Masculinities of Gym Users in the Context of Sustainable Development

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Abstract
The relationship between conceptions of masculinity and sport injuries is presented in this paper describing how male gym users, including bodybuilders and fitness practitioners, have shown risk behaviors that are typical of their gender. A qualitative and quantitative study was applied as a part of the methodology at a gym in the city of Hermosillo, Mexico, focusing on injury risks related to masculinity and their prevention. Questionnaire of injuries disposition and in-depth interviews were applied to gym users. Most of the surveyed users showed knowledge of the proper use of gym equipment and stretching and warming techniques as well as the support of the gym instructors. The main cause of injuries is related to behaviors, since they chose not to ask for instructions to show power and strength to others as a result of the male competitive tension that exists among them due to conceptions of masculinity. It is concluded that, in fact, there is a relationship between conceptions of masculinity and sport injuries. Users report the existence of social tension and that for the sole reason of being male they feel the responsibility and obligation of being the best without taking any prevention or safety measure.

Keywords
Masculinity, Gym Users, Sustainable Development

1. Introduction
The present article intends to explore the risks of physical injuries caused by conceptions of masculinity among gym users, including bodybuilding and fitness practitioners. The media has promoted and maintained a competitive image of men in sports (CGE-I, 2006); which could have served to foster competition
in physical activity amongst men and consequently to generate a predisposition to injury.

Masculinity is a concept that has recently become a topic of great social interest in the search for gender equality (Téllez Infantes & Verdú Delgado, 2011). The 2030 Agenda for sustainable development, approved by the United Nations in September 2015, includes gender equality as its goal number 5, highlighting the delay women and girls have in obtaining benefits derived from the progress and development achieved so far. For humanity, inequalities in work and wages are stressed, as well as in a large amount of unpaid work, such as childcare and domestic work, without forgetting discrimination in public decision-making (UN, 2015).

To achieve the empowerment of women and girls, the United Nations propose the goal number five into the Sustainable Development Goals 2030 (UNESCO, 2017). The empowerment of women cannot be achieved without withdrawing male privileges that exempt men from domestic work, parental, conjugal and family responsibilities, thus putting women, men and children in an environment of equity and improvement of their quality of life (Pérez Castro Vazquez, 2003). Equity would also be beneficial for men, since it increases self-esteem, favors personal growth and increases the quality of relationships (Bergara, et al., 2008). The improvement of the quality of life of women, men and children is only possible through gender equity; therefore, it is essential that policies for sustainable development address this issue in a more systematic and coherent manner (OECD, 2008).

Masculinity is defined as a social construction process in which the masculine personality is given a series of traits, behaviors, symbols and values, defined by society (Téllez Infantes & Verdú Delgado, 2011). It is important to understand that not every man has the same attitudes and that not every man presents behaviors which are labeled as masculine (Hardy & Jiménez, 2001). Some men however maintain attitudes and behaviors that result in violence toward women, to other men and even to themselves; this three-part conjunction is configured in such a way that these attitudes reinforce themselves. Disengaging from the social source of violence will mean the disappearance of the authoritarian, patriarchal and classist masculine role that society has established (Kaufman, 1999).

Gender equity is still a pending goal despite its importance. One of the goals of the UN’s 2030 Agenda for Sustainable Development is gender equity because it plays a critical role in sustainability (Kaltenborn, 2015). However, masculinity is still granted a privileged position in society; this starts in the family and even from pregnancy, where concepts of masculinity are conceived. Even when family members are raised as part of a team with equal rights and obligations (Instituto Nacional de las Mujeres, 2010), power structures, like schools, diffuse masculine norms. The education system privileges the masculine experience and thus encourages masculine dominance.

Internationally, efforts exist to develop tools and ideas that contribute to
changing the role of masculinity in the gender order such as improving the relationships and behaviors of men regarding women (Mora, Fritz, & Valdés, 2006). Masculinity is a natural restraint on the possibilities of individuals to develop their capacities; it limits men while also encouraging discrimination within their families and oppressing family members (Bergara, et al., 2008). Masculinity is associated with social status and freedom in public space, while other non-masculine individuals have to be subordinate to the patriarchal image.

