

Teachers' Talk of a Walk they Don't Stride: A Case Study of Education Student Teachers' Perspectives on Hookah Smoking

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ABSTRACT

Hookah smoking is widely spreading among Lebanese adolescence. The aim of this study was to investigate the perspectives of prospective student teachers pertaining to hookah smoking to determine their readiness to educate their future students in what relates to the dangers of smoking. The sample consisted of education sophomore student teachers (N=53), at the Education Faculty of one university in Lebanon. Participants constituted of the students enrolled in two educational psychology classes taught by the researcher. The topic was not part of what is being taught to students at the university. The e-survey obtained information on participants' demographics, hookah smoking awareness, and their educative perspectives on hookah smoking. The study used mixed methods employing an 18-item survey on hookah smoking, alongside a semi structured heterogeneous focus group interview with six student teachers; two who were identified respectively as: hookah smokers, non-smokers, semi-smokers, and all were selected randomly from the pool of participants. Findings suggest that education student teachers have dispersed and unbalanced educative perceptions on hookah smoking. The study recommends that an efficient Lebanese anti-smoking awareness program should highly emphasize targeting the college student teachers, who are at the future front line with the youthful upcoming generation, and thus can highly affect their awareness pertaining to smoking in general, and hookah smoking in specific.

Keywords: health education, education psychology, social cognitive learning theory, teacher education.

INTRODUCTION

Tobacco addiction is a serious health problem, and it is a habit that is usually established during adolescence and early adulthood (Everett et al., 1999). Hookah tobacco smoking is widely spreading among the Lebanese youth and consequently increasing the frequency of tobacco addiction in the Lebanese community (El-Roueiheb et al., 2008; Chidiac et al., 2016, Akel et al., 2020).

The objective of education is learning, not teaching (Ackoff, 2008). Learning, as emphasized in its literature review, is the change of behavior through experience. According to the social cognitive learning theory, a change towards or away from the smoking behavior is influenced by different social contexts, including teachers, who might provide adolescents with important role models (Bandura, 1972).

The risks of hookah smoking have not been researched and documented as compared to traditional cigarette smoking (Chidiac et al., 2016). As a result, the choice of smoking hookah is widely spreading in the Lebanese community in general and among the youthful generation in specific (Akel et al., 2020).

Confronting a wide spreading toxic social habit requires national and school programs where teachers have a responsibility to address the health risks of hookah especially at educational institutions such as schools and colleges (Rayens, 2017). Teachers are primary are considered as significant role models for their students (Bandura, 1997).

This study is exploratory in nature aiming at identifying the beliefs of student teachers pertaining to hookah smoking. It constitutes an attempt to envisioning the role of future teachers in tackling a growing harmful social phenomenon, which is hookah smoking.

Purpose of the Study

A change towards or away from the hookah smoking behavior is influenced by different social contexts, including teachers, who might serve as role models for adolescents (Bandura, 1972). The purpose of the study was to explore the beliefs of student teachers pertaining to hookah smoking so as to determine their readiness in terms of anti-smoking education programs. Particularly, this study was guided by the following research questions:

General Question: To what extent are student teachers aware of their educative role in terms of hookah smoking?

Secondary Questions:

- (1) Do education student teachers embrace self-awareness behavior on hookah smoking?
- (2) What are student teachers' perspectives on the motives underlying hookah smoking?
- (3) What are the student teachers' beliefs pertaining to their role in educating against hookah smoking?
- (4) What are the student teachers' perspectives on the interventional solutions against hookah smoking?

Importance of the Study

According to Bandura's social cognitive learning theory, previous studies confirmed that, at least partly, many behaviors could be learned through modeling (Bandura, 1978). When building awareness against addictive behavior of smoking in general and hookah smoking in specific in a certain society, teachers are at the core of any educational reform or initiative (Ghamrawi, 2010). This is especially when the initiative requires cognitive reconstruction awareness approach against youth's beliefs on hookah smoking. The study targets the future teachers majoring in education to explore to what extent they are aware of their educative role against hookah smoking.

