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SUMMARY

Editorial

This new issue of the Psychology Research Journal addresses different topics beginning with a work that unearths the correlation between the magnitude of risk in relation to socio-demographic variables, preventive actions carried out by the contracting company, the personnel's behaviour and the perception of risk when carrying out work at great heights during operating and maintenance activities for telecommunication towers. The study was carried out in Ecuador and Colombia. The topic is considered one of vital issue as it is a high-risk activity that must be executed quickly and accurately due to the world's constant need to stay communicated through technology.

From another point of view, the second article presents a bibliometric review of the studies published between 2008 and 2018 on the stylistic dimension of field dependence and independence (FID) and its relationship with information processing, memory and attention. In order to identify output and impact indicators and characterize the main findings of the studies found, different publications made in a ten-year interval in the ScienceDirect, Proquest and Scopus databases are analyzed.

The relationship between the Instructional Strategies used by the professor and the participant's cognitive domain in higher education is the subject for the following article. A correlational research was carried out with this objective, through which a postgraduate sample from the National Experimental University of Rafael María Baralt in Maracaibo was researched.

The purpose was to explore the relational incidence between the instructional strategies used by the teacher and the participant's cognitive domain in higher education.

On the other hand, the fourth article investigates the relationship between our unconscious body image and the consumption of aesthetic treatments. This is an interesting topic for which women who consider themselves consumers of aesthetic treatments from the city of Cali (Colombia) participated in. This study has sought to understand the possible relationship between unconscious body image and the consumption of aesthetic treatments.

Mindfulness-based therapies are currently being studied and implemented in the field of substance use disorders.

The following study consisted of a systematic review of literature on the effect of mindfulness-based therapy about substance use disorders.

The study's main goal was to determine the effect of mindfulness-based therapy on substance use disorders according to the literature reviewed.

Lastly, the research on otherness, conflict resolution, and social mediation, arose in the face of aggravated discussions that most often culminate in physical and verbal violence among politically active students in Venezuelan universities. In this paper, the general objective was to analyze the interpersonal relationships of students who are politically active in the FAD-LUZ.

Dr. Juan Luís Martín Ayala
Editor in chief

PERCEPTION OF RISK IN WORK AT HEIGHTS IN TELECOMMUNICATIONS COMPANIES IN ECUADOR AND COLOMBIA (AUGUST-DECEMBER 2018)

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Abstract. The article is aimed at presenting in a scientific manner the existing correlation between the magnitude of the risk in relation to the sociodemographic variables, the prevention actions carried out by the contractor, the behavior of the personnel and the perception of risk when executing work at heights in operations and maintenance of telecommunications towers in Ecuador and Colombia. This issue is of vital importance because it is a high-risk activity, which must be executed quickly and accurately due to the constant need for the world to be communicated through technology. To obtain the results of this research a measurement instrument was used consisting of 4 blocks of questions, with a total of 35 questions. It was applied to a sample that was established statistically in 251 workers of companies providing service operations and maintenance that perform work at heights in telecommunications towers in Ecuador and Colombia. The SPSS version 25 program was used for statistical analysis. The responses collected were the analysis of Kruskall Wallis resulting in four variables influencing the perception of the magnitude of the risk: the severity of the consequences, the catastrophic potential, personal vulnerability and verification of the status of protective equipment that each collaborator must carry.

Keywords: Danger, Perception of risk, Telecommunications, Works in heights

PERCEPCIÓN DEL RIESGO EN TRABAJOS EN ALTURAS EN EMPRESAS DE TELECOMUNICACIONES DE ECUADOR Y COLOMBIA (AGOSTO-DICIEMBRE 2018)

Resumen. El artículo está encaminado a presentar de manera científica la correlación existente entre la magnitud del riesgo con relación: a las variables sociodemográficas, a las acciones de prevención que realiza la empresa contratista, al comportamiento del personal y a la percepción del riesgo al ejecutar trabajos en alturas en actividades de operación y mantenimiento de torres de telecomunicaciones. El

estudio fue realizado en Ecuador y Colombia. Este tema es de vital importancia por ser una actividad de alto riesgo que debe ser ejecutada con rapidez y precisión debido a la necesidad constante de que el mundo se encuentre comunicado a través de la tecnología. Para obtener los resultados de esta investigación se utilizó un instrumento de medición que consta de 4 bloques de preguntas, con un total de 35 preguntas. El mismo fue aplicado a una muestra que se estableció estadísticamente en 251 trabajadores de empresas proveedoras de servicios de operación y mantenimiento que realizan trabajos en alturas en torres de telecomunicaciones en Ecuador y Colombia. Para el análisis estadístico se utilizó el programa SPSS versión 25. A las respuestas recopiladas se les aplicó el análisis de Kruskall Wallis obteniendo como resultado que cuatro variables influyen en la percepción de la magnitud del riesgo: la gravedad de las consecuencias, el potencial catastrófico, la vulnerabilidad personal y la verificación del estado de los equipos de protección que cada colaborador debe llevar.

Palabras clave: Peligro, Percepción del riesgo, Telecomunicaciones, Trabajos en alturas

Introduction

The telecommunications industry has developed exponentially in recent years. That is why, nowadays, it is essential to be constantly connected through technology. Due to the speed with which it is necessary to act when a problem arises, it is necessary for the service to be restored in an agile and timely manner. Thus, workers who perform operation and maintenance tasks on telecommunication towers must be willing and able to perform these tasks because working in heights involves inherent risks.

The term "risk" is used on a daily basis by humans who make a preventive effort so that no situation involving material or human losses occurs. Risk can be assessed by an induced stimulus that is caused by the number of times it can lead to human or material losses, in this case we are talking about an objective risk; on the other hand, there is also the subjective risk, which from the psychosocial point of view has a special interest since this type of "intuitive assessment takes into account both the level of knowledge or ignorance of the danger and the degree of control that the individual exercises over it" (Bayés, Portell and Riba 1997, quoted by Martínez, Morillejo, Pozo, 2002).

In this context we can say that in order to consider certain activity as risky, people must be analyzed as cognitive beings seeking logical information. In this field, psychology investigates the motivation of human beings to carry out dangerous actions, either because they feel an uncontrollable attraction or an exaggerated optimism towards it.

This is why it is important to study the perception of risk that people who work in heights in operation and maintenance tasks in telecommunication towers have, since it will lead to an understanding, on the one hand, of the causes of their behavior and, on the other, to the establishment of preventive measures against work accidents and occupational diseases.

Theoretical Framework

In the literature review that follows, five specific topics are addressed, such as work in heights, behavior, attitudes, danger, and perception of risk.

Work in heights

Working in heights can be one of the most dangerous jobs out there, because it is easy to fall. In Latin the concept of "fall" is known as "casus", which is the participle of the verb "cadere" (Salvador, 2015).

This in turn is related to the Indo-European root Kad (to fall), which represents the movement of an object from a higher to a lower level caused by the action of its own weight and by the attraction that the earth exerts on it.

"The free fall movement of a body is a uniformly accelerated rectilinear movement. 'Fall' can be defined, then, as an act of falling or collapsing" (Salvador, 2015, p.1).

In order to determine the injuries that a fall can produce, it is important to analyze the general factors such as the height of the fall, the impact surface, the position of the body in the fall and other individual factors such as age, body weight, pre-existing diseases and, above all, the force of gravity whose impulses increase the complexity of the injuries (Salvador, 2015).

Behavior

Behavior is a physical process, "which can be registered and verified, and which consists in being the activity by which a living being develops his life in relation to his environment, responding to it and modifying it" (Galarsi, Medina, Ledezma and Zanin, 2011, p.99). (Galarsi, Medina, Ledezma and Zanin, 2011, p.99).

Behavior also includes "comprehensibility of the action and legality of the psycho-organic processes by which it is performed" (Chauchard, 1961, quoted by Galarsi et al., 2011).

The human being, through the prefrontal cortex, plans a cognitively complex behavior, makes decisions and adapts his social behavior in all situations, however, the most important thing he does is the connection between his thoughts and his actions, being able to prevent instinctive behaviors (Galarsi et al., 2011).

Human behavior is under the individual's control and is born from a processing of available information that allows making behavioral decisions. However, behavior is not always the result of a rational thought or a decision-making process, since, in a risk situation, behavior can be a reflection of an instinctive or impulsive action (Puyal, n.d.).

On the other hand, behavioral psychology is heading toward a neutral position in the traditional conflict of personalism versus situationism. "The most recent perspective of behavioral psychology clearly distinguishes the historical analysis of the individual, the evolutionary process and the synthesis of the different experiences of the current determinants of human behavior" (Adarraga, Hernández, Márquez and Santacreu, 2002, p. 181).

Attitudes

"They are schemas or mental models from which people perceive the surrounding world. These models are shaped by cognitive (knowledge) and affective (feelings) elements that the individual incorporates throughout his or her life" (Espulga, 1196, cited by Armengou and López, 2006).

A study by Chisvert, Melià and Pardo (2001) analyzes the causal factors of occupational accidents through explanations of why they occur and how accident attributions influence workers' safety attitudes and behaviors.

There is a complex relationship between behavior and attitude. The immediate determinant of the behavior is intention. This behavioral intention is fixed by the attitude towards the behavior "(positive or negative evaluation of the person to execute this behavior) and by the subjective norm (the individual's perception that others close to him, such as friends, colleagues, etc., think that he/she should or not perform a certain behavior)" (Chisvert, Meliá and Pardo, 2001, p.6).

Risk

The term risk is used on a daily basis by the human being who makes a preventive effort so that no situation that leads to material or human losses occurs. Risk can be assessed by an induced stimulus that is caused by the number of times it can lead to human or material losses, in this case we are talking about an objective risk; on the other hand, there is also the subjective risk, which from the psychosocial point of view has a special interest since this type of "intuitive assessment takes into account both the level of knowledge or ignorance of the danger and the degree of control that the individual exercises over it" (Bayés, Portell and Riba 1997, quoted by Martínez, Morillejo, Pozo, 2002).

But this it is only an ideological division between those for whom "risk is a quantifiable attribute of technologies and hazards of natural origin", and those for whom "risk is a subjective experience which can be thought, felt and judged" (Puy, 1994, p.35).

There are different types of risks that can affect workers, Díaz (2015) mentions the following:

- Those caused by workplace conditions, that is, they depend on how safe and equipped the facilities are,
- Those coming from physical agents, classified in: mechanical risks (noise, vibration), risks related to lighting, temperature, and energy type risks (radiations, ultra-high frequencies),
- Those caused by chemical agents, which can be exposure to toxic, noxious or corrosive substances,
- Those originated by biological agents, including viruses, bacteria, parasites, among others,
- Risks of adaptation to the workplace, which are given by the organization itself, for example, machinery used, display screen, chair, poor distribution of work shifts, among others,
- Those of psychological type refer to the influence that work has on the individual and depend heavily on his or her personal characteristics. Work overload can cause stress and psychological problems.
- The risks derived from the human factor, related to the worker's attitude, unsafe practices or inappropriate behavior at work.

Perception of Risk

The first studies on perception of risk appeared in the 1960s in the discussion about the uses and consequences of atomic energy.

Subsequently, several researches have been carried out that play an important role in decision making in fields such as political science, industrial security, personal security, business, and social development, among others (Macía, Varela, Vera, 2010).

The first steps in the conceptualization of risk were mainly of a technical nature and were related to statistics with a strictly predictive approach (Fischhoff et al., 1978).

Nowadays, with the progress made in philosophy, technology and globalization, there is an evolution in the way of living and deciphering everything that happens to us, for example the notion of risk.

It is claimed that there are tangible risks and social and cultural constructed risks, and that no risk is a risk in itself, so that any situation, condition or circumstance could become a risk for individuals or for society in general (Macía et al., 2010).

In this context we can say that in order to consider a certain activity as risky, people must be analyzed as cognitive beings seeking rational information. In this field, psychology investigates the motivation of human beings to carry out dangerous actions, either because they feel an uncontrollable attraction or an exaggerated optimism towards it.

"This obstinate over optimism in relation to negative events is called the illusion of invulnerability, and the positive perception bias that the individual makes towards himself and his social environment is called illusory optimism" (Blanco, Paez, Rubio, Sanchez, 1998, cited by Martínez et al., 2002).

The fact that psychosocial and cognitive variables are involved indicates that perception of risk is under the influence of cultural patterns, previous knowledge and factors of the environment in which people live (González, 2015).

There are two cognitive-based models that are worth pointing out as they can be extrapolated to the prevention of occupational accidents, the "Health Belief Model (HBM) by Maiman and Becker (1974) and the Theory of Reasoned Action (TRA) by Fishbein and Azjen (1975)" (Martínez et al., 2002, p. 19).

The HBM explains preventive behavior based on a perceived threat and perceived severity, which can come from internal and external sources, such as prior information, colleague accidents, among others. But what stands out about this model is that "demographic, personality, structural and social factors influence the probability of executing healthy action through people's subjective beliefs and perceptions" (Martínez et al., 2002, p. 19).

On the other hand, the TRA model considers people as rational beings and whose preventive behavior is based on the intention determined by social pressures or beliefs of what other people may think about preventive behavior; this model does not consider demographic factors or personality traits (Martínez et al., 2012).

Both are cognitive theories, and it is essential to include social, cultural and sociological factors such as the role that a person plays, since in order to understand or act before a risk, it can vary, for example, if he is an entrepreneur or worker.

In this context, it is suggested to consider a psychosocial model of risk behavior that eliminates the deficiencies of strictly cognitive models, and which includes individual psychology variables, as well as micro and macrosocial factors (Martínez et al., 2002, p. 20).

Puy (1994) highlights four approaches related to the study of perception of risk; the psychological approach, the psychosocial approach, the cultural approach and the psychometric paradigm.

The psychological approach has a reductionist nature, since it is based on focusing the problem within a psychological, individual and cognitive scope, that is to say, when making decisions under uncertainty conditions, people's perceptions are considered as cognitive errors or biases.

This perspective is valid, however, it is questionable "the pretension to use this type of theories to blame people for the irrationality or bias of their responses to certain risks, ignoring other factors of a more psychosocial, sociological and cultural nature" (Puy, 1994, p.81).

The psychosocial approach is based on the perception of risk as an attitude of the person and their responses are related to beliefs, values and socio-demographic variables.

The sociological and cultural approach seeks more humane responses to risk, which are directly influenced by the beliefs, attitudes and values of a group of people who seek to avoid aspects that could endanger their relationship with society (Puy, 1994).

The psychometric approach refers to how people perceive risks from different sources by considering qualitative attributes "that affect the perceived risk rather than the mere unbiased probability of causing harm or death" (Puy, 1994, p.91).

In summary, perception of risk is a factor that determines behavior "in potentially dangerous situations in the multiple contexts that the individual faces, especially with regard to the work environment" (Martínez et al., 2002, p. 18).

Concerning specific studies, in 2002, an article entitled "Perception of risk: A psychosocial approach to the work environment", in which it is stated that in addition to the perception of risk that each individual has, it is necessary to consider psychosocial factors, attitudes of the individual, norms to follow, peer pressure, among others, that can modify perceptions about risk (Martínez et al., 2002).

Likewise, in 2010 a research was carried out on perception of risk and occupational health focused on risk paradigms (Macía et al., 2010).

In 2012, the article called "Occupational hazard determination workforce with work at height by measuring serum markers" is published, determining with a medical approach the risks involved in working in heights according to the worker's state of health (Lozano and Mazenett, 2012).

On the other hand, in 2015, a study was carried out on occupational accidents at heights in the agricultural sector, which made it possible to understand their consequences, analyze injuries and highlight the dangers that exist in this sector [15]. In the same year, a summary of the paper entitled "Risk assessment of work accidents during the installation and maintenance of telecommunication networks" was published although it was not possible to obtain detailed information (Dragoi, Pavalouis, Rosu, 2015).

Most recently, in 2017 a research was carried out on the bus drivers of a public transport company in Colombia, where it was possible to relate the traffic accidents that occurred in the company with the unsafe behavior of the workers determined in the study (Torres, 2017).

Thanks to the state-of-the-art, it has been found evidence of studies carried out on the behavior of workers analyzing their perception of risk, and in the same way there are also studies related to work in heights that have been carried out in various industries.

Method

The study is part of a transverse or transectional non-experimental research and its approach can be exploratory, descriptive, correlational or causal (Hernández et al., 2014).

The study was initiated applying the exploratory concept, which allowed to know the current situation of the companies that provide operation and maintenance services for telecommunications companies in Ecuador and Colombia, in relation to the monitoring and follow-up of work procedures.

Subsequently, a descriptive approach was used to identify the workers' behavior and their perception relative to the risk of work in heights in telecommunications towers, applying a survey type research instrument that was previously validated by experts and that uses the Likert scale from one to five, with the exception of the last question that uses a scale from zero to 100 in intervals of five.

The questionnaire consisted of four parts, the first corresponding to sociodemographic variants, described in table 1.

Table 1
Socio-demographic variables

Variables	Description
S1	Age
S2	Country
S3	Position
S4	Gender
S5	Marital status
S6	Number of children

Note: Source: Author's own creation, 2019

The second part corresponds to variants related to the prevention activities carried out by the company in which the employee works, and they are represented in table 2.

Table 2

Variables associated with prevention activities of the supplier company

Variables	Description
A1	Does the company you work for provide you all the protective equipment you need to work at heights?
A2	Do you receive training on job at heights?
A3	Does the company verify the condition of the personal protective equipment assigned to you?
A4	Before working at heights, do you go through a prior check of drug or alcohol use by your employer?
A5	Do you receive a permit for work at heights form your company prior to performing the task?

Note: Source: Author's own creation, 2019, based on Rodriguez et al (2013).

The third block represented in table 3 corresponds to personal behavior variables, i.e. actions performed by workers before and during work at heights.

Table 3

Variables associated with personal behavior

Variables	Description
B1	Are you familiar with the procedures you must follow to perform work at heights?
B2	Do you go up to work at heights carrying your cell phone or tablet with you?
B3	Do you review the equipment that you need to carry when working at heights?
B4	Do you check that personal protective equipment is in good condition before working at heights?
B5	Do you think that in order for an accident to occur, the health state of the person influences it?
B6	Do you consider it fun to smoke or eat when you work at heights?

Note: Source: Author's own creation, 2019, based on Rodriguez et al (2013).

The fourth block represented in table 4 corresponds to perceived risk variables, as well as the risk factor explored for each of them.

Table 4

Variables associated with perceived risk

Variables	Description	Explored Factor
C1	Do you understand the risk associated with working at heights?	Knowledge of the worker him/herself
C2	Do you think that those responsible for prevention in your company are aware of the risk associated with working at heights?	Knowledge of the person in charge of Health and Safety
C3	How much do you fear the damage that may occur while working at heights?	Fear
C4	What chance do you have of experiencing harm as a result of doing your job?	Personal vulnerability
C5	What are your chances of preventing this activity from triggering a risky situation?	Preventive action (fatality control)
C6	In a risky situation that may occur when working at heights, what possibility do you	Protective action (damage control)

have to intervene to control it?

C7	Is it possible that risk situations may arise in which more than one person is affected when working at heights?	Catastrophic potential
C8	In the event of a risky situation when working at heights, how serious is the damage it can be caused?	Severity of the consequences
C9	When do you think work-related health problems may appear at high altitudes?	Delaying the consequences

Note: Source: Author's own creation, 2019, based on Rodriguez et al (2013), Fischhoff et al. (1978).

Using the variables in tables 1, 2, 3 and 4, a correlative statistical analysis was performed in the SPSS 25 program with the variable (D1) "magnitude of risk" obtained in the last question of the survey.

The population considered for this study was 216 workers in Ecuador and 500 workers in Colombia, i.e. the total population was 716 workers.

Simple random sampling was used to establish the sample size, determining that for a population of 716 workers, it is required to apply the research to 251. However, it was applied to 273 workers to prevent lost data. This survey was conducted between August and December 2018. In the case of Ecuador, 62 workers answered the survey physically and in Colombia, 211 workers did it digitally.

Results

For this study, the answers obtained show that 88% of those surveyed have more than three years working at heights; 88% of those surveyed receive four or more job training at heights per year and 69% have finished third level studies, so the sample reflects that the workers are staff with extensive experience, training and preparation to perform work at operating heights and maintenance in telecommunication towers.

In order to demonstrate whether there is any type of correlation between the socio-demographic variables in table 1 and the variable D1 "magnitude of risk", this variable (D1) was subjected to a normality test by Anderson Darling and Kolmogorov-Smirnov, in which it was verified that the variable does not have a normal distribution, therefore, to make the correlations the statistical analysis called Kruskall Wallis was used for non-normal data, the same that represents the non-parametric alternative to the ANOVA test and that is reflected in table 5.

Table 5

Comparison between magnitude of risk and socio-demographic variants

Varaibles	P
S1	.867
S2	.070
S3	.713
S4	.115

S5	.709
S6	.129

Note: Pvalue < .05, the difference between the medians is not statistically significant.
Source: Author's own creation, 2019

Table 5 shows that variable S4 has a value of P Value less than .05, therefore its median is statistically significant in relation to variable D1 "magnitude of risk". For all other variables there is no significance.

Table 6 shows the results of the central tendency measure called arithmetic mean, the dispersion measures: variance and standard deviation and finally the correlation between variable D1 "magnitude of risk" and the variables associated with the prevention activities carried out by the company in which the collaborator works, which were indicated in table 2.

Table 6

Comparison between the risk magnitude and the prevention actions carried out by the supplier company

Variables	P	Mean	σ^2	σ
A1	.509	4.392	.775	.979
A2	.19	3.839	1.517	1.226
A3	.18	2.586	2.732	1.600
A4	.821	4.143	1.231	1.259
A5	.297	4.505	.345	.928

Reference value Pvalue < .05, the difference between the medians is not statistically significant. σ^2= Variance
σ= Standard deviation
Source: Author's own creation, 2019

The P value obtained in table 6 shows that the median of the variables of actions that the company carries out to prevent risks in the execution of work at heights of table 2, are not significant in relation to variable D1 "magnitude of risk".

The arithmetic mean analysis shows that only A3 variable, which refers to whether the company carries out the verification of personal protective equipment, is below three, indicating that workers perceive that the person in charge of the company does not always carry out this action. Similarly, the variance in presenting a high value for variable A3 shows a high dispersion of the values obtained.

Continuing with the results, table 7 presents the comparison between the perception of risk and the personal behavior variables indicated in table 3, which refer to the actions carried out by the employee prior to his/her work at heights in telecommunications towers.

Table 7

Comparison between magnitude of risk and personal behavior

Variables	P	Mean	σ^2	σ
B1	.868	4.784	.236	.486
B2	.178	4.341	1.107	1,053
B3	.129	4.780	.326	.571
B4	.013	4.813	.270	.519
B5	.818	4.527	.706	.840
B6	.131	1.300	.659	.812

Reference value Pvalue < .05, the difference between the medians is not statistically significant. σ^2= Variance; σ= Standard deviation

Source: Author's own creation, 2019

The result of table 7 shows that the median of variable (B4) "Do you check that personal protective equipment is in good conditions before working at heights?" is significant in relation to variable D1 "magnitude of risk". In other words, workers consider it important to verify the status of EPPS before performing work at heights on telecommunication towers.

For its part, the analysis of the arithmetic mean shows that B6 variable, which refers to whether it is fun to smoke or eat when working at heights, is at value below two, indicating that workers do not find it fun to do so. The results of the variance show a slight dispersion in the data obtained in variable B2, which refers to whether the worker goes up to carry out work at heights with his cell phone or tablet.

The analysis carried out in table 8 indicates the comparison between variable D1 "magnitude of risk" with the variables associated with perceived risk, indicated in table 4.

