

# **AN EXAMINATION OF CLIMBERS' INFORMATION-SEEKING BEHAVIORS FOR INJURY CARE AND PREVENTION**

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## **Abstract**

This preliminary study investigates the information-seeking behaviors of rock climbers regarding injury care and prevention. Forty-six rock climbers completed an anonymous online questionnaire concerning information resources. Eighty-five percent confirmed sustaining a climbing-related injury. The subjects reported receiving injury-care information from a general health website (47.4%), general doctor (42.1%), climbing-related website (39.5%), and friend (39.5%). Twenty-nine subjects (63.0%) reported training and using techniques to prevent injuries. Climbing-related magazines and friends were cited the most for injury prevention information (56.7% each). Rock climbers utilized a combination of resources for information needs, including anecdotal evidence.

**Keywords:** Information-seeking behaviors; questionnaire; wounds; athletes

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**Résumé**

Cette étude préliminaire examine les comportements de recherche d'information des grimpeurs en matière de soins et de prévention des blessures. Quarante-six grimpeurs ont rempli un questionnaire en ligne anonyme concernant leurs sources d'information. Quatre-vingt-cinq pour cent ont confirmé avoir subi une blessure liée à l'escalade. Les sujets ont déclaré avoir obtenu des renseignements sur les soins sur sites de santé non-spécialisés (47,4%), par un médecin généraliste (42,1%), sur des sites liés à l'escalade (39,5%), et par un ami (39,5%). Vingt-neuf sujets (63,0%) ont déclaré s'être entraînés et avoir utilisé des techniques pour prévenir les blessures. Les magazines et les amis liés à l'escalade ont été les plus cités pour l'information sur la prévention des blessures (56,7% chacun). Les grimpeurs ont utilisé une combinaison de ressources pour combler leurs besoins d'information, y compris des preuves anecdotiques.

**Mots-clés:** Comportements de recherche d'information; questionnaire; blessures; athlètes

## Introduction

Athletes' information-seeking behaviors concerning physical fitness and injuries are very limited. "Information-seeking behaviors" refers to a person's process of acquiring, analyzing, and applying information. Previous literature concerning athletes' information-seeking behaviors mainly concentrated on nutrition, dietary supplements, and drug/doping knowledge (Wiens et al. 2014; Walsh et al. 2011; Loraschi 2014; Thomas et al. 2011). Other studies investigated a wider population of non-elite athletes' exercise-related injuries and physical activity information-seeking behaviors (Grice et al. 2014; Gerbing & Thiel 2015). Prior to this study, climbers' information-seeking behavior regarding injury care and prevention was limited. Previous literature on rock climbers mentioned the importance of injury care and prevention; however, did not focus on the information-seeking behaviors or resources.

## Methods

An anonymous ten-question survey was developed to collect data concerning the climbers' information-seeking behaviors. Questions focused on the individual's demographic background, climbing experiences, injury occurrences, injury care and resources, injury prevention measures and resources. The questionnaire was distributed to climbers via the social media platform Facebook. The questionnaire link was posted on a North Carolina climbing facility's both public Facebook wall and its private members-only group, on the researcher's Facebook page with thirty-two known climbers tagged in the post, and emailed to three additional known climbers without Facebook accounts. The data were standardized by selecting the median, rounding to the nearest integer, and adding free-text responses into the standardized fields. Descriptive statistics were completed for demographic information and information resources. The free-text comments were analyzed using the grounded theory method for qualitative data (Strauss & Corbin, 1990).

## Results

A total of 46 climbers completed the survey. Eighty-five percent (39/46) of subjects reported a climbing-related injury; these injuries were chronic and acute. Twenty-nine subjects (63.0%) reported training and using techniques to prevent injuries. Within a free-text response space, participants listed and explained methods employed to prevent injuries. After coding the qualitative data, eight categories emerged: strength, flexibility, foresight, warm up, non-climbing activities, physical therapy, rest, and nutrition/medications. Subjects selected the multiple sources where they sought injury care and prevention information (Table 1). Most subjects reported that they received injury care information from a general health website, a general doctor, a climbing-related website and a friend. Climbing-related magazine and friend tied for the most utilized prevention resource.

<b>Sources of information</b>	<b>Care <i>n</i> (%)</b>	<b>Prevention <i>n</i> (%)</b>
Health care professional	27 (71.1)	19 (63.3)
General Doctor	14 (46.7)	17 (44.7)
Athletic Trainer/Physical Therapist	9 (30.0)	15 (39.5)
Sports Medicine Doctor	8 (26.7)	14 (36.8)
Complementary or Alternative Medicine Professional/Specialist	4 (13.3)	3 (7.9)
Internet-based resources	25 (65.8)	21 (70.0)
General Health Website	15 (50.0)	19 (50.0)
Climbing Website	13 (43.3)	15 (39.5)
PubMed or MedlinePlus	6 (20.0)	6 (15.8)
YouTube	4 (13.3)	4 (10.5)

Social Media- Facebook, Twitter, Blog, etc.	2 (6.7)	1 (2.6)
Other resources	22 (57.9)	27 (90.0)
Friend	17 (56.7)	16 (42.1)
Climbing-Related Magazine	17 (56.7)	10 (26.3)
Local Gym	10 (33.3)	6 (15.8)
Book/Guide	10 (33.3)	5 (13.2)
Magazine	4 (13.3)	3 (7.9)
Library	3 (10.0)	-
Television/Movie	2 (6.7)	-
Other (please specify)	3	6
<b>answered questions</b>	<b>30</b>	<b>38</b>

Table 1. Resources for injury care and prevention information according to surveyed rock climbers. Note that subjects could select more than one resource.

### Discussion

Rock climbers use a variety of information resources, similar to other athlete populations. Other athlete population studies on information-seeking behaviors found health professionals, friends and family, and the internet are the most highly-used resources (Thomas et al, 2011; Grice et al, 2014; Gerbing & Thiel, 2015). In this study, subjects utilized similar resources for injury care including healthcare professionals, internet-based resources, and friends. In regards to injury prevention, participants utilized internet-based resources, healthcare professional, climbing-related magazines, and friends. In addition to the top three resources, participants in this study also attributed climbing-specific resources (websites and magazines) as sources for injury information. Unlike other studies on athletes, participants in this questionnaire did not consult a climbing coach (Wiens et al. 2014; Walsh et al. 2011; Thomas et al. 2011). For both injury care and injury prevention, this questionnaire reported a higher percent of participants seeking help from friends compared to other studies on rugby players and elite athletes (Walsh et al. 2011; Thomas et al. 2011).

As the climbing community grows in numbers, especially following the debut of climbing as an Olympic sport in 2020, healthcare professionals will encounter more rock climbing injuries. Additionally, rock climbers already have access to more resources for injury care and prevention, than they did at the time this study was conducted. These new resources include coaches, teammates, personal trainers, podcasts about training, for-purchase training plans online, and new books.

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