Any smoking awareness program that ignores the role of teachers as role models is definitely missing a key stone for yielding effective results. If the teacher is modeling a behavior that is appropriate, responsible and overall positive on counteracting hookah smoking; students are more likely to mimic that positive behavior. So, as future educators, teachers need to be constantly aware of their key role in modeling desirable behaviors.

REVIEW OF LITERATURE

The American Lung Association describes hookahs as the new tobacco trend of the 21st century (Chidiac et al., 2017). Hookahs are water pipes of four main parts; the bowl where tobacco is heated usually with burning charcoal after which the smoke passes through the water at the base, and is then drawn through the hose to the mouthpiece. Hookah's tobacco comes in various flavors such as mint, chocolate, strawberry, cappuccino and typically used in social settings, with many lounges located near university campuses (Rayens. et al, 2017).

Among the youth, the negative health side effects of traditional cigarette smoking are widely known, but the same level of perceived risk has not been documented for Hookah (Akel, 2020). While many people underestimate the dangers of hookah, research has shown that it is associated with short and long-term health risks, including carbon monoxide toxicity, infectious disease transmission, reduced lung function and cancer (Ling et al. , 2017). One session of hookah smoking exposes individuals to a variety of chemicals (e.g. nicotine, carbon monoxide, arsenic, lead), as well as known carcinogens (Hadidi, 2002, Akel et al., 2020.). Also, hookah smoking has lately proven to increase the risk of cardiovascular disease (Chami, el al, 2021). Most hookah smoking sessions ranges from 40 to 45 minutes, so a hookah smoker may inhale as much smoke during a single session as consuming 100 or more cigarettes (WHO, 2005). More over, as of 2016, hookah is subject to action by the U.S. Food and Drug Administration (FDA) for false or misleading information and claims of modified risk. These findings reinforce the risk and toxicity of smoking hookah.

Despite of its toxicity, hookah smoking is widely increasing among the youth, because it is perceived to be more socially acceptable and falsely viewed as less risky (Rayens, et al., 2017). While parents have a role in adolescent smoking behaviors if done in a favorable manner (Huver, et al., 2006), yet they are not efficient alone. Health professionals and education leaders have a responsibility to address the health risks of hookah especially at educative institutions such as schools and colleges (Rayens, 2017).

Several studies suggest that the major agents predicting onset of smoking are smoker role models in family, peer and school settings, and the perception that tobacco use is the norm (Wakefield et al., 2000; Akel et al., 2020). Teachers, who are primary socializing members, are considered as significant role models (Oetting and Donnermeyer, 1998), thus teachers who smoke hookah may therefore influence adolescents to adopt smoking through direct modeling. Teachers act as exemplars for the students and studies have shown that teachers, including teachers who smoke, agree that school staff should set a good example by not smoking (Galaif et al., 1996).

The restrictive smoking policies at both, the national and school levels, have limited research regarding hookah smoking, and the need for developing policies, in collaboration with teachers' organizational unions (Wold, 2004). An indicator of the success of the implementation of national and school policies on restricting hookah smoking, could be the extent to which students are exposed to teachers who smoke at school (Ryan, 2017; Akel et al., 2020). Thus, restricting adolescents' exposure to models of adult hookah smokers may prove to be an effective means of smoking prevention (Chidiac, et al., 2017).

METHODOLOGY

The Sample

The sample consisted of education sophomore student teachers (N=53), at the Education Faculty of one university in Lebanon. Participants constituted of the students enrolled in two educational psychology classes taught by the researcher. The topic was not part of what is being taught to students at the university. The survey was electronic and was emailed to students along a consent form detailing the purpose of the study, how data will be treated and the anonymity of their participation. Participants shared the same sex, nationality, and academic level (sophomores). 64.2% of the sample were majoring in ESL, while 35.8% were enrolled in early childhood education.

The Survey

The researcher developed an 18-items survey and piloted it with a sample of 10 student teacher volunteers. Very few amendments were made in terms of language post the pilot study, after which it was administered to students. The survey data was analyzed using SPSS 24.0 for windows.