Table 8

Comparison between the magnitude of risk and the perceived risk

Variables	P	Medium	σ^2	σ
C1	.295	4.788	.64	.513
C2	.420	4.275	.891	.944
C3	.005	4.396	.961	.980
C4	.005	3.817	1.613	1.27
C5	.191	4.267	.932	.965
C6	.413	4.077	.931	.965
C7	.006	4.051	1.151	1.073
C8	.000	4.586	.640	.800
C9	.359	2.813	1.561	1.250

The result from table 8 shows that the medians of two variables in table 4 are significant in relation to the magnitude of the risk (D1). The variants are: (C7) that consults whether it is possible that risk situations may occur in which more than one person is affected when performing work at heights, i.e. that the magnitude of the risk is related to the factor known as catastrophic potential.

Finally, the variable (C8) that asked: In the event of a risky situation happening when carrying out work at heights, what is the severity of the damage that can be caused? This result shows the relationship between the magnitude of the risk and the factor known as the severity of the consequences.

The analysis of the arithmetic mean presents a value below three for the variable (C9) that refers to: "when do you consider that health problems related to work may appear at high altitudes?" that is to say that workers think that a disease caused by work does not appear immediately but in the long term.

The variance presents scattered values in variables C4 "possibility of experiencing harm"; C7 "possibility of risk situations in which more than one person is affected" and C9 "when it considers that illnesses appear because of work".

Discussion and Conclusions

The study provides important information on the risk perception that workers performing telecommunication tower operation and maintenance tasks have when doing work at heights.

The study was carried out in Ecuador and Colombia, as they are Latin American countries with similar economic, socio-cultural and labor legislation variables, in addition to geographical proximity, which facilitated the information collection and comparison of results under an analogous context, initially concluding that there is no difference between the perception of risk when performing work at heights in collaborators of both countries.

Regarding the level of studies, 69% of the workers surveyed have completed their studies at the third or fourth level, 28% have a high school education and only 3% have a basic level of education, so we can say that the sample reflects that the workers surveyed are staff with important technical knowledge for the execution of the task.

In terms of training, 94% of those surveyed state that they receive one or more job training at heights per year and only 6% state that during the year they do not receive training, which leads to the conclusion that companies providing operation and maintenance services are concerned that their personnel are trained and trained in knowledge and skills when performing work at heights.

In relation to the experience in performing operation and maintenance tasks in telecommunication towers, the results of the survey show that 88% of respondents have more than three years performing this type of work, which means that, in the sample analyzed, collaborators have extensive experience performing work at heights.

In analogy with the position they occupy, among the collaborators who completed the survey, it is found that 73% are workers of height that is to say those who properly execute the work in the tower, while 27% correspond to bosses, who supervise the tasks of these workers. This ensures that the results correspond to the perception of the workers who perform these tasks on a permanent basis.

In case of accidents occurring while working at heights, only the 6% of those surveyed say that they have ever suffered an accident at work, if it was calculated that 73% of them are bullfighters, of these only 3% have ever suffered an accident, therefore, it can be assured that the staff is highly trained, has experience and is especially cautious when performing work at heights.

Of the workers who have suffered work accidents, all assure that they have received at least one training in heights per year, as well as all have between 1 or more years of experience which proves that accidents are sudden events that can occur at any time and to anyone.

96% of workers claim that the risk of performing work at height on telecommunication towers is high; 85% fear damage and 67% think they may experience damage as a result of the work.

75% of workers say they can control a risk situation that can occur when working at heights; 74% think the risks can affect more people and 90% say the severity of the damage is very high.

The results of the variables that have a correlation with the magnitude of risk in operation and maintenance work at heights in telecommunication towers are: variable (B4) the verification of the state of the equipment that each collaborator must carry out prior to carrying out work at heights; (C7) the probability that more people will be affected by the risk, called catastrophic potential; (C8) called the severity of the consequences; and (C4) called personal vulnerability.

With these results, it is considered that the companies should carry out a communication plan for all the employees of the companies that provide operation and maintenance services, which includes the three variables that will allow the reduction of work accidents and professional illnesses when working at heights in telecommunications towers.

Likewise, companies providing operation and maintenance services for telecommunications towers should reinforce the importance of the use of personal protective equipment in their work equipment, even if the task to be performed is of short duration, as well as reinforce the fact that experience does not guarantee that accidents at work do not occur.

From the results section, the theoretical part mentions Maiman and Becker's Health Belief Model (HBM), which explains preventive behavior based on perceived severity and perceived threat, this was proven in this study by finding a correlation between the magnitude of the risk and the variable (C8) that refers to the severity of the damage it can cause when working at heights in telecommunication towers and the correlation with the variable (C3) that refers to how much the worker fears the damage that may occur while working at heights.

For its part, the Reasoned Action Theory (TAR) of Fishbein and Azjen considers preventive behavior based on social pressures or on what other people think about preventive behavior. This is verified in the analysis of the arithmetic mean of table 7, which shows that the variable (B6) "seems fun to smoke or eat when doing work at heights" is at a value below two, which indicates that workers do not find it fun to do so.

The theory also shows that there is research done on risk perception at work at heights in several industries, but there is no research done for work at heights in telecommunications companies, so this research is an important contribution including this industry that is constantly growing and changing.

Regarding limitations, despite the fact that the applied research instrument was anonymous, there is a possibility that the answers have a bias originated by the fear that workers may have of being dismissed due to non-compliance with work procedures or

by reporting the company's errors, which would demonstrate a lack of safety and health culture in the company.

The results of the study have not been able to be compared with other similar ones, since there is no free access to information so far.

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COGNITIVE STYLE, INFORMATION PROCESSING, MEMORY AND ATTENTION. BIBLIOMETRIC REVIEW 2008-2018

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Abstract. This article presents a bibliometric review of the studies published between 2008 and 2018, on the stylistic dimension of dependence and field independence (FDI) and its relation to the processing of information, memory and attention. In order to identify indicators of production and impact, and characterize the main findings of the studies found. 21 publications made between 2008 and 2018 were analyzed. Information was searched in the ScienceDirect, Proquest and Scopus databases. The results allow identifying and characterizing the number of annual publications, publications by country, magazine and in-text citations by article, type of study carried out, educational level of the participants in empirical studies, and representative findings of the relationship to the FDI cognitive style and information processing, memory, and / or attention. Most studies show that the stylistic dimension "field independence" has a positive correlation with more effective attention processes, working memory and information processing. More research is required on the characterization of cognitive processes associated with FDI, especially the stylistic polarity of field dependence. The study of FDI and cognitive processes is a line of action that contributes to improving teaching and learning processes in different educational environments.

Keywords: cognitive style, information processing, memory and attention.

ESTILO COGNITIVO DEPENDENCIA E INDEPENDENCIA DE CAMPO, PROCESAMIENTO DE INFORMACIÓN, MEMORIA Y ATENCIÓN. UNA REVISIÓN BIBLIOMÉTRICA 2008 A 2018

Resumen. Este artículo presenta una revisión bibliométrica de los estudios publicados entre los años 2008 y 2018, sobre la dimensión estilística de dependencia e independencia de campo (DIC) y su relación con el procesamiento de información, memoria y atención. Con el fin de identificar indicadores de producción e impacto, y caracterizar los principales hallazgos de los estudios encontrados. Se analizaron 21 publicaciones realizadas entre los años 2008 y 2018. Se efectuó la búsqueda de información en las bases de datos ScienceDirect, Proquest y Scopus. Los resultados permiten identificar y caracterizar cantidad de publicaciones anuales, publicaciones por país, revista y citas por artículo, tipo de estudio realizado, nivel educativo de los participantes en estudios empíricos, y hallazgos representativos de la relación al estilo cognitivo DIC y el procesamiento de información, memoria, y/o atención. La mayoría de los estudios evidencian que la dimensión estilística "independencia de campo" tiene una correlación positiva con procesos atencionales, memoria de trabajo y procesamiento de información más efectivos. Se requiere mayor investigación sobre la caracterización de los procesos cognitivos asociados a la DIC en especial a la polaridad estilística de la dependencia de campo. El estudio de la DIC y los procesos cognitivos es una línea de acción que contribuye a mejorar los procesos de enseñanza y aprendizaje en diferentes entornos educativos.

Palabras clave: estilo cognitivo, procesamiento de información, memoria y atención.

Introduction

Cognitive Style (CS) addresses the way information is perceived and processed. Considering various authors' point of view, Cognitive Style has been conceived as the "stable aptitudes, preferences or habitual strategies that determine the ways in which individuals perceive, remember, think and solve problems" (Messick, 1976, p.5); Similarly, Jonassen and Grabowski (1993) consider that CS deals with habitual forms or preferences for information processing. In relation to the concept of style, Hederich (2010) states that the style is characterized by being differential and relatively stable. Likewise, it integrates different personality domains and is value-neutral. In short, Cognitive Style deals with the categorization and grouping of individual characteristics, which allude to the habitual and spontaneous way of processing information, building upon perception, the focalization of attention and the use of memory. All this is observed in the different ways of solving problems and facing life by undertaking different types of tasks regardless of the content.

One of the most studied dimensions of Cognitive Style is the field dependence-independence dimension (FDI). Field-dependent subjects (FDs) are socially close and prefer teamwork and collaboration, their level of autonomy is low, meaning they are dependent on authority and their motivation towards learning is extrinsic. In contrast, field-independent subjects (FIs) are socially distant, prefer individual work, like to compete and gain individual recognition, have a high level of autonomy, are independent of authority, and are intrinsically motivated to learn. In the field of education and learning achievement, FI students have shown greater success than FD students (Hederich and Camargo, 2000b; Tinajero and Páramo, 1998; López, Hederich and Camargo, 2011, cited by Hernández, 2014, p.2). In this regard, questions have arisen about the neutral character of the FDI stylistic dimension, especially with highly FD students (Tinajero and Páramo, 1998). Additionally, the unipolar measurement character of the Embedded Figures Test (EFT) instrument is questioned, as it accounts for an individual's restructuring aptitude

levels, indicating high scores for FIs, while low scores are by default achieved by FDs. This suggests the need for an indicator that measures field dependence. In order to broaden the picture of stylistic differences between FI and FD, several studies have been conducted (Goodenough, 1976; Tinajero and Paramo, 1998; Hederich and Camargo, 2000a; Hederich, 2004) in relation to information processing, attention and memory.

The perspectives from which attention and memory are dealt with are briefly presented hereunder. In relation to attention, it is addressed from the approaches by Lupiáñez et al. (2016), who propose an integrating, attention model from cognitive neuroscience, which is based on the postulates by Posner and Corbetta. The model proposed by Posner defines three interrelated systems or networks. According to Lupiáñez et al., (2016) these networks are: (a) The *Posterior Attention Network*, "Its function is to select information at the perceptive level in the early stages of processing. The involved brain structures would be the parietal cortex and the union" (Lupiáñez et al., 2016, p.120). (b) The *Anterior Attention Network* deals with executive control, that is, the control of actions, in such a way that it adjusts to certain short-term objectives (Lupiáñez et al., 2016); Based on he neuronal circuit, it is situated in "the dopaminergic system, and brain structures such as the prefrontal cortex, the anterior cingulate cortex and the basal ganglia" (Lupiáñez et al., 2016, p.120). And (c) the *Vigilance Network* is in charge of generating and maintaining the alertness required to carry out a task; "The frontal and parietal cortex" are involved in this system (Lupiáñez et al., 2016). In addition, Lupiáñez et al. (2016) include two levels of control proposed by Corbetta. These controls consist in the fact that "attention can be directed from top to bottom by our goals, or from bottom to top by our own stimuli" (Lupiáñez et al., 2016, p.121). On the other hand, we assume memory from the working memory model proposed by Baddeley and Hitch (1974); It is a multicomponent system composed of a central executive system in charge of managing the working memory and coordinating two subsystems called the phonological loop and the visuospatial agenda. According to Baddeley (1998) and Baddeley, Eysenck and Anderson (2009), the articulatory or phonological loop is in charge of managing information based on language, while the visuospatial sketchpad performs an analogous function with visual and spatial information.

In the study "FDI and Information Processing: The Origin Of A Disadvantage," Tinajero and Páramo (1998) analyze studies and reflections on the FDI dimension and information processing. Results of interest are highlighted hereunder: FI subjects present greater selective attention (Rozestraten, 1981). In order to understand the concepts, FDs tend to retain information, while FIs break down and analyze information (Nebelkopf and Dreyer, 1973). As the information retention capacity is the same in both polarities, the difference lies in the control processes used by FIs (Bennink and Spoelstra, 1979). Remembering elements from a given structure is the same for both styles, but when recalling material that lacks structure, FIs perform better since they organize the elements according to subjective parameters (Coward and Lange, 1979). FIs benefit more than FDs from generating more mental images during the information-storing process (Annis, 1979; Pierce, 1980). FIs resort to their own or external information scheme during information retrieval (Spiro and Tirre, 1980). In this review, the authors express that problem solving requires a restructuring aptitude; Therefore, FIs obtain more benefits. In situations where social keys are available, FDs are more willing than FIs to use them, emphasizing that "insofar as restructuring aptitude is required in such tasks, differences in performance will arise among subjects with different styles" (Tinajero and Paramo, 1998, p. 425).

Subsequently, the study developed by Guisande, Páramo and Tinajero (2007) on Attentional Functioning and FDI Cognitive Style found that FI children deliver better performance than FD children in tests measuring verbal working memory, the ability to direct and keep attention, and sustained attention. In the study by Tinajero, Páramo and Guisande (2007), it was proposed that research be needed on the cognitive processes underlying field dependence and independence CS, instead of addressing studies on new instruments to measure FDI.

In relation to the understanding of cognitive processes, and specifically in information processing, memory and attention, studies on FDI require further broadening the spectrum of characterization of both stylistic polarities (FD and FI) regarding deeper cognitive characteristics. This article aims to present the results of a bibliometric review which covers other studies that have addressed the stylistic dimension of FDI in relation to information processing, attention and memory.

Method

The search for the research articles that constitute the sample to be analyzed was carried out in databases with high academic impact and a significant number of publications in indexed journals. These are: ScienceDirect, Proquest and Scopus. The search criteria used was: ("cognitive style") AND ("field dependence" OR "field independence") AND ("memory" OR "attention" OR "information processing").

The search was performed in the fields: title, abstract and keywords. Two filters were applied: a) type of selected document: article, and b) years of publication: between 2008 and 2018. The exclusion criteria used were: a) repeated articles, b) articles dealing with cognitive deficits, c) articles whose content did not address the relationship between ICD and information processing, memory and/or attention, and d) articles to which the complete document was not accessible. This search was conducted between July and August 2018.

The systematization of the articles that passed the filters and met the inclusion criteria was carried out in the Microsoft Excel program. For this, a matrix was made with the following categories and fields: a) identification of the articles: database, title and abstract, b) production and impact indicators: author(s), year of publication, publications by country, journal and citations by article, and c) content analysis: type of study, educational level of the participants in empirical studies, and description of the most representative findings of the relation of the cognitive FDI style and the processing of information, memory, and/or attention of the studies analyzed. From these results a descriptive analysis based on frequencies, minimum and maximum, and content analysis is carried out.

Results

39 articles were found, distributed in the databases as follows: a) ScienceDirect: 3 articles, b) Proquest: 12 articles, and c) Scopus: 24 articles. 13 repeated articles were discarded, three articles dealing with cognitive deficits, an article that did not deal with the relationship between ICD and information processing, memory and/or attention, and

an article to which the complete document was not accessible. Consequently, 21 articles remained for the bibliometric review. (See Figure 1).
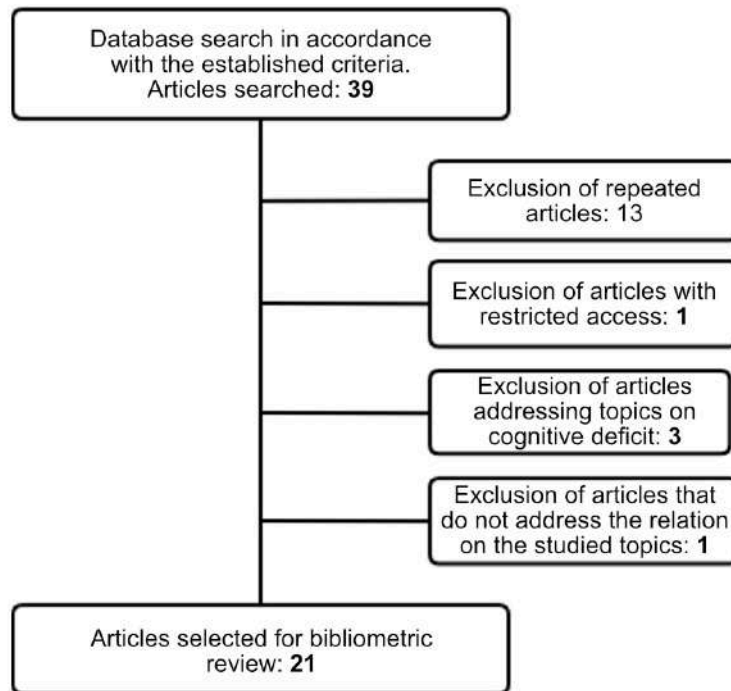
Figure 1. Flowchart of the article selection process.
Note: Source: *Prepared by the authors, (2018).*

       The following is an analysis of the 21 articles that met the inclusion criteria. The analysis is conducted according to the following criteria: a) number of articles published per year, b) number of publications per country, c) number of publications per journal, d) number of articles published per author, e) studies with the highest number of citations, f) type of study conducted and number of publications, g) educational level of participants in empirical studies, and h) main findings in FDI results, information processing, memory and/or attention.

Number of articles published per year

       Figure 2 shows the number of articles published annually. The average number of annual publications during the decade 2008 to 2018 corresponds to two articles. In 2018, the greatest number of publications was made (three articles). In 2013 and 2016, the lowest number of publications was produced, corresponding to one per year. The low but permanent number of annual articles is in line with the fact that the FDI dimension is a psychological construct with a long trajectory that has already lived its research "moment of glory", but whose theoretical soundness keeps it in the focus of attention of some working groups.
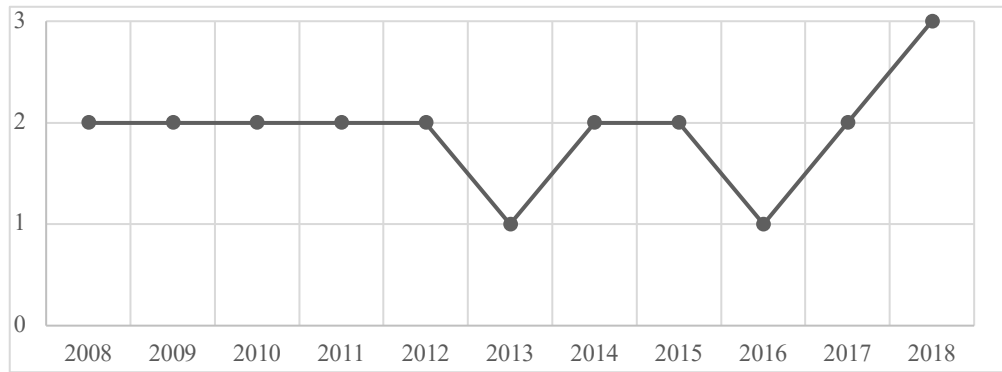
Figure 2. Number of articles published per year
Note: Source: *Prepared by the authors, (2018).*

Number of publications by country

The systematized articles in this paper have been published by authors from 15 countries. Figure 3 shows the number of articles published by country. It is evident that the countries with the highest number of publications are Spain and the United Kingdom with four articles. In second place is China with three publications. And in third place the United States and Italy with two articles. The other countries have one publication each. In addition, there is teamwork among several countries in three publications, such as Spain and Italy, Spain and Portugal, and Belgium, the Netherlands and the United Kingdom. The list of publications includes a Latin American article (Uruguay).
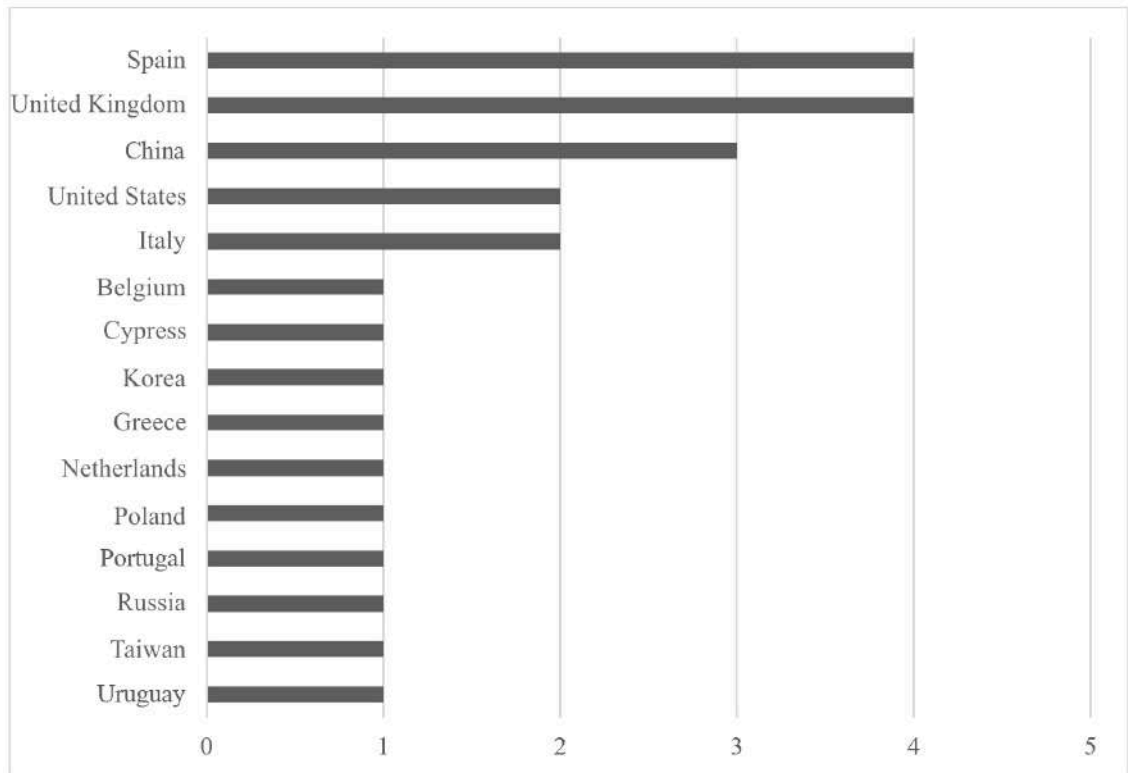
Figure 3. Number of publications by country.

Note: Source: Prepared by the authors, (2018).

Number of publications per journal

The analyzed studies in this search have been published in 19 scientific journals. Table 1 shows the journals in which the articles of this review have been published. The journals that have published more articles are *Psychological reports* with two publications and *Frontiers in pharmacology* with two publications. The remaining 17 journals have each published one article. Much dispersion is then observed in the research environments. As it can be deduced from the names of the serials, these environments range from medical-pharmacological research, through basic psychological studies, to fields of work in educational contexts.

Table 1

Number of publications per journal

Journal:	Number of publications
Psychological reports	2
Frontiers in pharmacology	2
The Social Sciences	1
Studia Psychologica	1
Psicologia: Teoria e Pesquisa	1
Polish Psychological Bulletin	1
Perceptual and motor skills	1
PeerJ	1
Neuroscience	1
Neuropsychologia,	1
Journal of Educational Computing Research	1
International Journal of Human-Computer Studies	1
Interacting with Computers	1
Food Research International	1
Experimental brain research	1
Educational Technology Research and Development	1
Chemistry Education Research and Practice	1
British Journal of Educational Psychology	1
Asia Pacific Education Review	1

Note: Source: Prepared by the authors, (2018).

Number of articles published by author

A total of 58 authors have participated in the publications reviewed in this study. Table 2 presents those authors who have published three and two articles. Guisande, Páramo and Tinajero stand out with three publications, followed by Boccia and Piccardi with two publications. In fact, Professors Guisande, Páramo and Tinajero, all three from the University of Santiago de Compostela, have been leading the research on the FDI dimension, which seems not only in their country, Spain, but also in the European context.

