

USING FACEBOOK, SOCIAL STANDARDS ALCOHOL CONSUMPTION AMONG YOUNG PEOPLE: THEORETICAL DERIVATION

USO DE FACEBOOK, NORMAS SOCIALES DEL CONSUMO DE ALCOHOL ENTRE LOS JÓVENES: DERIVACIÓN TEÓRICA

USO DO FACEBOOK, NORMAS SOCIAIS DE CONSUMO DE ÁLCOOL ENTRE OS JOVENS: DERIVAÇÃO TEÓRICA

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ABSTRACT

Objective: to present a theoretical model related to the persuasive power of Facebook, and the influence of social norms on the consumption of alcohol in young people. **Results:** the Roy adaptation model was applied to the phenomenon of media use and alcohol consumption facilitated by use of the theory derivation process proposed by Walker and Avant. As a practical discipline, nursing requires theoretical frameworks contextualized to the various research phenomena in order to best guide both practice and research. **Conclusion:** the resulting model could be useful for establishing interventions that may help to prevent or reduce alcohol consumption in young people. **Descriptors:** Alcohol Consumption; Social Network; Social Norms; Youth.

RESUMEN

Objetivo: presentar un modelo teórico relacionado con el poder persuasivo de Facebook, y la influencia de las normas sociales en el consumo de alcohol de los jóvenes. **Resultados:** el modelo de adaptación de Roy se aplicó al fenómeno de la utilización del Uso de Facebook y el Consumo de Alcohol facilitado por el uso del proceso de Derivación Teoría propuesta por Walker y Avant. Como una disciplina práctica, enfermería requiere marcos teóricos contextualizadas a los diversos fenómenos de investigación a fin de orientar mejor la práctica y la investigación. **Conclusión:** el modelo resultante podría ser útil para el establecimiento de intervenciones que pueden ayudar a prevenir o reducir el consumo de alcohol en los jóvenes. **Descriptor:** Consumo de Alcohol; Redes Sociales; Normas Sociales, Jóvenes.

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RESUMO

Objetivo: apresentar um modelo teórico relacionado com o poder de persuasão do Facebook, e a influência das normas sociais no consumo de álcool entre os jovens.

Resultados: o modelo de adaptação de Roy foi aplicado ao fenômeno do uso do Facebook e Álcool facilitada pelo uso da teoria processo de encaminhamento proposto por Walker e Avant. Como uma disciplina prática, a enfermagem requer marcos teóricos contextualizados ao diversos fenômenos de investigação, a fim de orientar melhor a prática e a investigação. **Conclusão:** o modelo resultante pode ser útil para o estabelecimento de intervenções que podem ajudar a prevenir ou reduzir o consumo de álcool entre os jovens.

Descritores: Álcool; Redes Sociais; Normas Sociais; Jovens.

INTRODUCTION

Considering its consequences for young people, the consumption of alcohol by this age group is one of the main public health problems in Mexico and, thus, its reduction is a health priority. Prominent among these problems are serious diseases, traumas, and damage in psychological, labor, economic and familial terms (National Institute on Alcohol Abuse and Alcoholism¹. At a global level, the consumption of alcohol is considered one of the principal risk factors in premature death, with 5.9% of all deaths estimated to have been caused by the consumption of alcohol². Furthermore, approximately 24 thousand people in Mexico die per year as a consequence of alcohol consumption³.

In light of the above, it is important to know the factors that place young people aged 18 to 24 at risk of beginning to consume or increasing their consumption of alcohol. One factor causing the constant increment of this phenomenon could be the persuasion exercised by Facebook use. This sector of the population could be induced to begin consuming or to increase their consumption of alcohol. The process could develop from viewing images, photographs, videos or messages on their personal page, which are shared by significant contacts such as friends and family and can, on viewing, reproduce said behavior related to the consumption of alcoholic beverages⁴.

It should be mentioned that, although young people can be seen to be persuaded through Facebook use to consume alcohol⁵⁻⁸, other variables of a social and personal type come in to play, and within these social norms, which can influence behavior in young people. Social norms can be divided into the descriptive and prescriptive, with the former related to the subject's perception of behavior in relation to significant reference points for the individual (family or friends). Prescriptive norms

are those that refer to the subject's perception of the approval or disapproval of their own behavior based on these significant reference points⁹⁻¹⁰ .