Sample Composition

Respondents, were all sophomore students at the faculty of education of one Lebanese university.

Hookah smoker groups

Participants were categorized as: non-hookah smokers, semi-hookah smokers, hookah smokers. Non- hookah smokers were those who reported that they never used hookah. Semi-hookah smokers identified themselves as occasional hookah smokers (i.e. never an established hookah smoker). Finally, students who acknowledged themselves as hookah smokers on daily basis, were labeled as hookah smokers within this study.

Hookah smoking toxicity

Respondents were asked: Which is more toxic? The response was designed to choose only one possibility; hookah or cigarette.

Hookah smoking in the Lebanese community and adolescence

The perspectives towards the reasons contributing to the wide spread of hookah smoking in the Lebanese community was assessed by two items: (1) 'Why do you think smoking Hookah is widely spread within the Lebanese culture as compared to other cultures?' (2) Which of the following factors contribute the most for the wide spread of Hookah-smoking among the Lebanese adolescents? The responses for both questions were meant to be an open ended, yet short answer.

Theoretical educative beliefs on hookah smoking

The educative beliefs on hookah smoking were assessed by four items (1) 'Do you find it alerting that Hookah-smoking is widely spread among the Lebanese youth?' (2) 'Would you quit Hookah-smoking for the sake of educating your students against it?' (3) 'Do you think schools should be a smoking free community?' The response was designed in a way allowing participants to choose only one factor from a set of different suggestions, while the response to

item (4) 'How would a Hookah- smoker teacher respond for a student question: [Do you smoke Hookah]?' was designed to be an open ended question.

Practical educational beliefs on hookah smoking

The educational beliefs pertaining to hookah smoking were assessed by five items, to which (1) 'A Hookah-smoker teacher can educate students against Hookah-smoking as effectively as a non-Hookah-smoker teacher.' (2) 'A non-Hookah-smoker teacher can educate students against Hookah-smoking more effectively than a Hookah-smoker teacher.' (3) 'A Hookah-smoker teacher can educate students against Hookah-smoking more effectively than a non-Hookah-smoker teacher?' (4) 'A Hookah-smoker teacher was spotted smoking in a cafe by the students who were taught by the teacher against the smoking habit. Would this incidence impact the students' choices in smoking Hookah?' (5) 'Imagine an outdoor activity, such as a trip, where students and teachers gathered in a cafe. Do you think it is normal for a Hookah- smoker teacher to order Hookah?'

Interventional solutions for hookah smoking

The perspectives towards the solutions contributing to the wide spread of hookah smoking in the Lebanese community was assessed by two items: (1) After accessing the YouTube link <https://www.youtube.com/watch?v=HwJ9LxopBag&t=3s> to watch an AUBMC awareness short movie on hookah smoking, respondents were asked 'Would the hookah smoking awareness movie on Hookah-smoking awareness impact a Hookah-smoker?' (2) 'Which of the following factors contributes the most for encouraging quitting of Hookah-smoking habit?' The responses for both items were designed to be an open-ended and short-answer question

The Focus Group

A semi structured heterogeneous focus group interview with six student teachers were carried out. Each focus group consisted of two participants from each of the identified categories: 2 hookah smokers, 2 non-smokers, and 2 semi-smokers. Participants were selected randomly from the pool of the respondents who showed interest in sharing their own perspectives on hookah smoking during a 45-minutes interview.