Table 2

Number of articles published by author

Author	Number of publications
Guisande	3
Páramo	3
Tinajero	3
Boccia	2
Piccardi	2

Note: Source: Prepared by the authors, (2018).

Studies with the highest number of citations

The analyzed research articles have a total of 287 citations. Table 3 presents 13 studies out of 21, which had the highest number of citations (>= 10) and/or the highest estimate of number of citations per year since publication. Each column presents the following information: In the first column is the reference of each article. The second column presents the number of citations for each study, using Google Scholar®. There are three articles with more than 30 citations each. The article with the highest number of citations is Rittschof, K. A. (2010).

Table 3

Studies with highest number of citations

Reference	Number of quotes
Rittschof, K. A. (2010).	56
Billington, J., Baron-Cohen, S., y Bor, D. (2008).	43
Evans, C., Richardson, J. T., y Waring, M. (2013).	32
Alamolhodaei, H. (2009).	26
Mawad, F., Trías, M., Giménez, A., Maiche, A., y Ares, G. (2015).	26
Overton, T. L., y Potter, N. M. (2011).	22
Jia, S., Zhang, Q., y Li, S. (2014).	15
Bednarek, H., y Orzechowski, J. (2008).	11
Guisande, M. A., Tinajero, C., Cadaveira, F., y Páramo, M. F. (2012).	10
Nisiforou, E., y Laghos, A. (2016).	8
Raptis, G. E., Fidas, C., y Avouris, N. (2018).	4
Boccia, M., Vecchione, F., Piccardi, L., y Guariglia, C. (2017).	3
Liu, H. C. (2018).	2

Note: Source: *Author's creation (2018).*

Type of study and number of publications

Figure 4 shows the number of publications according to the type of study carried out. Most of studies are empirical, equivalent to 90% of publications. And 10% of the research are theoretical studies. For instance, in one of the theoretical studies carried out by Evans, Richardson and Waring (2013), they made a documentary review about the evidence of polarity of field independence.
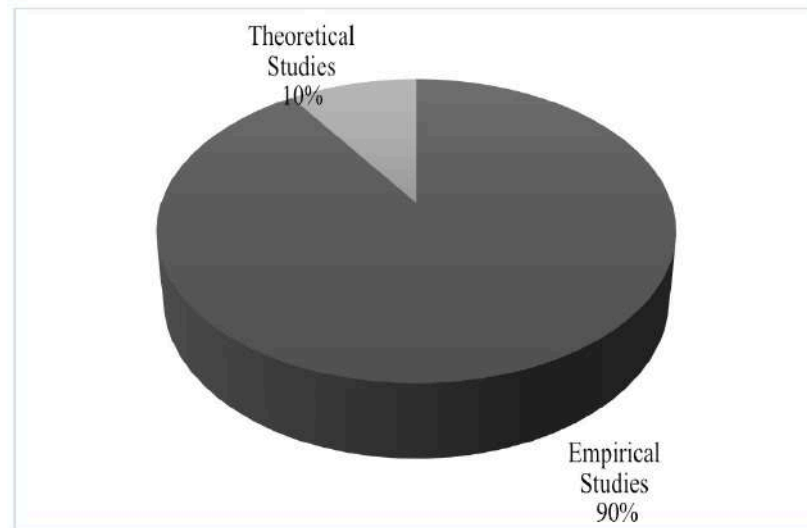
Figure 4. Type of study and number of publications.

Educational level of the participants of the empirical studies

The educational level of the participants of the empirical studies is assessed. 15 out of 19 studies specify the participants' educational level. Figure number 5 shows the distribution of the educational level of the participants of 15 empirical studies that reported the educational level of the sample. 73% of the studies worked with college students equivalent to 11 investigations. 13% of the participants are high school students, equivalent to two studies. 7% are elementary school students, with one study. And 7% correspond to a study in which its participants are from both levels, (elementary and high school students).
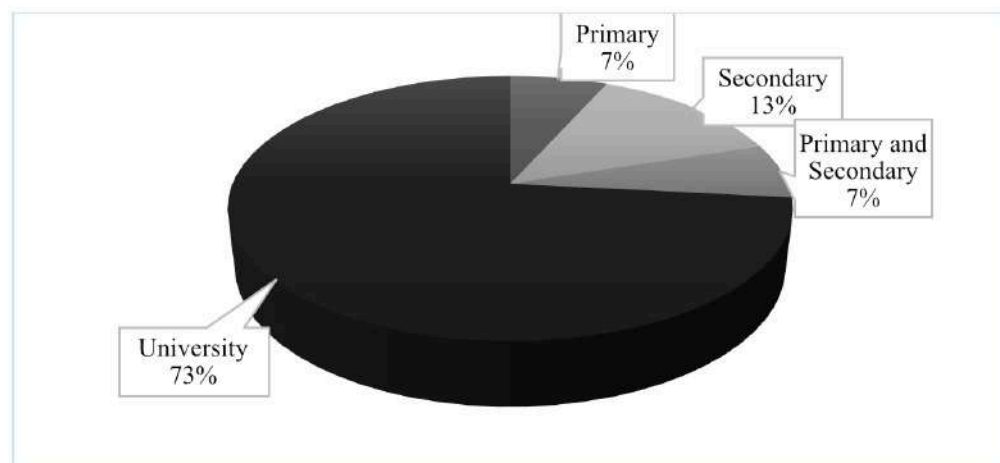
Figure 5. Educational level of the participants of the empirical studies.

FDI results, processing of information, memory and attention

As said before, cognitive style refer to the preferred way an individual acquires, comprehends, processes, and remembers information (Kozhevnikov, 2007 citado por Raptis, Fidas y Avouris, 2018). According to Curry's onion model[1] (1987), the cognitive styles present stability in time, since they address cognitive aspects of the individual. Therefore, cognitive style is one of the individuals distinguishing features in relation to the way they prefer to perceive and process the information. So that the studies analyzed in the last decade allow to extend the comprehension of the cognitive characteristics of FDI stylistic dimension regarding the processing of information, memory and attention. Also, lets us see recent work trends. Now, the most important findings are presented. They follow an evolutionary path from 2008 to 2018.

The study by Billington, Baron-Cohen and Bor (2008) addresses the relationship between systematization, understood as the ability to analyze rules underlying systems in order to predict, and FI as the ability to pay attention to local details without regard to cognitive distractors. The researchers used functional magnetic resonance imaging (fMRI). The study determined behavioral and neural evidence for the association of FI cognitive style with systematization. In addition, systematization was associated with increased activation in the brain regions (the prefrontal, parietal, and extra-striatal visual cortexes) with increased and maintained attention. Bednarek and Orzechowski (2008) investigated the possible connections between cognitive factors (attention and memory) and behavioral factors (structure of temperament traits) as predictors of FD and FI . They determine in their results that FI subjects have an adequate reaction in long-lasting activities, a high resistance to emotional stress, a high capacity to process external stimuli and an efficient selection mechanism. While FD individuals have low resistance to external distractors, low resistance to emotional stress and low capacity to process external stimuli.

In another context, Guisande et al. (2009) conducted a study on attentional processes and FDI. Results showed lower performance especially in a group of FD children in tasks involving sustained attention or ability to maintain attention on relevant stimuli. Regarding Alamolhodaei's work, H. (2009) one of the objectives was to explore the relationship between cognitive style (FDI), working memory and mathematical anxiety, and to examine their effects on students' mathematical problem solving. According to this study, FI cognitive style students tend to have a high working memory capacity compared to FD students. Furthermore, it suggests that teaching style and mathematical tasks are adapted to students' cognitive styles (FD/FI) and their working memory. In a similar paper, Rittschof (2010) describes that FDI is generally measured as visuospatial ability and executive functioning in working memory. He asserts the positive correlation between working memory and FI cognitive style polarity. This paper presents possible implications for the design and research of instruction systems based on FDI and its relationship with visuospatial and executive functioning in working memory.

On the other hand, Tinajero, Castelo, Guisande and Páramo et al. (2010) addressed the study of self-regulated learning in female students with different cognitive styles. Female FD students reported increased use of some learning strategies, specifically self-

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[1] It is a style integrator model. In which the following information is explained "interactions between cognitive style, learning style and learning strategies. This model shows a progressive relationship from the most stable cognitive functions (center of the onion) to the less stable ones (outer layers) in the subjects. The center is made up of elements corresponding to personality traits (cognitive style). It is followed by a layer related to the subjects' preferred ways of receiving information in a learning environment (learning style) and, finally, the last layer is composed of the subjects' instructional preferences" (López et al., 2011).

instruction, counteracting distractions (avoiding context and personal distractions), self-questioning, self-monitoring, and self-assessment. These findings on metacognitive strategies are inconsistent with previous research. The results can be explained by the fact that FD individuals have greater confidence in external references and could be considered a bias towards "appropriate responses. Meanwhile, Overton and Potter (2011) consider that FI is crucial to success in solving open, context-rich problems. The context used requires extracting the relevant information from a problem that contains more "noise" than a more traditional algorithmic problem. On the other hand, the work developed by Xu, Si and Zhang (2011) investigated if distractors interfere with the numerical estimation in students with cognitive style FDI. Distractors are elements that require the individual to allocate more attention and generate an increase in the cognitive load. The results indicate that no significant differences were found between FI and FD subjects.

From a different approach, the study by Meng et al. (2012), argues that styles, essentially FDI, are studied with special emphasis on the psychological and educational fields and hardly from the neuroscience. This study proposed that the components of the ERP event related potential could help to explain how FD and FI subjects process information. For this purpose, the functional neuroanatomy of attention control is characterized, which is composed of a dissociable sub-process of conflict control and cognitive control, performed by the lateral frontal cortex and the dorsal anterior cingulate cortex. It was found in relation to information processing that FI subjects have a deeper analysis and FD subjects a more automated and superficial analysis. As far as the ability in the "cognitive control" the FI subjects have a better capacity to mobilize and/or to assign mental-attentional capacity. Regarding the study by Guisande, Tinajero, Cadaveira and Páramo et al. (2012) found that FI children scored higher than FD children on attention function tests. Regarding visuospatial tasks, FI children scored higher than FD children in the field and intermediate in the block design test. A relevant result of the present study is that FI children seem to be able to use their attention span more efficiently.

Additionally, Evans, Richardson, and Waring (2013) conducted a review of the research evidence on FI . The review highlights that there is a large number of research studies that identify a clear relationship between FI and working memory. Cognitive psychologists have suggested that measures of FI depend on a system of working memory (Bennink and Spoelstra, 1979, cited by Evans et al., 2013). FI is associated with improved working memory performance, especially on tests of spatial ability and tasks involving visuospatial memory. Independent field students can minimize their cognitive load and maximize the efficiency of working memory by placing more emphasis on selectively coding information so that they have less information to process in working memory and therefore demonstrate greater information processing ability (Kozhevnikov, 2007; Richardson and Turner, 2000; St. Clair-Thompson et al., 2010, cited by Evans et al., 2013). Finally, it proposes some topics for future work such as conducting more detailed studies of all FI measures in relation to the components of working memory and identifying the cognitive mechanisms involved.

In the work of Jia, Zhang and Li (2014) it is evident that cognitive style in the FDI dimension can modulate a person's efficiency in isolating and filtering irrelevant information from a visual working memory task. FI individuals have a superior ability to isolate and filter irrelevant items from tasks than do FDs. Consequently, FI individuals can selectively attend only to task-relevant information and prevent irrelevant information

from accessing working memory, while FD individuals cannot successfully filter out irrelevant information. On the other hand, Marquez and Ellwanger (2014) determine that the hypothesis where collectivism and individualism are associated with differences in more analytical (FI) or holistic (FD) cognitive processing needs further investigation. On the other hand, the work developed by Artischeva (2015) on the structure of psychic states among people with different style preferences during the processing of information, found that the structural organization of the image of the mental state of the FD subjects is the most holistic, integrated and highly organized than subjects with FI .

On the other hand, Mawad, Trías, Giménez, Maiche and Ares (2015) carried out a study that does not have full affinity to the educational or psychological field, but there is evidence of the characteristics of the subjects based on the FDI and their relationship with some elements of the information processing. In the nutritional research, it stands out that FD consumers tend to make less reflective information processing than FI consumers when making decisions, and FD consumers made less fixation on traditional nutritional information on yogurt labels. Additionally, Nisiforou and Laghos (2016) addressed individual eye tracking. They investigated the association between cognitive style and eye movement of adults as they interacted with a set of visual tasks. FD subjects have a more disoriented and unstructured eye activity, therefore, a greater number of fixations and saccadic movements are generated as opposed to neutral FI and FDI. On the other hand, Tascón, Boccia, Piccardi, and Cimadevilla (2017) in examining the EFT results in relation to a spatial memory recognition test that required memorizing a location of a green box in an image of a virtual room determines that FI participants were associated with improved spatial memory performance. FIs were more accurate than FDs when they had few reference points available in the environment and were faster than FDs when all reference points were available. The results suggest that cognitive style affects spatial memory performance and this phenomenon is modulated by the complexity of the environment.

For their part, Boccia, Vecchione, Piccardi and Guariglia (2017) addressed the study of the effect of FD on learning and retrieval of navigation environments. They found that the FI cognitive style is fundamental to restructure environmental information into a global and flexible representation of the environment in the long term in the modeling of the cognitive map, as well as to facilitate changes in perspective that allow individuals to reorient and recognize places from a different point of view from the familiar one. FI individuals performed better than FD in the mapping task and in the spatial orientation and perspective taking test. The results suggest that FD affects learning and recovery from the navigation environment. On the other hand, the research work of Huygelier, Van der Hallen, Wagemans, de-Wit and Chamberlain, (2018) studied the extent to which performance on a new Embedded Figure Test (L-EFT) correlated with measures of intelligence, executive functions and estimates of local/global perceptual styles. The results indicated that performance on L-EFT does not correlate strongly with estimates of local/global perceptual style, intelligence or executive functions.

On the other hand, Liu's study (2018) used eye-tracking technology to discover whether FD and FI students differed in terms of their visual search efficiency and their multimedia learning performance. FI students outperformed FD students. FI students were more capable of identifying visual signals and showed efficient visual search patterns by learning using different information formats. Finally, the study carried out by Raptis et al. (2018) determines that mixed reality[2] amplifies the effects of FDI differences

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[2]It is the combination of virtual reality and augmented reality.

in the specific behavior of the game and the visual behavior of the user. The mixed reality context favors most FI users, as they adapted more easily to the visually enriched environment and were therefore more effective in the search for visual information. It is suggested to provide personalized mechanisms to the cognitive characteristics of users to support the efficiency of users in the processing of information and improve immersion in mixed reality applications.

In short, most analyzed studies provided empirical evidence for understanding the cognitive characteristics of each stylistic polarity in the FDI dimension. A high percentage of the analyzed research studies explored the FI and FD subjects' attention and memory. Broadly speaking, there is an advantage of FI subjects in contrast to FD subjects in relation of the processing of information.

Discussion and conclusions

Some characteristics of the study can be highlighted when carrying out a bibliometric revision of the FDI stylistic dimension related to the processing of information, memory and attention of the articles published in the ScienceDirect, Proquest and Scopus databases during the 2008 to 2018 decade. Regarding the articles published per year, there is evidence of an annual average of two articles, which shows a continued interest in research in the matter. In addition, there has been an increase in the number of publications over the last analyzed years, which would suggest a recent interest in the topic. In terms of the number of publications per country, Europe leads the way, while in Latin America and the Caribbean less research is carried out.

Regarding the number of publications per journal, it is highlighted that the *Psychological reports* journal published two articles in 2011 and 2014, and the *Frontiers in pharmacology* journal published two in 2017. In terms of the number of articles published per author, Guisande, Páramo and Tinajero stand out as the ones who have published more articles, and it is noted that these publications were made by groups of four or five authors in 2009, 2010 and 2012. These publications are geographically located in Spain and Portugal, affiliated to the University of Santiago de Compostela (Spain), the University of Minho (Portugal) and the Catholic University of Portugal (Portugal). This allows to conclude that teamwork has an impact on the fact that research on this subject is published with a certain frequency, as well as on the consolidation of research work groups. Regarding the studies with a greater number of citations, studies from 2008, 2010 and 2013 stand out, with more than 130 citations. There are also recent articles (Nisiforou and Laghos, 2016, Boccia et al., 2017, Liu, 2018, Raptis et al., 2018). This allows to confirm that in the field of study there are relevant and high-credibility publications to support further research.

Regarding the kind of study carried out and the number of publications, it is shown that most studies, 90% of them, are empirical, while the rest, the remaining 10%, are theoretical. When finding a significant number of empirical studies, the importance of evidence in this kind of studies is highlighted, since it makes is possible to understand the cognitive processes in the population, which stylistically differ by field dependence and independence. In this sense, according to the studies reporting the participants' educational level, most of the studies were carried out with university students and a smaller percentage with primary and secondary school students. This may suggest that most researchers have greater access to carrying out research work with university

population. It also makes it possible to establish the need to work more frequently in other educational level such as the child and adolescent population of schools. There, results regarding FDI in relation to the processing of information, memory and attention, could shed light in the educational sphere, with evidence and suggestions of possibilities to address more effective educational processes in schools.

Regarding the main findings of the studies analyzed on FDI in relation to the processing of information, memory and attention, it is found that the FI subjects show a positive correlation with a high performance with working memory (Alamolhodaei, 2009, Rittschof, 2010, Evans et al., 2013). There is evidence of better performance of FI individuals in terms of spatial memory, especially in the recovery of environmental or simulated environments (Tascón et al., 2017, Boccia et al., 2017). Regarding the attention processes, the ability to maintain attention is higher in FI subjects than in FD subjects (Guisande et al., 2009, Guisande et al., 2012, and Jia et al., 2014). For their part, Billington et al. (2008) found a connection between systematization ability and the FI cognitive style. Meanwhile, Overton and Potter (2011) determined that field independence is a success factor in solving open problems in disciplinary chemistry. For their part, Meng et al. (2012) have found that FI subjects perform a more in-depth analysis and FD subjects perform a more automated and superficial analysis. Mawad et al. (2015) conclude, when it comes to making decisions, FD subjects tend to perform a less reflective processing of information than FI subjects. In relation to technological applications, mixed reality favor most of FI users, since they adapt to the environment more easily and their search for visual information is more effective.

On the other hand, Bednarek y Orzechowski (2008) find that FD individuals show low resistance to external distractors, low emotional resistance to stress and a low capacity to process external stimuli. Moreover, Tinajero et al. (2010) prove that FD subjects showed a greater use of some learning strategies, specifically self-instructions, distraction counteracting, self-questioning, self-monitoring and self-evaluation, in the reporting of self-report questionnaires. Artischeva (2015) discovered that the structural organization of the mental state image of FD subjects is the most holistic, integrated and highly organized, compared to FI subjects. For their part, Xu et al. (2011) did not find any significant differences in attention processes in the numerical estimation of FD and FI subjects. Meanwhile, Marquez and Ellwanger (2014) conclude that the hypothesis associating collectivism and individualism with differences in more analytical (FI) or holistic (FD) cognitive processing requires further research. Regarding the studies about visual activity and tracking, FD were found to have a more disoriented and unstructured visual activity as opposed to FI (Nisiforou y Laghos, 2016). Liu (2018) noted that FI students showed a greater ability to identify visual cues, as well as efficient visual search patterns when learning by using different visual cues.

In short, bibliometric review of the FDI stylistic dimension and its relation to the processing of information, attention and memory during the 2008 to 2018 decade shows that it is a field of ongoing research interest. It is interesting to observe how research on this subject is carried out in different fields of study. It is noted that most of the 21 studies have mainly contributed to the consolidation of empirical studies. Works by Billington et al. (2008) and Meng et al. (2012) used brain response techniques such as fMRI and ERP in order to consolidate evidence about information processing and the FDI stylistic dimension. In this regard, Goode, Goddard and Pascual-Leone (2002) find these techniques to be valuable for further exploration of the FDI psychological construct and the functional brain systems behind the cognitive style differences. In conclusion, it is necessary to increase the number of studies in the subject of analysis of this study in order

to contribute to a greater characterization of the cognitive processes related to FDI, especially to stylistic polarity of field dependency and in groups of primary and secondary school students.

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INSTRUCTIONAL STRATEGIES AND ITS RELATIONSHIP IN THE COGNITIVE DOMAIN OF THE HIGHER EDUCATION PARTICIPANT

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Abstract. The purpose of this work was to determine the relationship between Instructional Strategies used by the teacher and the cognitive domain of the higher education participant. To this end, a correlational investigation was carried out, with a correlational non-experimental design, through which a sample of 37 Postgraduate participants from the Rafael Maria Baralt National Experimental University at Maracaibo Headquarters was investigated, to whom two were applied questionnaires: the first with 27 items, to describe the strategies used by the teacher, while the second, with 18 items, measured the cognitive domain that the participant possesses, each one, with a polycotomic scale. Such instruments were subjected to a validation procedure through expert judgment and their reliability was calculated using the alpha Cronbach formula resulting in a coefficient of 0.89, for the first instrument and 0.67 for the second. From the results obtained, it was concluded that there was a "Weak Positive" association between the variables, which shows a low incidence of relationship between the instructional strategies used by the teacher and the cognitive domain of the higher education participant, indicating that in order to The learning process is developed cognitive processes require certain conditions favorable to the conservation and valorization of the "I" as well as characteristics such as previous experience, reading ability, perseverance, spatial skills, Age and sex, all of which are involved in the promotion and facilitation of meaningful learning.

Keywords: Instructional strategies, cognitive domain, participating mediator

ESTRATEGIAS INSTRUCCIONALES Y SU RELACIÓN EN EL DOMINIO COGNITIVO DEL PARTICIPANTE DE EDUCACIÓN SUPERIOR

Resumen. El presente trabajo tuvo como propósito determinar la relación entre las Estrategias Instruccionales utilizadas por el docente y el dominio cognitivo del participante de educación superior. A tal fin, se efectuó una investigación correlacional, con un diseño no experimental transeccional correlacional, a través de la cual se indagó una muestra de 37 participantes Posgrado de la Universidad Nacional Experimental Rafael Maria Baralt en la Sede Maracaibo, a quienes se les aplicó dos cuestionarios: el primero con 27 ítems, para describir las estrategias empleadas por el docente, en tanto que el segundo, con 18 ítems midió el dominio cognitivo que posee el participante, cada uno, con una escala policotómica. Tales instrumentos fueron sometidos a un procedimiento de validación a través del juicio de expertos y se calculó su confiabilidad mediante la fórmula alfa cronbach resultando un coeficiente de 0,89, para el primer instrumento y 0,67 para el segundo. De los resultados obtenidos, se concluyó que existía una asociación "Positiva Débil" entre las variables, lo cual evidencia una baja incidencia de relación entre las estrategias instruccionales utilizadas por el docente y el dominio cognitivo del participante de educación superior, indicando que para que en el proceso de aprendizaje se desarrollen los procesos cognitivos se necesita de unas condiciones determinadas favorables a la conservación y a la valorización del "yo" así como de características como la experiencia previa, la habilidad en la lectura, la perseverancia, las habilidades de tipo espacial, la edad y el sexo, todas las cuales están involucradas en la promoción y facilitación de aprendizajes significativos.

Palabras Clave: Estrategias instruccionales, dominio cognitivo, mediador participante.

Introduction

Education has the goal of creating individuals who have the competences to perform in any context, but for achieving the development of these competences, instructional strategies must be incorporated. Here, the mediator plays a huge roll so apprehension and knowledge creation can be achieved; this person must implement strategies that make the learning process easier for the participants — all while taking into account their needs and interests and their perspective on how they learn. This is why the mediator must master these strategies so it's possible for them to achieve the aforementioned goals.

Current Education has the main objective of making the optimal growth and development of each individual easier, their interest focuses on physical, intellectual, socio-metal, emotional and spiritual behavior of the participant. Therefore, institutional strategies are essential in the cognitive development of each participant, what will allow them to move through all the levels of cognitive dominance, such as knowledge, understanding, application, analysis, synthesis, and evaluation. This development will depend on the paradigm that the teacher follows.

