



Development and Validation of Online Nutrition Education Video EMPIRE (Emotion and Mind Power in Relationship with Eating) For Millennials with Overweight and Obesity

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Abstract. Overweight and obesity are still the biggest health problem in Indonesia, especially for the current millennial generation. The concept of *mindfulness* and *mindful eating* can be one of the intervention strategies to overcome overweight and obesity in this modern era. The study aimed to develop and validate the online nutrition education video EMPIRE (*Emotion and Mind Power in Relationship with Eating*) for millennials with overweight and obesity. This study uses a 3-step method, namely, development (development of EMPIRE online nutrition education video materials), validation (validating content and constructs by 10 experts and 3 millennial respondents with overweight/obesity), evaluation (evaluation stage is not carried out by researchers due to time constraints). For construct validation using Pearson correlation and content validation using Content Validity Ratio (CVR) and Item-Level Content Validity Index (I-CVI) $\geq 0,80$. Validation consists of content, objective, relevant, motivational and construct components such as language and writing, illustrations, and quality. The content and construct validation of the EMPIRE nutrition education video (1,2,3,4,5) by experts and millennial respondents with overweight was declared valid with an overall average value of CVI $\geq 0,80$. The content and construct components in the EMPIRE online nutrition education video are valid, so they are suitable to help overcome overweight and obesity among millennials.

Keyword: development, EMPIRE, overweight, millennials, validation

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INTRODUCTION

Overweight and obesity are still the biggest health problems in Indonesia based on Basic Health Research in 2018, the prevalence of overweight in adults aged >18 years is 13.6%, while the prevalence of obesity is 21.8% (1). Overweight and obesity can be caused by various factors such as socioeconomic, education, environment, lifestyle, psychology, physical activity, and food consumption (2,3). Untreated overweight and obesity may induce cardiovascular disease, dyslipidemia, type 2 diabetes, atherosclerosis, cancer, respiratory problems, neurodegenerative diseases and psychological problems (depression) (3). Intervention for overweight and obesity is needed to overcome nutritional problems, there are two kinds of interventions, namely pharmacological and non-pharmacological interventions. Non-pharmacological interventions are preferred because they have a lower risk of side effects and can provide long-lasting benefits (4). Mindful eating can be one of the non-pharmacological intervention strategies for weight loss (5). Mindful eating is a psychological approach to eating that focuses on the mechanism of chewing food, raising awareness of physiological signs such as recognizing hunger, satiety, food environment, and food characteristics (6,7). Limited studies in Indonesia explore the mindful eating approach on the prevention on overweight and obesity in Indonesia.

In this technological era, the provision of interventions can be done online, one of which is through online educational videos. Online nutrition education videos are a form of educational media development that is effective and can provide various conveniences such as being able to have time flexibility in learning, being able to repeat material independently anytime and anywhere without being limited by place and time, and having a positive direct impact on knowledge (8). There is no study to explore the mindfull eating approach on the prevention on overweight and obesity in Indonesia using online intervention. However, there are several important steps in developing an educational intervention, one of which is to validate the educational media before it is used to intervene, validation of educational media can be done by experts and respondents of the target group (9). In a study conducted by Galindo et al, it was shown that media validation of educational videos for deaf people about CPR (cardiopulmonary resuscitation) conducted by experts and deaf students found that the video presented valid and could be understood by deaf students, and the video could be represents health education about CPR (cardiopulmonary resuscitation) for deaf people (10).

To date, no studies have done on the development and validation of nutritional education video about nutrition in relation to mindfulness to solve overweight and obesity. This study may provide clear judgment among expert and specific target to optimize the content and construct of the nutrition education before apply to test the effectiveness among target. Developing and validating the media for intervention is essential step to ensure the quality of further research.

OBJECTIVE

The study aim to develop and validate of online nutrition education video EMPIRE (Emotion and Mind Power in Relationship with Eating) among among millennials with overweight and obesity.