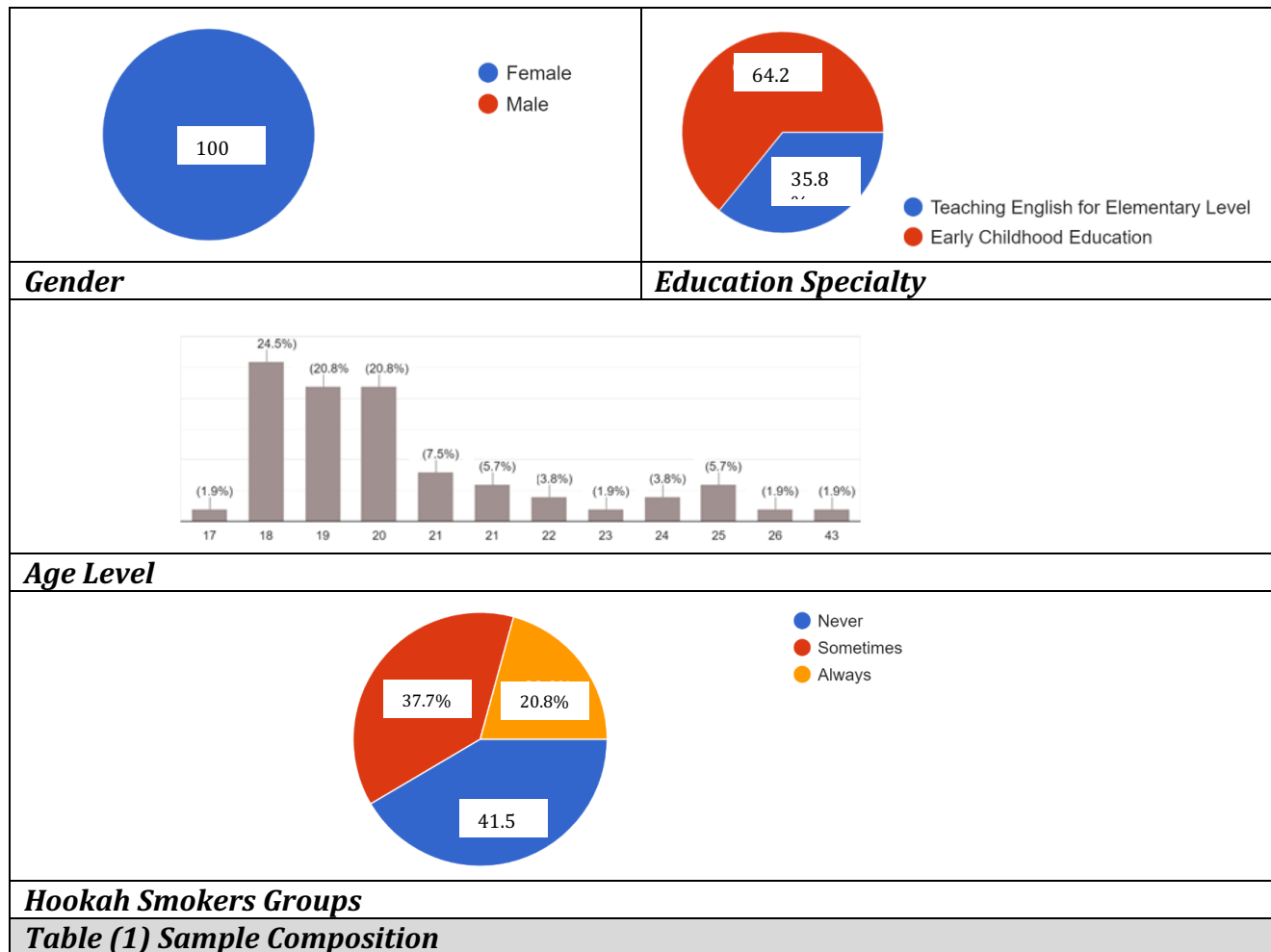
The focus groups were implemented through the Microsoft Teams application. The results of the 19-item survey were presented to the six members of the focus group who gave insights on the results. Thematic analysis was employed to analyze interview transcriptions. NVivo 2.0 qualitative computer software from QSR international was used at this stage, making advantage of its robust coding tools.

RESULTS

Sample Composition

The composition of the sample that took part in the study is presented in table (1). The sample was (100%) females since all the respondents, majoring in teaching English and early childhood education, at the faculty of education where the study was conducted during the academic year (2019-2020) were all females only. The sample was of the age range of [17-43] years, composed of (100%) sophomore student teachers: (64.2%) majoring in teaching English education while (35.8%) majoring in early childhood education. Participants were (41.5%) non-hookah smokers, (37.7%) semi-hookah smokers, and (20.8%) hookah smokers. Non- hookah smokers

reported that they never used hookah. Semi- hookah smokers smoke hookah occasionally (i.e., never an established hookah smoker). Hookah smokers smoke hookah on daily basis.



