Fagström scale is unable to predict smoking cessation. On the other hand, the study of (Robabeh et al., 2017) aimed to verify the reliability of the Persian version of the Fagerstrom nicotine dependence test (FTND) that was tested on patients with opioid addiction. The most prominent results of the second-order confirmatory factor analysis that the matching quality indicators are better than the original model, and the value of the alpha coefficient was (0.71).

In the same context, the study of (Miguel, Kienen, & Scarinci, 2019) aimed to uncover the psychometric properties of the shorter consequences of smoking BSCQ-A in adult Brazilian women. The results were reached by conducting a confirmatory factor analysis (CFA). Where the shorter reduced version contains (21) paragraphs instead of (25) paragraphs distributed on (9) factors instead of (10), and these areas are (reducing the effect, stimulation, health risks, taste / sensorimotor manipulation, social facilitation / weight control, Craving / addiction, negative feeling towards the body, reduction of boredom), and the exclusion of the negative social impression factor because it displayed ow factor loading. The value of the alpha coefficient for the original complete version was (0.67), and its value of the reduced version (0.72). In addition, (Keshavarzian, Nadrian, & Mohammadpoorasl, 2020) developed a scale of smoking obscenity consisting of 22 items, the explanatory factor analysis revealed a structure consisting of five factors (Negative Attitude; Negative Consequence; Negative Valuation; Inappropriate Relationship; A gateway to addiction) and the reliability of the scale for the factors ranged between 0.77 to 0.90.

### Predicting social phobia

The study of Dahne et al (2015) indicated that smokers with high social phobia experienced a significant decrease in the negative effects after smoking a cigarette when exposed to social pressures. This is what prompted us to investigate the role of cigarette smoking addiction in predicting social phobia. Not only that, but tobacco has been implicated in previous literature as a causative factor in the emergence of many mental disorders (Firth et al 2020). To highlight this, we refer to the study (Hajure, M., & Abdu, Z. 2020), which showed that tobacco use and a family history of mental disorders were significantly associated with symptoms of social phobia. Given these factors, the symptoms of social phobia significantly increase in students (Akçakoyun, 2018). Therefore, the most common symptoms among the undergraduate students are reflected in their performance during lectures (Goodwin et al 2005). Consequently, social phobia is the third most common disorder among people (Stein et al 2017). On the other hand, experimental evidence has varied across studies on the role and dimensions of anxiety in smoking behavior, under which social phobia is classified (Garey et al 2020). The study of (Buckner, Zvolensky & Lewis, 2020) emphasized that the

frequent use of avoidance behaviors to manage anxiety may preserve smoking, and this gives us a partial explanation for the high rates of smoking among those who suffer from high social phobia.

Based on this data, cigarette smoking addiction may contribute to a prediction of social phobia. It has been indicated (Al-Dubai et al., 2014) that undergraduate students smoking addiction of cigarettes is a response to a psychological issue, or based on the negative beliefs that the university student holds that smoking symbolizes maturity and masculinity, in addition to that smoking reduces Stress, anxiety, or social phobia, which some students may experience in the early stage of college. As a result of these factors, smokers are more sensitive to painful stimuli (Ditre et al., 2018). It was emphasized by Buckner and Vinci (Buckner & Vinci, 2013) that smoking motives which are the positive and negative reinforcement of smoking have a role in the relationship between severity of nicotine dependence and social anxiety. An indication of this is that there is an effect of negative reinforcement of smoking on the severity of dependence (Pang et al., 2014a). Consequently, it was shown that expectations of smoking reinforcement significantly accounted for the relationships of nicotine dependence with negative reinforcement (Pang et al., 2014b).

On the other hand, social phobia symptoms predicted eagerness to smoke cigarette in the case of a placebo situation, not in the case of nicotine patch. (Kimbrel, al., 2014). In the same context, the relationship between distress and psychological stress did not predict smoking, (Shadur et al., 2017). In contrast, pain-related anxiety maintains tobacco dependence (LaRowe et al, 2017). Accordingly, individuals with mental disorders expect that smoking deprivation will exacerbate pain (Zale, Maisto, & Ditre, 2016). Under those circumstances, anxiety sensitivity was significantly related to the severity of nicotine dependence (Zvolensky et al., 2019). This was also confirmed by (Leventhal & Zvolensky, 2015) that people with high social phobia have a greater motivation to use cigarettes to reduce the negative impact. Based on these data, social phobia when confronted with those thoughts and feelings is associated with smoking (Zvolensky et al., 2014). Therefore, the phenomenon of cigarette smoking addiction requires a deep understanding of the extent of its association with mental disorders in general, and social phobia in particular. Therefore, anxiety in social interactions

is an important factor in dependence on cigarette smoking (Izadpanah, Najafi, & Khosravani, 2021).

