Below is a list of research in the Beta Angel Project inventory that has not been summarized. If you see something in here you've read before, feel free to send over a 2-3 sentence summary (with or without commentary) of "what they did" and "what they found" and I'll be sure to attribute the work to you.

Cheers!

The Beta Angel Project

List of Un-summarized Research in the Beta Angel Project Research Inventory

The Interaction of Mind and Body (6)

Memory impairment during a climbing traverse: implications for search and rescue climbing.
Authors: Epling et al. | Year: 2018
Summary/Results:
Reference: Exp Brain Res. 2018 Nov;236(11):3043-3052.
https://www.ncbi.nlm.nih.gov/pubmed/30121739

Differences between traditional Visualization and Virtual reality on motor performance in novel climbers
Authors: Barca Martín et al. | Year: 2018
Summary/Results:
Reference: J Sports Med Ther. 2018; 3: 028-035.
https://www.heighpubs.org/jsmt/jsmt-aid1024.php

Emotional Intelligence in Male and Female Sport Climbers
Authors: Marczak, Ginszt | Year: 2017
Summary/Results:
Reference: J Educ Health Sport Vol 7, No 9 (2017)
http://www.ojs.ukw.edu.pl/index.php/johs/article/view/4851

Performance differences for intermediate rock climbers who successfully and unsuccessfully attempted an indoor sport climbing route
Authors: Draper, Dickson, Fryer, Blackwell | Year: 2011
Summary: No Summary Available Yet.
Reference: International Journal of Performance Analysis in Sport 11(3) · December 2011
Link to Research

Behavior Analysis and Sports Climbing
Authors: Fleming, Hörst | Year: 2010
Summary/results: Under construction :D
Reference: Journal of Behavioral Health and Medicine, 1(2), 143-154.
Link to Research

Self-handicapping in Rock Climbing: A Qualitative Approach
Authors: Ferrand, Tetard | Year: 2006

Summary/Results:
Reference: Journal of Applied Sport Psychology, 18: 271-280, 2006
https://www.tandfonline.com/doi/abs/10.1080/10413200600830331?journalCode=uasp20

Route Preview (3)

Motor Simulation in a Memory Task: Evidence from Rock Climbing
Authors: Pezzulo et al. | Year: 2010
Summary/Results:
Reference: Proceedings of the annual meeting of the Cognitive Science Society Vol. 32
https://pdfs.semanticscholar.org/1c2f/3137e69961d9f08a271c97878eb9618d93f8.pdf

Mental imagery and video observation in Sport climbing
Authors: Sanchez, Dauby
Summary: No Summary Available Yet. *Beta-Angel note: we're also not sure if this is classified correctly as a "route preview" article.*
Reference: Canadian Journal of Behavioural Science 41(2):93-101 · April 2009
https://psycnet.apa.org/record/2009-05252-007

Efficacy of external and internal visual imagery perspectives for the enhancement of performance on tasks in which form is important
Author: Hardy, Callow | Year: 1999
Summary: No Summary Available Yet. *Beta-Angel note: the 2009 Sanchez and Dauby article builds off this article.*
Reference: Journal of Sport & Exercise Psychology 21(2):95-112 · June 1999
Link to Research

Movement imagery in rock climbing : Patterns of interference from visual, spatial and kinaesthetic secondary tasks
Authors: Smyth, Waller | Year: 1998
Summary/Results:
Reference: Applied cognitive psychology. 1998, Vol 12, Num 2, pp 145-157 ; ref : 22 ref
Link to Research

Youth Specific Studies (1)

The system of development of coordination abilities of young climbers 6-7 years old
Authors: Kozina et al. | Year: 2018
Summary/Results:
Reference: http://doi.org/10.5281/zenodo.2536470
Link to Research

Grabbing (2)

Measurement of the Coefficient of Friction and the Centre of Pressure of a Curved Surface of a Climbing Handhold
Author: Fuss et al. | Year: 2013
Summary: No Summary Available Yet.

