

# **The Demographics of Climbing**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## **Introduction**

Most people could tell you indoor rock climbing is exploding in popularity. Climbing gyms are popping up everywhere, the sport was featured for the first time in the 2020 Olympics, a climbing documentary won an Oscar in 2019, and its star, Alex Honnold, is likely a household name. The data helps show exactly the extreme growth sport is experiencing. According to the Climbing Business Journal in an article published at the beginning of 2022. The number of climbing gyms in the US had doubled in the last decade, and since new millennium the number has quintupled. Although the popularity of climbing is skyrocketing, looking at the demographics you will see the sport is still dominated by males. This paper aims to answer what norms and conditions contribute to the demographics of climbing, indoor and outdoor. Longstanding public perceptions of the differences between men and women contribute to the style of routes people of each sex feel they should be climbing. Climbing should be made accessible to all people regardless of background, and identifying what barriers currently exist is the first step in solving this problem.

## **Background**

Both indoor and outdoor climbing can be broken down into multiple distinct disciplines. Outdoor climbing can be described by the style of climbing required to ascend or by the route itself. Styles include bouldering, top rope, sport, traditional (trad), and aid climbing. Bouldering involves climbing short routes close to the ground with no roped protection, only crash pads on the ground to break a fall. Top rope is the safest of roped climbing, with the rope already anchored at the top of the route and a belayer shortening the rope as the climber ascends. Lead climbing simply means climber ascends with the rope, attaching it to anchor points along the route to provide safety. This can either be on carabiners attached to bolts drilled into the rock,

being sport climbing, or on carabiners attached to gear that the climber places in cracks as they ascend, denoting the route as trad. Aid climbing involves the use of gear that assists in the ascent, such as ladders, pulleys, or ascenders. Climbing gyms originally began as a way to train for outdoor climbing, and simulate these styles, although almost never traditional or aid climbing.

Outdoor climbing can be broken down into bouldering, single-pitch, multi-pitch, big wall, mountaineering or alpinism. Bouldering is exactly as the style describes, and as the name suggests occurs almost exclusively on boulders and large rocks. A “pitch” is simply a single stretch of climbing, typically no longer than 80 meters and with an anchor to tie in securely. Single-pitch and bouldering have the closest relation to indoor climbing of the outdoor disciplines. Multi-pitch, obviously, is a route made of multiple pitches. These routes are broken into multiple pitches to allow the lead climber to then belay the original belayer up to the anchor, before continuing the subsequent pitches. Beyond a singular pitch, routes are more likely to involve trad climbing, although harder sections can have bolts placed to allow for a safer ascent. Big wall climbing occurs on huge faces, such as El Capitan in Yosemite National Park, and often take more than one day to ascend, with climbers setting up portaledge (a hanging cot-like system) to sleep on. Mountaineering involves reaching the top of a mountain through many different methods, with alpine climbing being more specific to that terrain requiring more skills such as ice climbing and occasionally skiing.

To understand how the men and women are judged based on the climbs they complete one must understand how climbing routes are rated. Each climb, both indoor and outdoor, is typically given a grade following its first ascent to inform future climbers of the difficulty of the climb. The two most popular and relevant forms of climbing are bouldering and free climbing. Free climbing is simply climbing without aid, and only using equipment to protect the climber in

the event of a fall. While there are many different scales for both bouldering and free climbing used across the world, the scales most recognized internationally are the Yosemite Decimal System (YDS) or the French numerical system for free climbing, and the Hueco Scale or the Fontainebleau system for bouldering. Similar to measurement scales, there are the ones used by Americans, and the ones used by everyone else.

The Yosemite Decimal System (YDS) is the scale for free climbing used in the US, with the Hueco Scale (colloquially known as the “V” scale) being used for boulders. The YDS breaks down the level of difficulty of an ascent for mountaineering with the scale broken down by “class” where Class 1 is a regular hike, Class 2 may require scrambling and some use of one’s hands, Class 3 and 4 denote an increased danger where a fall might be fatal and represent the transition from an intense hike to climbing. Class 5 is designated for technical climbing that breaks down into a much more specific ranking that most climbers are familiar with. A common grade for the easiest top rope climbs in a gym in the US might be a 5.6 or 5.7. These grades are further broken down by letters “a” through “d”, though this is not common for easier climbs below 5.10. There are only two routes with a proposed highest ever grade of 5.15d. The V scale is a bit simpler with V0 being the easiest and V17 the hardest ever climbed.