The role that masculinity plays in society reflects cultural changes that contribute to the construction of social identities. These social identities are produced by social institutions like work, school and even the state because models of masculinity cannot be separated from the social and institutional context in which they have developed (Connell, 1997). Masculine dominance defines the role of men in societies that is formed by and maintains gender division (Rodríguez Pizarro & Ibarra Melo, 2013). Society offers benefits to men based solely on their gender; this is not only expressed by power or status but also in the possibility of generating more economic resources than women and perceptions of their opinions having more value than women’s (Faur, 2004).

The attitudes and expectations of masculinity create stress among men, generating the need to prove themselves, forcing them to reject safety measures and risk danger out of the fear of losing their manliness. It is still unknown whether this inclination towards masculinity has to do with biology, is created by learned behaviors, or is a mixture of both (Ristolainen, Heinonen, Waller, Kujala, & Kettunen, 2009). Some authors (Alfaro Gandarillas, Bengoechea Bartolomé, & Vázquez Gómez, 2011) suggest that men adopt an athletic identity characterized by rudeness and competitiveness because it is part of the masculine self-image created in the early years of childhood and transmitted between father and son.

By rejecting safety measures, men risk injury, which occurs when the impact applied to body tissue exceeds the ability of the tissue to absorb the stress in a correct way (McBain et al., 2012). Although men have the same risk of physical injury as women at the gym when considering only physical conditions, their social and competitive attitudes lead to more risky behaviors; it has been reported that 44% of the male population suffered an injury at the gym as a result of incorrect weight lifting technique or practice (Ristolainen, Kettunen, Kujala, & Heinonen, 2012).

By changing these conceptions of masculinity, a huge step can be achieved towards different behaviors, which may not only help prevent injury but also change social dynamics by improving social interactions, creating a fairer society, and ultimately contributing to sustainable development.

2. Methodology

A non-experimental mixed research method was used. This non-experimental method was selected because it was not possible to control neither the numbers of participants nor the participants; therefore, the gym and the participants on
the study were not selected randomly, but intentionally. It was a mixed research because this combined unstructured interviews, a qualitative technique, with quantitative data from surveys. A survey was distributed to a sample of 28 gym users that were identified as either professional or non-professional fitness practitioners. 18 out 28 gym user was injured, the rest was not injured.

All the individuals were surveyed in a facility located in Hermosillo, México. The survey included questions from two questionnaires applied by two authors in theirs researches. One of them was applied to identify the existence of any risky behavior and possible associated injuries (Latorre & Pantoja, 2013). A second one explored the opinion about a series of statements on lifestyles (Baquerizo Ordoñez, 2014).

Those statements included in the latest questionnaire show notions of masculinity, even when it was not the intention of the author in the original research. It was useful in order to reach the objectives of the research which results are included in this paper. It was possible to analyze the opinions of gym users surveyed, as a risk factor for injuries suffered during fitness activities.

The first questionnaire referred above is measured in a 6-point Likert scale, ranging from 1 “completely disagree” to 6 “completely agree” and includes 22 questions. Any score with an answer equal to or higher than 5 was considered a potential risk for sports accident.

When survey was completed and analyzed, two of the gym users surveyed, the highest and lowest scores, were selected to complete in depth interviews with the goal of exploring their conceptions of masculinity. The interviews were recorded and transcribed for further analysis with the permission of the interviewed subjects.

3. Results

3.1. Unstructured Interviews

Before the survey was applied subjects were asked if they had suffered any injury, distinguishing between injuries suffered inside and outside the gym. Of the total of 28 people who met the initial criteria of fitness practitioners, 18 replied that they had suffered an injury at the gym that prevented them from continuing their sports activities, and 10 answered that they had not suffered injuries at the gym while exercising. Based on this, the users were grouped into “injured” and “not injured” for the application of the survey instruments.