METHOD

Three steps of methodology approach were applied in this study including: 1) development (development of online nutrition education video material EMPIRE), 2)

validation (validation of content and constructs by experts and millennial respondents with overweight/obesity), and 3) evaluation (10). This research survey was conducted online and the data was collected from November to December 2020. This study has passed the ethics review number 0358-20.346/DPKE-KEP/FINAL-EA/UEU/X/2020.

1) Development of Media

Media development is conducted qualitatively and quantitatively, where qualitatively we conduct preliminary surveys of millennial respondents who are overweight/obese and develop educational materials by seeking references from various research journals on all types of nutritional interventions that use a mindful eating approach to develop curriculum. Then make the material and do the video recording EMPIRE. In the curriculum, there are five different topics (table 1), so there are five nutrition education videos EMPIRE.

Table 1

Curriculum Online Learning EMPIRE (Emotion and Mind Power in Relationship with Eating)

Topics	Nutrition and Mindful Eating Topics
Meeting 1	Principles of Self-Health Care <ul style="list-style-type: none"> a. Health care threats and opportunities b. Self-health care factors that trigger overnutrition c. Able to determine the purpose and matrix of self-health care d. Able to know the five pillars of self-health care e. Pillars of mindfulness in health care
Meeting 2	Nutrition Pillars For Long-Term Health Care (Episode 1) <ul style="list-style-type: none"> a. Able to understand how food works in the body b. Able to know the reason for eating c. Able to determine when and where eating activities are carried out d. Able to understand how eating activities are done e. Able to sharpen the hungry signal
Meeting 3	Nutrition Pillars For Long-Term Health Care (Episode 2) <ul style="list-style-type: none"> a. Eating rules to overcome overnutrition b. Strategies to increase satiety c. Strategies for liking healthy food d. Strategy of resolving dietary barriers
Meeting 4	Nutrition Pillars For Long-Term Health Care (Episode 3) <ul style="list-style-type: none"> a. Creating a stately environment b. Controlling the consumption of non-home-food c. Recognizing <i>mindful eating</i> vs <i>mindless eating</i>
Meeting 5	Pillars of Motion and Sleep For Long-Term Health Care and Review <ul style="list-style-type: none"> a. Able to understand the importance of physical activity b. Know the recommendations of physical activity c. The importance of sleep d. Strategies of preventing failure e. <i>Material review</i>

Quantitatively statistical tests were carried out to see if this media is valid to describe "over nutrition" education to millennial respondents. We recruited 10 experts and 3 millennial respondents (overweight/obesity). We contacted millennial experts and respondents via e-mail and whats app by providing a google form (informed consent), then we select experts and millennial respondents who match the inclusion criteria, after that we provide a google form (questionnaire) to assess online nutrition education video EMPIRE.

The sample calculation in this study used the formula $n=Z\alpha^2.P(1-P)/e^2$, $Z\alpha$ (the level of confidence adopted), P (number of experts), e (represents the acceptable proportional difference compared to what would be expected) (11). Where we chose the proportion of experts 80% with an acceptable sample error of 25% so that the total obtained was 10 ps and

3 millennial respondents (overnutrition) (11). $Z\alpha$ according to the standard normal distribution will assume a tabulated value of 1.96 with a 95% confidence level is considered, thus the value used for the calculation is $Z\alpha^2 = 1.96$; $P = 0.80$; $e = 0.25$ (11).

2) Expert Validation

The criteria for professional assessors are practitioners or academics who have experience in the fields of nutrition, health, medicine, clinical psychology, or public health, and are willing to follow the entire research process by filling out the informed consent provided. criteria for millennial respondents are women or men who have a body mass index (BMI) of ≥ 25 kg / m², are not undergoing a diet program, are willing to follow the entire research process by filling out the informed consent provided.