## 3) Methods and tools

This study was conducted to develop a cigarette smoking addiction scale. The study population consisted of 5460 Arab students from four Malaysian public universities. The criteria for participation were smoking cigarettes and the age of the participants ranged between 18 to 45 years. The study sample consisted of 191 current smokers, including 72 smokers from the Universiti Teknologi Malaysia (UTM) at a rate of 37.70%, 39 smokers from the University of Malaya (UM), i.e. 20.24%, 26, smokers from the University Kebangsan Malaysia (UKM) at 13.61%, and the number of Arab smokers from the International Islamic University Malaysia (IIUM) were 54, or 28.27%.

This research was conducted on a sample of Arab students in the Malaysian public universities who were current smokers, and this sample was selected from a number of universities in Malaysia. The sample that was selected randomly, stratified, multi-stage method, and it was chosen from the halls, or libraries directly, where (450 A questionnaire was distributed, then data were collected from a group of Arab students in the undergraduate and postgraduate levels, the retrieved questionnaires reached (396) and all of them were valid. (191) smokers were diagnosed with social phobia (48%) of the selected sample, according to the diagnostic criteria, the average age of the sample = ± 22.7 years, with a standard deviation of (9.8).

After determining the size of the sample, a probability sample was drawn, a multistage stratified cluster sample, thus the current research the selection was made in four stages. In the first phase, the states in which the study is being conducted were identified in three regions and included the state (Johor Baru - Selangor - Kuala Lumpur), In the second phase, the areas that include Malaysian public universities ware identified, as each region was given a number, and random numbers were chosen from each state, according to the geographical location of the public universities in which they are located. Bangui and Gombak regions were chosen in the state of Selangor, and the starting point was from the region of Skudai is in the state of Johor Baru, and the last one was the Malaysian capital, Kuala Lumpur. The third phase, the sample of universities was chosen, and the

selection was for Malaysian government universities that include Arab students at the undergraduate and postgraduate levels, then the study population was divided into classes depending on the homogeneity of these parts of population. A number of universities were excluded from which there were no Arab students at the university level. The fourth stage, a random starting point was chosen, and colleges, departments and university offices were entered successively from the random starting point, and the sample was distributed in a way that suits the size of the classes according to the number of students in the academic year.

First, a draft of the Cigarette Smoking Addiction Scale was developed, consisted of 45 items, by relying on previous literature and The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). To verify the validity of the content, the draft was sent to 8 expert, physicians and specialists in the field of psychology and addiction to get their feedback. According to the experts' suggestion, the draft or the initial design of the scale has been reduced to 20 items, Thev to get the answers, the five points Likert scale was used as the follows: strongly disagree = 1 Disagree = 2 Neither agree nor disagree (Neutral)= 3 Agree = 4 Strongly agree = 5. The pilot study was conducted on 40 smokers, then the difficult paragraphs according to the participants were identified and modified, and the draft paragraphs have Internal consistency as the value of the Cronbach alpha coefficient of $0.8= \propto$. The scale of social phobia that was developed by (Raulin, & Wee, 1984) was used in this study. The scale includes 36 items, and the answer to each paragraph is yes or no, one score is given if the answer is yes, and the score is zero if the answer is no. The Cronbach coefficient was applied to determine the

internal consistency, which reached $88 =.\alpha$. This value gives an indication that the scale has a high reliability, and can be used in this current study.

Data was analyzed using SPSS 22.0 software, then the researcher used the reliability tests of the scale, percentages and mean values, Cronbach Alpha, Exploratory Factor Analysis Test, Pearson Correlation Coefficient, Analysis Tests (KMO, Bartlett's Test, then analysis of the basic components Varimax Rotation between the scale and its sub-dimensions, the simple and multiple regression coefficients to determine the extent to which cigarette smoking addiction contributed to the prediction of social phobia.