3.2. Survey for Gym Users

The most common injuries reported among users were contractures, although tears were also mentioned. The risk factors that could have caused these injuries are incorrect technique and overload.

Given that most of the users surveyed reported knowing the functions of the machines, how to use them, the necessary stretching and warm-up techniques to be performed, and the availability of instructors who know the morphology of
each exercise, it was concluded that the cause of injuries among gym users are attributable to behavioral factors. A lack of knowledge was discarded because the users could have asked for support from instructors, but it seems that this option was not taken because of the tension that exists between men and their competitiveness.

### 3.3. Sports Accident Propensity Questionnaire

This part of the questionnaire is based on a 6-point Likert scale, 1 signifying “completely disagree” and 6 signifying “completely agree.” Users that answered 5 or above to every question were considered to have a high risk for sports accidents. Because the instrument consists of 22 questions, the minimum score for being considered at risk was 110. The user with the highest score was number 9 of the “injured” group with a total of 115. Amongst the “not injured,” the user with the lowest score was number 10 with a total of 30.

Users with a score of 110 or higher are the most prone to injuries according to the instrument. Given that the user number 9 of the “injured” group obtained a total score of 115, it was found that there is consistency between the instrument’s findings and user behavior. A deep interview was conducted with user number 9 in order to learn about his conceptions of masculinity. Because user number 10 of the “not injured” group obtained the lowest score (30), an in-depth interview was conducted with him in order to compare his conceptions of masculinity to those of user 9 from the “injured” group.

An individual analysis of the questions in the section of sports accident propensity questionnaire was also performed in order to identify risk behavior as a complement of the research. There were seven questions in which users in the injured group had high scores, i.e., greater than 5. These questions were found to be directly related to characteristics of masculinity, reflecting a directly proportional relationship between conceptions of masculinity and risky behavior. These questions provide evidence that participants had feelings of empowerment and competence that were reflected in their actions.

Question 1 states, “I have the skills and physical power to perform any sport activity”; 96% of participants scored this question a 5 or higher. This question reflected a strong masculine identity among gym users in the injured group.

Question 2 states, “I like to always be better than others and surprise them with my ability”; 93% of participants scored this question a 5 or higher. This demonstrates a fundamental aspect of masculinity: competitiveness.

Question 5 states, “I need to improve myself to be the best”; 96% of participants scored this question a 5 or higher. Like the previous question, this reflects competitiveness amongst gym users.

Question 13 states, “I like to jump from the highest diving board in the pool”; 64% of participants scored this question a 5 or higher. This denotes the respondents’ inclination toward a sense of adventure and their desire not to measure risks.
Question 14 states, “Even though I may get lost, I would like to explore an unknown forest, either while hiking or cycling”; 71% of participants scored this question a 5 or higher. Like the previous question, this shows a sense of adventure amongst gym users.

Question 15 states, “I like to ride roller coasters”; 68% of participants scored this question a 5 or higher. This reflects masculine restlessness, a desire for adventure, and the ignoring of risk.

Question 18 states, “I like to camp in uninhabited and remote places”; 68% of participants scored this question a 5 or higher. This reflects men’s needs to experience adventure and demonstrate their courage, both facets of masculinity.

3.4. In-Depth Interviews

As mentioned above, the users with the highest and lowest scores in the sports accident propensity questionnaire were interviewed about their conceptions of masculinity.

From childhood, the characteristics and preconceptions of masculinities are present, playing a decisive role in child development. The main characteristic of masculinity is competitiveness, which manifests predominantly in sports, through demonstrations of strength and endurance, rather than academics. This is reflected in the following statements by user 9 of the “injured” group, who had the highest score on the sports accident propensity questionnaire:

“In sports, it will manifest in a different way—in a group dynamic—but there is always going to be a competitiveness to be the best.”

“From the time you are young there is competition, never academic competition but competition among those who were better at sports, those who were stronger.”

“In sports, you will want to be the best and the one who has the most victories. In team sports, you want to be the best team player—the strongest, the most agile, the fastest, the most everything.”