In this sense, the present research has the purpose of establishing the relationship between the Institutional Strategies that the teacher uses and the cognitive dominance of the higher-education participant. To achieve this, a descriptive correlative study will determine if the first variable is linked to the second, specifically in the context of the National Experimental University Rafael María Baralt (UNERMB).

Method

Type of Research

This type of research is framed under a positivist approach, which aims to produce objective, verifiable and valid knowledge through the use of scientific method; it maintains that reality is static, immutable, external and objective — trying to copy reality without deforming it.

According to its objective, the research is defined as descriptive-correlative. Sabino (2000) points out that descriptive research aims to know homogeneous groups of phenomena following systematic criteria in order to reveal their behavior. According to the aforementioned author, these studies do not deal with the verification of hypotheses, but with the description of facts based on criteria or a previously defined theory.

Chávez (2000; p. 137) says that the purpose of correlative studies is to determine the degree of relationship between variables, detecting up to what extent do the alterations depend on each other, which results in a coefficient. In this case, the relationship between the Instructional Strategies used by the teacher and the cognitive mastery of the higher education participant will be determined.

Also, Hernández, Fernández y Baptista (2003) explain that in correlative studies two or more considered variables are measured, so i0ts possible to determine after id the variation of one variable influences in the other's behavior.

Consequently, this research first described the Instructional Strategies used by the higher-education teacher in the activities developed in the classes. Subsequently, the cognitive domain possessed by the higher education participant was specified, and finally, its correlation was established.

Research Design

The research design used was non-experimental, transactional and correlative. According to Hernández et al. (2003, p.274) "these designs describe relationships between two or more categories, concepts or variables in a specific moment".

According to the aforementioned authors, even when these studies involve descriptions, it's no needed to analyze categories nor concepts, objects or individual variables but their relationships when they're purely correlative or causal relationships. Therefore, what's being measured or evaluated is the link between these categories, concepts, objects or variables in a specific time frame.

Therefore, in this study the aspects analyzed were observed and described just as they are in their real context, without being exposed to stimuli or being manipulated, so the link between them can be verified afterwards.

Population

According to Chávez (2000, p. 162), population is the "research's universe, in which we pretend to generalize the results and it's formed by characteristics or layers that allow us to differentiate every subject". Due to the purpose of this research, the population was formed by 125 participants of the different Masters Graduate program of the National Experimental University Rafael María Baralt in the headquarters of Maracaibo.

Table 1
Population

Program	Nº of participants
Human resources management	23
Higher Education teaching	25
Basic Education administration	64
Financial management	13
Total	125

Note: Source: Data provided by the Graduate Coordination. Headquarters in Maracaibo.

Samples

Sample is defined by Chávez (2000:164) as "a representative portion of the population, which allows to generalize on it the results of an investigation". Sabino C. (2000: 83) points out that "it's just a part of the universe that we call total, and it's used to represent it". It's important to highlight that what we're looking for when selecting a sample is that, observing a relatively reduced portion of units, similar conclusions are obtained to those that would be obtained if the total universe was studied.

In this investigation, Sierra's formula (quoted by Chávez N., 2003: 166) was used to calculate the sample size which establishes that the sample size depends on the size of the universe; level of confidence adopted; error estimation; and, standard deviation, as well as the sampling selected and proposing the following formula for finite universes.

$$n = \frac{4.\ N.\ p.\ q}{E^2\ (N-1)+4.\ p.\ q}$$

Where:
n = sample size that is being calculated
N = population size
4 = constant number
p y q = Success and failure probability (50 y 50%)
E^2 = mistake selected by the researcher (10%)
Isolating the equation:

$$n = \frac{4.\ 125.\ 50.\ 50}{10^2\ (125-1)+4.\ 50.\ 50}$$

$$n = \frac{1250000}{100\ .\ 124 + 4.50.\ 50}$$

$$n = \frac{1320000}{32000 + 10000}$$

$$n = \frac{1250000}{330000}$$

$$n = 37.14 \sim 37$$

In this sense, the investigation had the size of 37 participants of the Masters Graduate program of the National Experimental University Rafael María (UNERMB) in the headquarters of Maracaibo.

But since the population is formed by four (04) strata, the sample for each one f them was calculated according to the Schiffer's Equation in the following way:

Where: N_x is the sample for each headquarter in each stratum

$$Nx = \frac{nh}{N}.n$$

n = Appropriate size for the stratum sample
Nh= Population size per headquarters' stratum
N= Population size for the classroom teacher's stratum

1- Sample Calculation for Human Resources Management:

$$N1 = \frac{23}{125}.37 = 6.80 = 7$$

Sample Calculation for Higher Education Teaching
Sample Calculation for Basic Education Management

$$N1 = \frac{25}{125}.37 = 7.4 = 7$$

$$N1 = \frac{64}{125}.37 = 18.94 = 19$$

Sample Calculation for Financial Management

$$N1 = \frac{13}{125}.37 = 3.84 = 4$$

Table 2
General distribution of sample per stratum

Sample	Nº of participants
Human Resources Management	7
Higher Education Teaching.	7
Basic Education Management	19
Financial Management	4
Total	37

Techniques and Instruments for data collection

To collect data in this research, a survey was used. According to Sabino (2000, p. 78), this survey consists of "requiring information from a socially significant group of people about the study problems, and then, through a quantitative analysis, drawing the conclusions that correspond to the data collected".

Through the survey technique, the necessary information was obtained from the group of subjects studied for the influence of the Instructional Strategies used by the teacher in the cognitive domain of the Higher Education participant.

Regarding research instruments, according to Chávez (2000), these are the means used by the researcher to measure the behavior or attributes of variables. For this research, as a collection instrument, two questionnaires were constructed: the first, with 27 items, was oriented to describe the strategies used by the Higher Education teacher. The second instrument, with 18 items, measured the cognitive domain possessed by the higher education participant, each one, with a measurement scale with five alternative answers:

5) Always
4) Almost Always
3) Sometimes
2) Almost Never
1) Never

Table 3
Ratio Scale

Variable: Instructional Strategies		
Upper limit	Lower limit	Category
4.24	3.72	Very High
3.71	3.19	High
3.18	2.66	Medium
2.65	2.13	Low
2.12	1.60	Very Low
Variable: Cognitive Domain		
Upper limit	Lower limit	Category
4.62	4.50	Very High
4.49	4.37	High
4.36	4.24	Medium
4.23	4.11	Low
4.10	3.98	Very Low

Legitimacy and Reliability

Any data collection instrument must meet two indispensable requirements: legitimacy and reliability. According to Chávez (2000), validity is the effectiveness with which an instrument measures what you desire. In this case, validity for the instrument will be determined through the judgment of experts in the field, that is, legitimacy of content as indicated by Chávez (2000). For Chávez, this procedure is the correspondence

of the instrument with its theoretical context; it is not expressed in terms of numerical index, but is based on discernment and independent judgment among experts — it's the careful and critical analysis of all reagents according to the specific area of theoretical content

The aim of this method is to make observations about the relevance or the congruence of the items using the content that is intended to measure. Also, about the writing, the tendentiousness of its formulation and their relevance to the variables and indicators, with the purpose of unifying criteria. To that end, four experts in the field were asked to give their opinion. They suggested to make some appropriate changes for the writing of the items that would be considered for it.

Having said that, Chávez (2000) describes the term 'reliability' as the extent to which similar results may be obtained from different applications. For the present case, some individuals with similar characteristics to the population of the study were pilot tested. The Cronbach's alpha formula was applied to the results in order to estimate the reliability of the tools presenting more than three alternative response:

$$r_{tt} = \frac{K}{K-1}\left[1 - \frac{\sum S_I^2}{S_t^2}\right]$$

Wherein:

K = Number of items.
S_I^2 = Variance of the points of every item.
S_T^2 = Variance of the total points.

In substitution for the method, the final results had a coefficient of 0,89 for the first tool and 0,67 for the second one, proving that both questionnaires have a very high and a high reliability respectively (See Annex Nº C).

Strategies for processing and analyzing the information

According to the kind of research, the obtained data and the level of mediation of the variable, the analysis of the results was made using the Pearson coefficient. This helped to establish a statistic correlation between the variables under study. The Pearson correlation coefficient (r) is recommended for studies with two variables that are not considered dependent or independent, and that do not imply a causality relationship.

According to Hernández and others (2003), the Pearson correlation coefficient is calculated with the score obtained from a sampling of two variables. The score obtained from a variable is compared with the score obtained from another variable in the same individuals.

Research procedures

To carry out the research, a series of steps were made, considering the following aspects: human and material resources available and the estimated time for the execution of the project. The procedure is as follows:
- Selecting of the subject and description of the issue.
- Formulating the objectives of the research.
- Revising antecedents and establishing theoretical bases

- Operating with the variables to determine their dimensions and indicators.
- Determining the methodological approach
- Selecting the population under study
- Designing the tools for data collection, according to the variable's operationalization.
- Determining the effectiveness and calculating the reliability of the tools.
- Applying the tools to the individuals under study.
- Coding and tabulating the results in order to analyze the information
- Analyzing the information, applying descriptive statistics.
- Discussing the results for interpreting the findings of the study
- Correlating variables
- Formulating the conclusions and recommendations derived from the research.

Results

The analysis of the results was carried out following the specific objectives that guided the research and the dimensions and indicators of the variables under study. Thus, for Instructional Strategies (the first variable), the dimensions were: Constructivist, with V Gowin indicators, Portfolio, Conceptual Maps and Mind Maps; and Cognitive, whose indicators are Representation, Memorization, Interpretation and Evaluation.

For the Cognitive Domain variable, the dimensions were: *Observation*, with the indicators of Direction, Attention, Fixation, Concentration, Identification and Search of data, with the indicators of Little Concentration, Extreme Restlessness and Inattention; *Analysis*, with the indicators of Comparison, Underlining, Distinguishing and Highlight; *Ordering*, with the indicators of Gathering, Grouping, Listing and Arrangement in series; finally, The Classification dimension whose indicators were Hierarchize, Synthesize, Schematize and Categorize. Later, the statistical correlation between both variables was established using the Pearson correlation coefficient (r) and, finally, the discussion of the results is presented by comparing them with the theoretical approach that supported the study.

Variables: Instructional strategies

Table 4
Constructivist dimensions

Indicators	Items	Average	Category
Gowin V.	1 to 3	1.76	Very low
Portfolio	4 and 5	3.51	High
Conceptual maps	6 to 9	3.80	Very high
Mind maps	10 to 13	3.93	Very high
Overall Average		**3.33**	High

Note: Source: results of the application of the tool
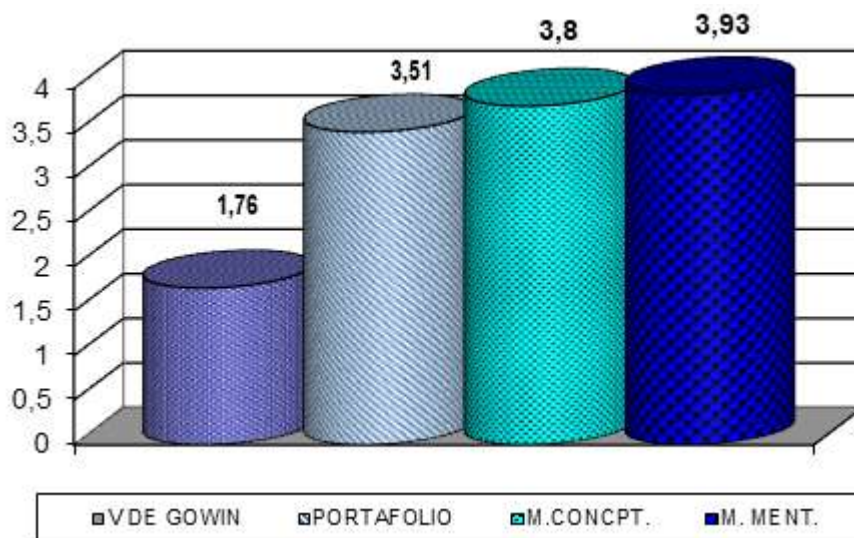
Figure 1. Constructivist dimensions
Note: Source: Table 4

In relation to the Instructional Strategies variable, Table 4 and Figure 1 show the results for the Constructivist dimension measured through the Gowin V indicators, the Portfolio, the Conceptual maps and the Mind maps. In this regard, Mind maps obtained the highest average with 3.93 which places it in the 'Very High' category. The lowest average was for Gowin V, with 1.76 and a 'Very Low' category. The overall dimension average was 3.33, placing it in the 'High' category. In other words, regarding the instructional strategies used by higher education teachers, the results show a high tendency for facilitators to use mind maps to learn content in a comprehensive way, to represent a set of conceptual meanings and to represent knowledge as a whole.

Table 5
Constructivist dimensions

Indicators	Items	Average	Category
Representation	14 to 17	2.98	Moderate
Memorization	18 to 23	3.74	Very high
Interpretation	24 to 27	3.40	High
Evaluation	28 to 30	3.88	Very high
Overall average		3.51	High

Note: Source: Results of the application of the instrument
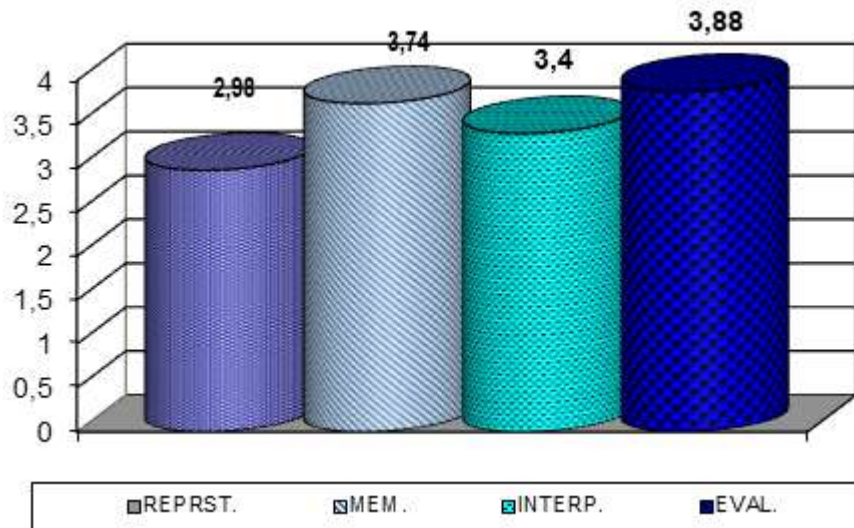
Figure: 2. Cognitive Dimension
Note: Source: Table 5

For the Cognitive dimension, measured through the indicators Representation, Memorization, Interpretation and Evaluation, Table 5 and Figure 2 show that the overall average was 3.51 in the high category; the highest average per indicator was reached in the evaluation with 3.88 and a very high category, while the lowest was for representation with 2.98 moderate category. However, even when the dimension obtained a High level, it is below the previous dimension, that is to say, in relation to the instructional strategies used by higher education teachers, there is a predominance of constructivist strategies over cognitive ones.

Variable: Cognitive Domain

Table 6
Observation Dimension

Indicators	Items	Average	Category
Direction	1	4.08	Very low
Attention	2	4.24	Moderate
Fixation	3	4.32	Moderate
Concentration	4	4.24	Moderate
Identification	5	4.00	Very low
Data search	6	4.35	Moderate
Overall average		4.21	Moderate

Note: Source: Results of the application of the instrument
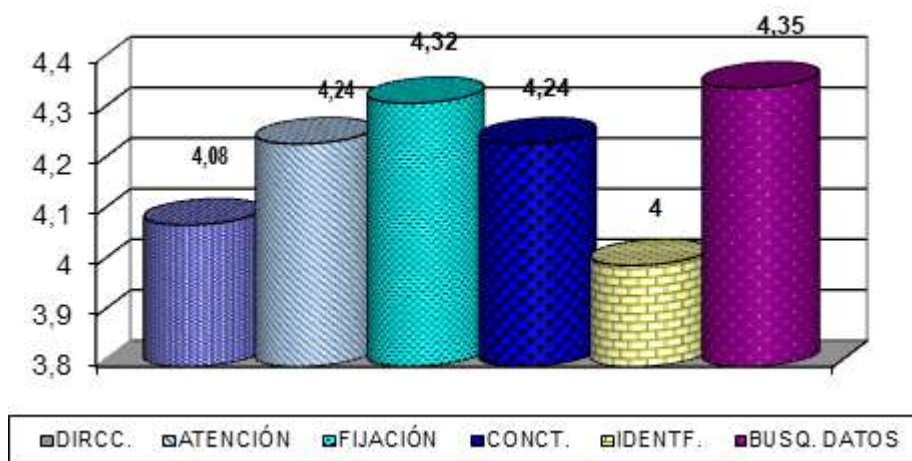
Figure 3. Observation dimension

In respect of Cognitive Domain variable, the table and graph Nº 3 present the results for the Observation dimension, measured through the indicators Direction, Attention, Fixation, Concentration, Identification and Data Search. In that sense, the highest average was obtained by the Skill Search of data with 4.35 located in the moderate category, while the lowest was for Identification with 4.00 and the category very low. In the overall average , dimension was 4.21 which also belong to moderate category that is to say participants of higher education exhibit a cognitive domain that allows them to inquire about the information of greatest interest, focus on the search for important ideas, pay attention to the ideas read and be interested in the content of what is read.

Table 7
Analysis Dimension

Indicators	Items	Average	Category
Compare	7	4.08	Very low
Underline	8	4.57	Very high
Distinguish	9	4.11	Low
Highlight	10	4.19	Low
Overall average		4.24	Moderate

Figure 4. Analysis dimension

For the Analysis Dimension, the results presented in table and graph Nº. 4 reveal that the overall average for the dimension was 4.24 in the Moderate category; The highest average was obtained by the domain Highlight with 4.57 in the category Very High, while the lowest was for Compare with 4.08 and the category Very Low, indicating that the participants of higher education present a median tendency to contrast different and similar aspects in the same text, to point out the most outstanding aspects, to differentiate the main and secondary ideas and to highlight the most significant aspects of a text read.

Table 8
Regulation Dimension

Indicators	Items	Average	Category
Meet	11	4.11	Low
Group	12	4.30	Moderate
List	13	4.05	Very low
Serialize	14	4.08	Very low
Overall average		4.14	Low
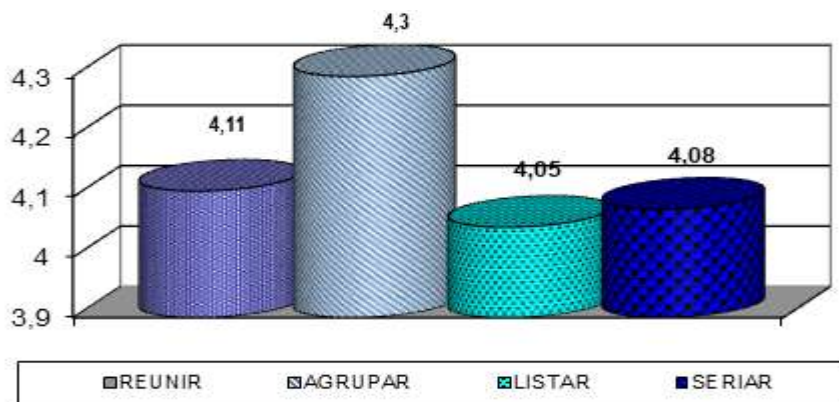
Figure 4. Regulation dimension

With respect to the Regulation Dimension, according to the results presented in Table 8 and Figure 4, it is observed that the overall average for this was 4.14 in the Low category; The highest average was obtained by the domain Group with 4.30 located in the Moderate category, while the lowest was for Listing with 4.05 and the category Very low, indicating that the participants of higher education present a low tendency to concentrate the most important ideas in a text about an event under investigation, to list the common aspects in two or more texts or to place in successive form the similar aspects between ideas of interest to carry out a written work.

Table 9
Classification Dimension

Indicators	Items	Average	Category
Prioritize	15	4.22	Low
Synthesize	16	4.62	Very high
Map	17	4.41	High
Categorize	18	4.32	Moderate
Overall average		4.39	High

Note: Source: Results of the application of the instrument
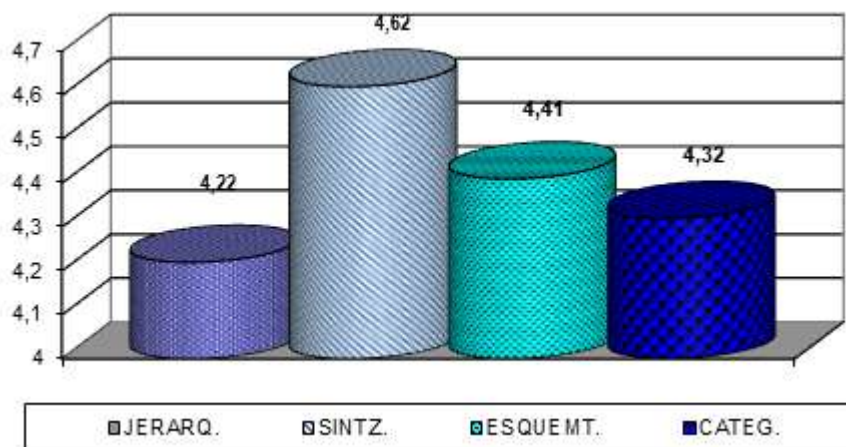
Note: Source: Table 9

With respect to the Classification Dimension, the results shown in Table 9 and Figure 5 refer that the overall average for this was 4.39 in the High category; the highest average was obtained by the synthesizing domain with 4.62 and the High category, while the lowest was for Prioritize with 4.22 and the Low category. However, the overall average indicates a high tendency among higher education participants to read information and summarize its most important aspects, represent in a chart the most important ideas of a reading, and synthesize the most important ideas in a text on a topic they are researching.

Correlation of variables

The correlation coefficient (r) among variables was calculated using Pearson's direct scoring method (see Annex D):

$$Rxy = \frac{\sum \frac{x.y}{N} - \bar{x}.\bar{y}}{Sx.Sy}$$

Whereas:

N = Objects number $\sum X$= sum of X

$\sum X^2$ = Sum of X^2 $\sum Y$ = Sum of Y

$\sum Y^2$ = Sum of Y^2 $\sum YX$ = Sum of X and Y

r = 0.02710683

Table 10
Pearson's Coefficient

-1	Perfect refusal	+1	Perfect positive
-.90	Very strong negative	+.90	Very strong positive
-.75	Considerable negative	+.75	Considerable positive
-.50	Negative average	+.50	Positive average
-.10	Weak negative	+.10	Weak positive

0 No correlation between Variables

Note: Source: Hernández, Fernández & Baptista, (2003, p. 384)

According to the result obtained through the answers issued, the resulting correlation coefficient was 0.02710683, indicating a "Weak Positive" association between the variables. According to Hernández et al, the results indicate that there is a low incidence of relationship between the instructional strategies used by the teacher and the cognitive mastery of the higher education participant. This was noted in the descriptive analysis of each of the variables and indicates that as the first variable increases, so does the other, but in a very weak proportion.

Discussion and Results

According to the general objective of this research, which was oriented to determine the relationship between the instructional strategies used by the teacher and the cognitive mastery of the higher education participant, the following can be pointed out:

In relation to the instructional strategies used by the higher education teacher in the activities developed in the classes, a predominance of the constructivist over the cognitive was evidenced, with a high tendency in the facilitators towards the use of mental maps as a strategy to learn contents in a comprehensive manner, to represent a set of conceptual meanings and to represent knowledge as a whole.

Such results are relevant in that the effectiveness of constructivist strategies for building and understanding new knowledge and developing higher order thinking skills is recognized by teachers around the world. The development of visual diagrams, such as mind maps, helps students process, organize, and prioritize new information so that it can

be meaningfully integrated into their previous knowledge base. In addition, it allows them to identify erroneous ideas and to visualize patterns and interrelations in the information, factors necessary for the comprehension and deep interiorization of the concepts.

