



UNIVERSITAT DE
BARCELONA

Anàlisi psicosocial d'esportistes extrems

Èric Vande Vliet Gómez

ADVERTIMENT. La consulta d'aquesta tesi queda condicionada a l'acceptació de les següents condicions d'ús: La difusió d'aquesta tesi per mitjà del servei TDX (www.tdx.cat) i a través del Dipòsit Digital de la UB (diposit.ub.edu) ha estat autoritzada pels titulars dels drets de propietat intel·lectual únicament per a usos privats emmarcats en activitats d'investigació i docència. No s'autoritza la seva reproducció amb finalitats de lucre ni la seva difusió i posada a disposició des d'un lloc aliè al servei TDX ni al Dipòsit Digital de la UB. No s'autoritza la presentació del seu contingut en una finestra o marc aliè a TDX o al Dipòsit Digital de la UB (framing). Aquesta reserva de drets afecta tant al resum de presentació de la tesi com als seus continguts. En la utilització o cita de parts de la tesi és obligat indicar el nom de la persona autora.

ADVERTENCIA. La consulta de esta tesis queda condicionada a la aceptación de las siguientes condiciones de uso: La difusión de esta tesis por medio del servicio TDR (www.tdx.cat) y a través del Repositorio Digital de la UB (diposit.ub.edu) ha sido autorizada por los titulares de los derechos de propiedad intelectual únicamente para usos privados enmarcados en actividades de investigación y docencia. No se autoriza su reproducción con finalidades de lucro ni su difusión y puesta a disposición desde un sitio ajeno al servicio TDR o al Repositorio Digital de la UB. No se autoriza la presentación de su contenido en una ventana o marco ajeno a TDR o al Repositorio Digital de la UB (framing). Esta reserva de derechos afecta tanto al resumen de presentación de la tesis como a sus contenidos. En la utilización o cita de partes de la tesis es obligado indicar el nombre de la persona autora.

WARNING. On having consulted this thesis you're accepting the following use conditions: Spreading this thesis by the TDX (www.tdx.cat) service and by the UB Digital Repository (diposit.ub.edu) has been authorized by the titular of the intellectual property rights only for private uses placed in investigation and teaching activities. Reproduction with lucrative aims is not authorized nor its spreading and availability from a site foreign to the TDX service or to the UB Digital Repository. Introducing its content in a window or frame foreign to the TDX service or to the UB Digital Repository is not authorized (framing). Those rights affect to the presentation summary of the thesis as well as to its contents. In the using or citation of parts of the thesis it's obliged to indicate the name of the author.

ANÀLISI PSICOSOCIAL D'ESPORTISTES EXTREMS



TESI DOCTORAL

ÈRIC VANDE VLIET GÓMEZ

Dirigida per Dr. Eduard Inglés i Dr. Pau Mateu

ANÀLISI PSICOSOCIAL D'ESPORTISTES EXTREMS

El risc com a filosofia de vida

Èric Vande Vliet Gómez

UNIVERSITAT DE BARCELONA

Facultat d'Educació

Institut Nacional d'Educació Física de Catalunya (INEFC)

Centre de Barcelona

Programa de Doctorat

HDK02 - Activitat Física, Educació Física i Esport

**ANÀLISI PSICOSOCIAL D'ESPORTISTES
EXTREMS**

El risc com a filosofia de vida

Tesi Doctoral presentada per

Èric Vande Vliet Gómez

Dirigida per

Dr. Eduard Inglés Yuba

Dr. Pau Mateu Samblás

Tutoritzada per

Dra. Susanna Soler Prat

Per optar al grau de

Doctor per la Universitat de Barcelona

Barcelona, 2024

Què seria d'una vida sense emocions, sense risc ni aventures?

Muntanya, riu, cel i mar, espais de creació, fulls en blanc; l'esport, l'eina d'expressió; i l'activitat, l'obra mestra. La llibertat total i absoluta de jugar amb la vida per sentir-nos vius. El risc a morir, una conseqüència acceptada.

Agraïments



Agraïments

Als presents agraïments hi apareixen diferents persones del meu entorn que han tingut una rellevància important en la consecució d'aquesta tesi doctoral. Es tracta d'un viatge temporal fins a l'assoliment de l'objectiu.

Gràcies mama i papa, Mercè Gómez i Marc Vande Vliet, per portar-me a una vida increïble, especial i plena d'aventures. Dins aquesta societat tan estressant, de control desmesurat i conformista, vosaltres vaueu aconseguir trobar un espai tranquil i immillorable per criar- nos a l'Alba i a mi, Boldís Sobirà.