Similar to the metric system, the French established the scales for free climbing and bouldering widely used across Europe and much of the world. The French numerical system rates climbing routes 1, the easiest, through 9, the hardest. The numbers are then broken down further by letters “a” through “c” and feature a “+” if the grade is between letters. Each of these grade increments are equivalent to a step in the YDS. For example, 5.13a, 5.13b, 5.13c, and 5.13d from the YDS correspond to 7c+, 8a, 8a+, and 8b in the French scale. The corresponding current hardest grade in the French scale is 9c. The bouldering scale developed in France is

called the Fontainebleau system, named after a famous area for bouldering in France of the same name. This scale increments the same as the French scale for free climbing (though the letters are capitalized), the highest grade equivalent of V17 being 9A. French scales for both free climbing and bouldering typically do not break lower grades with letters or a “+”. For the rest of this paper grades will be referred to in the American system.

The American Alpine Club (AAC) published their Inaugural State of Climbing Report in 2019, revealing a number of statistics that beckon some questions. Women made up 42% of indoor climbers, a relatively even divide between the genders, however, for outdoor climbing women only made up 33%. Social notions of who climbers should be likely play a role in these statistics as climbing is often seen as a masculine sport.

## **Method**

The majority of information collected for this analysis comes from research papers published surrounding climbing and climbing demographics. Some papers may not be climbing related, but rather regarding differences in risk-aversion between men and women, strength and sport participation statistics – essentially any resource that may shed light on claims that describe the discrepancies in climbing participation statistics. It is important, especially when the focus is on social interactions and not hard data, to find sources written by not just men so different perspectives can be appreciated and inherent bias may be removed.

## **Results and Discussion**

Wigglesworth’s (2021) ethnographic study explores claims of differences between men and women in the sport of climbing, aspects of the female climbing experience, and contributions to sexism in climbing gyms through discussion of background information and

interviews with female climbers. Many claims reflect people's assumptions that men are stronger and women are more flexible. Wigglesworth refers to interviews with women in this ethnography where the participants reinforce these notions with thoughts that a woman who completes a hard route must have done it through good technique, whereas a man having completed the same route had done so through strength. These assumptions can be applied to many different maneuvers in climbing. The female interviewees discuss how they are not necessarily expected to be good at moves requiring jumping, overhangs, large moves, and "campusing", a move where the climbers' feet are not on the wall. They claim that because men are physically stronger, they progress at the beginning faster, relying on brute strength rather than technique. Women, on the other hand, would progress slower in the beginning and due to a lack of strength would focus on the basics and learn better technique. Wigglesworth believes this causes women to rely on "smart climbing".

Besides simply associating strength and risk-taking with men, there are associations between gender and specific moves in climbing. The interviews "support the idea that dynos are movements attributed to men and not to women." (Wigglesworth, 2021). "Dynos" are dynamic moves that require the climber to jump between holds, in contrast to what is known as a "static" move, where the climber simply reaches for the next hold and maintains contact with the wall. Wigglesworth and the interviewees claim men are drawn to dynos as they make the climber seem stronger and that men want to show off, and that women are more risk averse as well as long-term thinkers. There seems to be a feedback loop in which due to separate routes and boulder problems being set for men and women in competitions, people will train for their respective styles thereby further separating the genders by climbing style. A majority of those interviewed for this thesis reported they were not comfortable doing dynos. This was consistent

among both novice and expert climbers. Apprehension to perform dynos among the participants stems from both feeling that dynamic moves are not for women as well as a claim that injuries are more common with these moves.

Wigglesworth explores the notion that, like many other sports, a significant part in the perceived masculinity of climbing comes from the required ability to endure pain and injury, and that there is a real relationship between masculinity and injury. A publication in the *Scandinavian Journal of Medicine and Science in Sports* reported statistics from a study on injuries in climbing. It must be noted that more females that answered the questionnaire were novice climbers than men which could possibly skew the data towards higher injury rates for men. 30% of the participants reported at least one injury. As predicted by the accounts of those interviewed by Wigglesworth, in this study men accounted for a greater proportion of the injuries, at 34.5% injured men and 18.9% injured women. Being male also was related to a higher re-injury rate, while being older was correlated to a lower rate. Overuse injuries made up the vast majority of injuries, accounting for 93% of all reported injuries. As to specific risks, “Indoor rock climbing: who gets injured?” from the *British Journal of Sports Medicine*, preferred activity appeared as a factor towards an increased injury rate, with bouldering and lead climbing more likely to cause injury than top roping.