## 4) Results and Discussion

In order to test the validity of the cigarette smoking addiction scale, an Exploratory Factor Analysis was performed, in addition to the analysis of the basic components Varimax and the method of orthogonal rotation, where the value of the KMO test in this study reached (0.894), which is a good value according to the Kaiser standard (Kaiser, 1974). As for the results of Bartlett $= 5111.883=\chi2$, $0.000 = P$; statistically significant.

To verify the construct validity of the scale, the Exploratory Factor Analysis was used by adopting the Holting Principal component method in addition to the Varimax orthogonal rotation method to determine the dimensions and then the Eigenvalue of each dimension, or factor, where the factor is considered significant if the value of the eigenvalues greater than 1, and the phrase saturation has reached (0.30) according to the Guilford standard or criterion, and saturation of the phrase is high in more than one dimension or factor, then the one with the higher value is adopted.

**Table (1) shows the values of the latent root and the factor-explained variance ratio**

| Factor | Eigenvalue | Standard Deviation | Cumulative Variance % |
|--------|-----------|--------------------|-----------------------|
| **First** | **8.778** | **%43.89** | **%61.41** |
| **Second** | **2.330** | **%11.66** | |
| **Third** | **1.172** | **%5.86** | |

After exploring table 1, we find that the results of the factor analysis showed that there are three dimensions in which the value of the

Eigenvalue is greater than 1, and the first dimension had higher value of the explanation of the variance, as the value of the Eigenvalue of the first dimension reached (8.778), which explains the percentage

(43.89%) of the total variance of the scale of the level of addiction cigarette smoking, and the three dimensions together interpreted a percentage (61.41%) of the total variance of the scale, which is considered acceptable, and the Eigenvalues were represented graphically by what is known as the (Scree plot), where the horizontal axis represents the dimensions, or factors, and the vertical axis represents the Eigenvalues.
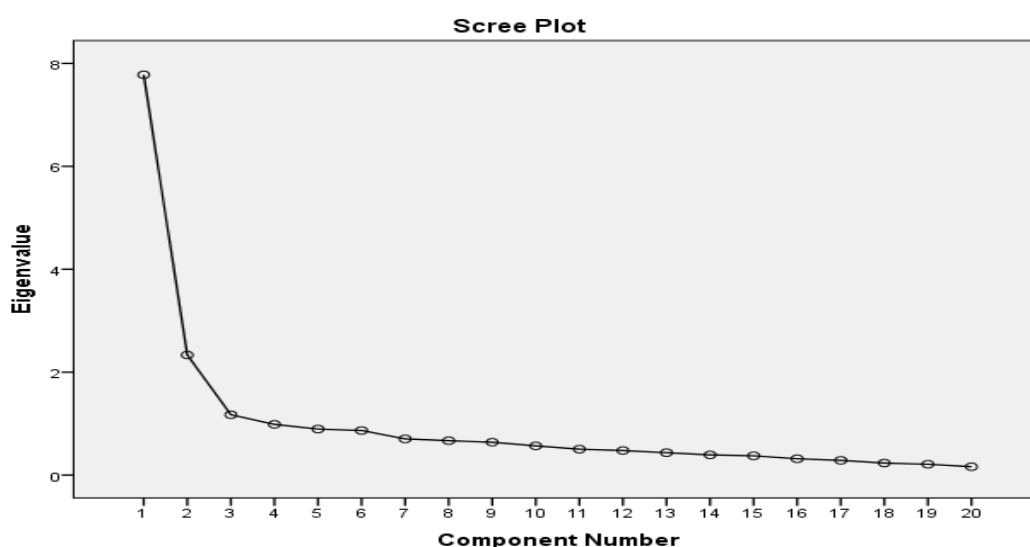


Figure 1: The Scree plot of the 3 demotions of the cigarette smoking addiction scale level.