In this regard, Mata (1993) refers that the constructivist perspective of learning is basically the result of a construction process and not a passive reception process; for the student to be able to establish relationships between previous and new contents, logical significance is required, that is, a content constructed in a logical/coherent and ordered manner; functional significance and psychological significance, that is, a level of prior information sufficient to understand the new content and a favorable attitude for learning.

In that sense, Palencia (2005) points out the use of mental maps brings with it a series of advantages allowing the brain to establish new connections at the level of the inter hemisphere and develops creativity through the creation of ideas. By means of them, the visual-spatial intelligence is approached that evidences an individual with capacity to integrate, to perceive, to order elements or objects in the space, in order to establish relations between them, developing in the individual the ability to think and to perceive the world of images, transforming the visual experience through the imagination.

Consequently, it can be affirmed that the higher education teacher is not merely a transmitter of knowledge, as the only source of information; rather, he or she is capable of creating the appropriate conditions for the participant to carry out the construction of his or her own knowledge, in consonance with what was stated by González (1997).

Regarding the cognitive domain of the participant in higher education, the results obtained refer to the fact that the dimension with the highest score was Classification, placing it in the High category. The dimension with the lowest score was Ordination. The other two dimensions, Observation and Analysis, were placed in the moderate category.

However, the fact that the greatest cognitive domain has been classification, expressed in the ability to read information and summarize its most outstanding aspects, to represent in a chart the most important ideas of a reading and to synthesize the most important ideas in a text, is directly related to the use of mental maps by the mediator as an instructional strategy through which he helps students to process, organize and prioritize information.

According to Somuncuoglu and Yildirim (1999), classifying means having a set of data by classes or categories. This also means hierarchizing, synthesizing, schematizing and categorizing what, in De Sánchez's (1999) opinion, is done within the framework of the development of thinking skills, which means increasing habits to naturally and spontaneously apply thinking processes in any physical or mental activity in which they are required. In other words, the product of teaching a thought process is the corresponding thinking skill; that is, people's capacity to apply thought processes. From that perspective, developing cognitive skills empowers students to construct knowledge, as well as reproduce and transmit what they have learned to other fields or areas of knowledge.

Finally, regarding the statistical correlation between the Instructional Strategies used by teachers and the cognitive domain of the higher education participants, the findings indicated a "Weak Positive" association between the variables, which is to provide evidence of a low incidence of relationship between the instructional strategies used by teachers and the cognitive domain of the higher education participants, that is to say, by increasing the former, the other increases equally but in a very weak proportion.

In this regard, it is necessary to emphasize that, during the learning process, it is necessary to develop activities through which individuals face situations that cope with cognitive processes, which encompass processes of attention, perception, memory, reasoning, imagination and decision making. These are the active components of the

human mind that facilitate information processing. In this sense, it can be pointed out that all the products of the mind are generated by the interaction of the thought processes with previously developed concepts and processes. Through this process, human beings construct knowledge. (Chadwick and Rivera, 1991; Rigney, 1978).

However, this process does not always become evident automatically, but certain conditions must be met in order for it to surface. The human mind requires a context of positive human relations favorable to the conservation and valuation of the "I," that is to say, it requires relations devoid of threats or challenges to the conception that subjects have about themselves.

Having said that, according to De Sánchez (1997), this mastery is gained by repeating certain thought processes and operations considered useful so as to achieve intellectual development, which can be improved in a systematic and deliberate way. It begins when individuals direct their attention towards a specific topic or thought process; This activity must be deliberate; Besides, it must be worked on together with procedures aimed at exercising the mind in a disciplined and systematic way. It continues with practice and finalizes acquiring the habit of thinking.

Consequently, the fact that higher education participants have shown a moderate-to-low cognitive domain demonstrates that the characteristics of individuals also play a significant role in academic success or failure, despite a very high tendency among facilitators towards the use of constructivist strategies. Some of these factors are previous experience, reading skills, persistence, spatial abilities, age and gender.

Lastly, it can be asserted that even when instructional strategies are involved in promoting and facilitating meaningful learning, strategies do not always ensure this since it is also necessary to have metacognitive processes involved.

Conclusions

On the basis of the results obtained and depending on the specific objectives that guided the study, the following is concluded:

According to the cognitive approach, the learning process is related to how information is received, organized, stored and located. The principles related to the learning process are the hierarchical cluster analysis for identifying and illustrating prerequisite relationships (analysis procedures, cognitive task procedures), structuring, organizing and sequencing information to facilitate its optimal processing (the use of cognitive strategies), as well as creating a stimulating learning environment.

The Cognitive Domain is the cognitive capacity; It refers to the intellectual dimension and rationality that comprises six levels: knowledge, comprehension, application, analysis, synthesis and evaluation.

Cognitive Skills are a set of mental operations, whose purpose is that individuals incorporate the information acquired through the senses into a knowledge structure that is comprehensible to them. Such skills are understood as operations and procedures for acquiring, retaining and retrieving different types of knowledge and execution; They are capacities for self-direction and representation.

Cognitive Skills are the facilitators of knowledge, as they operate directly on information: compiling, analyzing, understanding, processing, and storing information in the memory, so that, subsequently, it can be retrieved and used where, when and how appropriate.

Certain strategies that allow for the development and strengthening of these skills, especially in the field of education and research, empowering students to construct knowledge, as well as reproduce and transmit what they have learned to other fields or areas of knowledge.

With respect to the instructional strategies used by higher education teachers, constructivist strategies predominated, showing a very high tendency among facilitators towards the use of mental maps as a strategy to comprehensively learn contents, represent a set of conceptual meanings and represent knowledge as a whole.

As for the cognitive domain of the higher education participants, the findings indicated a greater tendency towards classification, that is to say, the participants showed high mastery when reading a piece of information and when making a summary on its most outstanding aspects. They were requested to represent the most important ideas of a reading in a chart, synthesizing the most important ideas of the text, thus relating to the use of mental maps by the facilitators.

Concerning the statistical correlation between the Instructional Strategies used by the teacher and the cognitive domain of the higher education participant, the result obtained indicated a "Weak Positive" association between the variables, which is to provide evidence of a low incidence of relationship between the instructional strategies used by the teacher and the cognitive domain of the higher education participant, that is to say, that by increasing the former, the other increases equally but in a very weak proportion.

In this regard, it is necessary to emphasize that, during the learning process, it is necessary to develop activities through which individuals face situations that cope with cognitive processes. However, this process does not always become evident automatically, but certain conditions must be met in order for it to surface, requiring a set of relations favorable to the conservation and valuation of the "I," as well as previous experience, reading skills, persistence, spatial abilities, age and gender, all of them being involved in promoting and facilitating meaningful learning.

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THE UNCONSCIOUS IMAGE OF THE BODY AND CONSUMPTION OF SURGICAL AESTHETIC TREATMENTS IN THREE WOMEN FROM THE CITY OF CALI

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Abstract. The unconscious image of the body and the consumption of aesthetic treatments is a research project, which counted with the participation of three women of Cali Colombia, who considered themselves consumers of aesthetic treatments. The present study seeks to know the possible relationship between the unconscious image of the body and the consumption of aesthetic treatments. The type of methodology chosen in this research is qualitative with a phenomenological design. The data collection techniques were semi-structured interview Machover human figure test. For analyzing the data, a categorical analysis mas used. Within the results it is known that possibly the construction of the unconscious image of the body is given through the signifier or word of the other, as well as the different experiences lived by the participants which have an influence on them and lead them to be conformed or dissatisfied with your body, generating the need to consume aesthetic treatments.

Keywords: Unconscious body image; body consumption of aesthetic treatments, women.

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LA IMAGEN INCONSCIENTE DEL CUERPO Y CONSUMO DE TRATAMIENTOS ESTÉTICOS QUIRÚRGICOS EN TRES MUJERES DE LA CIUDAD DE CALI

Resumen. La imagen inconsciente del cuerpo y el consumo de tratamientos estéticos es un proyecto de investigación, en el cual se contó con la participación de tres mujeres de la ciudad de Cali Colombia, que se consideran consumidoras de tratamientos estéticos. El presente estudio busca conocer la posible relación entre la imagen inconsciente del cuerpo y el consumo de los tratamientos estéticos. El tipo de metodología escogida en esta investigación es cualitativo con un diseño fenomenológico. La técnica de recolección de información utiliza es la entrevista semiestructurada y el test de la Figura Humana de Machover. Como instrumentos de análisis se toma el análisis de contenido categorial. Dentro de los resultados se conoce que posiblemente la construcción de la imagen inconsciente del cuerpo se da a través del significante o palabra del otro, así como también las diferentes experiencias vividas por las participantes influye para ello y esto las lleva a estar conformes o inconformes con su cuerpo, generando la necesidad de consumir tratamientos estéticos.

Palabras claves: Imagen inconsciente del cuerpo, cuerpo, consumo de tratamientos estéticos, mujeres.

Introduction

Currently, surgical aesthetic consumption is a phenomenon that is on the rise, since according to research on the subject, in recent years an increase in aesthetic surgeries in Colombia has been reported. It seems to be associated with the perception that people have of their bodies. It is important to emphasize that this perception has changed over time and that the media has contributed to this consumerism, leading people to stereotype the female body as beautiful, slender, young and "perfect."

It is for this reason that this research acquires social relevance, because aesthetic surgeries play an important role in society and especially in Colombia, as highlighted in a report published in El País (2018). This report shows the results found by the International Society of Plastic Surgery. In its latest review in 2017, the results emphasize that, of the countries where people choose to perform aesthetic surgical procedures, Colombia ranks number four. In addition to that, this country is responsible for attending the 26% of foreigners who prefer this country to perform these procedures – an aspect stated by the same report.

In accordance with that, it can be mentioned that the need to maintain a beautiful and slender body is not only a part of the Colombian culture, but there are also other cultures that perform these practices in order to fit into the society. There, the media constantly bombard the minds of people and especially women through their advertising, establishing the need to be beautiful and "perfect," thus creating a cult of the body, where physical practices are constant. Cortes (2001) says that "the contemporary cult of the

human body, of a young and beautiful body and, moreover, the desire to not age, is a symptom of this culture" (p.29).

Given this, it cannot be denied that the media, such as magazines, television, radio and postmodernism-like posters use the body as the main trading instrument to promote various products, "which is the mass medium par excellence, whose schemas extend to all other media" (Baudrillart, 2009, p. 145). This can be noticed in advertising of well-known brands, where they promote the delusional and dreamy beauty of a face or a standardized body.

It is also known that the performance of cosmetic surgery can become a public health problem, since health risks have been identified for certain women who are willing to have their bodies modified in places not certified by the Colombian National Institute of Food and Drug Administration (INVIMA). This is what the following report published in El País refers to, where Salazar (2014) states that every week a different patient arrives at Del Valle University Hospital, due to bad aesthetic procedures that leave sequels in the body such as resistant infections, masses or tumors and irreversible deformities.

On the other hand, the Colombian National Administrative Department of Statistics, 2013, (DANE) shows in its statistics the death of 49 women in the department of Valle del Cauca, due to complications in surgical procedures producing infections or deformities, because some products are not compatible with the body or create blood clots that can reach both the brain and lungs causing death.

Similarly, in order to understand the unconscious body image, the cases of three women who underwent different aesthetic surgical procedures are taken into account. For this, a conceptual framework is proposed, which works on fundamental concepts such as: psychic topics; psychosexual theory; the Oedipus complex; the castration complex; narcissism; identification; hysteria; the unconscious body image; the three body registers; the real, symbolic and imaginary body; and finally, the body from a social perspective, which leads to identifying the influence of the media, aesthetic consumption and the ideal body.

Likewise, the research method that was worked on is of a qualitative type. The scope of this research is of a descriptive nature, as it seeks to collect information independently. The instruments that were used during the realization of the research are the Human Figure Drawing Test by Karen Machover and the semi-structured interview. The collected information was organized through the analysis of categorical content.

Method

Type of Research

The research is of a qualitative type, because its purpose is "to examine the way in which individuals perceive and experience the phenomena that surround them,

deepening their points of view, interpretations and meanings" (Sampieri, 2014, p.358) – that is, it takes into account the subjectivity or the particularity of the phenomenon that one wants to study, but it does not seek an universal explanation through statistical and numerical foundations.

The research does not attempt to collect information with standardized methods, but rather takes into account the subject's perspective through unstructured interviews. In this way, each participant's speech is expressed, with the aim of providing an authentic and natural description of the studied phenomenon. Likewise, the research is also aimed at accessing their phantasmagorized imaginary reality in order to understand the meaning of the body.

Therefore, the scope of this research is descriptive, since it seeks to collect information independently, in order to "specify the properties, characteristics and profiles of people" (Sampieri, 2014, p.80)

Design

This research is based on phenomenological design, whose "main purpose is to explore, describe and understand people's experiences of a phenomenon and find out the elements in common with those experiences" (Sampieri, 2014, p. 493). Taking that into account, the research includes what the participants' body mean to them, looking into each one of the experiences, and finally analyzes significant and common aspects that are generally held through a case study.

According to Sampieri and Mendoza (2008), the case studies are "Studies, (...) they deeply analyze a unit to respond to the problem, test hypotheses and develop theories" (p.163). They allow to contextualize and analyze in a particular way in relation to what the research wants to answer, being appropriate for the analysis of each participant's background and experiences, because apart from that, "the case study recognizes the privileged space where culture and history 'deposit' and form a speaking being" (Serrano, 1997, p.203).

Participants

The sample taken into account for data collection is homogeneous, since the selected units have the same profile, characteristics or share similar features (Sampieri, 2014). The units concern the three selected participants with similar characteristics. For this, inclusion and exclusion criteria were taken into account, allowing the type of participants to be specified for the research.

Inclusion criteria: The selected participants are 20-30 years old females and have used surgical aesthetic treatments at least once.

Exclusion criteria: Participants cannot be men, have children, be married, be without physical modifications at an aesthetic level. Women with eating disorders or

some psychopathological difficulty are also excluded from the study. This is identified by the clinical analysis of the participants' speech and reported directly by them.

Although the three participants have similar characteristics, the aim is to understand the particular significance of their bodies, which are projected in their speech and the human figure drawings.

Instruments

The Human Figure Drawing Test created by Karen Machover in 1949 – This allows to identify each subject's individual traits through the projection in "which the subject expels in herself and locates in the other (person or thing) qualities, feelings and/or desires" (Laplanche 1987, p. 306).

For this reason, the Machover test allowed to establish an unconscious link between the drawing made by the subject and her personality, clarifying the conformation of the unconscious body image, thus confirming it.

For this reason, it is understood that the Machover test allows to understand the psychic situation related to the conflicts, impulses and anxieties that the subject is experiencing. This can be seen in the human figure drawings and in the sheet related to the environment.

Semi-structured interview – It is characterized by its flexibility, allowing interaction with the interviewed people and the identification of lifestyles, habits and infinite details that can generate more precise contextualization of the problem (Sampieri, 2007).

Within the interview, 4 guide questions were taken into account, related to the categories of analysis, which conduct and give meaning to the interview.

Analysis Technique

The collected information was organized through the analysis of categorical content, through which the following categories stand out: Identifying with the mother (IM), Identifying with the father (IF), Meaning of the body (MB), Significance of the body from the viewpoint of the other (SBVO), Dissatisfaction with the body (DB), Aesthetic treatments (AT), Partner (PA), Actions for maintaining the results (AMR), Conformity or non-conformity with the results obtained (CNRO). This will be related and included in the human figure analysis in order to have deeper and more validated knowledge of each case.

Procedure

Phase 1

Firstly, the categories to be taken into account when asking the questions in the semi-structured interview are: mother, father, body and significant experiences.

Phase 2

Several questions will be asked, according to the previously selected categories, such as:

• Tell me about your mother

• Tell me about your father.

• How have you experienced your body over the course of your life?

• Tell me about the experiences in your life that have been meaningful to you.

Phase 3

At this point, the interview format is designed, which will be taken into account during the interview and includes: each participant's personal and family data with their respective genogram, the interview questions and the protocol for applying the human figure drawing test.

Phase 4

Here is where informed consent is built in.

Phase 5

A pre-selection of participants is made, and they are contacted by applying the previously mentioned protocol.

Phase 6

Review of the human figure drawing made by the participants, taking into account the analysis protocol of the Machover human figure test, as well as the review of the interview.

Finally, ethical actions were carried out, such as signing the informed consent by the participants, in which they give their authorization to work with the collected information, as well as making it clear to them that what comes out of the interview and the Machover human figure test is only for academic purposes. The contacted women are totally unknown to the researchers, and no contact is made with any of them.

Results

Participant N° 1

Analysis

A certain identification with her mother can be observed, since during the first stages of life, it is her who initially supplies the child's needs – in other words, from birth children are sensitive to the events that occur around them, and a fundamental part of this process occurs when they hear the tone of their mother's voice. According to Dolto (1996), "the girl is sensitive to the presence of her mother when she needs her. Once she has been satiated and feels good, she will feel more attracted to a man than a woman" (p. 170).

During this identification process, according to the theory, the subject's self takes the partial form of its representation – in other words, "it concerns the identification of the self with a partial aspect of the object," Freud (as cited in Nasio, 1988, p. 144). This may mean that the participant has probably taken on certain characteristics and traits of her mother, which are related to the fulfillment of her goals.

Likewise, she is a woman who worries about her care and likes to be seen by others, which demonstrates a concern in the participant for her physical appearance. This may be related to the need to impact and be sexually attractive – that is, there is an emotional component visible in the relationships established by her, before and after surgery, where the concern about the partner's approval of her body becomes clear.

On the other hand, a person with high somatic concentration and intensified narcissism is observed. When referring to this, they talk about the process experienced by the subject in the initial stages of life, in which all his or her libidinal drive returns to the self.

This process, known as primary narcissism, is initially due to the fact that parents deposit in their children a drive load, related to the fulfillment of their frustrated dreams. In this case, the participant's mother has given her the need to always achieve her goals and desires.

Nevertheless, this first stage changes, presenting itself as secondary narcissism, where the subject understands that, in order to be able to satisfy his or her needs, he or she must comply with the demands of the ideal self (Nasio, 1988). Regarding the participant's speech, the importance of the fulfillment of certain cultural constraints is emphasized when she seeks to be loved or accepted. For this, she fulfills certain demands, those of the ideal self, probably related to a beautiful and slender body, having in this way the body as a means to access the other.

It is likely that, to the world surrounding the participant, she will be appealing, feminine and sensual. But internally, she may feel anguish about how her body is seen from a sexual perspective, leading her to eroticize what is not sexual. This is a symptom of hysteria.

With respect to the participant's body, the significance of her body emphasizes diverse important aspects referring to how uncomfortable she feels with it. Among others, her glutes are the only part that bothers her, and it is a physical trait that she inherits and

identifies with her mother, which Freud denominates (as it was cited in Nasio, 1988) "Partial identification with the local image of the object" (p.148). It should also be mentioned that the significance of the body in women is associated, according to Dolto, with how the body was experienced in childhood. As the author states: "On the one hand, the girl has an intuition of her femininity and her sex, in agreement or disagreement with the pleasure or displeasure of her mother. And of her father with respect to her, and with the pleasure that the feelings of her sex give her in her body" (Dolto, 1996, p. 170).

For this reason, it can be inferred that the participant has related her large glutes to an aspect of being a developed and experienced woman – that is, she visualizes her body in a fragmented way, a way of identifying with the maternal figure, which alludes to the experience of being a woman, of being recognized from the sexual aspect. This is because she has possibly positioned her mother as a sexual being – that is, she places her mother as an object of desire.

What has been said up to this point implies the probability that the participant has associated her body to her childhood experiences, which are possibly linked to a conflict in the construction of femininity, because during the interview she highlights certain experiences that made her uncomfortable in her childhood, such as being seen as an object of desire. Considering this, it is important to refer to Dolto (1996):

> With this human environment, the girl has bodily contacts that take on a sense of emotional and ideational harmony or disharmony in her relationship with others, according to other people's statements and reactions. A phenomenon called introjection occurs and the notion of her femininity is established in the girl by bestowing positive symbolic values that she has thus received from others, which concern her being in the world, her body, her appearance and her behavior (p.170).
>
> In this regard, it can be argued that, depending on the experience lived on the body, it can trigger a positive or negative value of the conception of being a woman (Dolto, 1996).

On the other hand, it is possible to notice evasion and little appreciation of the male figure. The participant in the interview shows a certain dissatisfaction with the relationship she maintains with her father. This may indicate that the fear and lack of confidence that she shows in him may have created a barrier in their relationship.

Nevertheless, the fundamental role of the mother in including the father in his children's development should be emphasized – that is, if the mother feels positive feelings towards the man, the daughter manages to bond comfortably with him (Dolto, 1996).

It is likely that the poor relationship that the participant claims to have with her father figure was due to the fact that the mother, possibly in the stage of dependence and maternal care, did not allow the father to become integrated into the dyad, leading to conflict in the conception that she has of the father figure and hence the argument of her protest against the male figure.

Participant N°2

Analysis

In this participant, a partial identification with her mother is observed, thus focusing on only one aspect of her mother image. The identification with her father is transformed into a partial identification, Freud (as cited in Nasio, 1988), the self takes significant features of that identifying object, turning into that aspect that she adopted within her representation.

On the other hand, a conflict related to hiding the body can be observed, indicating a fear of exposing the body. Therefore, what Freud (as cited in Nasio, 1991) mentions as a characteristic of hysteria is brought up again: "The contradictory enigma that hysteria raises (...) is the couple of opposites formed by an excessive sexual need and an excessive rejection of sexuality" (p. 47). It is understood that the hysterical subject remains in an unconscious duality between an excessive need and, at the same time, a feeling of disgust over that need. This is seen in the participant when she is unconsciously afraid of showing her body but at the same time enjoys being seen by others.

Likewise, there is evidence of anxiety and emotional conflicts probably at a social and sexual level. The participant has, in some parts of her speech, difficulties establishing pleasant relationships with others. Besides that, there is evidence of lack of confidence in social contacts – situation that she recognizes. "I keep eighty percent of my life to myself, while I share the other twenty percent with very few people." Therefore, the participant is likely to have objections when adapting to new situations and interaction with others (Machover, 1974).

The test shows guilt over the non-recognition of her father, as she mentions that she does not know him. Concerning this, Dolto says:

> The most serious rejection is undoubtedly that of the father who does not want to symbolically and legally recognize his child – it is a symbolic rejection of his or her social humanization. (…). As for the child who has been abandoned, due to pure rejection of his or her emotional value, and considered insufficient to retain emotional interest (...), he or she may feel like a symbol of excrement for both parents (Dolto, 1996, p, 85).

Taking into account what the author mentions, the participant is likely to feel rejected in her social humanization because of her father's abandonment, which can lead to possible feelings of inferiority. To make up for this, she feels "the desire to play with her own attraction in search of honor, attention and satisfaction of her own vanity, trying to value the most visible physical aspect, and trying to call the male's attention" (Machover, 1974, p. 56). The insecurity with respect to her body makes her need another body that offers her the necessary value. This is what Machover (1974) considers as "individuals who have a faulty and indecisive sense of their body integrity" (p. 80), since it is visible in the human figure drawing.

Taking that into account, the participant is likely to have built an unconscious body image with some conflicts, due to the personal experiences. Those experiences entail that, when looking at herself in the mirror, she will probably see the image she has unconsciously created of her own body, representing it through its body schema. It is important to add what Dolto mentioned when he differences between body schema and

body image. According to this author, the body "is our carnal life in contact with the physical world (...) it refers to the actual body in space, to the immediate experience" (Dolto, 1984, p.18-22).

Unlike the body schema, "the body image is proper to each subject and is linked to the subject and his or her history (...) and is exclusively imaginary" (Dolto, 1984, p. 21). That is why the body image is the representation that each subject makes of himself or herself in relation to all the emotional experiences and through the pleasure or displeasure of the erogenous zones.