Professionals are given 16 questionnaire items consisting of content, language, writing, relevance, illustration, quality, and open questions such as suggestions and comments. Meanwhile, millennial respondents were given 18 questionnaire items consisting of content, objectives, motivation, language, writing, illustrations, relevance, quality, and given open questions such as suggestions and comments. We use two types of rating scales, for content validity using a dichotomy scale of "Yes" and "No", and for construct validity using a Likert scale of "strongly disagree", "disagree", "quite agree", "agree", and "strongly agree". Where later the value given by the assessors will determine the valid or invalid item used, if there is an invalid item value then improvements will be made to the content and construct components in the media.

3) Evaluation of product

Data analysis used SPSS version 22 and Microsoft Office Excel 2016. To test the construct validity using the pearson correlation (12). To test the content validity using the method developed by Lawshe (1975), namely the content validity ratio (CVR) and the content validity index (CVI) with a minimum value of ≥ 0.80 (13).

RESULTS

The validation was carried out by 10 experienced experts in the fields of nutrition, health, medicine, clinical psychology, and public health. From the results obtained, 8 experts (80%) have master's degrees, one expert (10%) has a bachelor's degree, and one expert (10%) has a doctorate who participated in validating the online nutrition education video "EMPIRE". The experts came from hospitals, health polytechnics, health science colleges, and 7 different universities. In addition to being carried out by experts, 3 millennial respondents also conducted validation. From the data obtained, 3 millennial respondents had an average body mass index (BMI) of 28.90 kg / m² and an average of 12 years of education.



Figure 1. Preview Video EMPIRE 1
"Principles of Self-Health Care"



Figure 2. Preview Video EMPIRE 2
“Nutrition Pillars For Long-Term Health Care (Episode 1)”



Figure 3. Preview Video EMPIRE 3
“Nutrition Pillars For Long-Term Health Care (Episode 2)”



Figure 4. Preview Video EMPIRE 4
“Nutrition Pillars For Long-Term Health Care (Episode 3)”

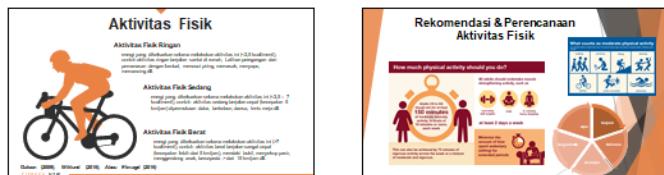


Figure 5. Preview Video EMPIRE 5
“Pillars of Motion and Sleep For Long-Term Health Care and Review”

In the results of the content validity test (Table 2) conducted by experts in the educational video EMPIRE 1 "Principles of Self-Health Care" (Figure 1), the average CVR value of all items is CVI = 0.86. In the educational video EMPIRE 2 "Nutrition Pillars for Long-Term Health Care (Episode 1)" (Figure 2), the average CVR value of all items is CVI = 0.97. In the educational video EMPIRE 3 "Nutrition Pillars for Long-Term Health Care (Episode 2)" (Figure 3), the average CVR value of all items is CVI = 0.97. In the educational video EMPIRE 4 "Nutrition Pillars for Long-Term Health Care (Episode3)" (Figure 4), the average CVR value of all items is CVI = 0.97. In the educational video EMPIRE 5 "Pillars of Motion and Sleep for Long-Term Health Care and Review" (Figure 5), the average CVR value of all items is CVI = 1.00. This indicates that the content in the online nutrition education video "EMPIRE" is overall accepted or valid because the overall average CVI value is ≥ 0.80 .

Table 2

Results of Content Validity Online Nutrition Education Video EMPIRE (by experts)