“When I was a kid, I was expected to be a star in all sports and have excellent grades; that’s what was expected.”

These conceptions of masculinity are shared by user 10 of the “not injured” group. He is aware of the sense of competitiveness that demonstrates masculinity in society and the tension that this entails. This is true even though he is amongst the participants that have not experienced injuries at the gym and thus may be less likely to engage in risky masculine behavior. He reported that in the past he wanted to be better than others and has suffered injuries, just not in this period of training at this gym:

“Always, always, there was always something to gain, someone to defeat, not as an enemy but as a way of personal improvement; you use yourself as a reference for others.”

“And, if you did not beat them once, then if you win the next one; you want
to say that you are improving.”

“If a man hurts himself, he is already the hero of war.”

“Generally, you are tense because you are expected to win, because you have always won or because you are the best in your school or because you tried hard enough to win.”

“I put in so much passion because there was something to gain in that sport.”

“Man is a hero when he hurts himself; we usually perceive this as him giving more effort than what was expected of him.”

Regarding the family environment, a factor of social predisposition was found, as the family prepares the subject to adopt the mentality of what is expected of a man. This includes pressure to be independent, strong and a provider for a family. This social pressure continues in the workplace where men compete with respect to who has a better salary, position, car, home and family. This is reflected in the opinions of user 9 of the “injured” group:

“A man is expected to always work, and the man is expected to be the one to support his family.”

“I think that what is becoming fashionable, so to speak, is intentionally done by media to promote certain behavior in us men.”

“And currently it could be, who has a better job, who has a more stable family.”

“I know that my family has complete expectations. By the mere fact of being a man they expect me to keep my family, provide for my family, educate my children, teach them sports.”

“Dad and Mom taught me that I have to find a job that I have to provide for my family, knowing that at some point I will have a family.”

A common factor found in the areas of family, social relationships and school is competitiveness, which becomes a risk factor because that desire to be the best, the strongest, the most successful leads to overexertion and can be equally present in different scenarios such as the gym, school, office and home. This is reflected in statements by user 9 of the “injured” group:

“At school, you want to be the best or the funniest the most ... prominent in something [within] your group.”

“At work [there is a focus on] having the best position, dressing the best dress, having the most success—the one that wins the most.”

“Nowadays, it could be, who has a better job that has a more stable family ...”

The relationship between conceptions of masculinity and sports injuries is also present in statements by user 10 of the “not injured” group, which reflect a sense of competitiveness in all areas of life, including as work, family and sports:

“I would not care so much if my sons were ugly, but I would care if they
*(R. Perez-Rios et al., 2018)*

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were physically or mentally weak”

“Even in physical appearance, even in the type of car we buy, there is a const-
stant and clear comparison that represents competition in all aspects.”

“You want to see yourself better, speak better; you want to present better re-
results.”

“If something goes well, you want to be the first to tell your boss. There is com-
petition in both time and image.”

With reference to the practice of bodybuilding and fitness, the interview with
user 10 of the “not injured” group reflects how conceptions of masculinity are a
determining factor in injuries. His interview demonstrates how the pressures of
masculine competitiveness encourage men to prove themselves stronger and more resil-
ient. This results in overexertion, increased risks and the failure to take
precautions when training or when finishing the practice.

“When there are many men in the weights area, when choosing my weights,
I tend to choose 5 or 10 pounds more than I’m used to.”

“If I feel like they’re watching me I tend to do my exercises better and tend
to behave in a more masculine way.”

“The desire to be the strongest and the most agile is going to exceed any
limit and everything, always.”

“We go faster than what our bodies can support cardiovascular.”

“We do more repetitions until we are redder and sweatier with veins jump-
ing. We are at peace with wanting to show that we can do more.”

“You want to look strong, muscular.”

4. Conclusion

The results indicate a causal relationship between conceptions of masculinity
and sports injuries, as evidenced this from the in-depth interviews as well as
both survey instruments. Users report the existence of social tension resulting
from the mere fact of being men and therefore feeling a great responsibility and
obligation to be the best, neglecting injury prevention or safety measures.