Entre muntanyes, en un petit poble de 7 habitants del Pallars Sobirà, a 1.500m d'alçada. Em vaueu ensenyar coses importants que amb els anys he anat valorant cada vegada més. Una vida rural no és fàcil, i sempre heu estat un exemple a seguir. M'heu ensenyat que l'esforç i la constància són valors que et porten a aconseguir les fites i que les derrotes són oportunitats per aprendre. Que cal sortir i descobrir coses noves, cal ser creatius i curiosos. Que si ets autosuficient no depens dels altres, que com més aprens, més versàtil, resolutiu i autònom pots ser. Respectar l'entorn i les persones és imprescindible, cuidar els que et cuiden i ajudar a qui ho necessiti, ser altruistes i generosos.

Els matins d'estiu pescant amb tu, papa, en un petit riu perdut en mig de les muntanyes pallareses, les tardors plenes de bolets fent pícnic en família entre boscos d'avets, les tardes fredes de gener berenant dins un iglú construït amb la mare i la meua germana; primaveres corrent pels prats verds i perseguint isards. Suposo que una infància especial, diferent, i que no canviaria per res del món. La felicitat d'un nen que juga a la natura, que aprèn sense ser-ne conscient, que cau mil cops i s'aixeca les que faci falta, és un aprenentatge molt diferent i molt més profund del que es troba a les aules d'avui en dia a les grans ciutats.

Així doncs, aquest agraïment va per a vosaltres. Marc Vande Vliet, papa, el "belga" que va decidir començar una aventura al Pallars als seus 20 anys d'edat i que és el més lluitador que he conegut mai, el millor guia, tant de pesca, com referent en molts aspectes de la vida. Mercè Gómez, mama, des de Sabadell al Pirineu, buscant la tranquil·litat a les muntanyes, treballadora com ningú, altruista i la millor mare que

podria tenir. Alba Vande Vliet, la meva germana gran. Qui em cuida sempre que ho necessito, i de la que em sento tan orgullós. Ets la millor, i ara, també, la millor mare...

“Als pobles ja se sap, les persones son tancades.”

Quants cops hauré sentit aquesta afirmació... doncs possiblement sí, és cert. Ens costa confiar però quan ho fem, és de veritat. Els meus amics són com la meva segona família, són a qui els hi confiaria la vida si calgués. Primerament vull fer un agraïment als amics i amigues que m’han donat suport durant tots aquests anys, ja sigui en l'àmbit personal, acadèmic o en el professional.

El Xavi, Jesús i el Nil, els de sempre, “els del poble”. Companys de mil aventures, d'hores de futbol al pati de Ribera, de batalles de boles de neu a l'acabar classes, de supervivència a la muntanya, de rutes amb moto, de tardes al riu i nits a festa major. Són els autèntics, hem crescut junts i allà estan sempre que els necessites.

Laia i Mariona. Les dues amigues de classe, des dels quatre anys i amb moltes històries per explicar. Sou tant diferents i especials, impossibles de definir, personalitats úniques que fa que tingueu un valor increïble. N’hem passat de tots colors, els tres rebels de la classe, els que no ens agradava estudiar ni llegir llibres, però els que apreníem a fora les aules, vivint experiències molt més interessants.

“A la ciutat es pot fer de tot, ja veuràs com t’ho passes molt bé.”

Als 15 anys va tocar baixar a Sabadell. A la meitat de la secundària. Un cop molt dur per a un “inadaptat social” com era jo en aquell temps. Un institut de 1.000 estudiants... com sobreviuria jo allà?

Aquí ve el meu agraïment a uns amics que actualment encara conservo, amics que em van obrir les portes a les seves vides en plena adolescència i em van cuidar com ningú. El Lluç Montull... què dir del Lluç. Company de classe a l'institut, aplicat des del principi, sempre correcte, treballador i que va madurar a marxés forçades. El primer en començar a fer muntanya, el que més tard va ser un company d'aventures als Pirineus i als Alps. Grans escalades, aventures i hores en muntanya que agraeixo enormement a dia d'avui. Doctor i professor a INEFC Pirineus, algú incansable que sempre aconsegueix les seves fites. Oriol Domènech, company de classe, de tardes de billars i nits infinites d'estudi i reflexió. Gràcies per estar sempre al meu costat.

Gerard Gomà, gràcies per transmetre'm la màgia, ets una persona increïble i per poc que ens veiem, sempre et tinc molt present. Mai deixis de brillar, que ets magnífic.