Remarkably, the majority of the participants (58.5%) used hookah as compared to the participants (41.5%) who never used hookah. As the table shows, more than the half of the sample (66.1%) belonged to the stage of late adolescence as their age interval was [18 -20 years] which is normally the stage of smoking establishment (Berg, 2011).

Hookah smoking awareness

Table (2): Hookah smoking awareness	
	%
Awareness of hookah smoking toxicity	
<i>Hookah is more toxic than cigarettes</i>	38.7
<i>Cigarette is more toxic than hookah</i>	61.3
Why do you think smoking Hookah is widely spread in the Lebanese culture as compared to other cultures?	
<i>The abundance of free time and boredom</i>	47.2
<i>The absence of a life purpose</i>	34
<i>The lack of Lebanese legislation laws against smoking</i>	18.8
Which of the following factors contribute the most for the wide spread of Hookah-smoking among the Lebanese adolescents?	
<i>Imitation</i>	25.5
<i>Peer pressure</i>	23.5
<i>Media</i>	22.6
<i>Lack of ethical/religious values</i>	19
<i>The lack of Lebanese legislation laws against smoking</i>	9.4
Which of the following factors contributes the most for encouraging quitting of Hookah-smoking habit?	
<i>Medical awareness</i>	35.8
<i>Media</i>	17
<i>Education</i>	17
<i>Legislation Laws</i>	13.2
<i>Family</i>	11.3
<i>Determination self-skill</i>	5.7

Table (2) reveals the perspectives of the sample on hookah smoking awareness. The respondents affirmed, in line with published research studies, that part of hookah's appeal is attributed to the perception that hookah is less harmful than cigarettes (Nuzzo, 2013). This is explicitly revealed in the responses, where approximately one third of the sample (38.7%) was unaware of the toxicity of hookah, considering it a safer choice than other forms of smoking.

As for their beliefs on the hookah addictive behavior, none related the drug like compounds that compose up the hookah tobacco, instead, the respondents related hookah smoking spread in the Lebanese culture, as compared to other cultures, to personal and external factors. The major personal factor was the absence of a life purpose (34%) which consequently led to the abundance of free time and boredom (47.2%) ; while the external factor was the absence of the Lebanese legislation laws against smoking (18.8%). Research studies confirm that an identified correlate of smoking is decreased level of meaning in life (Thege, 2006) and persons feeling less meaning in their lives were more likely to be daily smokers than nonsmokers (Kushnir, 2009). Theorists suggest that feelings of meaninglessness may lead to boredom (Frankl, 2006), which in turn can result in behaviors such as violence or substance use (Santrock, 2003). Boredom links the chain between smoking behavior and decreased level of meaning in life (Piko, Wills, and Walker, 2007).

According to the spread of hookah smoking among the Lebanese adolescents, the respondents mainly related the incline of hookah consumption to imitation (25.5%), peer pressure (23.5%),

media (22.6%), lack of religious values (19%) and the lack of legislation laws (9.4%). When adolescents observe the hookah smoking behavior of others, they can be vicariously reinforced to imitate the hookah smoking behavior as imitation involves the actual reproduction of the observed motor activity (Bandura 1977) if the observed behavior is linked to rewards related to the observed behavior. Consequently, adolescents who observe their peers' hookah smoking behavior, they are more likely to imitate them, as they seek the acceptance of their peers and that is a rewarding experience for imitating the hookah smoking behavior. Additionally, adolescents who observe their teachers or any other influential social figures, are more likely to imitate them as learning by modeling, according to Bandura (1977) suggests.

In addition, (19%) of the respondents considered the religious/ethical values as one of the major factors that might influence the adolescents' hookah smoking behavior. According to WHO (2021), religion has a strong influence in the WHO Eastern Mediterranean Region, as it is a part of the daily life of individuals and thus tackling tobacco use from a religious perspective is a key component of the WHO's Tobacco Free Initiative program in the MENA region.