Issues relating to misogyny in climbing are reported across multiple sources. Wigglesworth’s feminist ethnography goes into detail describing the forms it can take. Sexism can take disguise as help or care for women such as when a man gives unsolicited advice on how to complete a boulder. While indoor climbing is roughly 50/50 between the genders, outdoor climbing is still male dominated. With men setting the majority of routes outdoors, a majority of routes will be chosen in a style that is more conducive towards male body types. “I didn’t realise

the variety of people that are climbers’: a sociological exploration of young women’s propensities to engage in indoor rock climbing” describes the labeling of climbing as “an ‘extreme’ or ‘risky’ activity is more detrimental to women’s propensities to participate than men’s” (Hewitt & McEvilly, 2022). This is due to the possible socialization of women from a young age to fear risk. Another place for misogyny to appear in climbing is the naming of outdoor routes. The person who first ascends a route typically has the honor of bestowing a name upon the climb, along with its grade. This has led to there being very inappropriate names given to some routes. Routes names like these make women feel eliminated and uncomfortable (Wigglesworth, 2022).

The International Rock Climbing Research Association in 2014 published a paper featuring a table classifying climbers by level, but for each gender. It consistently requires a higher climbed grade for men to be grouped in a new level than for women, for instance men are only designated an “elite” climber after having climbed 5.13c whereas women would only have to have completed a 5.12d. This table reports these levels for both free climbing and bouldering grades.

Most would not dispute the physiological differences between men and women, and while the perception of these differences has been shown to lead to cultural norms as explored in the previous paragraphs, it is important to explore exactly how these differences manifest in climbing. Within a study published by the International Journal of Sports Physiology and Performance, it was found that men have for both individual finger and full-grip higher strength per body weight. The Journal of Physical Education and Sport performed a much more detailed study on the bouldering differences between men and women. They found that women require more attempts on a boulder than men and rest longer in between each attempt. Men, however,



will spend more time on the boulder itself and spend more time gripping a single hold. The authors claim their data supports the hypothesis that women generally apply a more technical approach due to lacking grip strength and endurance (Medernach et al., 2016). They claim that implementation of “gender-specific training regimen could be important for better CB (competition boulder) performances”. A video released on YouTube by Lattice Training, a training facility in the UK that performs climber strength assessments as well as provided coaching and training services, showcased results of their assessment of male and female climbers finger strength for dead hangs. They determined the maximum weight climbers of different grades could have added on to them while hanging on a 20 millimeter edge for 7 seconds. Unsurprisingly, men of all climbing grades outperformed the women in the percent of their body weight they could have added, but more interestingly the gap decreased the higher the grade. They reported a difference of 10% for V4 climbers, 8% for V7 climbers, and a 6% difference for V11 climbers.

## **Conclusion**

There are a number of reasons to explain the interpreted differences in style between men and women in climbing. Societal notions of masculinity and femininity play a large role in determining what people believe they should be climbing more so than what they physically are able to. While studies show that men are physically stronger, there is no reason a lower strength prevents women from doing the same climbs. It comes down more to biases of what each gender is good at, highlighted throughout Wigglesworth’s PhD thesis. Women feel less comfortable performing moves perceived as having higher risk and requiring great strength, and therefore stick to routes with small hand holds and movements that require more grace and technique. A number of factors relevant to outdoor climbing appear that can explain the lack of women that

climb outdoors. Socialization of males to engage in more extreme and dangerous sports guide them towards outdoor climbing, and the socialization of females away from risk and danger may cause the opposite for them. The masculine environment fostered by the percent of males engaging in outdoor climbing can create a toxic environment for females. General misogyny and microaggressions deter women from the sect of climbing, and sexist and racist route names certainly create an uncomfortable environment. It appears norms existing in society outside of climbing leach into the sport but disappear at the higher levels in climbing.

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