Joan Salomó, un germà per a mi, des del principi la connexió és perfecta. Ens quedem a les portes d'entrar a la universitat i no ens rendim, perquè no som de rendir-nos, grau superior i endavant. Matins de córrer per la Mola, tardes de gimnàs, nits de converses al bar. Ets la persona que m'ha fet creure més en mi, la que m'has motivat i aconsellat quan tocava, que m'has fet costat a les bones i a les dolentes. Ets aquell amic que amb tan sols una mirada sabem el que estem pensant. T'he vist créixer com a persona i m'has fet créixer a mi. Moltes gràcies per seguir al meu costat dia a dia. En les hores més baixes a la fosca cova, sempre hi ha una petita espelma que m'il·lumina, aquest ets tu. No canviïs mai Jonny.

Les noies de Sabadell. Gina, Aina, Helena i Mariona, gràcies per seguir formant part de la meva vida, cadascuna amb les vostres particularitats i això us fa úniques i irremplaçables.

Sense el recolzament d'aquestes amistats, aquesta tesi hagués estat impossible, és per això que els agraeixo de tot cor el simple fet de formar part de la meva vida.

“La universitat, per fi he aconseguit el meu gran repte, he entrat a l'INEFC de Barcelona. Com fa anys ho van fer la meva mare, i la meva germana.”

Aquí vull agrair a una persona que ha estat molt important en la meva formació acadèmica, però també per al meu creixement personal. Eduard Inglés. No sé si pots arribar a imaginar l'impacte que vas tenir quan et vaig conèixer fa ara uns 8 anys. Professor d'Activitats en el Medi Natural. Mai havia conegut a un professor, o una persona com ell. Tranquil en totes les situacions i capaç de somiar i complir somnis, resolutiu i intel·ligent, productiu i eficient, una persona admirable sens dubte. Costa trobar a persones així en la societat actual, on tothom sembla passar de puntetes per la vida, intentant esforçar-se al mínim i esperar que les coses surtin soles. L'Edu, podria dir, que va ser el meu primer professor en escoltar-me, en creure en mi, recolzar-me, incitar-me i motivar-me a millorar, a tenir idees i a prendre el risc de provar-les. Encara avui segueixo amb el Club d'Escalada de l'INEFC, 7 anys després de la nostra conversa: “Èric, si ho veus clar, endavant, jo et recolzaré amb tot”. Em

dones ales, i m'empenys perquè pugui volar. Moltes converses. Em vas mostrar el camí, i em vas donar les eines per que pogués complir amb objectius que mai hauria imaginat, una d'elles, completar la tesi doctoral. Actualment, el meu director de tesi, el director d'INEFC, pare del Biel i home de la Míriam, per a mi, un amic que espero conservar durant molts anys, veure't amb nous projectes i seguir treballant per aconseguir-los. Espero que tornis algun dia a les classes, sobre el terreny, podent inspirar a molts alumnes que, com jo, segur que t'estaran sempre agraïts.

Per la universitat m'he trobat amb altres professors i professores, que des de ben al principi em van acompanyar a la descoberta de l'àmbit de la recerca. Suposo que la inquietud d'aprendre sumada amb grans professionals és la fórmula perfecta perquè el pas per la universitat no sigui un tràmit. He participat a forces estudis científics des de que vaig trepitjar l'INEFC, i d'una manera o una altra m'han servit per arribar fins aquí. Vull agrair a tots i totes els que m'han donat aquesta oportunitat. Joan Cadefau, amb els diferents estudis de fisiologia, moltes hores amb la YoYo Squat suant al laboratori. La Natàlia Balagué referent també en recerca d'aquest país, fent testos a la bicicleta i analitzant dades. El Blai i l'Albert, amb els seus estudis d'escalada tan interessants. Victor Illera i la seva tesi doctoral. Lluc Montull amb l'slackline buscant l'equilibri. En definitiva, ha estat un aprenentatge complementari i molt profitós en tots els sentits.

Menció especial per al Víctor Labrador, amb qui he tingut el plaer de ser alumne i actualment ser companys a l'INEFC durant les Intensives de la Seu d'Urgell. Gràcies per ensenyar-me el que és la professió i els seus valors, no conec a ningú que pugui empatitzar tant amb l'alumnat i sigui ta estimat dins i fora les aules.

Hi ha professors/es que simplement m'han inspirat amb les seves classes. Carles Ventura, si tornés a fer la carrera, segurament hi aniria a parlar més sovint.