As to media, it can share two opposing roles when it comes to hookah smoking awareness. Media can be destructive when it normalizes the behavior of hookah smoking by spreading models observed by the adolescents, and it can also be constructive when it shares responsibility in spreading hookah smoking awareness, and that was mentioned by (17%) of the respondents who considered media as one of the interventional solutions to restrict hookah smoking behavior. However, the medical awareness was chosen by (35.8%) of the respondents as the main solution to build hookah smoking awareness while education was only considered as a solution by (17%) of the sample. According to learning psychology, constructing cognitive medical awareness of the adolescents definitely requires a behavior change by experience that can best be acquired through a learning process in the context of formal learning that involves good models of teachers (Bandura, 1977).

As to legislation laws and family factors, research has shown that the non-existence of smoking bans for students was associated with an increased risk of being smoker, one of the most important controllable aspects of the school environment is the school's and national smoking policies (Lantz, 2000). According to family smoking behavior, it represents crucial microsystem that may interact with individual factors to influence adolescent behavior (Piontek, 2008), however, family characteristics seem to have a smaller influence on smoking prevalence as compared to peers influence.

Educational perspectives on hookah smoking

Table (3): Educative perspectives on hookah smoking	
	%
In your opinion, which of the following statements is the most accurate?	
<i>A non-Hookah-smoker teacher can educate students against Hookah-smoking more effectively than a Hookah-smoker teacher.</i>	62.3
<i>A Hookah-smoker teacher can educate students against Hookah-smoking more effectively than a non-Hookah-smoker teacher.</i>	20.8
<i>A Hookah-smoker teacher can educate students against Hookah-smoking as effectively as a non-Hookah-smoker teacher.</i>	17
Would you quit Hookah-smoking for the sake of educating your students against it?	
<i>Sure</i>	45.3
<i>Maybe</i>	34
<i>Never</i>	20.7
A Hookah-smoker teacher was spotted smoking in a cafe by the students who were taught by the teacher against the smoking habit. Would this incidence impact the students' choices in smoking Hookah?	
<i>Sure</i>	71.7
<i>Maybe</i>	28.3
How would a Hookah- smoker teacher respond for a student question: "Do you smoke Hookah?"	
<i>Yes, I smoke Hookah and I hope that teaching you its side effects may help me in quitting it someday.</i>	94.3
<i>Yes, I smoke Hookah and it's a personal choice and it is not of your business.</i>	5.7
Imagine an outdoor activity, such as a trip, where students and teachers gathered in a cafe. Do you think it is normal for a Hookah- smoker teacher to order Hookah?	
<i>No</i>	92.5
<i>Yes</i>	7.5
Do you think schools should be a smoking free community?	
<i>No</i>	30.2
<i>Yes</i>	67.9

Table (3) reveals the educational perspectives of the sample on hookah smoking. The sample was confronted with 4 case studies in the survey, as a way to elaborate on their educational perspectives underlying hookah smoking. Also the same opposing hypotheses were discussed in the focus group.

1st case study: *Who can teach hookah smoking awareness better: A hookah smoker teacher or a non-hookah smoker teacher?*

The survey yielded (62.3%) of the sample who considered non-smoker teachers more efficient in teaching hookah smoking awareness while (20.8) considered the hookah smokers as more efficient, and the focus group enriched the survey results with clearer reflection:

A Hookah smoker (A) said:

"Teachers who smoke hookah will teach students to be aware of this habit as it is highly addictive that teachers themselves are not able to quit it..."

On the contrary, a non-hookah smoker (X) disagreed:

"The teacher who does not smoke hookah is more authentic for the students as she teaches them by words and by actions..."

However, a semi-smoker (D) expressed the fact:

"It depends on the way of teaching hookah smoking awareness independent of the teacher act of smoking or not..."

As noticed above, the results are arguable as it yielded 3 different hypotheses that are deeply rooted with the review of literature on smoking.