The persuasive power of social media exemplified by Facebook and the influence of social norms support the necessity of conducting research into the new forms in which young people are being intentionally or unintentionally persuaded to consume alcohol. Non-experimental approaches from a psychological perspective are shown in the literature, with this aspect an important point to be approached from the perspective of the nursing professional. However, there is currently no one theory of nursing that provides theoretical support and which could serve as a guide and would, thus, be able to be used to approach this phenomenon from a holistic perspective.

The Roy Adaptation Model¹¹ could be a useful guide and support for understanding the phenomenon being studied here, a model which aims to explain human responses (be they adaptive or ineffective) as products of the stimulus process (internal and external). In line with day-to-day nursing work, the philosophy of this model is characterized by the directing of care toward the management of stimuli, which enables the nursing professional to undertake prevention measures¹¹. It is important, therefore, to apply a model that can explain the process of persuasion via Facebook that young people undergo in terms of alcohol consumption, with the aim of carrying out interventions that include the manipulation of these stimuli and contributing to the reduction of alcohol consumption in young people.

The aim of this paper, therefore, is to develop a model of the persuasive power of Facebook and the influence of social norms on the consumption of alcohol in young people based on the Roy Adaptation Model¹¹. Model development was facilitated by steps in the theory-derivation process proposed by Walker and Avant¹².

STEPS IN DEVELOPING THE MODEL OF ALCOHOL CONSUMPTION BASED ON THE RAM

As proposed by Walker and Avant¹², the first step in theory derivation is to identify and become familiar with the phenomenon being studied here. Based on our objective of developing a model incorporating the persuasive power of Facebook and the influence of social norms on the consumption of alcohol in young people, we undertook a review of the process that a young person can undergo on being persuaded to consume alcohol through the use of social networking websites such as Facebook.

Furthermore, we also undertook a review of the literature to demonstrate how established social norms can affect this process, and demonstrate the importance of using theories that provide a basis for the care provided by the nursing professional. It is, therefore, important to learn more about the above-mentioned concepts of persuasion and social norms.

Through the process of persuasion, a person changes their beliefs, attitudes and/or behavior by means of the transmission of information via content (photographs, videos, messages, or recordings), in which an individual has the opportunity to accept or reject said information¹³. This process of persuasion can be seen in the new forms, such as the use of Facebook, through which young people are able to communicate amongst themselves. Frequent use of this type of platform can increase the risk of adopting various behaviors damaging to the young person, in this case the consumption of alcohol. This occurs through exposure to patterns of behavior that induce them to undertake this type of behavior, via content shared on Facebook by people important for the individual, such as family members or friends. This may influence them to use or increase their consumption of alcohol^{5,7}.

On the other hand, Facebook is defined as a virtual place or community, which is to say an internet platform that gathers people, in this case young people, who use this type of platform to communicate between themselves and share information or common interests. Among the main objectives of this network is to make contact with people from the past or generate new friendships. Belonging to a social network such as Facebook enables the young person to extend their social life or construct one through the group of contacts which is shown through their list of friends. These friends can be personal (ones they have met in person), friends of friends, or individuals they have met through the internet. It must be noted that on Facebook, the concept of friend has a meaning different to the traditional meaning of the term in real life, in that, on Facebook, friend refers to all those added to their list of friends on their personal page¹⁴.

Young people are able, through Facebook, to identify with others, providing them with a way to relate to people and the outside world. It has been observed that identity is socially cultivated over the course of everyday life, depending on a person's age, profession, university education or gender. This allows for the establishment of forms of interaction through digital spaces such as comments, photos, videos, the use

of applications that represent an individual's identity, as well as the young person's current state of mind, the activities they carry out and what they think^{8,15}.

However, within the process of persuasion that the young person may undergo through Facebook use, there are various internal and external factors that may help them to confront it, one of which could be social norms. Formed over a lifetime, social norms are considered subjective as they are constructed by the individual through their relationship with important reference points, such as friends, colleagues or family. In turn, these norms can influence the behavior of the individual, in that they refer to general norms for behavior as established by society, which are socially approved or disapproved by people^{9, 11}.

Social norms can provide an important social control mechanism for the behavior of an individual in society. Similarly, it is observed that society often seeks to change perceptions, opinions or behavior in order that they are compatible with its own norms, a process known as conformity. These norms usually include sanctions or punishments for those people that do not comply with them or those that do not conduct themselves within the social or group norm. It is important to note that these norms vary depending on the situation and culture. Furthermore, it is shown that individual behavior is seen to be affected by the changes undergone by societal norms^{9, 11}.