Reference: Procedia Engineering, 60, 2013: 491-495
https://www.sciencedirect.com/science/article/pii/S1877705813010965

Effect of Object Width on Muscle and Joint Forces During Thumb–Index Finger Grasping
Authors: Vigouroux, Domalain, Berton | Year: 2011
Summary/Results: *Beta-Angel note: while not a paper which even mentions rock climbing, the lead author is a climbing researcher (and strong boulderer – I climbed with him in Chamonix, France) and the experimental design using multiple-width pinch grips that exploit the fingertips is one which has obvious rock climbing implications.*
Reference: Journal of Applied Biomechanics, 2011, 27, 173-180
https://pdfs.semanticscholar.org/942d/5ecc01f5d656e1cf83b950c923fd6cb0f196.pdf

Learning (2)

ClimbVis: Investigating In-situ Visualizations for Understanding Climbing Movements by Demonstration
Authors: Kosmalla et al. | Year: 2017
Summary/Results:
Reference: ISS '17, October 17-20, 2017, Brighton, United Kingdom
Link to Research
Cognitive Motor-Learning > Learning

Exploring Rock Climbing in Mixed Reality Environments
Authors: Kosmalla et al. | Year: 2017
Summary/Results:
Reference: CHI 2017, May 6-11, 2017, Denver, CO, USA
Link to Research
Cognitive Motor-Learning > Learning

Studies of Human Movement (4)

Movement Phase detection in climbing
Authors: Dovgalecs et al. | Year: 2014
Summary/Results: Under Construction :D
Reference: Sports technology 7(3) October 2014
https://www.researchgate.net/publication/278622408_Movement_phase_detection_in_climbing

ClimbAX: Skill Assessment for Climbing Enthusiasts
Author: Ladha et al. | Year: 2013
Summary/Results:
Reference: UbiComp '13, September 8-12, 2013, Zurich, Switzerland
Link to Research
Kinesiology > Studies of Human Movement

Idiosyncratic control of the center of mass in expert climbers
Authors: Zampagni et al. | Year: 2011
Summary/Results:
Reference: Scand J Med Sci Sports. 2011 Oct;21(5):688-99.
https://www.ncbi.nlm.nih.gov/pubmed/21917019

A Time Motion Analysis of Bouldering Style Competitive Rock Climbing
Authors: White; Olsen | Year: 2010
Summary/Results: Under Construction :D
Reference: J Strength Cond Res. 2010 May;24(5):1356-60.
https://www.ncbi.nlm.nih.gov/pubmed/20386481

ClimBSN: Climber performance monitoring with BSN
Authors: Pansiot et al. | Year: 2008
Summary/Results:
Reference: Conference: Medical Devices and Biosensors, 2008. ISSS-MDBS 2008. 5th International Summer School and Symposium
Link to Research

Anatomy (1)

Isokinetic work profile of shoulder flexors and extensors in sport climbers and nonclimbers
Authors: Wong, Ng | Year: 2008
Summary/Results:
Reference: Journal of Orthopaedic & Sports physical therapy, 38(9), 2008
https://www.jospt.org/doi/pdf/10.2519/jospt.2008.2779

Injury (29)

Knee injuries in Rock climbing and Bouldering - An Update
Author: C. Lutter, D. Popp, V. Schöffl | **Year:** 2018
Summary/Results: No Summary Available Yet.
Reference: Orthop J Sports Med. 2018 Apr; 6(4 suppl2): 2325967118S00019.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5954325/

Addiction in Extreme Sports: An Exploration of Withdrawal States in Rock Climbers.
Authors: Heirene et al. | Year: 2016
Summary: No Summary Available Yet.
Reference: J Behav Addict. 2016 Jun;5(2):332-41. doi: 10.1556/2006.5.2016.039. Epub 2016 Jun 27
https://www.ncbi.nlm.nih.gov/pubmed/27348554

The "Heel Hook"-A Climbing-Specific Technique to Injure the Leg.
Author: V. Schöffl, C. Lutter, D. Popp | Year: 2016
Summary/Results: No Summary Available Yet.
Reference: Wilderness Environ Med. 2016 Jun;27(2):294-301.
https://www.ncbi.nlm.nih.gov/pubmed/27009908

A Critical Review of the Incidence and Risk Factors for Finger Injuries in Rock Climbing.
Author: G. Jones, MI Johnson | Year: 2016
Summary/Results: No Summary Available Yet.
Reference: Curr Sports Med Rep. 2016 Nov/Dec;15(6):400-409.
http://eprints.leedsbeckett.ac.uk/3076/3/Current%20Sports%20Medicine%20Reports.pdf

Incidence and Risk Factors for Upper Extremity Climbing Injuries in Indoor Climbers
Author: van Middelkoop et al. | Year: 2015
Summary: No Summary Available Yet.
Reference: Int J Sports Med 2015; 36: 837–842
Link to Research

TRAUMATIC PERONEAL TENDON DISCLOCATIONS IN ROCK CLIMBERS "THE CLIMBERS PULLEY LESION OF THE FOOT" - A CASE PRESENTATION
Author: Heid, Popp, Schöffl | Year: 2013
Summary: No Summary Available Yet.
Reference: Medicina Sportiva 17(4):188-192 · December 2013
Link to Research