Some of the hookah smokers considered that sharing their personal struggle with the addiction side effect of hookahs as an effective way to build awareness regardless of the possibility that students might learn hookah smoking by modeling their teacher. According to APA, 'addiction is a chronic disorder with biological, psychological, social and environmental factors influencing its development and maintenance'. While half the risk for addiction is genetic, the use of drugs including tobacco, is influenced by psychological, social (e.g., family, teachers or friends' use of a substance), and environmental factors (e.g., accessibility of a substance, low cost) can lead to brain changes that include alterations in involving the neuro-circuitry of reward, motivation, memory, impulse control and judgment. 'This can lead to dramatic increases in cravings for a drug or activity, as well as impairments in the ability to successfully regulate this impulse, despite the knowledge and experience of many consequences related to the addictive behavior', (APA,2021). There is also a danger that discussions of hookah addiction may provide young smokers with the excuse: 'I can't quit because I'm addicted' and thus normalize the smoking behaviors (Wood, 1999).

All of the non-hookah smokers adopted the perspective of Bandura's social cognitive learning theory (SCLT) in believing that teachers who smoke hookah might vicariously reinforce their students in imitating the same behavior.

However, some of the respondents did not value the role of teachers in modeling non-smoking behavior, that is to teach is independent from to act accordingly, as they considered awareness is best delivered through the qualities of effective teaching: professional and personal qualities listed by Santrock (2013) and lacked modeling as a primary efficient quality of teaching. It is worth noting that research has proved that the exposure to teachers smoking on the school grounds increased the probability of smoking (Piontek, 2008), schools that permit their staff to model smoking provide students with the message that smoking is a normal and accepted behavior, this is problematic when smoking is restricted only for students but not for teachers; 'such mixed messages may result in oppositional behavior and increased smoking among adolescents'.

2nd case study: *A Hookah-smoker teacher was spotted smoking in a cafe by the students who were taught by the teacher against the smoking habit. Would this incidence impact the students' choices in smoking Hookah?*

The survey yielded (71.7%) of the sample who considered the incidence impact on hookah choices while (28.3%) of the respondents were uncertain on its impact, yet none considered

the incidence of no impact on the observers, and the focus group presented in-depth insights for the resulting perspectives:

Smoker (Z) says: My students will learn from my actions better than my words, and such incidence will make me impact them negatively.

Smoker (W) says: I guess that incidence impact depends on the age level of the students who observed me smoking, children will be affected more than the teenagers as teenagers might excuse me as I am an addicted smoker.

Almost all the survey responses, in addition to the focus group interview, agreed that informal learning of hookah smoking has a great impact on the observers since outdoor social contexts influence youth smoking behavior by providing role models and by setting social norms concerning smoking, and this is what the social cognitive theory confirmed about that the learned behaviors depend greatly on actual and anticipated consequences [10]. Accordingly, anticipation is developed through personal experiences and vicarious observations of important role models in the social environment, especially teachers (Bandura, 1986), and it would consequently be difficult for adolescents to resist hookah smoking if they perceive that this is a popular and socially desirable behavior.

According to the factor of age level of the learner with respect to learning by model, Ormrod (2014) mentions the characteristics of effective learning by model according: to be competent, has prestige and power, gender-appropriate, and relevant to the observer's situation. As noted, none of the characteristics are related to the age appropriacy of learners who learn from models regardless of their age.

When a teacher self justifies hookah smoking by relying on the addictive nature of hookah smoking instead of confronting the habit with the real reasons underlying the behavior, the/she is indirectly modeling for the students a rationalization defense mechanism which Freud described in psychoanalytical theory, and as mentioned previously, this excuse may provide young smokers with the excuse: 'I can't quit because I'm addicted' and thus normalize the hookah smoking behaviors (Wood, 1999).