As a second step, we searched for new perspectives on the approach to the phenomenon being studied here to highlight perspectives from different areas of knowledge. Although alcohol use falls in the behavioral domain, the literature review shows that this phenomenon has been approached from a psychological perspective, an approach from which descriptive data has been obtained^{5-8, 16}. Furthermore, correlations between the use of Facebook and the consumption of alcohol have been observed^{5-8, 16}. Research shows that the use of Facebook has motivated young people to consume alcoholic drinks through social pressure, and the need for social acceptance and to be seen to be cool in front of one's friends^{6, 8}.

The research also shows the media through which young people can be motivated to consume alcohol, such as photographs and messages with alcohol related content posted on Facebook walls. It also reveals some of the problems or consequences of showing content featuring alcohol consumption, among which are highlighted

hangovers, memory loss, blackmail, injury, and being seen by adults (parents, family or teachers) and reprimanded⁸.

According to the studies abovementioned, alcohol consumption in young people is a most complex phenomenon, in light of the diverse risk factors associated with this type of behavior, the potential consequences of excessive consumption and the need to develop interventions that have a meaningful impact in terms of preventing or reducing the consumption of alcohol in the population. It is necessary, therefore, that any approach to this type of phenomenon from the perspective of the nursing professional has the theoretical support necessary to develop the research required. The use of theory affords the discipline clear and explicit forms of communication with the object of the study¹⁷.

As a third step, a model or theory was chosen for use in the construction process, in order to thus identify its structural and content-based characteristics, and, for which reason RAM and three of its propositions has been chosen. The Adaptation Model was first presented by Sister Callista Roy in 1963, taking its foundation from Systems Theory and Adaptation-level Theory. From the perspective of the theorist, a person (either as an individual or in groups) is an adaptive holistic system that maintains a constant interaction between the internal and external environment in order to achieve adaptation¹¹. In this sense, adaptation is a process or a result through which people integrate themselves into the environment in which they develop. In order that the person is able to achieve adaptation, various methods are employed, known as coping processes.

Coping processes can be of an innate origin, where they are determined genetically or are common for the species and usually emerge automatically, with the individual unconscious of them. They can also be of an acquired origin, in that they are developed through methods such as learning or experiences lived over the course of a lifetime, which contribute to the presentation of habitual reactions to specific stimuli. Moreover, these coping processes are divided into two sub-systems - the regulator and cognator.

The regulator sub-system is a coping process in which the neuronal, chemical and endocrine systems come into play. Stimuli from the external and internal environment enter the human being by means of the senses and affect the abovementioned systems automatically, producing a response of which the person is not

conscious. On the other hand, the cognator sub-system consists of a process that includes four cognitive and emotive channels: the perceptive and information processing channel; learning; personal judgment; and, the emotions.

The responses of the human system are behaviors that can be of an adaptive nature, which fosters integrity according to the objectives of the human or ineffective system, responses which are processed through the four adaptive modes: the physiological; the self-concept; the function of role; and, inter-dependence. Behavior in the physiological mode is the manifestation of physiological activity in the cells, tissues, organs and systems that comprise the body, further to the processes of the senses, the balance of fluids, electrolytes and acid-base, and neurological and endocrine function.

Similarly, the self-concept mode corresponds to the psychological and spiritual category of behavior. This is composed of the beliefs and emotions held by a person toward themselves, formed by internal perceptions and perceptions about others. In the same way, the self-concept mode possesses components of the physical being (bodily sensations and body image) and the personal being (self-consistency, self-ideal and the moral-ethical-spiritual being). The role function mode includes behaviors that correspond to the roles that human systems occupy in society. The last mode of adaptation is the inter-dependence mode, which is considered a category that includes interactions relative to offering and receiving love, respect and worth.

Lastly, Roy describes stimuli, which are an important part of the adaptation model and represent all those which could provide a response¹¹. Three types of stimuli are classified: the focal, contextual and residual. Focal stimuli are the internal or external stimuli most immediate to those encountered by the human system. The human system focuses its attention or energy on this type of stimuli. Contextual stimuli refer to those factors that are present in the situation and which contribute to causing the focal stimulus. These may be present in the interior of the human system or the environment, and, while they are not the principal stimuli, they do have an influence on the effect of the focal stimuli. The residual stimuli can be found within or outside the human system and provoke effects in the situation, although they are not clearly defined.