El meu pas per l'Observatori Català de l'Esport, amb la Míriam, la Judit i el Marcel. La temporada a Gestió Acadèmica amb la Núria, el Xavi, la Magda, l'Alicia i la meva "jefa" preferida, l'Alba Vande Vliet.

La meva incorporació al GISEAFE, on vaig conèixer a grans persones investigadores com el Pau Mateu, a qui vull agrair en especial la seva implicació en la present tesi doctoral com a codirector, la seva ajuda en els moments més durs, i la

seva determinació per tirar endavant, moltes gràcies. La Susanna Soler, amb qui he compartit grans converses reflexives i inspiradores, l'Anna Vilanova, que ha hagut d'aguantar xerrades sobre la tesi als sopars d'aniversari, i que sense saber-ho, m'ha ajudat en moltes ocasions.

Xènia, Lia, Silvia, Aaron, entre altres persones, hauríeu estat encara més al meu costat si hagués freqüentat una mica el despatx, però heu estat presents a la tesi de veritat, a la tesi de la vida. Sempre serem #inefcfeliç.

Els i les del Club d'Escalada INEFC Barcelona: la Núria, companya de projectes, sempre allà pel que faci falta, entre drames i felicitat; l'Ivan i les nostres llargues jornades equipant el CAU amb Nickelback de fons; Marc, una persona compromesa i amb vocació, seràs un gran bomber company!; la Vinyet... alegria i felicitat personificada, amb qui m'embarcaria a qualsevol aventura; Anna, Manel, Arnau, Fer, Aram, Aleix, Sílvia, Víctor David... i molts d'altres amb qui hem pogut compartir grans moments escalant, heu estat el meu refugi dels anys a la ciutat, moltes gràcies.

La Joana Sans, que sens dubte va a part, ja que és algú especial. La persona amb la que m'embarcaria a qualsevol projecte sense pensar-ho, treballadora com poques, intel·ligent i empàtica, una gran persona en l'àmbit professional però molt més en el personal. Companya de travesses, escalades i esquíades. Als Alps no hi vaig amb qualsevol, i tu saps que ho tenim molt pendent. Molts projectes per fer i idees a treballar. Sigui com sigui, una persona important, d'aquelles que vols al teu costat.

Un referent, Joan Babí, que ens va deixar massa aviat, i que en part aquesta tesi és gràcies a ell. Qui em va motivar amb llargues converses a la muntanya que aquest tema valia la pena i que ho havia de culminar amb la tesi. Sempre disposat a ajudar-me, a guiar-me... És la fita que m'ajuda a retrobar el camí quan em perdo. Gràcies per tant Joan, seguim fent muntanya junts.

No em vull descuidar als protagonistes d'aquesta tesi. Els esportistes extrems que he pogut entrevistar i conèixer de primera mà. Alguns referents a nivell mundial, altres no tan coneguts, practicants de modalitats ben diverses. Els vull agrair el seu temps i dedicació en la present recerca. No tan sols per la part més acadèmica, sinó

pel que m'han transmès amb els seus relats, la seva filosofia de vida, la proximitat i humilitat, per fer-me veure que les coses bones, molts cops les trobem fora de la zona de confort, en terreny desconegut. Que la llibertat cada vegada costa més de trobar, i que sentir-la practicant esport, és quelcom increïble i indescriptible. M'heu acostat a un terreny on les sensacions són reals i on cada vegada m'hi trobo més feliç. Gràcies.

A l'INEFC Barcelona, que com a institució ha estat excel·lent. Que m'ha ensenyat a valorar la professió i la nostra formació acadèmica. Que estimo la casa i que va ser el meu refugi durant els anys viscuts a la ciutat. Heu fet de mi una persona millor. Moltes gràcies INEFC.

Resum



Resum

La present tesi doctoral aprofundeix en el fenomen dels esports extrems utilitzant un enfocament interdisciplinari, combinant perspectives socials i psicològiques. L'important augment de les pràctiques esportives extremes ha fet créixer l'interès científic per aquesta temàtica i el nombre de participants en aquestes modalitats. El caiac en aigües braves, l'escalada sense corda, el salt BASE, l'esquí i l'alpinisme extrem, entre d'altres, són activitats on el risc a morir és elevat i assumit pels practicants. Partint d'un enfocament qualitatiu, aquesta recerca, dividida en dos estudis, se centra en l'estudi de les influències, motivacions i percepcions que influeixen sobre els i les esportistes a practicar aquestes activitats extremes.