3rd case study: *How would a Hookah- smoker teacher respond for a student question: "Do you smoke Hookah?"*

All of the respondents confirmed the importance of hookah smoking confession, while (94.3%) of the sample connected the confession to the importance of quitting the hookah smoking habit to reinforce their modeling role of spreading awareness '*hope... quitting it someday*', however only (5.7%) of the respondents modeled aggressive rationale '*it is none of your business*'. Also, (45.3%) of the sample, when was asked whether they quit hookah smoking for the sake of modeling good behavior, agreed while (20.7%) disagreed, and smoker (W) considered that "*hookah smoking is a personal choice regardless of the career of teaching.*"

Moral modeling has been highlighted in Bandura's theory, so when a teacher responds to students with aggressive justification of a behavior such as the hookah smoking, students are more likely reinforced to learn cognitively to respond in a similar way once they are confronted with a stressful personal situation. Accordingly, when a teacher admits the weakness of

determination in quitting the hookah, students vicariously learn to admit their weaknesses in similar situations.

4th case study: *Imagine an outdoor activity, such as a trip, where students and teachers gathered in a cafe. Do you think it is normal for a Hookah- smoker teacher to order Hookah?*

The survey yielded (92.5%) of the sample agreed on the incidence impact on hookah choices while (7.5%) of the respondents were unsure on its impact, and the focus group presented in-depth insights for the resulting perspectives:

All the beliefs, on teachers smoking hookah in an outdoor context, agreed with literature reviews that considered the exposure to teachers smoking outdoors increased the probability of adolescent smoking.

As to indoor school smoking, (30.2%) of the sample, which is approximately one-third of the respondents, considered having a smoking free school community as unnecessary. Research studies pointed on adolescents, in schools that do not have smoking regulations, have an increased risk of being smokers by more than one and a half (Piontek, 2008). As noted earlier, and according to social cognitive theory, schools that permit their staff to smoke on school property provide students with the message that smoking is a normal and accepted behavior. This is especially problematic when smoking is restricted only for students but not for teachers; such mixed messages may result in oppositional behavior and increased smoking among adolescents (Piontek, 2008).

CONCLUSION

As mentioned before, the objective of education is learning, not teaching (Ackoff, 2008), and students learn by modeling the behaviors they observe according to Bandura's theory (1977). Education is one of the major ways to confront the hookah smoking behavior in the Lebanese community, as the findings from the researched sample showed. Being educators of the future, the sample was all chosen to be students majoring in education, in order to investigate the extent to which they were aware of their educative role on hookah smoking.

According to their self-awareness, two third of the sample smoked, hookah while one-third believed hookah is not toxic. The lack of the knowledge of researched sample of the toxicity of hookah might be one of the justifications of their smoking behavior.

As to their beliefs underlying the widespread of hookah smoking in the Lebanese culture, the study related the causes to personal and external factors. The major personal factor is the absence of a life purpose which consequently leads to the abundance of free time and boredom. The external factor is the absence of the Lebanese legislation laws against smoking. According to the spread of hookah smoking among the Lebanese adolescents, the respondents mainly related the inclination towards hookah consumption to imitation, peer pressure, media, lack of religious values and the lack of legislation laws.

The study highlighted interventional solutions on hookah smoking that are mainly focused on medical awareness, media, education, legislation Laws, family awareness, and determination self-skills. In specific, the educative perspective on the impact of teachers as being role models

in terms of combating the hookah smoking habit was not well balanced in the results of the study.

Limitation

This study is confronted with a number of methodological limitations which restricts the extrapolation of its results. The first one of them all is the size of the sample involved in this study. In addition, the criteria used for selecting the education student teachers were limited to the ease of accessing students attending the courses taught by the researcher. Also, the gender of the sample was all females because the course registered students on the date of the study was only females.

Recommendations

This study was limited to two sections at the faculty of education at one Lebanese university. It would be informative if future research employs a more representative sample of college students. The involvement of students from all sorts of universities would give a more comprehensive picture of the reality of hookah smoking educational beliefs. Besides, geographic dispersion would be beneficial allowing for the various governorates of Lebanon to take part. In addition, conducting a similar study focused on the administrators and/or community stakeholders would be additionally informational. Finally, examining the results of this study maybe useful for those interested in designing youth programs that targets awareness on smoking in general and hookah smoking in specific; as it links the impact of education on an effective behavioral change of the Lebanese generation.

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