As a fourth step we developed new propositions regarding the phenomenon being studied here, based on the content and structure of the RAM. The first

proposition mentions that “the characteristics of the stimuli influence the adequacy of the coping processes”¹¹, with adequacy referring to the capacity to adapt. In this sense, this study is founded on the scientific basis that persuasion can change a young person’s social norms with regard to alcohol consumption, as well as highlighting that Facebook use is the tool through which the young person could be unconsciously persuaded to engage, or not, in said behavior⁴⁻¹⁰. In light of the foregoing, the proposition developed indicates that “the persuasion exercised through Facebook use influences the adaptation / adequacy of young people’s social norms”.

The second proposition determines that “the adaptation of the regulator and cognator subsystems affect the adaptive responses”¹¹. In light of the above, various authors mention the possibility that social norms affect the consumption of alcohol^{9,10,18}. Therefore, the proposition developed shows that “the adaptation of social norms affects the consumption of alcohol in young people”.

The third proposition indicates that “the characteristics of the stimuli influence the adaptive responses”¹¹. The abovementioned serves to support that found in the literature, which refers to how persuasion and Facebook use can incite the commencement or increase in alcohol consumption^{4-6, 8}. The proposition developed is that “persuasion and Facebook use influence alcohol consumption in young people” (Table 1).

Table 1 - Deriving propositions

Propositions Roy’s Adaptation Model	Propositions proposed by the model using Facebook persuasion and influence of social norms on drinking in Young
1. “The characteristics of the stimuli affect the adequacy of coping processes”	“The persuasion of the use of Facebook influence the adequacy of social standards of the young”.
2. “The adequacy of the regulator and subsystems cognator affects adaptive responses”	“The adequacy of social norms affecting alcohol consumption in young people.”
3. “The characteristics of the stimuli influence adaptive responses”	“The persuasion and the use of Facebook influence alcohol consumption of young people”.

Derived from the Roy Adaptation Model¹¹

Finally, as a fifth step we located the concepts and propositions developed in a model with the aim of presenting a theoretical approach to the phenomenon studied here, and showing its potential use in research efforts for the prevention of alcohol

consumption in young people. Figure 1 presents an adaptation of the original RAM, illustrating the possible application of the RAM to the context of alcohol use by young people. The derived model will be tested by means of Structural Equation Modeling (SEM), in an attempt to show the hypothetical direction of the relationships between concepts. This has the aim of making inferences about the relationships between concepts, and thus generalizing in order to make conclusions.