El primer estudi, aborda des d'una perspectiva psicosocial, la influència que exerceixen els agents socials propers sobre els practicants, tals com la família, la parella, els fills, les amistats, o l'entorn laboral. Utilitzant el model ecològic desenvolupat per Bronfenbrenner (1979), i mitjançant 13 entrevistes en profunditat a esportistes extrems de diferents modalitats, aquesta investigació conclou que els vincles afectius poden incentivar, condicionar o modificar la pràctica d'esports extrems en alguns subjectes però no són determinants per fer-los abandonar la seva activitat.

El segon estudi, amb una aproximació sociològica, analitza quins són els factors que afavoreixen o motiven la pràctica d'activitats esportives extremes. Emprant el prisma de la teoria de la modernitat líquida de Bauman (2000), s'ofereix una major comprensió sobre aquest comportament humà dins la societat contemporània. A través de 18 entrevistes qualitatives a diferents esportistes extrems s'analitzen les motivacions que els condueixen a aquestes pràctiques. Es conclou que realitzar aquestes activitats respon a una representació de la modernitat líquida, caracteritzada per la cerca de sensacions, per la fluïdesa i la incertesa social, proporcionant als individus una via per explorar els seus límits físics i psicològics, i per donar un sentit d'autenticitat i llibertat en un món en constant canvi.

Així, la present tesi doctoral permet ampliar els coneixements dins del camp de les ciències socials i la psicologia de l'esport obrint camí a futures investigacions en l'àmbit de l'esport extrem.

Resumen

La presente tesis doctoral profundiza en el fenómeno de los deportes extremos utilizando un enfoque interdisciplinario, combinando perspectivas sociales y psicológicas. El importante aumento de las prácticas deportivas extremas ha incrementado el interés científico por esta temática y el número de participantes en estas modalidades. El kayak en aguas bravas, la escalada sin cuerda, el salto BASE, el esquí y el alpinismo extremo, entre otros, son actividades donde el riesgo de morir es elevado y asumido por los practicantes. Partiendo de un enfoque cualitativo, esta investigación, dividida en dos estudios, se centra en el análisis de las influencias, motivaciones y percepciones que influyen sobre los y las deportistas a practicar estas actividades extremas.

El primer estudio aborda desde una perspectiva psicosocial la influencia que ejercen los agentes sociales cercanos sobre los practicantes, tales como la familia, la pareja, los hijos, las amistades o el entorno laboral. Utilizando el modelo ecológico desarrollado por Bronfenbrenner (1979), y mediante 13 entrevistas en profundidad a deportistas extremos de diferentes modalidades, esta investigación concluye que los vínculos afectivos pueden incentivar, condicionar o modificar la práctica de deportes extremos en algunos sujetos, pero no son determinantes para hacerles abandonar su actividad.

El segundo estudio, con una aproximación sociológica, analiza cuáles son los factores que favorecen o motivan la práctica de actividades deportivas extremas. Empleando el prisma de la teoría de la modernidad líquida de Bauman (2000), se ofrece una mayor comprensión sobre este comportamiento humano dentro de la sociedad contemporánea. A través de 18 entrevistas cualitativas a diferentes deportistas extremos se analizan las motivaciones que les conducen a estas prácticas. Se concluye que realizar estas actividades responde a una representación de la modernidad líquida, caracterizada por la búsqueda de sensaciones, por la fluidez y la incertidumbre social, proporcionando a los individuos una vía para explorar sus límites físicos y psicológicos, y para dar un sentido de autenticidad y libertad en un mundo en constante cambio.

Así, la presente tesis doctoral permite ampliar los conocimientos dentro del campo de las ciencias sociales y la psicología del deporte, abriendo camino a futuras investigaciones en el ámbito del deporte extremo.

Abstract

The present doctoral thesis delves into the phenomenon of extreme sports using an interdisciplinary approach, combining social and psychological perspectives. The significant increase in extreme sports practices has heightened scientific interest in this subject and the number of participants in these modalities. Whitewater kayaking, free solo climbing, BASE jumping, extreme skiing, and mountaineering, among others, are activities where the risk of death is high and assumed by the practitioners. Based on a qualitative approach, this research, divided into two studies, focuses on examining the influences, motivations, and perceptions that lead athletes to engage in these extreme activities.

The first study addresses, from a psychosocial perspective, the influence exerted by close social agents on practitioners, such as family, partners, children, friends, or the work environment. Using the ecological model developed by Bronfenbrenner (1979) and through 13 in-depth interviews with extreme athletes from different modalities, this research concludes that affective bonds can incentivize, condition, or modify the practice of extreme sports in some subjects, but they are not determinants for making them abandon their activity.