Acute injuries and overuse syndromes in sport climbing and bouldering in Austria: a descriptive epidemiological study.
Authors: Pieber et al. | Year: 2012
Summary/Results:
Reference: Wien Klin Wochenschr. 2012 Jun;124(11-12):357-62.
https://www.ncbi.nlm.nih.gov/pubmed/22661041

"Heel Hook" Rock-Climbing Maneuver: A Specific Pattern of Knee Injury
Author: R. Thompson, B. Hanratty, IS Corry | Year: 2011
Summary/Results: No Summary Available Yet.
Reference: Clinical Journal of Sport Medicine: July 2011 - Volume 21 - Issue 4 - p 365-368
https://journals.lww.com/cjsportsmed/Citation/2011/07000/_Heel_Hook__Rock_Climbing_Maneuver__A_Specific.16.aspx

Radiological changes and signs of osteoarthritis in the fingers of male performance sport climbers.
Authors: Allenspach, Saupe, Rufibach, Schweizer | Year: 2011
Summary: No Summary Available Yet.
Reference: J Sports Med Phys Fitness. 2011 Sep;51(3):497-505.
https://www.ncbi.nlm.nih.gov/pubmed/21904290

Work-relief ratios and imbalances of load application in sport climbing: another link to overuse-induced injuries?
Authors: Donath et al. | Year: 2011
Summary/Results:
Reference: Scand J Med Sci Sports 2013: 23: 406-414
Link to research

Rock climbing injury rates and associated risk factors in a general climbing population.
Author: Backe, et al. | Year: 2009
Summary/Results: No Summary Available Yet.
Reference: *Scand J Med Sci Sports. 2009 Dec;19(6):850-6.*
https://www.ncbi.nlm.nih.gov/pubmed/19508652

Rock Climbing Injuries Treated in Emergency Departments in the U.S., 1990–2007
Authors: Nelson, McKenzie | Year: 2009
Summary: No Summary Available Yet.

Reference: American Journal of Preventive Medicine, 37 (3), 2009: 195-200
https://www.sciencedirect.com/science/article/abs/pii/S0749379709003857

Injuries in bouldering: a prospective study.
Author: G. Josephsen et al. | Year: 2007
Summary/Results: No Summary Available Yet.
Reference: *Wilderness Environ Med. 2007 Winter;18(4):271-80.*
https://www.ncbi.nlm.nih.gov/pubmed/18076293

Climber's finger
Authors: Yamaguchi, Ikuta | Year: 2007
Summary/Results:
Reference: Hand Surg. 2007;12(2):59-65.
https://www.ncbi.nlm.nih.gov/pubmed/18098354

Injuries at the 2005 World Championships in Rock Climbing
Authors: Schöffl, Kuepper | Year: 2006
Summary/Results:
Reference: Wilderness & Environmental Medicine, 17(3):187-190 (2006).
Link to Research

Injuries to the finger flexor pulley system in rock climbers: current concepts.
Authors: Schöffl, Schöffl | Year: 2006
Summary/Results:
Reference: J Hand Surg Am. 2006 Apr;31(4):647-54.
https://www.ncbi.nlm.nih.gov/pubmed/16632061

Injury patterns and safety practices of rock climbers.
Author: Gerdes, Hafner, Aldag | Year: 2006
Summary: No Summary Available Yet.
J Trauma. 2006 Dec;61(6):1517-25.
https://www.ncbi.nlm.nih.gov/pubmed/17159699

Factors influencing osteological changes in the hands and fingers of rock climbers
Authors: Sylvester, Christensen, Kramer | Year: 2006
Summary: No Summary Available Yet.
Reference: J Anat. 2006 Nov; 209(5): 597–609.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2100343/

Lumbrical Tears in Rock Climbers
Author: A. Schweizer | Year: 2003
Summary/Results: No Summary Available Yet.
Reference: J Hand Surg Br. 2003 Apr;28(2):187-9.
https://www.ncbi.nlm.nih.gov/pubmed/12631495

Acute hand and wrist injuries in experienced climbers
Authors: Logan, Makwana, Mason, Dias | Year: 2003
Summary/Results:

Reference: British Journal of Sports Medicine 2004; 38:545-548
https://bjsm.bmj.com/content/38/5/545

Finger pulley injuries in extreme rock climbers: depiction with dynamic US.
Author: Klauser et al. | Year: 2002
Summary/Results: No Summary Available Yet.
Reference: Radiology. 2002 Mar;222(3):755-61.
https://www.ncbi.nlm.nih.gov/pubmed/11867797