Although some users surveyed suffered injuries inside the gym and others did
not during the period in which the study was conducted, all participants had
suffered a sports injury at some points in their lives. The common denominator
amongst them is their conceptions of masculinity and how they think about
male roles that must be fulfilled and taken to the limit. This has resulted in their
sports injuries.

Although gym users are aware of the regulations, operation and use of exer-
cise equipment, the survey reveals that overload and contracture are still the
most common injuries. This indicates that when men are in the presence of oth-
er men, their competitiveness increases, and they decide to ignore preventive
measures in order to satisfy the pressure they feel to be the best. Injury by over-
exertion is even celebrated by other men. This reinforces the point that this type
of behavior persists as a result of social recognition and their own conceptions of
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masculinity.

The study revealed that it does not matter whether a person is prone to sports injuries, these conceptions of masculinity, which are part of a social group; physically affect the people that make up the society both inside and outside the gym. Findings suggest that the concept of masculinity should not be taken any more on the traditional sense that focuses on to be the highest, the stronger, and the fastest. Therefore, it is necessary to explore and to foster the evolution of the conceptions of masculinity to release the existing tension that leads men to suffer physical injuries. At the end, this will also help to achieve a social balance and gender equity towards sustainable development. Findings have confirmed previous literature theories; however, results cannot explain causal relations. Another limitation in this study is the small numbers of participants, which can offer good explanation about the situation on this particular gym, but it is not proper to generalize.

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Questionnaire for Gym Users (Baquerizo Ordoñez, 2014)

1) How long have you been physically active?
   a) 3 months
   b) 6 months
   c) 7 months or more
2) How many days a week do you attend the gym?
   a) 5 days
   b) 6 days
   c) 7 days
3) Do you know the function of each machine and what are the muscles you are exercising?
   a) YES
   b) NO
4) Do you receive instructions each time you do physical activity?
   a) YES
   b) NO
   c) SOMETIMES
5) Did the instructors let you know the correct way to prepare for physical activity?
   a) YES
   b) NO
6) Do you perform warm-up before doing physical activity?
   a) YES
   b) NO
7) Do you know and perform stretching before, during and after doing physical activity?
   a) YES
   b) NO
   c) SOMETIMES
8) Do you know the correct position to use the machines or when lifting weights?
   a) YES
   b) NO
   c) SOME
9) What type of injury have you experienced during physical activity in the gym?
   a) SPRAIN
   b) CONTRACTURE
   c) FRACTURE
   d) TEAR
   e) LUXATION
   f) DISTENTION
10) What risk factor do you think has caused you the injury?
    a) OVERUSE
b) OVERLOAD

c) INCORRECT TECHNIQUE

Sports for accident propensity questionnaire; PAD-22 (Latorre & Pantoja, 2013)

1) I have abilities and physical power to perform any sporting activity.
2) I always like to be the best and surprise others.
3) When I lose, I feel very bad about myself.
4) When I play sports, if I do not win, I do not have fun.
5) I need to improve myself to be the best.
6) I drive the bicycle without a helmet.
7) I play sports while injured.
8) I do not mind skating without a helmet or protection.
9) I usually let go of my hands when driving the bicycle.
10) I am often feeling bad because of an issue related to my physical appearance.
11) My body does not transmit positive feelings.
12) I believe that, compared to most, my body does not seem to be in the best physical shape.
13) I like to jump from the highest platform of the pool.
14) I like to explore an unknown forest by hiking or cycling, although I may get lost.
15) I like to ride a roller coaster.
16) I am always the first to offer myself to do the riskiest activities.
17) Sometimes I like to do things that involve small surprises.
18) I like to camp in uninhabited and remote places.
19) Jumping a fence does not entail any danger.
20) Doing a somersault in the air is not very dangerous.
21) As I swim very well, canoeing without a lifejacket is not a risk for me.
21) Jumping the foal is not very dangerous.

The answer options are numbered from 1 to 6, with 1 being totally disagree and 6 being totally in agreement.