Therefore, she takes up again a situation that leads her to build up her concept of unconscious body image, seeing the mark before the conception of her body as a teenage experience. This way, she will present features of inferiority, identifying herself at the same time with that person – what Freud calls partial identification with the local image of the object. "The self operates an identification with other people's image, considering only that the sexual being, or more exactly with the sexual part of the other" Freud (as cited in Nasio, 1988, p, 148).

Therefore, the participant is likely to experience her body in a partial way because she satisfies her drives in a partial way, which makes her have the notion of a divided or fragmented body. Freud mentions that the subject initially feels and sees the body separately or in sections depending on where the drive is felt (Freud, 1905). This can be observed when the participant throughout her story mentions that, initially, she does not feel comfortable with her breasts, so they are operated, passing that drive to the glutes, which are also operated. And then, she operates her abdomen to be as she says, "*perfect in the sense that I wanted my body according to my perfection.*"

When her body feels fragmented, she may be satisfied with one part of her body after surgery and pass the drive to another part, until she is satisfied with what she has not yet achieved, possibly remaining at fault before her body.

This leads us to talk about the meaning that the participant gives to her body from what she sees in it, Lacan (as cited in Soler, 1983). It is mentioned that, for the subject to give meaning to her body, she needs to shape the image that she observes in the mirror. It is in that moment that the subject gives meaning to the body that she observes. The participant is not happy with what she sees in the mirror so it is difficult for her to make sense of her body and accept it, because the image she sees in the mirror is not acceptable to her, giving meaning to the body she is looking at.

On the other hand, there is dissatisfaction with the relationship with her mother, because she expresses that they do not have an adequate relationship. Because of that, the participant feels that she has been left in permanent dissatisfaction by the mother, due to her first separation with her, which is given previously with the mother's womb, thus interfering with the girl's first loving feeling towards the mother (Nasio, 1988).

Thanks to her speech, the aunt is found out to be the one who plays the role of mother in the relationship with the participant, and the mother is the one who plays the role of father because it is her who imposes the rules. The superego is the one who introduces the rules or authority and means it in such a way that moral and ethical foundations are created, which are given to her in the development of the Oedipus complex. This depends to a great extent on the persistent presence of the father or the

authority of what should be and is not licit to be. Before this, the participant's mother is the one who introduces the rules in her, leading to conflict in the mother-daughter relationship. This is because of the confusion that she has about the role of mother that she expects from her mother and the one that she actually plays, meaning that the participant mentions a possible hostile relationship at times. "It is not that typical mother-daughter relationship in which you want to talk about everything, trust and get some advice."

Because of this, Dolto says that the mother can only play the role of dominant mother and rule introducer, as long as the father is there to give value to that attitude of the mother. On the contrary, the girl enters into an ambivalence between the sex of the mother and what she represents. (Dolto, 19996), because of the lack of a father, the participant is unable to clearly identify what the mother means to her.

As it can be seen throughout the analysis, the participant is insecure about her body because she was not satisfied before and after the procedures. That is why we refer again to Dolto when he talks about how the lack of affection of one of the parents on the child, or excessive love, can lead to insecurity in the subject about their fate or ability to cope with life.

So it can be said that it is possible that, thanks to the value that the participant placed on the language of those close to her, she was led to create the sense of her femininity, as well as the sense that she gives to the language of her current partner, which flatters her body thus giving her possibly a different sense of her femininity.

According to this, Dolto says: "When the girl (...) expresses emotions to communicate with others, she does so from her feeling of being valued by the people around her. This value is given to her during her childhood (...) A daughter is a female human specimen," (Dolto, 1996, p. 170). In view of this, it can be said that the insecurity projected by the participant and the isolation is a consequence of the feelings of security experienced during her childhood.

Participant N° 3

Analysis

Maternal dependence is visible since the mother plays the role of an indispensable figure for the participant. Everything she says makes it all possible to give it all to her or satisfy her, which refers to the previous stages of development, where the mother was the one who fulfilled the nurturing function – that is, there is probably a return to the oral stage, which is not necessarily directly related to the nurturing function of feeding, but in the way in which the participant meant during this phase, the interaction of giving and receiving with the paternal figures and the environment.

Likewise, it can be observed that the mother is the one who influences the participant's decisions, which is the influence of the mother in the object choices. This is due, according to Dolto (1996), to "the introjection of the mother. The latter one allows the desires felt by the mother (...) it is also transformed into the girl's desires" (p.111).

The introjection of the maternal figure is one of the beginnings that gives birth to the identification process, becoming clear between the participant and her mother when she states in her speech: "My mommy works in a restaurant, she works really hard." And she also refers to it when she speaks about herself: "I have to work hard." According to this, it can be observed that probably a part of the participant's self has been transformed into a part of the identified object – process known as partial identification, which according to Freud, as it was cited in Nasio (1988), "concerns the identification of the self with partial aspect of the object."

On the other hand, it is important to emphasize, in the participant's speech, the reference to the continuous loss of her most beloved ones. Some of her losses are her father, the object of external love, and her cousin. Therefore, it can be seen that the participant experiences a constant loss and constitutive lack. This leads her to dissatisfaction, possibly related to the unconformity that she feels about her body, even after the performed procedures, because what she thinks about her body is: "Now I'm feeling normal, I'm such a non-conformist." As for the lack related to dissatisfaction, it could be mentioned that the participant presents typical features of hysteria – a characteristic of the first state proposed by Nasio (1991) called "an unsatisfied self," where "the self is constantly waiting to receive from the other, not the satisfaction that fills, but, curiously, the non-response that causes frustration" (p. 15).

On the other hand, there are indicators of conflict at the sexual level, "related more to fears of castration for auto-erotic satisfaction" Machover (1974, p.59). They could be related to what Nasio (1991) highlights: "A hysteric person's body suffers from being divided between the genital part, surprisingly anesthetized and afflicted by intense sexual inhibitions" (p.14).

The participant's drawings are what Machover calls a childlike drawing, which could be linked to the possible maternal dependence preserving the love of this apparently asexual figure. This is because of the supposed pre-Oedipus conflict, because of the predominantly hysterical features where she positions herself as an object of desire but not a desiring object, becoming a sexually anaesthetized subject. As Freud (1905, p.74) states: "They did not withdraw their tenderness, or they did it in a very partial way. It's mostly girls: (...) they fully preserve their childlike love (...). Becoming (...) sexually anesthetized [and insensitive]."

On the other hand, there is resistance in assuming her corporeity, probably related due to the inconformity that she says she has in her body when she says: "I was too thin, extremely thin (...) I had lots of fights when it came to what to wear. It was awful."

Therefore, the participant has referred her body in a devaluing way when she talks about the non-conformity of her body for being "extremely thin." According to Dolto (1986), the unconscious body image "is inscribed in the relational experiences of need and desire, which are valuing and/or devaluing, (...) are manifested as a symbolization of the variations in the perception of the body schema" (p. 33).

Likewise, the meaning that the participant gave to her body is linked to the devaluing meaning given to it by her mother. Therefore, she refers to it: "*My mom thought it was me who had a problem but neither of those things was true.*" In view of this, it is important to mention what Dolto (1984) says: "The healthy evolution of this subject (...) depends on the emotional relationship between her and her parents. It also depends on that, very early, they offer her information that is true to her physical state" (p. 19).

Discussion and Conclusion

It was found that there is a common aspect that stands out in all three participants, which is the identification with the maternal figure. The concept of identification, according to Freud (as cited in Nasio, 1988) is an intrapsychic process dominated by the unconscious, where the self is transformed into a part of the identified object. Therefore, the identification process is observed in the participants in a partial way, since they have taken a significant aspect of the primary object, the participants have internalized certain characteristics of the mother and have taken them as their own, making them part of the construction of their self.

In relation to this, it can be understood that the identifications that the participants make with the primary object are significant during the construction process of their unconscious body image, as these identifications have allowed them to represent their body image. However, these are reflected in a conflictive way. Because the participants conceive their body image in a partial way, they feel and see their body separately or in sections depending on where the drive is felt (Freud, 1905).

Moreover, the absence of the father has possibly led to difficulties in the symbolic resolution of the Oedipus and castration complex, which makes it difficult for the subject to establish the rules and restrictions of her desires (Dolto, 1984). In the absence of the father, one can observe a conflict in the participants when it comes to assimilating the rules set by their mothers, making a male protest in one of them and showing features of dependence with the maternal figure in the other two.

On the other hand, in P2 and P3 there might be a fear of castration associated with the anguish of separation with the primary love object, since according to Nasio (1988), the castration complex in the girl is the most important situation where the separation with the mother occurs.

In accordance with this, paternal figures play an important role in the construction of the girl's femininity and sex, since according to Dolto, it is associated with how she has experienced this in her childhood – that is to say, the girl conceives her femininity through the speech she hears from her mother regarding the conformity and non-conformity she has about her own body, as well as her father's approval.

Likewise, we can highlight the importance of the paternal figures' opinion, in relation to the body image. It is inscribed, according to Dolto (1984), "in the relational, valuing and/or devaluing experiences of need and desire" (p.21). This is why the unconscious body image is built from the first contact with the caregiver, from the valuing or devaluing opinion that transmits to the child in his or her body schema.

For this reason, in P3's speech, a certain impact is noticed in her opinion when the mother mentions her body in a devaluing way. Unlike P3, P1 expresses in her speech the valuing manner in which her mother refers to her body. Finally, in P2 the importance she gives to the others' opinion is observed, but in this case reflected in the partner, which she does in a valuing way.

In the same way, Dolto puts down an important value to language, understood not only as the opinion but also as the sensory exchanges that occur from experience – that is, the subject relates to others through the signifier, thus giving meaning to her body.

Considering this, it can be said that in the three participants the others' speech influences in such a way that it is likely to affect them in the construction of their unconscious body image, finding in this way certain inconformity with some parts of their body – precisely with those that are allusive to femininity, such as glutes, breasts, abdomen and legs.

P1 shows her dissatisfaction with her breasts and glutes, because according to her speech, they are not suitable for her height. P2 mentions that, when she looks at herself in the mirror, she does not like what she sees and that she has always had a "little girl" type of body. In P3, a contradiction in her story is identified because she says that she is satisfied with her body, but at the same time she shows that she feels normal and dissatisfied. In relation to this, the meaning of the unconscious body image is inscribed in the order of the imaginary, which may be related to the tendency to non-conformity that they claim to have, since according to Bernard (1994), the body is traversed by a ghost and given a meaning by a body.

Likewise, it can be identified that the meanings of her body are linked, according to Dolto (1984),"to the subject and her background (...) and is exclusively imaginary" (p. 21). In relation to this, the experiences mentioned by the participants that led them to build up their body image are taken into account, because it is known that each one lived her body in a different way, leaving marks in them and leading them to build up what they see in the mirror.

According to this, a possible conflict between what they see and what they live can be observed in the participants – that is, the participants perceive their body from the unconscious body image in discordance with the body schema, giving a possible priority to the external part, According to Nasio, as children grow up, they will understand that others will access them through the image that the children observe in the mirror. This is why they begin to give priority to their physical appearance, as what they see is different than what they live. "These images govern our aesthetic choices and, more generally, decide our dreams and our actions" (Nasio 2008, p. 23).

The discordance between body schema and body image is a difference between the real and the imaginary. This possibly generates a constitutive lack in them, in relation to the dissatisfaction with their body. This is a characteristic aspect of hysteria, because according to Lacan (as it was cited in Dellepiane, n.d.), "the lack in being or alignment of the desire of the other" (p.4) is reported in hysteria. Women with these features tend to position themselves as other people's objects of desire, which is visible from the beginning of the Oedipal process. This prevents the father from reaching to his daughter

and leads her to resign herself and feel identified with the maternal figure, taking from its seductive characteristics to gain access to an external object.

On the one hand. an ambivalence can be seen in the participants, as they want to be that object of desire. On the other hand, they fear having intercourse – that is, they probably fear exposing their bodies to their partners, but modifications are made to their bodies in order to be sexually attractive. In view of this, Freud (as cited in Nasio, 1991) mentions that "the contradictory enigma posed by hysteria (...) (is) the couple of opposites formed by an excessive sexual need and an excessive rejection of sexuality" (p. 47).

However, because the body serves as a mediator for making contact with the outside world and thanks to cultural constraints, certain disconformities with the ideal body can be seen in the participants' speech, since they are likely to feel that they do not conform to the stereotypes of beauty marked by society.

This ideal of beauty is related to characteristics of sexually attractive and voluptuous women, which causes a kind of cultural unrest, given that the consumer society has established a single image. According to Cortés (2001), this is a society "without the possibility of variation characterized by flawless bodies and the lack of imperfections that has been promoted by the media" (p.30).

In view of this, the participants have agreed to modify certain parts of their bodies in order to include themselves within the predominant archetypes of beauty established by society, which according to Córtes (2001) is related to "a young, beautiful and slender body" (p.29). However, it should be highlighted that, despite the interventions on their bodies, they remain at fault – that is, dissatisfied and wanting to attract the others' attention.

Finally, narcissistic features are visible in the three participants since they are concerned about how their body is seen, feeling the need to see themselves attractive to others in order to be recognized and loved. This can only be achieved by fulfilling the demands of the ideal self. This ideal is the prototype of beautiful and voluptuous women, which makes the "investment of the elements return and invest in the self" Freud (as cited in Nasio, 1986, p. 66).

In conclusion, it can be said that a relation was found between the surgical aesthetic treatments and the participants' unconscious body image, as this is mediated by different experiences throughout their lives. Another relation was found between the paternal references and the other, located from the identification, resolution of the Oedipus and castration complex, the signifier, and the influence of cultural constraints. This process leads to the identification of the psychic structure that, in the participants' case, is related to the predominantly hysterical features.

One of the outstanding characteristics in the participants is related to the constitutive lack, which probably leads them to try to replace this lack through surgical aesthetic treatments. This makes them part of the prototype of a voluptuous, slender woman that society establishes in order to expand aesthetic consumption.

Another characteristic is the ambivalence, which is visible in the participants' speech and the Machover test results when the participants mention the fear to exhibit their bodies, although at the same time they want to be seen.

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SYSTEMATIC REVIEW OF THE LITERATURE ON THE EFFECT OF MINDFULNESS BASED THERAPIES ON SUBSTANCE USE RELATED DISORDERS

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Abstract. Nowadays mindfulness-based therapies are being studied and implemented in the field of substance use related disorders. The present study consisted on the systematic review of the literature on the effect of mindfulness-based therapies on substance use disorders. The aim of this study was to determine the effect of mindfulness-based therapies on substance use disorders. Fifteen studies based on randomized, controlled or pilot trials that compared mindfulness-based therapies to other therapies for the treatment of substance use disorders, were reviewed. This study consisted on a descriptive and exploratory investigation and used a qualitative approach. The results of the study revealed that mindfulness-based therapies have a positive effect on substance use disorders. This conclusion is based on the results of the reviewed articles; mindfulness-based therapies promote substance use reduction, craving reduction, reduction of stress, anxiety, depression and other psychiatric symptoms related to substance use disorders.

Keywords: mindfulness, substance related disorders, meditation, craving, relapse.

REVISIÓN SISTEMÁTICA DE LA LITERATURA SOBRE EL EFECTO DE LA TERAPIA BASADA EN CONCIENCIA PLENA (MINDFULNESS) SOBRE LOS TRASTORNOS RELACIONADOS CON EL USO DE SUSTANCIAS

Resumen. Hoy en día las terapias basadas en la conciencia plena están siendo estudiadas e implementadas en el campo de los trastornos relacionados al uso de sustancias. El presente estudio consistió en la revisión sistemática de la literatura sobre el efecto de la terapia basada en conciencia plena (mindfulness) sobre los trastornos relacionados con el uso de sustancias. El objetivo principal del estudio consistió en determinar el efecto de la terapia basada en conciencia plena sobre los trastornos relacionados al uso de sustancias según la bibliografía revisada. Para la consecución de dicho objetivo fueron revisados quince estudios basados en ensayos controlados, aleatorios o pilotos que comparaban las terapias basadas en conciencia plena con otro tipo de terapias para el

tratamiento de trastornos relacionados al uso de sustancias. Este estudio consistió en una investigación descriptiva y exploratoria y utilizó el enfoque cualitativo. Los resultados del estudio revelaron que las terapias basadas en la conciencia plena tienen un efecto positivo sobre los trastornos relacionados al uso de sustancias. Se llega a esta conclusión a través de los resultados obtenidos en las investigaciones revisadas: las terapias basadas en la conciencia plena facilitan la reducción del consumo de sustancias, reducción del deseo de consumo, reducción del estrés, la ansiedad la depresión (precipitantes de las recaídas) y otros síntomas psiquiátricos relacionados a los trastornos relacionados al uso de sustancias.

Palabras clave: conciencia plena (mindfulness), trastornos relacionados con el uso de sustancias, meditación, deseo de consumo, recaídas.

Introduction

This research consists of a systematic review of the literature on the effect of therapies based on the full awareness of substance use disorders.

Barlow and Durand (2012) define substance-related disorders as a range of problems related to drug use, abuse and dependence. People consume these substances in order to alter the way they think, feel and behave. On the other hand, the American Psychiatric Association (2013) argues that substance use disorders consist of cognitive, behavioral and physiological symptoms that cause a person to continue consuming, regardless of the problems that substance use may have caused in their lifetime. Substance use disorders produce changes in brain circuits that cause an increased desire for consumption during the detoxification process and which are responsible of relapses to some extent.

Mindfulness or full consciousness are translations of the word *santi* of Pali origin. This term is related to attention, memory and awareness (Vásquez-Dextre, 2016). Barrows (2016) argues that the practice of mindfulness comes from India approximately 2,500 years ago. It is suggested, from ancient writings, that Buddha was the creator of this practice. Mindfulness is a meditation technique that consists of observing and experiencing the present moment with acceptance, openness and without judging it (Vásquez-Dextre, 2016).

Although there are many treatments for substance use related disorders, their prevalence is still high (Witkiewitz, Dillworth, Chawla, Simpson, Ostafin and Larimer, 2006). According to Witkiewitz, Bowen, Douglas, Enkema and Sedgwick (2014), the popularity of mindfulness-based treatments has grown. According to Brewer et al. (2011), the practice of full consciousness has proven effective for treating psychological problems such as depression, anxiety, addictive disorders and others. There are studies that have shown that this type of intervention can be effective for the treatment of addictive behaviors and substance use related disorders (Witkiewitz, Bowen, Douglas, Enkema and Sedgwick, 2014).

The main objective is to determine the effect of mindfulness-based therapies on disorders related to substance use according to the literature reviewed. In order to achieve this objective, 15 published studies were reviewed, consisting of controlled, randomized or pilot trials comparing therapies based on full consciousness with other therapies for the treatment of disorders related to substance use.

Method

Type of Research

The type of research in this study is exploratory, descriptive and consists of a systematic review of qualitative type.

Guiding question: What is the effect of mindfulness-based therapies on disorders related to substance use according to the literature reviewed?

Inclusion and exclusion criteria

Inclusion criteria: these include published scientific articles where randomized, controlled and pilot trials were conducted, the studies were in Spanish or English and were older than 15 years since their first publication.

Exclusion criteria: these exclude scientific articles that were not published, articles that were not based on randomized, controlled and pilot trials, articles based on literature review, studies in languages other than English or Spanish, and studies older than 15 years since their first publication.

Literature Search Plan

The literature search plan consisted of searching for scientific articles in reliable databases such as the National Library of Medicine of the United States. Literature that has been used as a reference for preparing studies was also selected. Lastly, literature was also searched in scientific journals in the field of health.

Data recording and evaluation on the quality of the selected studies

The literature was registered in bibliographic records. The quality evaluation of the study was carried out based on the sample size. Only studies with a sample of 30 or more subjects were reviewed, since the minimum number for experimental studies is 30 subjects (Sareh, Gholami and Jafari, 2018).

Results

The first specific objective of this research work was to determine the elements of the practice of consciousness that reduce the use of substances according to the literature reviewed. From the literature review it was possible to determine the elements or components of the practice of mindfulness that help to reduce the use of substances. These elements were mentioned by four of the fifteen studies. The results of the studies will be mentioned below.

On the one hand, the study conducted by Bowen et al. (2009), consisted of a trial, whose objective was to determine the feasibility and effectiveness of the relapse prevention program. The results of the study showed that participants in the mindfulness-based relapse prevention program presented higher levels of acceptance and awareness compared to the control group that received a traditional therapy. These elements of mindfulness help reduce substance use.

In addition, the study conducted by Witkiewitz, Bowen, Douglas and Hsuc (2012) consisted of an essay where attempts were made to discover the mechanisms that cause the mindfulness-based relapse prevention program to reduce the desire for substance use. The results of the study showed similar results to the study that was previously mentioned. The results of the study revealed that acceptance, awareness (awareness) and the fact of not judging, are elements worked on in mindfulness that reduce the desire for consumption and therefore the subsequent consumption of substances.

Additionally, the study conducted by Bowen, Witkiewitz, Dillworth and Marlatt (2007) consisted of a trial where two groups were compared. One group received a Vipassana meditation course and the other group received traditional treatment. The results of the study revealed that the practice of mindfulness decreases attempts to avoid undesirable thoughts, and thus facilitates their acceptance (component of mindfulness). It has been proven that the suppression of thoughts related to substances increases their consumption.

Finally, the study conducted by Hoeppner, Elvins and Brewer (2014) consisted of a randomized controlled trial. One group received training in mindfulness and the other group received as treatment a cognitive behavioral therapy called Freedom of Smoking. The results of the study showed that mindfulness could enhance the therapeutic effect of not judging internal experience (component of mindfulness), which facilitates the smoking cessation process.

The second specific objective was to determine, from the literature review, the effectiveness of the practice of full consciousness to reduce the desire for consumption. Four of the fifteen studies mentioned that full awareness is effective for the prevention of relapse from the decrease in the desire for consumption. The results of the studies will be mentioned below.

To begin, the study conducted by Bowen et al. (2009), consisted of a trial that aimed to determine the feasibility and effectiveness of the relapse prevention program based on mindfulness. One group received as a treatment the relapse prevention program based on mindfulness and the other group received traditional treatment. The results of the study showed that participants who received the mindfulness-based relapse prevention program as a treatment, presented lower levels of desire for consumption compared to the participants in the group who received traditional therapy.

Similarly, the study conducted by Witkiewitz, Bowen, Douglas and Hsuc (2012) consisted of an essay that aimed to determine the mechanisms that make the relapse prevention program based on full awareness decrease the desire to consume . One group received as a therapy the relapse prevention program based on full awareness and the other group received traditional therapy. The results of the study revealed that the participants of the group that received the relapse prevention program based on full awareness as a treatment, presented a desire for lower substance use compared to the other group.

On the other hand, the study conducted by Witkiewitz and Bowen (2010) consisted of an essay. The participants were divided into two groups, one group received the mindfulness-based prevention program as a treatment and the other group received traditional therapy. The results of the study revealed that the mindfulness-based prevention program attenuated the relationship of depressive symptomatology and the desire for consumption and therefore reduced substance use among participants in this group.

Finally, the study conducted by Sareh, Gholami and Jafari (2018) consisted of an essay. The sample was divided into two groups. The experimental group received the mindfulness-based relapse prevention program and the control group received another treatment. The results of the study revealed that the participants of the group received the relapse prevention program based on mindfulness as a treatment, presented a desire for reduced consumption with respect to the control group and also presented half of the number of relapses.

The third and final specific objective of this research hoped to be able to determine, from the literature review, if the intervention based on full consciousness is more effective than other treatments to treat disorders related to substance use. Through the review of the 15 studies, he was able to determine that full consciousness-based therapies are more effective than other therapies in the treatment of substance use-related disorders. All the results of the studies reviewed revealed that the efficacy of mindfulness-based treatments is superior compared to other therapies for the treatment of substance use-related disorders. The studies will be presented below briefly in the form of a list:

- Witkiewitz, K., Bowen, S., Douglas, H., y Hsu, S. H., 2012: The present study focuses on discovering what are the mechanisms that make the program based on full awareness

for relapse prevention decrease the desire for substance use. From a sample of 168 participants, two groups were formed. One group received the 8-week relapse prevention program based on mindfulness and the other group received traditional treatment. The results of the study revealed that the mindfulness-based relapse prevention program was more effective than the traditional treatment in reducing the desire to consume.