Finger Injuries of young elite rock climbers
Authors: Schlegel, Büchler, Kriemler | Year: 2002
Summary: No Summary Available Yet.
Reference: Schweizerische Zeitschrift für «Sportmedizin und Sporttraumatologie» 50 (1), 7–10, 2002
https://sgsm.ch/fileadmin/user_upload/Zeitschrift/50-2002-1/3-2002-1.pdf

Acute avulsion fractures of the pelvis in adolescent competitive athletes: prevalence, location and sports distribution of 203 cases collected
Author: F. Rossi, S. Dragoni | Year: 2001
Summary/Results: No Summary Available Yet.
Reference: Skeletal Radiol. 2001 Mar;30(3):127-31.
https://www.ncbi.nlm.nih.gov/pubmed/11357449

Orthopedic problems in sport climbing
Author: Peters | Year: 2001
Summary: No Summary Available Yet.
Reference: Wilderness and Environmental Medicine, 12, 100 110 (2001)
https://www.wemjournal.org/article/S1080-6032(01)70701-6/pdf

Indoor rock climbing: who gets injured?
Authors: Wright, Royle, Marshall | Year: 2001
Summary: No Summary Available Yet.
British Journal of Sports Medicine 2001;35:181-185.
https://bjsm.bmj.com/content/35/3/181.info

Injury in traditional and sport rock climbing.
Paige et al. | Year: 1998
Summary: No Summary Available Yet.
Reference: Wilderness and Environmental Medicine, 9,2-7 (1998)
https://pdfs.semanticscholar.org/d240/029a0ddb66186ab9fdd79e1b70884cac9060.pdf

Injury patterns in recreational rock climbers.
Author: Rooks et al. | Year: 1995
Summary: No Summary Available Yet. *Beta-Angel Note: this is one of the oldest climbing studies we have in the inventory.*
Am J Sports Med. 1995 Nov-Dec;23(6):683-5.
https://www.ncbi.nlm.nih.gov/pubmed/8600734

A stress fracture of the phalanx from rock climbing: a case report
Authors: Young and Raasch | Year: 1994
Summary/Results:

Reference: Journal of Wilderness Medicine, 5, 413-416 (1994)
https://www.wemjournal.org/article/S0953-9859(94)71142-6/pdf

Anthropometry – Measuring the Climber (4)

Climbing-Specific Fitness Profiles and Determinants of Performance in Youth Rock Climbers
Authors: Nichols et al. | Year: 2018
Summary/Results:
Reference: Journal of Sports Science 6 (2018) 257-267
http://www.davidpublisher.org/Public/uploads/Contribute/5bf678ae16c42.pdf

Somatic Profile of the Elite Boulderers in Poland
Authors: Ozimek | Year: 2017
Summary/Results:
Reference: J Strength Cond Res. 2017 Apr;31(4):963-970.
https://www.ncbi.nlm.nih.gov/pubmed/28328714

Athletic profile of highly accomplished boulderers
Authors: Macdonald, Callender | Year: 2011
Summary/Results:
Reference: Wilderness & Environmental Medicine, 22, 140-143 (2011)
https://www.wemjournal.org/article/S1080-6032(10)00376-5/pdf

A comparison of male and female teenage sport rock climbers from a high school climbing league
Authors: Kunz et al. | Year: 2001
Summary/Results:
Reference: Medicine & Science in Sports & Exercise: May 2001 - Volume 33 - Issue 5 - p S247
Link to Research Abstract

Finger Strength (2)

Investigation of Sport Rock Climbers' Handgrip Strength
Authors: Gührer, Yildiz | Year: 2015
Summary: No Summary Available Yet.
Reference: Biology of Exercise, Volume 11.2, 2015
https://www.biologyofexercise.com/images/issues/1124.pdf

Dynamic Eccentric-Concentric Strength Training of the Finger Flexors to Improve Rock Climbing Performance
Authors: A. Schweizer, A. Schneider | Year: 2007
Summary/Results:
Reference: Isokinetics and exercise science 15(2) · January 2007
Link to Research

Trunk (3)

Effects of Climbing on Core Strength and Mobility in Adults
Authors: Muehlbauer, Stuerchler, Granacher | Year: 2012
Summary: No Summary Available Yet.