Items	Panelist		CVRcritical one-tailed $\alpha = 0.05$		
	n	CVR			
EMPIRE 1					
"Principles of Self-Health Care"					
1. The content discussed provides basic information about self-health care	9	0.80	0.80		
2. The information presented is scientifically correct	10	1.00	0.80		
3. Well structured information	9	0.80	0.80		
4. The content displayed is indeed necessary for self-health care for overnutrition	9	0.80	0.80		
5. The material discusses the role of mindfulness in overnutrition	9	0.80	0.80		
6. Title according to the material	9	0.80	0.80		
7. The content/material discusses solutions to solve problems that are needed by millennials to overcome overnutrition	10	1.00	0.80		
CVI		0.86			
EMPIRE 2					
"Nutrition Pillars for Long-Term Health Care (Episode 1)"					
1. The content discussed provides information on the reasons and processes for how we meet our food intake for long-term health care	10	1.00	0.80		
2. The information presented is scientifically correct	10	1.00	0.80		
3. Well structured information	10	1.00	0.80		
4. The content displayed is needed as a pillar to overcome overnutrition	10	1.00	0.80		
5. The educational material discusses solutions to solve problems that are needed by the millennial generation to overcome overnutrition	10	1.00	0.80		
6. Title according to the material	9	0.80	0.80		
7. The content/material discusses solutions to solve problems that are needed by millennials to overcome overnutrition	10	1.00	0.80		
CVI		0.97			
EMPIRE 3					
"Nutrition Pillars for Long-Term Health Care (Episode 2)"					
1. The content discussed provides basic information about the principles of low-calorie balance nutrition for long-term health care for millennials with overweight/obesity	10	1.00	0.80		
2. The information presented is scientifically correct	10	1.00	0.80		
3. Well structured information	9	0.80	0.80		
4. The content displayed is needed as a pillar to overcome overnutrition	10	1.00	0.80		
5. The educational material discusses solutions to solve problems that are needed by the millennial generation to overcome overnutrition	10	1.00	0.80		
6. Title according to the material	10	1.00	0.80		
7. The content/material discusses solutions to solve	10	1.00	0.80		

problems that are needed by millennials to overcome overnutrition

CVI	0.97
EMPIRE 4	
"Nutrition Pillars for Long-Term Health Care (Episode 3)"	
1. The content discussed provides information on the establishment of a nutrient-conscious environment in long-term health care	10 1.00 0.80
2. The information presented is scientifically correct	10 1.00 0.80
3. Well structured information	10 1.00 0.80
4. The content displayed is needed as a pillar to overcome overnutrition	10 1.00 0.80
5. This material discusses the important role of awareness in controlling the eating environment	10 1.00 0.80
6. Title according to the material	9 0.80 0.80
7. The content/material discusses solutions to solve problems that are needed by millennials to overcome overnutrition	10 1.00 0.80
CVI	0.97
EMPIRE 5	
"Pillars of Motion and Sleep for Long-Term Health Care and Review"	
1. The content discussed provides information on the role of physical activity and sleep quality in long-term health care for overnutrition	10 1.00 0.80
2. The information presented is scientifically correct	10 1.00 0.80
3. Well structured information	10 1.00 0.80
4. The content displayed is needed as a pillar to overcome overnutrition	10 1.00 0.80
5. This material discusses the important role of awareness in exercising and improving sleep quality	10 1.00 0.80
6. Title according to the material	10 1.00 0.80
7. The content/material discusses solutions to solve problems that are needed by millennials to overcome overnutrition	10 1.00 0.80
CVI	1.00

In the results of construct validity (Table 3) carried out by experts on the "Language and Writing" component in the educational video EMPIRE from the first to fifth meeting videos, the r value is ≥ 0.632 was obtained so that the language and writing used in video is valid. In the educational video EMPIRE 3, item "Text is clear and comprehensive" the r value is < 0.632 , but from the data obtained 100% professionals agree that the text in the video looks clear so there is no need for improvement to the text in the video.

In the "Illustration" component of the educational video EMPIRE, from the first to fifth meeting videos, the value of $r \geq 0.632$ is obtained so that the illustrations used in the video are valid. In the educational video EMPIRE 3 and 5 on the item "Illustrations and text can motivate millennial respondents to understand the themes in the content" and "illustration used has the right design for millennial respondents" obtained a value of $r < 0.632$, but from the data 100% of experts agree that the illustrations used in the video already have the right design and can motivate millennials, so there is no need for illustrations change in the educational video EMPIRE.