By examining the Figure1, we notice that the Eigenvalue greater than 1 is limited to three dimensions, consequently based on the results of the Eigenvalue test of the cigarette smoking addiction level scale, it is consistent with finding of the Scree plot, that there are three dimensions determine the level of addiction to cigarette smoking, and after these analysis the orthogonal rotation (Varimax) was adopted, because he factors extracted before the rotation does not represent a clear interpretation of the dimensions. Through the orthogonal rotation the best saturation is obtained, and the dimensions were named according to the greater saturated factor and they consisted with the nature of symptoms and signs of cigarette smoking addiction.

**Table (2) Factors matrix after applying orthogonal rotation and determining the dimensions.**

| dimensions | Psychological signs and symptoms | Signs and symptoms of smoking craving and urges | Signs and symptoms of physical diseases |
|---|---|---|---|
| Items | Factor loading | Factor loading | Factor loading |
| 1.  I rely on smoking to stay focused and attentive | **.781** | .323 | - |
| 2.  Smoking helps me relieve stress and pressures. | **.869** | - | - |
| 3.  If I do not smoke for a long time, I quickly lose my patience. | .423 | **.711** | |
| 4.  When I do not smoke, I feel nervous and anxious. | .537 | **.818** | |
| 5.  I feel upset when I don't smoke | **.728** | .447 | - |
| 6.  In embarrassing circumstances, smoking makes me relax. | **.790** | - | - |

| | | | |
|---|---|---|---|
| 7. I feel impatient when I don't smoke for a long time. | .359 | **.714** | |
| 8. Just having cigarettes by my side makes me feel so relaxed | **.740** | - | - |
| 9. In areas where smoking is banned, I feel bored. | **.829** | - | - |
| 10. As soon as I wake up, I smoked my first cigarette. | .339 | **.809** | - |
| 11. I smoke between 11-20 cigarettes daily | .322 | **.856** | - |
| 12. I smoke automatically without thinking | - | **.807** | .402 |
| 13. if I don't have a cigarette I try to get it in every way that I can | - | **.750** | - |
| 14. I make sure to smoke a cigarette right after eating | - | **.698** | - |
| 15. Holding a cigarette in my hand led to the yellowing of the nails | - | - | **.857** |
| 16. smoking stained the color of my teeth | - | - | **.879** |
| 17. My teeth suffered from decay due to smoking | - | - | **.701** |
| 18. I find it difficult to swallow due to the chronic inflammation in the larynx | - | - | **.823** |
| 19. I suffer from coughing, especially after waking up. | - | - | **.876** |
| 20. I notice blood on the toothbrush due to gingivitis | - | - | **.808** |

smoking cigarettes, the saturation values ranged between (0.701 and 0.879), which are considered well-saturated values .

In order to verify the reliability of the cigarette smoking addiction scale, Cronbach's alpha coefficient was used whereby the coefficient in the dimension of psychological signs and symptoms scored 0.83, the dimension of signs and symptoms for craving and urges scored 0.84, and the coefficient of the dimension of signs and physical diseases got 0.87. As for the scale factor as a whole it reached 0.91.

It is evident from the data of Table (2) that the first factor has (6) paragraphs / items of the scale items, all of which relate to the psychological dimension, and the values of the saturation of the paragraphs ranged between (0.721 and 0.869), which are acceptable saturation values. The results also indicate that the second factor has (8) paragraphs of the scale, all of which relate to the symptoms of craving and urges resulting from addiction to cigarette smoking. The saturation values of the paragraphs ranged between (0.698 and 0.869). The third factor has (6) paragraphs of the scale related to physical diseases resulting from

**Table 3: Relative contribution of cigarette smoking addiction to the prediction of social phobia**

| Independent variable | B | R | T-test | | F-test | | $R^2$ | B |
|---|---|---|---|---|---|---|---|---|
| | | | Value | (sig) | Value | (sig) | | |
| **Constant** | 2.762 | 0.975 | 10.219 | 0.000 | 35.765 | 0.000 | 0.951 | 0.975 |

| Cigarette smoking addiction | 0.290 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|

*The level of significance (0.05 ≥P)

predicting social phobia from the smoking addiction. As for the explanatory power of the cigarette smoking addiction regression model, represented by the coefficient (R2), it reached (0.95), and as we can see through the results that cigarette smoking addiction contributes to the prediction of social phobia, with a value of β (0.97).