The second study, with a sociological approach, analyzes the factors that favor or motivate the practice of extreme sports activities. Using the lens of Bauman's (2000) theory of liquid modernity, a greater understanding of this human behavior within contemporary society is offered. Through 18 qualitative interviews with different extreme athletes, the motivations that led them to these practices are analyzed. It is concluded that engaging in these activities responds to a representation of liquid modernity, characterized by the search for sensations, fluidity, and social uncertainty, providing individuals with a way to explore their physical and psychological limits and to find a sense of authenticity and freedom in a constantly changing world.

Thus, the present doctoral thesis allows for the expansion of knowledge within the field of social sciences and sports psychology, paving the way for future research in the realm of extreme sports.

Sumari

1.	Introducció.....	1
1.1	Justificació de la recerca	1
1.2	Objectius de la tesi doctoral	2
1.3	Estructura del document de tesi doctoral	2
1.4	Publicacions	4
2.	Estat de la qüestió.....	5
2.1	Conceptualització i terminologia.....	7
2.2	La història de l'esport extrem	11
2.3	Teories psicològiques i sociològiques	14
3.	Mètode.....	20
3.1	Disseny dels estudis.....	22
3.2	Participants	22
3.3	Instruments	23
3.4	Procediment	23
3.5	Anàlisi de dades	24
4.	Estudis realitzats	25
4.1	Estudi I	27
4.2	Estudi II	49
5.	Discussió	66
5.1	L'entorn social i la seva influència	68
5.2	La pràctica d'esports extrems en una modernitat líquida	69
5.3	La cerca de sensacions i la identitat dins dels esports extrems	70
5.4	Impacte cultural i social dels esports extrems	71
6.	Conclusions.....	73
6.1	Conclusions.....	75
6.2	Limitacions i futures línies d'investigació.....	77
7.	Referències	80
8.	Annexos	91

8.1	Comitè ètic pel tractament de dades	92
8.2	Guia d'entrevista Estudi I	93
8.3	Guia d'entrevista Estudi II	94
8.4	Sol·licitud d'entrevista	95
8.5	Consentiment informat	96
8.6	Estudi I Revista Heliyon	97
8.7	Estudi II Revista World Leisure Journal.....	106

1. Introducció



Aquest capítol recull la justificació de la recerca, els objectius de la tesi doctoral, l'estructura del present document i les publicacions que conformen el compendi d'articles

1.1 Justificació de la recerca

La present tesi doctoral centra la seva atenció en la pràctica d'esports extrems, un fenomen en exponencial creixement els darrers anys (Brymer & Schweitzer, 2013; Florenthal & Shoham, 2001; Mata, 2002). Quan parlem d'esport extrem ens referim a aquell tipus de pràctiques esportives que poden suposar un risc de mort en la seva pràctica; i aquesta tesi persegueix no només entendre aquest concepte, sinó sobretot, comprendre el per què de la seva pràctica i del seu auge en els darrers anys, des d'un punt de vista psicosocial posant el focus sobre les persones que el practiquen.

L'interès per experimentar noves sensacions, trencar amb la rutina, augmentar la capacitat d'autocontrol i buscar els propis límits (Kern et al., 2014) s'està convertint en una atracció per a moltes persones que s'exposen cada vegada a més risc practicant esports extrems (Allman, Mittelstaedt, Martin & Goldenberg, 2009). Aquesta investigació centra el focus en analitzar alguns elements pels quals determinats individus cerquen el plaer en les activitats extremes (Zuckerman, 2007). Aquesta tendència genera un innovador camp de treball a ciències com la sociologia i la psicologia, permetent aprofundir en el comportament humà, en un àmbit concret com és el de l'esport extrem. La present recerca pretén, així, comprendre aspectes com la percepció del risc, la por, l'acceptació de la mort, la filosofia de vida i els límits físics i mentals de les persones que practiquen esport extrem i que, per tant, opten per posar-se en risc vital per decisió pròpia.

L'estudi dels esportistes extrems no només enriqueix el coneixement acadèmic en sociologia i psicologia, sinó que també ofereix coneixement aplicable en àmbits com l'educació, la formació esportiva o l'entorn de lleure i la recreació, on la comprensió del comportament humà en situacions de risc és fonamental. La rellevància d'aquesta recerca es basa, per tant, en la seva capacitat per oferir una comprensió de com els individus gestionen els límits de les seves capacitats en un món cada vegada més enfocat cap a la superació i la cerca de nous reptes, al mateix temps que permet contrastar les seves sensacions amb l'opinió i visió de la societat que els envolta.