In the "Quality" component from the first to fifth meeting videos, the value of $r \geq 0.632$ was obtained so that the audio quality and resolution in the video are valid. In the educational video EMPIRE 1 for item "Good video resolution", the value of $r < 0.632$ is obtained, but from the data obtained 90% of experts agree that the video resolution is good, so there is no need for improvements to the resolution of the educational video EMPIRE.

In the "Relevant" component of the educational video EMPIRE, from the first to fifth meeting videos, the value of $r \geq 0.632$ is obtained so that this educational media is relevant and suitable for use by nutritionists to help in providing education to patients with overweight/obesityTable 3

Results of Construct Validity Online Nutrition Education Video EMPIRE (by experts)

Items	r value	Critical value $\alpha = 0.05$
EMPIRE 1		
"Principles of Self-Health Care"		
Language and Writing		
8. The language used can be understood by millennials	0.821	0.632
9. The language used can lead to critical thinking	0.869	0.632
10. Text is clear and comprehensive	0.792	0.632
Illustration		
11. The illustration used has the right design for millennial respondents.	0.721	0.632
12. The illustrations used are necessary to understand the entire content	0.777	0.632
13. Illustrations and text can motivate millennial respondents to understand the themes in the content	0.852	0.632
Quality		
14. Audio is clear	0.735	0.632
15. Good video resolution	0.618	0.632
Relevant		
16. This media is very suitable for use by nutritionists to assist in carrying out educational activities for patients with overnutrition	0.942	0.632
EMPIRE 2		
"Nutrition Pillars for Long-Term Health Care (Episode 1)"		
Language and Writing		
8. The language used can be understood by millennials	0.813	0.632
9. The language used can lead to critical thinking	0.813	0.632
10. Text is clear and comprehensive	0.705	0.632
Illustration		
11. The illustration used has the right design for millennial respondents.	0.822	0.632
12. The illustrations used are necessary to understand the entire content	0.863	0.632
13. Illustrations and text can motivate millennial respondents to understand the themes in the content	0.932	0.632
Quality		
14. Audio is clear	0.836	0.632
15. Good video resolution	0.656	0.632
Relevant		
16. This media is very suitable for use by nutritionists to assist in carrying out educational activities for patients with overnutrition	0.840	0.632

EMPIRE 3**"Nutrition Pillars for Long-Term Health Care (Episode 2)"****Language and Writing**

8. The language used can be understood by millennials	0.840	0.632
9. The language used can lead to critical thinking	0.755	0.632
10. Text is clear and comprehensive	0.628	0.632

Illustration

11. The illustration used has the right design for millennial respondents.	0.806	0.632
12. The illustrations used are necessary to understand the entire content	0.706	0.632
13. Illustrations and text can motivate millennial respondents to understand the themes in the content	0.528	0.632

Quality

14. Audio is clear	0.687	0.632
15. Good video resolution	0.708	0.632

Relevant

16. This media is very suitable for use by nutritionists to assist in carrying out educational activities for patients with overnutrition	0.893	0.632
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EMPIRE 4**"Nutrition Pillars for Long-Term Health Care (Episode 3)"****Language and Writing**

8. The language used can be understood by millennials	0.806	0.632
9. The language used can lead to critical thinking	0.963	0.632
10. Text is clear and comprehensive	0.822	0.632

Illustration

11. The illustration used has the right design for millennial respondents.	0.907	0.632
12. The illustrations used are necessary to understand the entire content	0.855	0.632
13. Illustrations and text can motivate millennial respondents to understand the themes in the content	0.926	0.632

Quality

14. Audio is clear	0.864	0.632
15. Good video resolution	0.881	0.632

Relevant

16. This media is very suitable for use by nutritionists to assist in carrying out educational activities for patients with overnutrition	0.962	0.632
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EMPIRE 5**"Pillars of Motion and Sleep for Long-Term Health Care and Review"****Language and Writing**

8. The language used can be understood by millennials	0,765	0.632
9. The language used can lead to critical thinking	0,893	0.632
10. Text is clear and comprehensive	0,886	0.632