Reference: International Journal of Sports Medicine 33(6):445-51 · March 2012
https://www.researchgate.net/publication/221709149_Effects_of_Climbing_on_Core_Strength_and_Mobility_in_Adults

Climber's back--form and mobility of the thoracolumbar spine leading to postural adaptations in male high ability rock climbers.
Authors: Förster et al. | Year: 2009
Summary/Results:
Reference: Int J Sports Med. 2009 Jan;30(1):53-9.
https://www.ncbi.nlm.nih.gov/pubmed/18651371

Differences in Static Scapular Position Between Rock Climbers and a Non-Rock Climber Population
Authors: Roseborrough, Lebec | Year: 2007
Summary/Results:
Reference: N Am J Sports Phys Ther. 2007 Feb; 2(1): 44–50.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2953287/

Power (1)

The acute effects of post-activation potentiation on sport-climbing specific power exercises Upper-limb power test in rock-climbing
Authors: Sas-Nowosielski, Angelika Kandzia | Year: 2018
Summary/Results:
Reference: Journal of Education, Health and Sport 8(11):44-55, 2018
Link to Research

Quantifying Forces in Movement (4)

Postural regulation and motion simulation in rock climbing
Authors: Quaine et al. | Year: 2016
Summary/Results: *Beta-Angel Note: Book Chapter from The Science of Rock Climbing & Mountaineering by Schweizer, Seifert, and Wolf. I'll summarize the book chapter soon.*
Reference: Book Chapter from the Science of Rock Climbing & Mountaineering, Schweizer, Seifert, Wolf (2016)
https://hal.archives-ouvertes.fr/hal-01415690

WORKLOAD CHARACTERISTIC, PERFORMANCE LIMITING FACTORS AND METHODS FOR STRENGTH AND ENDURANCE TRAINING IN ROCK CLIMBING
Author: Michailov | Year: 2014
Summary/Results:
Reference: Med Sport 18 (3): 97-106, 2014
Link to Research
Biomechanics > Quantifying Forces in Movement

Description of the finger mechanical load of climbers of different levels during different hand grips in sport climbing.
Authors: Morenas Martin et al. | Year: 2013
Summary/Results:

Reference: J Sports Sci. 2013;31(15):1713-21.
https://www.ncbi.nlm.nih.gov/pubmed/23751129

Instrumented climbing holds and performance analysis in sport climbing
Author: Fuss, Niegl | Year: 2009
Summary/Results:
Reference: Sports Technology, 1 (6), 301-313, 2008
https://onlinelibrary.wiley.com/doi/full/10.1002/jst.71

Energy System Responses (2)

Forearm muscle oxidative capacity index predicts sport rock-climbing performance.
Author: Fryer et al. | Year: 2016
Summary: No Summary Available Yet.
Reference: Eur J Appl Physiol. 2016 Aug;116(8):1479-84. doi: 10.1007/s00421-016-3403-1. Epub 2016 Jun 2.
https://www.ncbi.nlm.nih.gov/pubmed/27255506

Climbing-specific finger flexor performance and forearm muscle oxygenation in elite male and female sport climbers.
Authors: Philippe et al. | Year: 2012
Summary/Results:
Reference: Eur J Appl Physiol. 2012 Aug;112(8):2839-47
https://www.ncbi.nlm.nih.gov/pubmed/22131087

Recovery During Climbing (2)

ACTIVE RECOVERY STRATEGIES AND HANDGRIP PERFORMANCE IN TRAINED VS. UNTRAINED CLIMBERS
Authors: Green; Stannard | Year: 2010
Summary/Results: Under construction :D *Beta-Angel Note: I have a copy. Paper concluded that shaking out doesn't help climbers – this one's going to be provocative once I get some time to read it.*
Reference: J Strength Cond Res. 2010 Feb;24(2):494-501.
https://www.ncbi.nlm.nih.gov/pubmed/20072048

Effects of Four Recovery Methods on Repeated Maximal Rock Climbing Performance
Author: Heyman et al. | Year: 2009
Summary/Results: *Beta-Angel note: I have a copy, still need to read it.*
Reference: Med Sci Sports Exerc. 2009 Jun;41(6):1303-10.
https://www.ncbi.nlm.nih.gov/pubmed/19461534

Theses (2)

The Impact of a Rock-Climbing Program: A mixed methods case study of high school students' climbing self-efficacy
Author: P. Boudreau | Year: 2017
Summary/Results:
Reference: School of exercise science, physical and health education, University of Victoria

Link to Research

The Effect of Mental Imagery on Sport Climbing performance of College Students
Author: K. Barton | Year: 1996
Summary/Results:
Reference: University of Wisconsin - La Crosse, master's theses
https://minds.wisconsin.edu/handle/1793/48363?show=full