1.2 Objectius de la tesi doctoral

A partir de la justificació de la investigació, la present tesi es planteja els següents objectius.

- Analitzar els practicants d'esports extrems des d'una perspectiva psicosocial, tant pel que fa a la influència del seu entorn social, com a les motivacions personals que els condueixen a la pràctica d'aquestes activitats de risc, en el context de la modernitat.
- Entendre l'origen de les motivacions que condueixen als esportistes extrems a gaudir de la realització d'aquests esports en que les conseqüències d'un error pot causar la mort.
- Analitzar com els agents de l'entorn social proper als individus poden condicionar el comportament dels esportistes extrems.

1.3 Estructura del document de tesi doctoral

Aquesta tesi doctoral es presenta estructurada en set capítols o seccions principals. Primerament, la *Introducció*, que inclou la justificació de l'estudi, els objectius específics de la tesi, un esquema general del document i una referència a les publicacions que constitueixen el cos del treball.

En el segon capítol es desenvolupen les *Perspectives teòriques*, on s'exposa l'origen i l'evolució de l'esport extrem, els fonaments teòrics obtinguts de la literatura existent, així com una conceptualització detallada i taxonomia de les modalitats esportives extremes.

El *Mètode*, desenvolupat en el tercer capítol, descriu detalladament el disseny de la investigació, l'enfocament i posicionament metodològic que s'ha adoptat, el nombre i la tipologia dels participants, els instruments utilitzats, els procediments seguits, a més de les tècniques d'anàlisi de dades emprades.

En la quarta secció es presenten els *Estudis* sobre els que es fonamenta aquesta tesi doctoral.

En el cinquè capítol, i de forma sintètica, s'incorporen els *Resultats* obtinguts en cadascun dels dos estudis realitzats, que s'engloben en aquesta tesi.

La *Discussió* conforma la sisena secció, i ofereix una visió integradora que engloba els dos estudis i estableix una comparativa dels resultats obtinguts i el coneixement existent.

Finalment, el setè capítol, presenta les *Conclusions* que alhora es mostren en tres subseccions: les conclusions principals, les limitacions de la tesi juntament amb les futures línies d'investigació i finalment les implicacions derivades de la tesi doctoral.

Aquesta última secció conclou el document, que és seguit per les *Referències bibliogràfiques* i els *Annexos*.

1.4 Publicacions

A continuació se citen els articles publicats en revistes indexades d'àmbit internacional.

1.4.1 Estudi I

Títol: Decision-making by extreme athletes: the influence of their social circle.

Revista: Helyon

Índex d'Impacte: SJR Q1

Referència: Vande-Vliet, E. & Inglés, E. (2021). Decision-making by extreme athletes: the influence of their social circle. *Helyon*, 7(1).