Illustration

11. The illustration used has the right design for millennial respondents.	0,578	0.632
12. The illustrations used are necessary to understand the entire content	0,833	0.632
13. Illustrations and text can motivate millennial respondents to understand the themes in the content	0,803	0.632

Quality			
14. Audio is clear	0,648	0.632	
15. Good video resolution	0,831	0.632	
Relevant			
16. This media is very suitable for use by nutritionists to assist in carrying out educational activities for patients with overnutrition	0,924	0.632	

In the results of the content validity of the video EMPIRE at the first to fifth meetings, which were carried out by millennial respondents, the I-CVI (item-level content validity index) score was ≥ 0.80 and some ≤ 0.80 . For the results of construct validity there are those who get low to very high correlation values, so the results of content and construct validity in the educational video EMPIRE at the first to fifth meetings according to millennial respondents there are valid and invalid value.

DISCUSSION

Overweight and obesity are still the biggest health problems in Indonesia. We chose to develop an online nutrition education video EMPIRE with the concept of "mindfulness" and "mindful eating" to overcome overnutrition that occurs among Indonesian millennial generation. We conducted validity tests on nutrition education video EMPIRE to ensure the validated media of overweight and obesity intervention among millennial generation. In the process of developing and validating the nutrition education video "EMPIRE", we imitated the three stages of developing media by Arora, which consists of preliminary surveys, interviews, and validating media (9). In this study, we also conducted a preliminary survey of 17 respondents with overweight/obesity. The second stage is designing a draft of educational media content or material. In our study, we also created a material curriculum for educational media EMPIRE. The third stage is validating educational media by experts and target group respondents (9). In our research, we also conducted media validation of the nutrition education video "EMPIRE" by experts and millennial respondents, this proves that the development and validation of the educational video "EMPIRE" are appropriate with the existing process in developing an educational media. There is an evidence that in developing an educational media, validating media must be carried out by experts so that the media can be effectively used in education. The results of a study by Galindo et al showed that validation of media conducted by experts and deaf students on educational videos about CPR (cardiopulmonary resuscitation) is valid and could be understood by deaf students so that effective for use by nurses and other health workers (10). Another study by Nascimento showed that validated educational videos to promote maternal self-efficacy in preventing diarrhea in children, and the results showed that the video was valid so that media was effective and can be used by health services to help provide education to mothers (14). Taken together, we conducted nutrition education media validity and found that EMPIRE video was valid.

In the educational video EMPIRE, the first meeting discussed the topic of "Principles of Self-Health Care" according to experts, content and construct components in the video EMPIRE 1 is valid. Doing self-health care can improve health status by changing a person's behavior (15). Mindset and emotions are the main keys in making a change, research shows that individuals with overweight/obesity are less able to care for control their emotions, so they choose to vent their emotions to food (16). So that by doing self-health care is expected to overcome the problem of overweight/obesity. In addition to self-health care, it is also important to know what are the pillars that can help overcome overweight/obesity in the long term. In the educational video EMPIRE, the second meeting discussed the topic of "Nutrition Pillars for Long-Term Health Care (Episode 1)" according to experts, content and construct

components in the video EMPIRE 2 is valid. Mindfulness is the main pillar for a healthy lifestyle. With mindfulness or mindful eating, a person can find out why they eat, why they choose to eat these foods. With mindful eating they can indirectly know how the process of eating occurs, from choosing food, food entering the mouth, and being processed by the body, to behavior while eating (17,18,19). In addition, it is important to know the eating schedule by determining when and where to eat, so those who are overweight/obese will indirectly train themselves to be able to recognize the conditions when they are hungry and full (17,18). Studies show that individuals who eat breakfast on time such as breakfast, not past 9 a.m. and 2 hours after waking up can reduce the risk of obesity by 50%, while individuals who often eat dinner 2 hours before bedtime can be at risk of experiencing obesity five times (20). In overcoming overweight and obesity, especially in the millennial generation, now it is important to know how, when, and where they eat, and why they should eat so that those who are overweight/obese can control themselves over food.