In addition, it was concluded that acceptance, awareness and non-judgment (components of mindfulness) are mediators between the program based on full awareness and the decrease in the desire for consumption.

- Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J. y Marlatt, A., 2009: The present study consists of an experimental test to evaluate the viability and efficacy of an 8-week outpatient program based on full awareness for relapse prevention, comparing it with a traditional treatment program. The study sample was 168 subjects. The study participants were divided into two groups. One group received as a treatment the relapse prevention program based on full awareness and the other group received traditional treatment. The results of the study revealed that the relapse prevention program based on mindfulness was more effective than the traditional treatment, because the participants of the experimental group presented lower levels of consumption and greater acceptance and awareness (components of mindfulness) with respect to control group.

- Bowen, S., Witkiewitz, K., Dillworth, T. M. y Marlatt, G. A., 2007: Studies have been conducted on how the suppression of thoughts on substance use affects and it has been concluded that actually suppressing such thoughts increases their use. Vipassana is a type of mindfulness meditation, which, instead of trying to suppress undesirable thoughts, promotes their acceptance. This study consisted of a sample of 173 participants, these were distributed in two groups, one received the Vipassana meditation course and the other received traditional treatment. The results of the study revealed that Vipassana meditation was more effective than traditional treatment since its participants presented greater decreases in attempts to avoid undesirable thoughts regarding the control group. Trying to suppress such thoughts increases substance use.

- Bowen, S., Witkiewitz, K., Dillworth, T., Chawla, N., Simpson, T., Ostafin, B. and Larimer, M., 2006: This study has investigated the efficacy of Vipassana meditation as a treatment for substance use in a prisoner population, comparing it with a prisoner control group that has received traditional treatments for substance use related disorders. We worked on a sample of 78 subjects. The results of the study revealed that Vipassana meditation was more effective than traditional treatment because the participants in the experimental group had a significant reduction in the use of alcohol, marijuana and cocaine.

In addition, participants in the experimental group presented decreases in psychiatric symptoms and an increase in psychosocial performance compared to participants in the control group.

- Andreu, C.I, Cosmelli, D., Slagter, H.A., y Franken I.H.A., 2018: This study investigates the effects of a short practice of full awareness on the inhibition of the smoking response through behavioral and electroencephalogram measures. The study involved 50 subjects who were exposed to cigarettes to cause desire to consume and subsequently were randomly assigned to two groups. The experimental group received full awareness instructions and the control group received other instructions. Subsequently, the participants of both groups underwent a GO / NO GO test. The results

of the study revealed that the instructions in full consciousness were more efficient because the participants who received this type of instructions had less effort to inhibit the responses.

- Brewer, J. A., Mallik, S., Babuscio, T. A., Nich, C., Johnson, H. E., Deleone, C. M. y Rounsaville, B. J., 2011: In this study, 88 nicotine-dependent subjects were assigned to two groups. One group received treatment based on full awareness practice and the other received a treatment from the American Smoke-Free Lung Association. The results showed that mindfulness-based therapy was more efficient, because the participants in the experimental group had a higher rate of reduction in cigarette consumption compared to the participants in the control group.

- Witkiewitz, K., and Bowen, S., 2010: The objective of this research is to study the relationship of measures of depression, desire to use and use of substances after the intervention of the relapse prevention program based on full awareness. We worked on a sample of 168 subjects suffering from disorders related to substance use. The participants were randomly divided into two groups. One group received as a treatment the relapse prevention program based on full awareness, the other group received traditional treatment. The results of the study revealed that the mindfulness-based relapse prevention program was more efficient than the traditional treatment, because the mindfulness-based relapse prevention program attenuated the relationship of depressive symptomatology and the desire for consumption.

- Bowen, S., Witkietitz, K., Clifasefi, S., Grow, J., Chawla, N., Hsu, S., Carroll, H., Harrop, E., Collins, S., Lustyk, K., y Larimer, M., 2014: This study aims to evaluate the effectiveness of the mindfulness-based relapse prevention program compared to the relapse prevention program and traditional treatment. We worked with a sample of 286 subjects. The sample was divided randomly in three groups One group received the relapse prevention program based on mindfulness as a treatment, another group received the relapse prevention program as a treatment, and the last group received the traditional treatment. The results revealed that the three therapies were effective for reducing consumption, however, participants in the mindfulness-based relapse prevention program and the relapse prevention program had lower probabilities of relapse. Amongst both prevention relapse programs based on mindfulness was the most effective, since its effects showed to last longer.

- Schuman-Olivier, Z., Hoeppner, B. B., Evins, A. E., y Brewer, J. A., 2014: This study argues that not judging internal experience could influence the response of treatment for substance use related disorders. In order to determine whether this component influences smoking cessation, a randomized controlled trial was conducted. We worked with a sample of 85 subjects. The subjects where divided in two equal groups.

    A group received a training in mindfulness and the other group recieved a cognitive compartmental therapy called the freedom to smoke.   The results of the study revealed that training in mindfulness compared to Freedom of Smoking therapy, was more effective in enhancing the therapeutic effect of not judging the internal experience during smoking cessation which caused lower levels of consumption.

- Imani, S., Atef Vahid, M. K., Gharraee, B., Noroozi, A., Habibi, M., y Bowen, S., 2015: The present study consisted of the investigation of the efficacy of mindfulness-based group therapy compared to the traditional treatment for opium dependence. We worked on a sample of 30 subjects. The participants were assigned randomly in two groups.

    The experimental group recieved a group therapy based in mindfulness for eight weeks and the control group received a traditional treatment.   The results of the study showed that the prevention programs relapses based in mindfulness is viable and efficient compared to traditional therapy. This conclusion is based on the following

factors: mindfulness-based therapies can reduce addictive behaviors, prevent relapses precipitated by stress, decrease substance use and increase the sense of control over desire or temptation to consume.

- Garland, E. L., Gaylord, S. A., Boettiger, C. A., y Howard, M. O., 2010: It could be suggested that the practice of full consciousness could interfere with relapses precipitated by stress. We worked on a sample of 53 adults dependent on alcohol. Participants were randomly assigned to a mindfulness training or support group, both lasting 10 sessions. Of the 53 subjects, only 37 completed the interventions. The results of the study revealed that, in comparison to the support group, full awareness training is more effective since it could affect the cognitive, affective and physiological risk mechanisms involved in relapses. Furthermore, it seems that mindfulness reduces stress and suppressing thoughts related to alcohol consumption.

- Witkiewitz, K., Warner, K., Sully, B., Barricks, A., Stauffer, C., Thompson, B. L., y Luoma, J. B., 2014: The objective of this study is to compare the effectiveness of the mindfulness-based relapse prevention program with respect to the relapse prevention program. We worked on a sample of 105 women offenders. The participants were randomly assigned to one of the two groups. A group of 55 participants received the mindfulness-based relapse prevention program. The other group of 50 people received the relapse prevention program as a treatment. The results of the study modestly revealed that the mindfulness-based relapse prevention program is more effective than the relapse prevention program. The women who received the mindfulness-based treatment had significantly fewer days of consumption, fewer legal problems and fewer health problems.

- Davis, J. M., Mills, D. M., Stankevitz, K. A., Manley, A. R., Majeskie, M. R., y Smith, S. S., 2013: In this study two interventions were compared, Mindfulness Training for Smokers and Interactive Learning for Smokers. We worked on a sample of 55 young adult participants who consumed alcohol excessively at least 5 times a month and who also smoked an average of 10 or more cigarettes a day. The participants were randomly assigned to two groups. One group received Mindfulness Training for Smokers. The other group received Interactive Learning for Smokers. The results of the study revealed that the efficacy of mindfulness-based training was higher, because the prevalence of smoking withdrawal was higher in the participants of this group.

- Yaghubi, M., Zargar, F., y Akbari, H., 2017: This study aims to compare the relapse prevention program based on mindfulness with traditional treatment with respect to impulsivity and relapse in patients treated with methadone. Impulsivity is one of the causes that cause relapses and that interferes with the results of treatments. We worked on a sample of 70 participants. The participants were randomly assigned to two groups. One group received as a treatment the relapse prevention program based on mindfulness and the other group received traditional treatment. The results of the study revealed that the mindfulness-based relapse prevention program was more effective because it presented a greater potential to reduce the likelihood of relapses in opium-dependent individuals compared to traditional treatment. It was also shown that this program is able to reduce the impulsivity that constitutes one of the causes that cause relapses.

- Sareh, H., Gholami, Z., y Jafari, M., 2018: The present study aims to investigate the efficacy of mindfulness-based group therapy for the prevention of relapses in men dependent on methamphetamines. We worked on a sample of 30 subjects. The 30 participants were divided into 2 groups. One group received mindfulness-based treatment for nine one-hour sessions and the other group received another type of treatment. The results of the study revealed that group therapy for mindfulness-based relapse prevention was more effective because participants in the experimental group

presented half the number of relapses compared to the control group. In addition, this therapy significantly reduced the desire for consumption, the probability of consumption and the rate of depression.

Finally, the general objective of this study was to determine the effect of therapies based on full awareness on disorders related to substance use according to the literature reviewed. Through the review of 15 studies, it was concluded that full consciousness-based therapies have a positive effect on substance use related disorders. This conclusion is reached because in all the studies reviewed there is evidence that suggests that the practice of full consciousness is beneficial for disorders related to substance use. Next, a list of the effects of mindfulness on the disorders related to the use of substances presented by each study will be presented.

- Witkiewitz, K., Bowen, S., Douglas, H., y Hsu, S. H., 2012: In the present study it was shown that the mindfulness-based relapse prevention program reduces the desire for consumption. In addition, it increases acceptance, awareness and not judging, elements of mindfulness that facilitate the reduction of the desire for consumption.
- Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J. y Marlatt, A., 2009: This study showed that the mindfulness-based relapse prevention program reduces consumption levels. In addition, this program increases acceptance and awareness, which consist of elements of mindfulness that facilitate the reduction of the desire for consumption.
- Bow Bowen, S., Witkiewitz, K., Dillworth, T. M. y Marlatt, G. A., 2007: This study showed that Vipassana meditation (mindfulness-based meditation) reduces attempts to avoid undesirable thoughts related to consumption. It has been shown that suppressing such thoughts increases substance use.
- Bowen, S., Witkiewitz, K., Dillworth, T., Chawla, N., Simpson, T., Ostafin, B. and Larimer, M., 2006: The present study has shown that the practice of Vipassana meditation significantly helps reduce the use of alcohol, marijuana and cocaine. In addition, this type of meditation also decreases psychiatric symptoms and increases psychosocial performance.
- Andreu, C.I, Cosmelli, D., Slagter, H.A., y Franken I.H.A., 2018: Within addictions, inhibition of response is one of the causes responsible for relapses. This study showed that instructions in mindfulness can decrease efforts to inhibit responses.
- Brewer, J. A., Mallik, S., Babuscio, T. A., Nich, C., Johnson, H. E., Deleone, C. M. y Rounsaville, B. J., 2011: The present study showed that the practice of mindfulness could reduce tobacco consumption.
- Witkiewitz, K., and Bowen, S., 2010: The results of the present study revealed that the mindfulness-based relapse prevention program could attenuate the relationship of depressive symptomatology and the desire to consume This program seems to influence cognitive and behavioral responses to depressive symptoms and therefore helps reduce substance use.
- Bowen, S., Witkietitz, K., Clifasefi, S., Grow, J., Chawla, N., Hsu, S., Carroll, H., Harrop, E., Collins, S., Lustyk, K., y Larimer, M., 2014: The present study has shown that the mindfulness-based relapse prevention program produces a lower probability of relapses, fewer days of consumption and a greater probability of not consuming alcohol in high concentrations, and, in addition, its effects are more lasting.
- Schuman-Olivier, Z., Hoeppner, B. B., Evins, A. E., y Brewer, J. A., 2014: This study has shown that mindfulness could enhance the therapeutic effect of not judging internal experience during smoking cessation. People who do not judge their internal experience often tend to smoke in a reduced way.

- Imani, S., Atef Vahid, M. K., Gharraee, B., Noroozi, A., Habibi, M., y Bowen, S., 2015: In this study it was shown that mindfulness-based therapies have positive effects on disorders related to substance use because they are capable of reducing addictive behaviors, preventing relapses precipitated by stress, reducing substance use and increasing substance use. feeling of control over desire or temptation to consume.

- Garland, E. L., Gaylord, S. A., Boettiger, C. A., y Howard, M. O., 2010: The results of this study revealed that full awareness training could affect the cognitive, affective and physiological risk mechanisms involved in relapses in people dependent on alcohol. The results suggest that the program reduces stress and suppression of thoughts related to substance use.

- Witkiewitz, K., Warner, K., Sully, B., Barricks, A., Stauffer, C., Thompson, B. L., y Luoma, J. B., 2014: This study showed that people who received the mindfulness-based relapse prevention program had fewer days of consumption, and less legal and health problems related to substance use.

- Davis, J. M., Mills, D. M., Stankevitz, K. A., Manley, A. R., Majeskie, M. R., y Smith, S. S., 2013: This study showed that the practice of mindfulness could reduce the consumption of tobacco and alcohol.

- Yaghubi, M., Zargar, F., y Akbari, H., 2017: The present study has shown that the mindfulness-based relapse prevention program could reduce the likelihood of relapses in opium-dependent individuals. In addition, it was shown that this intervention could reduce levels of impulsivity, impulsivity is one of the elements responsible for relapse.

- Sareh, H., Gholami, Z., y Jafari, M., 2018: This study has shown that mindfulness-based group therapy can decrease the number of relapses. In addition, this intervention significantly decreases the desire for consumption, the likelihood of consumption and depression.

Discussion and Conclusions

Disorders related to substance use consist of a pathological behavioral pattern associated with substance use (The American Psychiatric Association, 2013). Barlow and Durand (2012) define them as a range of problems related to drug use, abuse and dependence.

On the other hand, full consciousness consists of a type of meditation originated approximately 2500 BC. The roots of this practice go back to the Buddhist tradition (Collard, 2015). Mindfulness is a practice that consists in the process of raising awareness in everyday events and physiological and psychological sensations (Snyder, López and Teramoto, 2011). Vásquez-Dextre (2016) defines it as the process in which a person observes, becomes aware and accepts what happens in his body, in his mind and around. The popularity of mindfulness-based treatments has grown, currently mindfulness-based therapies have aroused a lot of curiosity and their effects on various disorders and diseases are being investigated (Witkiewitz, Bowen, Douglas, Enkema and Sedgwick, 2014) .

To begin, through the literature reviewed, it could be suggested that therapies based on full consciousness have a positive effect on substance use related disorders. The studies reviewed studied the efficacy and effects of therapies based on full awareness of substance use disorders. Positive effects of full consciousness-based therapies have been described in people suffering from substance use related disorders. These effects will be mentioned below.

There is evidence that suggest that the suppression of thoughts related to the use of substances contradictorily increases their consumption (Bowen, Witkiewitz, Dillworth and

Marlatt, 2007). Studies by Bowen, Witkiewitz, Dillworth and Marlatt (2007) and Garland, Gaylord, Boerriger and Howard (2010) suggest that therapies based on full consciousness could reduce attempts to avoid undesirable thoughts and, rather, motivate individuals to accept this kind of thoughts. Perhaps by reducing attempts to avoid undesirable thoughts, relapse could be prevented. The reduction of attempts to avoid undesirable thoughts could be an important element that could be incorporated into other therapies for the treatment of disorders related to substance use.

There are studies that suggest that there is a strong relationship between negative effects and the desire for consumption. Depression, especially, is linked to the desire for consumption and relapse. That is, depression is one of the causes responsible for relapses. The studies by Witkiewitz and Bowen (2010) and Sareh, Gholami and Jafari (2018) revealed that full consciousness-based therapies could lower levels of depression in people suffering from substance use-related disorders. Full awareness influences the behavioral and cognitive responses of depressive symptoms and thus decreases substance use.

Additionally, stress is another factor that causes relapses. The practice of full consciousness could positively interfere with relapses caused by stress (Garland, Gaylord, Boerriger and Howard, 2010). The results of the study by Garland, Gaylord, Boerriger and Howard (2010) revealed that full awareness training could affect the cognitive, affective and physiological risk mechanisms involved in relapses. This practice can reduce stress and, in this sense, it could reduce the chances of relapses precipitated by stress.

There are studies that argue that the practice of full consciousness could reduce the use of substances, thus helping them to cease them. The study conducted by Bowen et al. (2006) suggests that the practice of Vipassana meditation (type of mindfulness-based meditation) could reduce the use of alcohol, marijuana and cocaine. On the other hand, the studies carried out by Brewer et al. (2011) and Davis, Mills, Stankevitz, Manley, Majeskie and Smith (2013) argue that the practice of mindfulness could help reduce tobacco use.

Impulsivity is one of the responsible causes of relapse in people suffering from disorders related to substance use. There are studies that suggest that the practice of full awareness could reduce anxiety levels and thus prevent relapses precipitated by impulsivity. The study by Yaghubi, Zargary Akbari (2017) revealed that the relapse prevention program based on full awareness is able to decrease impulsivity in opium dependent individuals.

Like impulsivity, the difficulty of inhibiting responses is also a cause that causes relapses in people suffering from substance use related disorders. Like impulsivity, the difficulty of inhibiting responses is also a cause that causes relapses in people suffering from substance use related disorders.

Other interesting findings of the practice of full consciousness are that it could reduce psychiatric symptoms and increase psychosocial performance in substance dependent people. The study conducted by Bowen et al. (2006) has determined that the practice of Vipassana could reduce psychiatric symptoms and increase psychosocial performance. This is an important finding because within a population of criminals, comorbid disorders are common and improvements in psychosocial performance are important for reintegration into society. In addition, it has been shown that mindfulness could influence the desire for consumption, reducing it and thus preventing relapse.

Another important finding consists in the durability and stability of the effects of the practice of full consciousness. A study conducted by Bowen et al. (2014), which compared three therapies (the mindfulness-based relapse prevention program, the relapse prevention

program and traditional therapy), revealed that mindfulness-based therapy had the most lasting results.

On the other hand, Snyder, López and Teramoto (2011) argue that there are twelve qualities or elements that an individual can develop through the practice of full consciousness. These elements are: not judging, not insisting, acceptance, patience, trust, openness to novelty, letting go, gentleness, generosity, empathy, gratitude and kindness.

Within the reviewed literature, there are studies that support mindfulness-based therapies can contribute to the development of elements such as awareness, acceptance, not judging, among others. These elements could be beneficial for disorders related to substance use. El estudio realizado por Witkiewitz, Bowen, Douglas y Hsuc (2012) y el estudio realizado por Bowen et al. (2009) argued that the practice of mindfulness could increase acceptance, awareness and failure to judge. These elements could be related to the lower levels of consumption and desire for consumption reported in the studies.

Additionally, the study by Bowen, Witkiewitz, Dillworth and Marlatt (2007) determined that the suppression of thoughts related to substance use could increase their consumption. Mindfulness encourages the acceptance of such thoughts; this phenomenon could be related to reductions in substance use. In addition, the study by Schuman, Hoeppner, Evins and Brewer (2014) argued that not judging internal experience (one of the components of mindfulness) could influence the response of treatment for substance use-related disorders. Mindfulness could enhance the therapeutic effect of not judging the internal experience in the cessation of substances.

Witkiewitz, Bowen, Douglas and Hsu (2012) define the desire for consumption as the subjective experience of the urgent need to consume substances. The desire for consumption is one of the causes responsible for relapses. There is scientific evidence that suggests that therapies based on full consciousness are able to reduce the desire for consumption. Through clinical trials comparing therapies, studies by Witkiewitz, Bowen, Douglas and Hsuc (2012), Bowen et al (2009) and Sareh, Gholami and Jafari (2018), have shown that full-consciousness therapies can reduce desire for consumption

Finally, through literature review it has been possible to determine that mindfulness-based therapies are more effective than other therapies for the treatment of substance use-related disorders. This conclusion was reached because 15 studies were reviewed consisting of trials comparing mindfulness-based therapies with other types of therapies. Mindfulness-based therapies were compared (mindfulness-based relapse prevention program, mindfulness-based group therapy, mindfulness training for smokers, Vipassana meditation, etc.) with traditional therapies (12 steps, cognitive-behavioral therapies, etc.) . In all the studies reviewed, mindfulness-based therapies proved to be more effective than the other therapies.

Through the systematic review of the literature it was concluded that full consciousness-based therapies have positive effects on substance use disorders These will be mentioned below in the form of a list:

- Reduction of the desire for consumption.
- Reduction of substance use.
- Disminución de los intentos por evitar pensamientos indeseables relacionados a las sustancias, la supresión de este tipo de pensamientos contradictoriamente incrementa su consumo.
- Decreased levels of depression that induce consumption or precipitate relapses.
- Stress reduction that precipitates relapses.

- Reduction of impulsivity and the difficulty of inhibiting response that precipitate relapses.
- Reduction of psychiatric symptoms.
- Increase in psychosocial performance.
- Lasting effects.

On the other hand, this study also aimed to demonstrate the components or elements of mindfulness that could help or be beneficial for disorders related to substance use through reduced consumption. It was determined, through the review of the literature that mindfulness-based therapies can contribute to the development of elements such as awareness, acceptance, not judging, among others. These elements are beneficial for disorders related to substance use.

Another objective of this study was to determine whether full consciousness-based therapies could reduce the desire for substance use. After the literature review, it was determined that there are studies that argue that therapies based on full consciousness are able to reduce the desire for consumption in people suffering from disorders related to substance use.

The last objective of the study was to determine, from the literature review, if the intervention based on full consciousness is more effective than other treatments to treat disorders related to substance use. After reviewing fifteen studies, it was determined that there is evidence to suggest that therapies based on full consciousness are more efficient than other therapies in the treatment of disorders related to substance use.

This research work met all its objectives; however, it also has limitations. First, only fifteen studies were reviewed. Second, there were no access to many studies due to their monetary cost. Third, in a systematic review it is advisable to review the literature between two people to avoid falling into subjectivities, however, this review was performed by a single person. Finally, the research topic was very broad, it would be advisable to concentrate the research on a single type of mindfulness-based therapy.

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PSYCHOLOGY RESEARCH

THE OTHER, DISPUTE RESOLUTION AND SOCIAL MEDIATION: REFLECTIVE TOOLS BEFORE THE DIVERSITY OF POLITICAL THOUGHT IN UNIVERSITY STUDENT LEADERS

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Abstract. Research on otherness, conflict resolution and social mediation arose from the aggravation of discussions, which most often culminated in physical and verbal violence, among students with active political life in Venezuelan universities. This was developed in the university educational context of the Facultad of Arquitectura and Diseño of the Universidad del Zulia, Venezuela; Therefore, the general objective was to analyze the interpersonal relationships of the students who develop a political task in the FAD-LUZ. The methodological framework was structured with a quantitative approach, from a causal typology, with a non-experimental transectional design. The sample was taken from the population that integrates the Student Center of the FAD-LUZ. The main findings revealed that the denial of the other to the diversity of thought in the political dimension generates relationships of manifest conflicts. It is concluded that the resolution of conflict based on otherness generates mutual respect between university political leaders, building networks of conversations towards the other, the other as a legitimate coexistence with diversity of thoughts, resolving differences from mutual respect.

Keywords: Other, Conflict Resolution, Respect, Politics, University Leaders.

Introduction

The Counselor in the university educational context seeks indispensable tools that allow him to intervene in a neutral and impartial manner the requested requirement of the population where he works, with the purpose of creating in the advisors, the reflection so that they explore, plan and evaluate their doings as biological, dynamic and integral beings. This, with the intention that all those high school students who seek guidance service[1], can deal with conflict situations from mutual respect from the feeling of their emotions. Now, what role does otherness, conflict resolution and social mediation play here? In the first place and, despite all the efforts to improve the quality of college education, still, most students face their differences from a violent attitude, both physical and verbal, which leads them to an isolated construction of themselves, of the human feelings, depersonalization of human values, ethics, morals and the philosophy of life that each weaves in their conversations from living with others. The fundamental role that conflict resolution plays is based on how to solve the problems that arise in everyday life, in which, the other is a legitimate cohabitant and each one has a life story, because conflicts are going to appear from day to day, since the human being as a dynamic entity is in constant movement in the world and among living beings.