Based on the results of the simple regression analysis, we find that the F-value for the predictability of social phobia through the addiction to cigarette smoking among the current smoker is (35.765), which is a statistically significant at the P-value (0.000), which indicates the possibility of

**Table 4 Standardized Beta Coefficients Regression for the Contribution of the Dimensions of Cigarette Smoking Addiction to Predicting Social phobia**

| | Independent variable | B | $R^2$ | β | t | (sig) |
|---|---|---|---|---|---|---|
| **1** | **Constant** | 2.667 | 0.972 | 0.986 | 19.405 | 0.000 |
| | Signs and symptoms of physical diseases | 0.79 | | | 80.822 | 0.000 |
| **2** | **Constant** | 0.763 | 0.980 | 0.440 | 2.806 | 0.000 |
| | Psychological signs and symptoms | 0.388 | | | 8.264 | 0.000 |
| **3** | **Constant** | 0.680 | 0.980 | 0.125 | 2.602 | 0.010 |
| | Signs and symptoms of smoking craving and urges | 0.078 | | | 2.087 | 0.038 |

*The level of significance (0.05 ≥P)

Based on the results of multiple regression analysis, the value of the relative contribution (B) of the dimension of signs and symptoms of physical diseases in the prediction equation is (0.79) and the constant value is (2.667). The relative weight β reached (0.986), while the value of (B) of the dimension of the psychological signs and symptoms of cigarette smoking (0.383). The standard value of β is (0.440). As for the signs and symptoms of craving and urges, the value of (B) reached (0.078), and the standard value of β is.(0.125)

The Arabic version of the Cigarette Smoking Addiction Scale was developed, where the number of paragraphs of the final version reached 20 items, the KMO value is 0.894, from which we conclude that the sample is suitable for the exploratory factor analysis to determine the factors according to (Kaiser, 1974) Criterion. Accordingly, those variables have been reduced into three dimensions, namely the dimension of psychological signs and symptoms, the dimension of Signs and symptoms of smoking craving and urges, and the dimension of Signs and symptoms of physical diseases. As a result, we find that craving for smoking is a key and fundamental feature in determining the level of dependence on smoking (Moreno-Rius, & Miquel, 2017). The data is consistent with The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). Because it highlighted the symptoms of dependence on nicotine (American Psychiatric Association, 2013). In contrast, the results of the Factor analysis of the Fagerstrom test have

determined one dimension (Svicher. Cosci., Giannini., Pistelli., & Fagerström, 2018). As indicated by the data, the reliability of the cigarette smoking addiction scale according to the Cronbach alpha coefficient values with respect to the dimensions of the cigarette smoking addiction scale is at the good value, and the scale coefficient as a whole is at the excellent level (Jain, & Anural, 2017). ). This gives us an indication of the reliability of the Arabic version of the Cigarette Smoking Addiction Scale.

In addition, the results of a regression analysis conducted to determine the extent to which cigarette smoking addiction contributed to the prediction of social phobia, and its ability to predict it based on the presence of signs and withdrawal symptoms of cigarette smoking. The finding of the (Bakhshie et al., 2017) study pointed out that the correlation of social anxieties with misconceptions of smokers. In the same context, the correlation of social phobia with lower levels of acceptance of the harms of smoking (Watson et al., 2017). As it should be noted, smoking can be predicted by low self-esteem (Joffer et al., 2014). We conclude from this that lack of self-esteem and loss of self-confidence are among the symptoms of social phobia , and the individuals who suffered from anxiety uses psychological defense mechanisms, specifically for removing the fears by using symbolic behavior that reduces the tension, such as addiction to smoking cigarettes.

The results indicated the role of the dimensions of cigarette smoking addiction in increasing social phobia. Thus, the reason for the smoker's urges that pushes him to smoke cigarettes regularly, after exceeding the habitual period, is due to the high level of nicotine in the blood, so the smoker needs an adequate doses to adjust the mood and to reduce the stress resulting from a lack of nicotine in the blood. Also when the individual exhibits symptoms of social phobia accompanied by exaggerated tension during certain situation that raises his fear, then he symbolically gets rid of his fears through smoking cigarettes to compensate for the lack of self-confidence. To clarify this, we refer to the findings of the (Ra & Cho, 2017) study, which showed that the craving for smoking cigarettes is related to a person's feeling of stress and pressure. Not only that, but also it is consistent with the finding that some of the signs and symptoms of craving and urges for cigarette smoking contribute to the prediction of social phobia symptoms. Thus, it is possible for the therapist or psychologist,

through conducting a diagnostic interview, to determine through the signs and symptoms of cigarette smoking addiction the level of social phobia.