In the educational video EMPIRE, the third meeting discussed the topic of "Nutrition Pillars for Long-Term Health Care (Episode 2)" according to experts, content and construct components in the video EMPIRE 3 is valid. In making behavioral changes to overcome overnutrition after knowing the reasons, when, and where to eat, it is important to know what are the rules and barriers to eating and what strategies can be taken. Study shows that distraction while eating, such as eating in front of a television, computer, or handphone can unconsciously increase food intake and make a person unable to remember how much food has been consumed, as a result, a person cannot recognize their fullness (19,21). It is necessary to increase satiety naturally. Practicing mindful eating tutorial or increase the consumption of vegetables and fruits, and being able to do problem-solving therapy to overcome obstacles when doing a diet may help to overcome overweight/obesity (22,23,24).

In the educational video EMPIRE, the fourth meeting discussed the topic of "Nutrition Pillars for Long-Term Health Care (Episode 3)" according to experts, content and construct components in the video EMPIRE 4 is valid. Besides having awareness of why, what, when, and where to eat, it is also important to have awareness of the eating environment, especially when eating outside the home. Studies show that family, friends, and other external factors, can increase excessive food consumption, in addition to rarely cooking food at home is a reason for choosing food outside the home, which on average has large portions, high calories, and high sodium, which can cause it to occur weight gain (25,26). So that in overcoming overweight and obesity, it is necessary to create and control a mindful eating environment, and to know the difference between mindful eating and mindless eating (27,28,29).

In the educational video EMPIRE, the fifth meeting discussed the topic of "Pillars of Motion and Sleep for Long-Term Health Care and Review" according to experts, content and construct components in the video EMPIRE 5 is valid. In carrying out a healthy lifestyle to overcome overweight and obesity, besides having mindfulness towards the pillars of nutrition, it is also important to have mindful of physical activity and the sleep cycle. Studies show that lack of physical activity and sleep less than 6 hours can lead to weight gain to the obesity phase (2,30). It is important to have mindful movement and good sleep quality to overcome overweight and obesity. By frequently doing affirmations or self-talk positive, we can find out what, when, where, why, and how physical activity and sleep cycles must be done properly without feeling overwhelmed (31,32,33).

Analysis of the content and construct components of the educational video EMPIRE at the first to fifth meetings, according to millennial respondents, is valid and invalid. This is because the number of samples for millennial respondents is small. Besides that, the respondents have an average education of 12 years and do not have an education related to health sciences. So this becomes a limitation in assessing the content and construct

components of the nutrition education video EMPIRE, and there are studies that prove that education can influence the value (score) especially on the item "Language" (34). However, EMPIRE is very effective for use in overcoming overweight and obesity. Study by Moore, showed that video podcast may increase psychomotor, learning attitudes and behavior among physical therapy students. Students have flexible time which make them easier to convey education (35).

CONCLUSION

In the development and validation of online nutrition education video EMPIRE (emotion and mind power in relationship with eating) for millennials with overweight/obesity, on content and construct components (illustration, quality, relevance, language, and writing) according to experts are valid and this media is suitable for use by nutritionists or other health workers to assist in interventions in the form of educational activities for patients or millennials with overweight/obesity. It is recommended that further research is needed to evaluate the online nutrition education video EMPIRE.

STRENGTH AND LIMITATION

Overall, the online nutrition education video EMPIRE provides solution to overweight and obesity through mindfulness/ mindful eating. EMPIRE also motivates in the form of positive affirmations and self-efficacy which can be used to build, change or maintain a person's healthy lifestyle behavior in the long term. Also, the online nutrition education video EMPIRE can be easily used anytime and anywhere. There is no validated nutrition education media about emotion and mind power in relationship with eating among overweight and obese in Indonesia. The limitation in this study is that the number of millennial respondent was small. Another limitation is this research didn't conduct an evaluation stage due to time constraints.

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