In many professionals in the area of orientation, exists a concern when observing, in university spaces, how disrespect seems to be imposed from the student leadership, as the only way to address political and social discrepancies of the nation, reflected in an active denial of relationship dynamics of its members, which in some cases leads to physical, psychological and ecological violence, which could trigger situations of social structural breakdown. Among some of the examples, we can mention the evidence on Friday, October 30, 2015, while the student election day was held at the Faculty of Humanities and Education of the University of Zulia, where a law student died (PANORAMA, 2015). Another situation seen on May 5, 2018, where five students from one of the political groups of the Faculty of Engineering of LUZ moved to the Faculty of Architecture and Design (FAD) facilities, to mercilessly hit a young man that belongs to the FAD-LUZ Student Center, they left him unconscious, all of this for presenting adverse positions to them. Currently, the level of disrespect becomes increasingly high.

Consequently, what makes it possible that among fellow students who live-coexist in the university campus, to handle the rants about the political and social situation that Venezuelans are encountering through verbal and physical violent behaviors? It could be considered, from the conversations between student leaders, that they move in discontent, due to the mismanagement of national assets administered by the current government; in this sense, the need arises to think that the diversity of intimate feelings, doings and emotions dance in the sensory-operational-relational sphere of premises accepted a priori from political ideologies of which they have decided not to put them in doubt, as universal and transcendent truth, thus generating a denial of others, the other as a legitimate cohabitant.

From the above, it is time to focus attention on three dimensions: the first, look at the other as a legitimate cohabitant, the second, focus on conflict resolution as a natural event of community life and third, the negotiation and mediation as intervention strategies in difficult situations such as interpersonal, intergroup and international relational dynamics. For this, this study will be directed from the perspective of Dr. Humberto Maturana, Dávila Ximena (2015), among others, all this in function of the experiential domain to considering otherness a starting point before a creation of an impregnated world of values and principles, so that the acceptance of the other can be lived as a

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[1] The University of Zulia, together with the University of Carabobo, graduates students in the area of Guidance, who are responsible for working on the biopsychosocial process of students in the educational context, from the initial stage to the university.

legitimate coexistence. To the resolution of conflicts, based on the understanding of what is the conflict, the negotiation and mediation from the epistemological foundations of FUNIBER (s/f), the transforming model of Bush and Folger (1996) as an intervention tool before a conflict.

Based on the above, this article will analyze students interpersonal relationships who develop a political life in FAD-LUZ, Venezuela, through the design and implementation of a theoretical-practical workshop with which to offer them training on conflict resolution, through negotiation, mediation and acceptance strategies of the other as a legitimate cohabitant, in order to seek a more comprehensive nuance in an experiential domain where the other also takes place and in which students are co-builders such a world.

Method

Design

It is based on an investigation oriented in the classic positivist paradigm, which according to Hernández, Fernández and Baptista (2014), relies on empiricism in terms of logic trying to find a causal and mechanistic explanation of the phenomena of reality. With a non-experimental transectional design, since none of the variables are manipulated; with a quantitative approach of causal type, when wanting to determine the relationship between the labor variables used. In addition, a new proposal for practical application was provided, given that it is the design of a training workshop in conflict resolution for student leaders who make political life in the School of Architecture and Design of LUZ, in order to improve their situation, as well as the current moment that Venezuela is going through.

This study had the purpose, at first, to impart knowledge about conflict resolution theories based on negotiation and mediation strategies, considering "Otredad" (the other), from the perspective of Dr. Humberto Maturana, Dávila Ximena (2015) etc., as an influential component when solving differences between students who make political life, in relation to the socio-political situation of Venezuela and, in a second moment, once that epistemic floor is understood, at the moment of making the decision to face the requirements demanded by the University of Zulia, carry out the conflict resolution strategies given.

Therefore, the hypotheses that were raised for this investigation:

- H_o: employing the principle of otherness in the resolution of conflicts improves the intergroup relations of students who make political life in the FAD-LUZ.

- H_1: employing the principle of otherness in conflict resolution does not improve the intergroup relationships of students who make political life in the FAD-LUZ.

Variables

- Independent: "Resolution of social conflicts based on the acceptance of the other".
- Dependent: "The intergroup relationships of students who make political life in the School of Architecture and Design of LUZ".

Participants

Twenty students who make political life, belonging to the Student Center of the Faculty of Architecture and Design of the University of Zulia, Venezuela will be taken into account for the study.

Because of the strong disturbances that have occurred in recent times, many of the participants were unable to finally attend the date when the training workshop was held, so that only a total of 65% of the sample could be worked, in total 13 students of the initial 20, of which 5 were male and 8 female, who ranged from 18 to 22 years old.

Techniques and Instruments

In the workshop on conflict resolution it was used for the work of self-awareness: "Self-perceptions and the other"; 2 techniques, the first, Mirror technique, which consisted of the look of how I am, using the Questionnaire-type instrument with open question entitled: "Looking at my being", the second, will be the Observation technique, where the student leaders were attentive to the level of behavior or attitude they present in front of colleagues with a different political ideology, using the checklist instrument entitled: "My partner is legitimate to me."

After the implementation of the techniques and instruments mentioned above, we worked on the networks of conversations of otherness and conflict resolution that the students handle, with the techniques: "Brainstorming" and the "Diary of emotions", brainstorming, it was generated through the instrument of survey of distinctions, which has three open questions, gathering the information that students handle by otherness, conflict resolution, and how they resolve these when facing the socio-political problems of the country; the emotions diary contemplates what emotions are repeated day by day, its origin, and conversations that are handled in the outcrop of that emotion, accompanied by the questionnaire-type instrument with an open question.

Finally, through the deep session technique and the socio-drama, the understanding of the conflict, its process, and its resolution strategies were worked on, using the conceptual mapping instrument to know, analyze and deepen distinctions of conflict, resolution of these, negotiation, mediation, among others and, in order to carry out the theoretical discourse, the student leaders made simple theatrical performances (socio-drama) where they addressed a context situation, sought to generate learning about conflict resolution based on the Bush and Folger Transformative Model (1996) using the instrument: "Sociodrama Planning".

Analysis of data

For the observation guide, open questionnaire and conversation polling, the process of choosing a constant unit was used using two techniques: guided scrutiny with the material linked to a theory. And, processing technique using metacoding, where the relationships between categories are examined to discover potentially new ones, generating the analytical memos of each category and their relationship with the theoretical codes of references for research.

Carrying out the following procedure:
A certain number of questionnaires were selected.
The frequency with which each answer to the question appears.
The most frequent responses (general response patterns) were chosen.
The chosen answers were classified into topics, aspects or items, according to a logical criterion.
A name or title was given to each topic, aspect or item (general response pattern).
Assigning a code to each general response pattern.
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Assigning a code to each general response pattern.

Regarding the Conceptual Cartography and the socio-drama, the analysis processing was done through the learning map, which determines the level of performance based on the indicators, using the domain levels: Pre-formal, Receptive, Resolutive, Autonomous and Strategic.

Subsequently, after emptying the data offered by the responses, these were analyzed using descriptive and inferential statistics, based on absolute and relative frequencies; the measures of central tendency were also applied in order to reach reliable data that allowed to generate statistical results that were subsequently confronted with the theoretical bases raised in this study, things that derived whether or not they are the solution to the problem, allowing to give theoretical inputs to the construction of conflict resolution strategies given by the same political leaders of the University of Zulia.

Results

The first variable "Resolution of Social Conflicts based on the acceptance of the other", was based on investigating the perception of student leaders of the School of Architecture and Design of LUZ in Venezuela, about the role they have in the situation policy of the country, its implied self-awareness, resulting:

Table 1
Perception of oneself and towards the other

Code	Categories responses (patterns with or greater frequency in mention)	Nº of frequencies of mention
1	I am a person who studies, struggles, with goals	13
2	Kind, cheerful, good friend	7
	Impulsive -Discreet	8
3	Be professional, successful, father and mother, please God	13
4	Discipline, dedication, study, self-confidence	13

Note: taken from Hernández, Fernández and Baptista (2014)

The researchers visualize that 65% of student leaders are perceived, first and foremost, as people who have the strength to be hard working and fighters in their goals that are set to become successful professionals, but that they also want to have a future family and they become aware that to achieve such a goal, they have to do it through dedication, study and the believe that they can achieve what they propose, coupled with a degree of belonging that they reflect towards the FAD-LUZ when responding to item Who am I? "I am a student of architecture". However, it is striking that in the item How am I? the 40% with 8 repetitions or frequencies mentioned that "depending on the situation" they are impulsive and distrustful towards the other. Therefore, the researchers deduce that when faced with a conflict situation, the 40% of them respond with impulsive behaviors, which may, depending on the form of the conflict, be manifested with verbal or physical violence.

Subsequently, the space for reflection was opened in relation to who is the other-another for each of them, analyzing the concept of otherness from the epistemological foundation of Maturana and Dávila (2015) in which the bachelors demonstrated:

On the Likert type score scale, being the minimum 8 and the maximum 40, for 13 leaders surveyed under the Likert, Escalation type mode constitutes 65%, it is obtained with:

Table 2
Likert type score scale

Points	Leaders
31	1
30	2
29	1
28	4
27	1
26	1
19	1
18	1
17	1

	17 18 19			26 27 28	29 30 31		
8	16		24			32	40
Attitute very unfavorable	Attitude neither favorable nor unfavorable					Very Attitude	Favorable

Note: own elaboration, taken from Hernández, Fernández and Baptista (2014)

The 65% of the political leaders of the FAD-LUZ Student Center have neither a favorable nor unfavorable attitude in relation to the other as a legitimate cohabitant.

Next, the networks of conversations about the otherness and resolution of conflicts that the political student leaders of the School of Architecture and Design of LUZ were diagnosed, where once the distinction of otherness of Maturana and Dávila (2015) was contracted with the who feel, say and do the leaders with political life, managed to understand and verbalize that the other is a legitimate cohabitant generating respect, where:

Table 3
Otherness and Conflict Resolution

Code	Categories responses (patterns with greater frequency in mention)	Nº of frequencies of mention
1	Recognize and accept the other individual as different and who does not share the same thinking-Respect	13
2	Process, ability to understand how to resolve conflicts peacefully and nonviolently.	4
	Way to reach an agreement with one or several people applying some negotiation alternatives.	9
3	Peacefully through negotiation, agreement and dialogue. Self-awareness and correct mistakes.	7
		6

Note: taken from Hernández, Fernández and Baptista (2014)

The diagnosis on the verbalizations that young students present about otherness and conflict resolution, once contracted with the epistemic foundation of Maturana, FUNIBER and other authors, evidence that 65% verbalized and responded, that the other is to recognize, accept and respect the other individual as different and does not share the same thinking.

The 45% verbalized and responded to item 2 that conflict resolution is the way to reach an agreement with one or several people applying some negotiation alternatives.

And, the 35% of student leaders responded that the way or how they would resolve conflicts in response to item 3, would be peaceful through negotiations, agreements and dialogue.

As well as, a central aspect in such a diagnosis raised the level of the workshop in raising awareness of the emotions that are present in situations of conflict that face the political divergence between some classmates:

Table 4

Emotions present in conflict situations

Code	Categories (patterns or responses with greater frequency in mention)	N° of frequencies of mention
1	Impotence, anger, sadness. Hope, happiness for the change of government in the protest that does not faint and that God has control.	12 / 1
2	Discouragement, bad mood, family discussions and with friends. Isolation.	13
3	Anger, helplessness, anger.	12
	Hope	1
4	When will this end?	2
	God's will.	1
	Respect for the other	1
	President's exit-verbalizations with obscene words.	9

Note: taken from Hernández, Fernández and Baptista (2014)

The emotions that underlie them - how they face the social and political situation in Venezuela - reflected that a 60% moves daily in the emotion of helplessness, anger and sadness. The 65% have actions or behaviors of discouragement to continue with academic activities, coupled with bad mood, which leads them to discuss with family and friends, leading them to isolation that they called "lock themselves in their room". So, at the moment of reacting to situations of inherent political-social conflict, a 60% do so from anger, helplessness and anger, maintaining a 45% networks of obscene conversations and rage asking for the urgent exit of the President of the Bolivarian Republic of Venezuela.

In this sense, it was generated to know distinctions of conflicts and to classify the conflict types that political student leaders face before the requirements demanded from the University of Zulia, where the student has developed a Conceptual Cartography throwing at the levels of the Learning Map:

Table 5

Concept and Types of Conflicts

Code	Categories (patterns or responses with greater frequency of mention	Number of frequencies of mention
1	Conflict is when two or more people differ from their points of view, but that is not bad when people can grow emotionally.	12
	The difference among yourself and other people.	1
2	Intraindividual-interindividual	2
	Intraindividual	7
	Interindividual	4
3	Latent-manifest	7
	Latent	6
4	College group	13

Note: taken from Hernández, Fernández and Baptista (2014)

By contracting the epistemological foundation of FUNIBER with the work of students with political life in the FAD-LUZ, the 60% of high school graduates when knowing distinctions about conflict, managed to conceptualize the same saying that this is when two or more people differ from your views, but that is not bad when you grow emotionally; the 35% is identified within a type of intra-individual conflict, with a latent-manifest form and, unanimous with a 65% within a collective university setting.

Already known the distinction of conflict and the type of conflict experienced by them, specify a confrontational profile before the conflict of student leaders who make political life at the University of Zulia, which was also developed through Cartography, showing evidence in the levels of the Learning Map:

Table 6
Confrontation Profile in Conflict

Code	Categories (patterns or responses with greater frequency of mention	Number of frequencies of of mention
1	Avoid it or withdraw	4
2	Compete, compel or be able	3
3	Adaptation, conciliation or please	-
4	Concession or agreement	5
5	Colaboration, cooperation	1

Note: taken from Hernández, Fernández and Baptista (2014)

It is evident that 25% have a profile of confrontation before the conflict through the concession and agreement, 20% prefer to avoid the conflict and withdraw and 15% resolve it through competition and power.

Once it is clear to the student what is otherness, the verbalizations that drive the other, knowing the conflict as a natural aspect in the flow of living, the type of conflict most experienced by them, the profile as they confront them; high school graduates consider how to solve them so that researchers encourage a psychic space so that they know negotiation and mediation strategies for the construction of intergroup relations based on the culture of peace, and with that, better improving the intergroup student relationships, who make political life in the School of Architecture and Design of LUZ.

Such constructs were discussed through Conceptual Cartography, throwing at the levels of the Learning Map:

Table 7
Negotiation and mediation strategies

Codes	Categories (patterns or responses with greater frequency of mention	Number of frequencies of mention
1	Private talk of the negotiation strategy	12
2	Mediation	1

Note: taken from Hernández, Fernández and Baptista (2014)

The 60% are inclined to resolve conflicts through the negotiation technique using the private session strategy.

Finally, the high school students made a socio-drama where they did a small play presenting a problem of the context to be solved, which would be from the Bush and Folger Transformative Model, evidenced in the Learning Map:

Table 8

Transformation in living together. Transformative Model

Codes	Categories (patterns or responses with greater frequency of mention	Number of frequencies of mention
1	Attention to friendship, to relationships of fellowship	13
2	Revaluation of each of the parties, awareness of those involved in the role they have and the emotions that direct it.	13
3	Acceptance of recognizing the other or another as a legitimate coexistence: mutual respect and shared responsibility in the conflict resolution process.	13
4	Networks of conversations towards collaboration, respect, dialogue and agreements.	13

Note: taken from Hernández, Fernández and Baptista (2014)

The 65%, reached a new look of the other ("outside") and of themselves ("inside"). As well as, the objectives set for this study were worked and achieved.

Discussion and Conclusions

The relational dynamics of physical and verbal violence in the face of the diversity of political ideology among students, supported, in the researchers, the reason for working with political leaders of the FAD-LUZ Student Center, training on conflict resolution, but based on the otherness so that one can speak and make relationships from mutual respect, because as Maturana and Dávila (2015) said: love is the acceptance of the other as a legitimate cohabitant and that this is the emotion that sustain the human being, in which it is woven and preserved in conversations.

In this sense, if the student changes the negative aspects of conversations about the other due to differences in politics, they would change their actions towards collaborative behaviors from mutual respect, since, as Maturana (2002, p.42) states:

The "language" in fact occurs in everyday life entwined with emotion, and what happens in this entanglement I call conversation. Human beings are always in conversation, but language -as a phenomenon- occurs in the operation of recurrent consensual behavioral coordination.

Therefore, the training workshop for these students on conflict resolution allowed them not only to know theories about the otherness and how to solve the diversity between partners through negotiation, mediation and acceptance strategies of the other in their legitimate being, but transforming actions which lead them to resolve differences in a competitive form of moral, psychological and physical damage.

Now, to achieve the proposed objectives, the students opened a space for reflection on how they are doing what they do through self-awareness on who and how they are, as well as wondering who is the other or the other for themselves, self-describing their intimate feelings, emotions and ways of doing, but also, recognizing the networks of conversations that support them, thus began a work in which the experience of high school graduates with the political life in the FAD, in contrast with the theory on the otherness and the conflict resolution generated following conclusions:

1. Perceive the student through self-description of: their actions and consequences and the emotions that underlie such behaviors, the undergraduate reflects on how is doing, triggering changes on how to doing based on respect mutual.
2. Human beings live in conversation and, depending on what they are talking about, they will proceed and vice versa.

Under that maturation premise, high school graduates began the formation of epistemological bases on otherness and conflict resolution, after discerning about the weaving conversations of themselves and the others, the student leaders distinguish by otherness "Recognize and accept the other individual as different and who does not share the same thinking-Respect" (Student Leaders of the FAD-LUZ Student Center, 2017, based on the epistemological bases of Maturana and Dávila, 2015).

And by resolution of conflict based on the otherness "is the way to reach an agreement with one or more people applying some negotiation alternatives". Contracting theory with experience generates significant changes in the networks of conversations, dismantling verbalizations that connote denial of the other-by conversations that distinguish respect for political ideological diversity, establishing cooperative and collaborative relationships.

3. By knowing the conflict, the political student leaders and classifying the types of conflicts they are facing, the spaces for reflection lead to the deconstruction of negative configurations about conflict, thus building networks of positive conversations where internal structural changes orient less violent behaviors and more collaborative and cooperative based on respect and acceptance of the political diversity of the others.

Thus, the young people managed to build a distinction of conflict by stating: "It is when two or more people differ from their points of view, but that is not bad when you grow emotionally-respect" (Student Leaders of the FAD-LUZ Student Center, 2017, based on the knowledge of FUNIBER, s/f).

The most recurrent type of conflict in high school students at the FAD-LUZ Student Center is intra-individual, because they pursue divergent ideologies and political goals between them-they and other Student Centers.

The way in which the conflict is currently taking place for these high school FAD-LUZ graduates is latent-manifested by the situation of permanent disturbance they live.

The most repeated field in the leaders of the FAD where conflicts are generated is the university collective, given that the street fight is led by students from the student centers, planned within the university campus and manifested on its surroundings. Although, it is carried out with groups of different ideologies, some in favor and others against.

In this way, the bachelor managed to understand that the conflict and/or the conflicts are circumstances in which two or more people come in different points of view or diatribes, because their positions, interests, needs, desires or values are distinguished as incompatibles, guided by the emotions of annoyance and where the coordination of actions between the parties to the conflict, can be strengthened or deteriorated according to the conflict resolution process.

4. The conflict confrontation profile represents in the people, in the case of this study, the FAD-LUZ student leaders, the ontogenetic and phylogenetic changes that weave in language during the history of living in natural drift, constituted by the configurations that are intertwined in the relational interaction between the internal dynamic structure and the environmental structure, generating distinctions among themselves, and the others.

The profile or features of confrontation in the face of the most recurrent conflict in student leaders who make political life at the University of Zulia is reflected in 25% through the concession and pact, 20% avoid the conflict and withdraw and 15% resolve it by means of competition and power.

The political leader of the FAD-LUZ resolves conflicts through consensus, agreement and dialogue to get out of the political, economic and social crisis they are experiencing, by 25%.

There are circumstances that trigger, in some of these leaders, violence behaviors, however, human nature in 25% of them inclines towards nonviolence, dialogue and consensus. Once again, students expanded their cognitive experience by achieving the fourth specific objective by identifying the profile of confrontation in the face of conflict.

5. Student leaders knowing the negotiation and mediation strategies for building intergroup relationships based on the culture of mutual respect, caused:

5.1. Accept and recognize the other or another as a legitimate coexistence implying: mutual respect and shared responsibility in the conflict resolution process.

5.2. Weave networks of conversations towards collaboration, respect, dialogue and agreements, generate behaviors without physical and verbal violence.

5.3. Student leaders prefer to resolve social conflicts through the negotiation strategy through private sessions, between those involved and not third parties.

5.4. The Bush and Folger model (1996) in the university context is a tool for conflict resolution based on the revaluation of young people's self-esteem and shared responsibility for decisions made and executed, emphasizing friendly relationships and companionship.

Negotiation is a process that directly involves the parties, without the need for a third party, or facing a dispute. The day to day brings with it a constant negotiation that leads to a win-win to the parties.

While mediation involves a negotiation system where an unbias third party is required that can accompany the parties to harmoniously resolve the diatribes they expose.

Knowing what each one implies, gives a range of possibilities that awakens creativity in people who come to these strategies to better manage relationships and even better decision making.

The student leaders with political life of the FAD-LUZ Student Center who entered the training workshop on conflict resolution, were not the same as those who left in their intimate feelings, emotions and doings, since, as indicated by the transformative Model of Bush and Folger (1996, cited by Hernández, 2014):

… It consists, therefore, in modifying the relationship between the parties, so there is not so much emphasis on obtaining an agreement, although of course this is the final objective to be achieved, but its achievement is weighted as a kind of consequence of that new situation produced between the parties, as a result of the transformation produced in the relationship between mediated persons. The agreement will only be achieved to the extent that the participants find a new look of the other ("outside") and of themselves ("inside"). (p.71)

The cited by Hernández (2014), referring to the Bush and Folger Model (1996), produced "that each party enhances its role and can recognize its share of responsibility in the development of the dispute and that which corresponds to its opponent" (Rivas, 2015, p. 1); this was proofed in the Sociodrama that the young people represented, achieving these the last specific objective such as knowing the negotiation and mediation strategies for the construction of intergroup relations based on the culture of peace, but also applied to their experience of peer life.

Likewise, the work of each of them was obtained, forming the student leaders in the resolution of conflict through the negotiation, mediation and acceptance strategies of the others and, demonstrating the achievement of all the objectives set forth in this investigation.

Starting the way for the continuous deepening of conflict resolution, which involves the conservation of evaluation and changes that over time can be generated in negotiation and mediation strategies based on the otherness.

Establishing a culture of the otherness requires a look of oneself, the others from the investigation, reflection, explanation, argumentation and contextualization in the present continuous change of the natural drift of the sensory-operational-relational coherence of the human living being and the ecological niche that makes it possible to live.

Finally and after everything discussed, the fulfillment and scope of the general objective proposed for this study can be affirmed, which is none other than to analyze the interpersonal relationships of students who develop a political life in FAD-LUZ, Venezuela, through the design and implementation of a theoretical-practical workshop through which to offer them training on conflict resolution, through negotiation, mediation and acceptance strategies of the other as a legitimate cohabitant, in order to seek a more nuanced encompassing in an experiential domain where the other and/or the others also take place and in which the students are co-builders of a world with them. Therefore, we can conclude with an affirmation and acceptance of one of the hypotheses raised at the beginning of this study in which it was predicted that using the principle of otherness in the resolution of conflicts improves the intergroup relationships of students who make political life in the FAD-LUZ.

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