In the same context, the result is consistent with the study of (Bakhshaie et al., 2018) regarding the partial conclusion that social fears are related to the perceptions of the smoker. From this, we conclude from the analysis of the personality of the person with social phobia, that the cognitive structure is where the problem lies due to the adoption of many misconceptions, which have been referred to by many psychological theories. They are supported by The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), about the negative expectation that drives the emergence of psychological, behavioral and physiological symptoms of social phobia. The decrease in social phobia was also associated with an awareness of the negatives of smoking (Ayer et al., 2019).

The results of the current study are consistent with the related literature, where the results of the (Watson et al, 2018) study, found that smokers who have a high level of social phobia are more likely to smoke due to stress during social situations. Which reinforces that there is an effect of smoking on the level of social phobia. On the other hand, the results of the current research are not consistent with the results of the (Dahne et al, 2015) study which found that the negative impact of stress after smoking a cigarette was not observed with individuals who have moderate social phobia. The results of the study didn't agree with the study by Kimbrel (Kimbrel et al., 2014), which revealed that people with social phobia do not have a high addiction to nicotine, and the study did not predict symptoms of social phobia through craving smoking. In contrast, the scientific literature indicates that pain-related anxiety may contribute to persistent addiction to cigarette smoking (Smit et al, 2019.

In line with the results of (Jofeer et al., 2014), which showed the effect of the dimensions of cigarette smoking addiction on social phobia, there are several misconceptions in mind of the smoker who suffers from social phobia such as feeling weak, self-blame, low self-esteem. Also smoking also contributes to predicting low self-esteem, which are among the negative thoughts that affect people with social phobia. Accordingly, smokers who have social phobia may benefit from relaxation exercises to reduce social phobia. (Guillot, et al, 2018). Based

on this data, there are many misconceptions a person who suffers from social phobia may have, such as feeling weak, self-blame, low self-esteem, negative thinking, and insecurity, which explains the severity of the addiction to smoking cigarettes as a symbolic behavior resulting from shifting the anxiety and tension that a person who suffers from social phobia feels without addressing the real cause of those negative feelings.

## 6) Limitations and recommendations

In conclusion, given the clinical implications, the results indicated the contribution of cigarette smoking addiction and its dimensions in predicting social phobia, therefore this must be taken into account by specialists and counselors in the psychological field when they develop the preventive and treatment programs to reduce smoking addiction among people with social phobia disorder. In addition to the contribution to the scientific literature, this study has limitations that must be examined. First, the study was conducted on a sample of male Arab male smokers in Malaysian public universities, thus female smokers did not participate due to the Social Desirability. Second, it is recommended to conduct a cross-cultural study that deals with all nationalities and involve a larger sample.

## 7) Conclusion

The study concluded that the Arabic version of the Cigarette Smoking Addiction Scale is a reliable and valid tool. The scale consists of 20 items distributed on three dimensions to determine the level of dependence on smoking. The scale can be used for youth and adults, as well as the patients in medical clinics, and for the general public, in addition to that, the results of the regression analysis conducted to determine the extent to which cigarette smoking addiction contributes to the prediction of social phobia, also it indicated, to the possibility of predicting its occurrence based on the presence of signs and withdrawal symptoms of cigarette smoking.

As social phobia can be diagnosed through determining the purpose or goal that made the individual smoke excessively. Because if the purpose of smoking is to impart a smoker's feeling of pride and to enhance his/her confidence, this can be diagnosed from the individual's thoughts and social phobia through the smoking behavior that he /she do to expresses confidence. It also should be noted that the expert who develop the preventive and therapeutic programs for smoking reduction may benefit from building an intensive program for smokers with social phobia, this program focuses on changing the cognitive structure of people with social phobia, especially that the person with social phobia complains of the negative thoughts and criticism from others. Thus, it affects him /her psychologically and this lead to the behavior of avoidance, then to get rid of his/her social anxiety he/she resort to different types of abnormal behavioral disorders such as addiction to smoking.

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