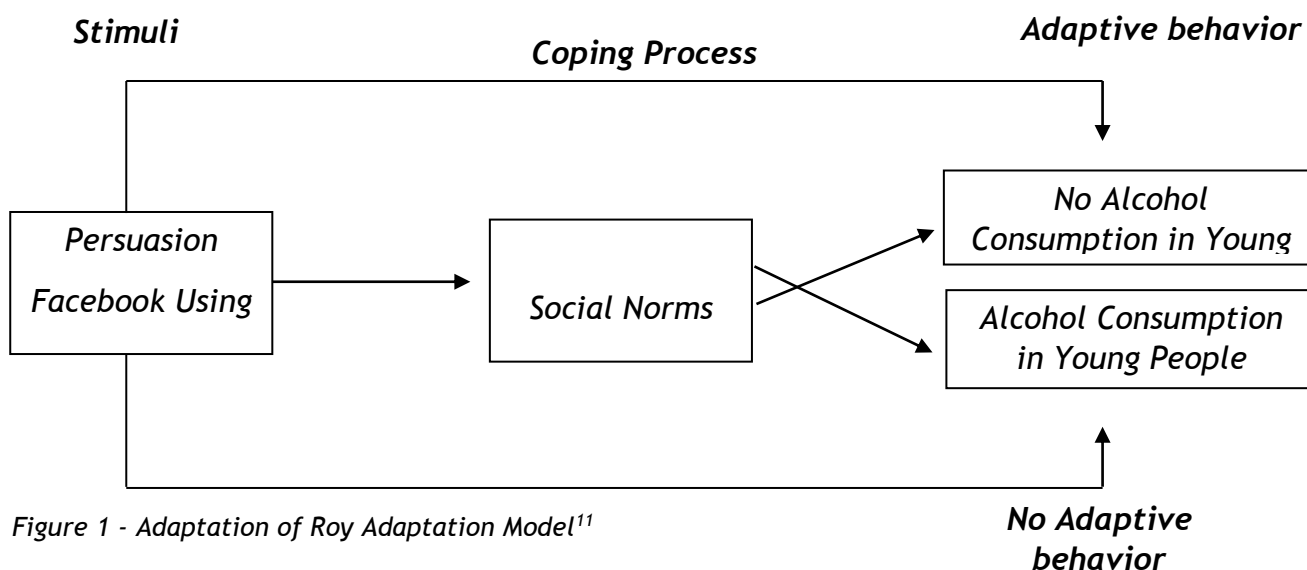


Figure 1 - Adaptation of Roy Adaptation Model¹¹

CONCLUSION

The development of theories in the discipline of nursing is an important factor in the strengthening of its body of knowledge, further to providing theoretical support required for carrying out interventions in practice. It is important that these theories are contextualized in terms of the phenomenon for which this study aims to develop an approach, thus developing medium range theories that are possible to verify. Therefore, in order to be able to develop this type of theory, it is necessary to use specific methods that guide said development; in this case the use theory derivation facilitated such development¹². This was adapted for the development of the model for persuasion through Facebook use and the influence of social norms in the consumption of alcohol by young people.

This model could be useful for learning about the relationships and effects of persuasion through Facebook use and the social norms related to alcohol consumption,

and, moreover, for establishing interventions that could help prevent or reduce the consumption of alcohol in young people.

REFERENCES

1. National Institute on Alcohol Abuse and Alcoholism. Statistical snapshot of college drinking; 2010 [27 Abril 2016] Available from: <http://www.niaaa.nih.gov...StatisticalSnapshotCollegeDrinking.htm>
2. World Health Organization (WHO). Riesgos para la salud de los jóvenes; 2011. [acceso 28 Abril 2016] Available from: <http://www.who.int/mediacentre/factsheets/fs345/es/>
3. Pan American Health Organization. México, séptimo lugar en accidentes de tránsito: OPS; 2014. [28 Abril 2016] Available from: http://www.paho.org/mex/index.php?option=com_content&view=article&id=552&Itemid=0
4. Fogg BJ, Eckles D. Mobile Persuasion: 20 Perspectives on the Future of Behavior Change. Stanford, California: Stanford Captology Media; 2007.
5. Moreno MA, Christakis DA, Egan KG, Brockman LN, Becker T. Associations between displayed alcohol references on Facebook and problem drinking among college students. Arch Pediatr Adolesc Med. 2012; 166(2):157-63.
6. Fournier AK, Clarke SW. Do college students use facebook to communicate about alcohol? an analysis of student profile pages. Cyberpsychol. 2011; 5(2).
7. Ridout B, Campbell A, Ellis L. 'Off your face(book)': Alcohol in online social identity construction and its relation to problem drinking in university students. Drug alcohol rev. 2012. 31(1):20-26.
8. Moreno MA, Briner LR, Williams A, Brockman L, Walker L, Christakis DA. A content analysis of displayed alcohol references on a social networking web site. The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine. 2010; 47(2):168-175.
9. Borsari B, Carey KB. Descriptive and Injunctive norms in College Drinking: A MetaAnalytic Integration. J stud alcohol. 2003; 64:331-341.

10. Alonso MM, Del Bosque J, Gómez MV, Rodríguez L, Esparza SE, Alonso B. Percepción de normas sociales y consumo de alcohol en jóvenes universitarios. *Anu Inv Adicciones*. 2009;10(1):40-9.
11. Roy C. *The Roy Adaptation Model*. 3ª ed. Upper Saddle River (NJ): Pearson; 2008.
12. Walker LO, Avant KC. *Strategies for theory construction in nursing*. 5ª ed. Upper Sadder River (NJ): Pearson Education; 2011.
13. Igartua JJ. La técnica del listado de pensamientos como técnica de investigación en comunicación publicitaria. *Comunicación y Cultura*. 1998; 3:43-62.
14. Morduchowicz R, Marco A, Sylvestre, Ballestrini A. *Los adolescentes y las redes sociales*. Ministerio de Educación de la Nación; 2010.
15. Aspani MS, Sada M, Shabot R. Facebook y vida cotidiana. *Alternativas psicol*. 2012; 16(27):107-114.
16. Epstein JA. Adolescent computer use and alcohol use: What are the role of quantity and content of computer use? *Addic behav*. 2011; 36:520-522.
17. Kozier BE, Blais K. *Nursing Theories and Conceptual Frameworks.*, editor. *Professional nursing practice: concepts and perspectives*. California: Longman AW; 1997.
18. Litt DM, Stock ML. Adolescent alcohol-related risk cognitions: The roles of social norms and social networking sites. *Psychol addict behav*. 2011; 25:708-713.

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