Autoria: Èric Vande Vliet Gómez i Eduard Inglés Yuba

DOI: <https://doi.org/10.1016/J.HELIYON.2021.E06067>



1.4.2 Estudi II

Títol: Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners

Revista: World Leisure Journal

Índex d'Impacte: SJR Q1

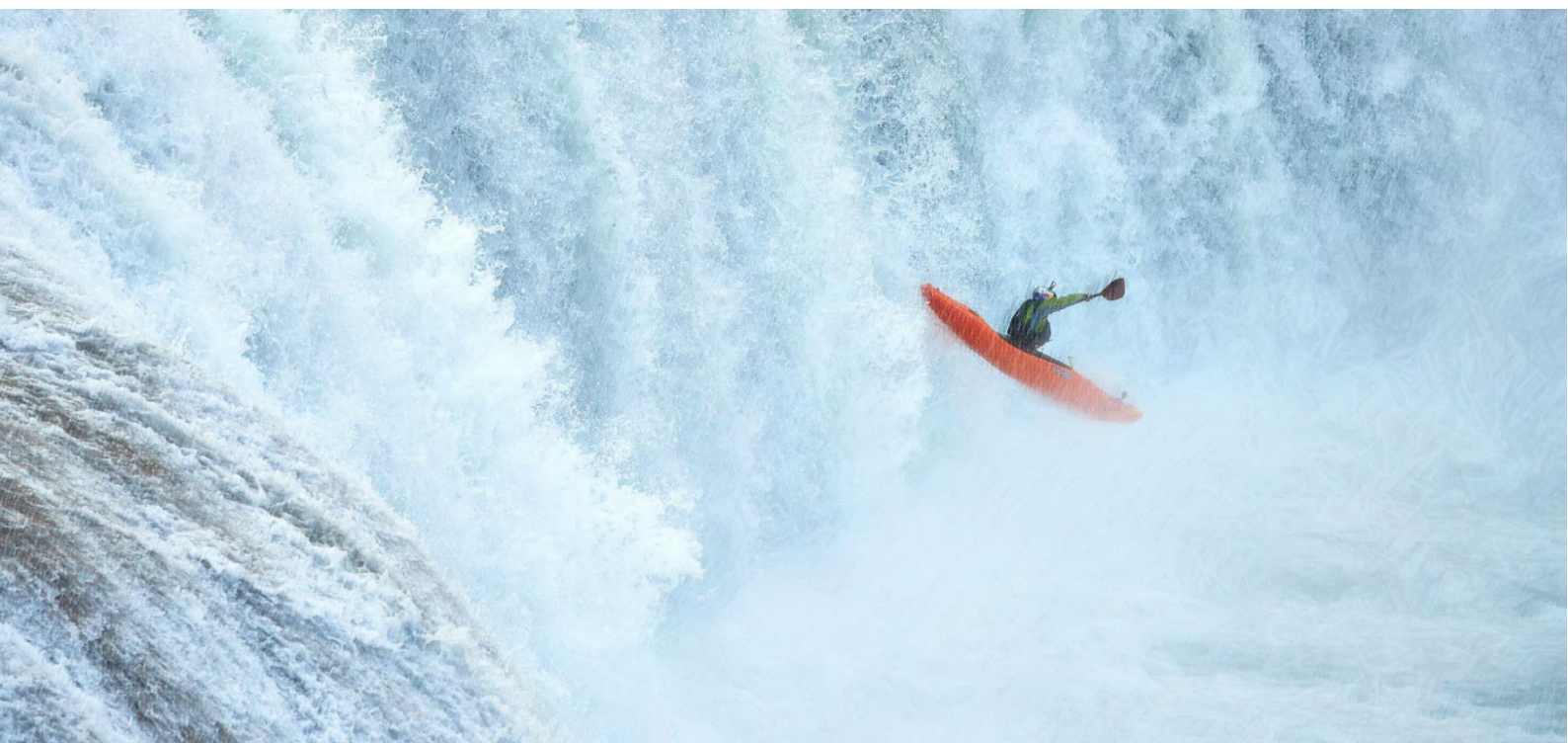
Referència: Vande-Vliet, È., Inglés, E., Mateu, P. & Montull, LL (2023): Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners, *World Leisure Journal*, 1-12.

Autoria: Èric Vande Vliet Gómez, Eduard Inglés Yuba, Pau Mateu Samblás, Lluc Montull Pola

DOI: <https://doi.org/10.1080/16078055.2023.2261896>



2. Estat de la qüestió



En aquesta secció, s'introdueixen les bases teòriques que fonamenten l'àmbit d'investigació, des d'una visió àmplia fins a una més detallada que conformarà el marc teòric del present projecte de tesi.

2.1 Conceptualització i terminologia

Abans de desenvolupar la perspectiva teòrica que ha emmarcat aquest estudi, hem considerat necessari mostrar aquest apartat terminològic breu per tal d'exposar els diferents termes que han estat utilitzats de manera gairebé sinònima per referir-se a les activitats d'alt risc o extremes, objecte d'aquesta tesi. Aquesta diversitat terminològica, així com la manca d'un consens real per part de la comunitat científica, justifica, doncs, la seva incorporació dins d'aquest capítol.

En uns inicis, les primeres denominacions buscaven descriure activitats físiques amb un cert grau de risc i aventura. Amb el pas dels anys, aquestes activitats, han evolucionat i augmentat, tant en nombre de modalitats com de practicants. Aquest creixement ha provocat que la terminologia s'hagi hagut d'adaptar, reflectint les novetats tècniques i físiques aparegudes i la influència dels canvis culturals, socials i econòmics. En l'actualitat, l'impacte de la comercialització, especialment a través d'esdeveniments com els *X-Games*, ha tingut un paper destacat en la popularització de noves denominacions, com la d'esports extrems que, pel gran impacte social i mediàtic generat, s'han arribat a estendre, també, en l'àmbit acadèmic i científic.

Així doncs, en les darreres dècades, trobem diferents conceptes vinculats als practicants d'activitats esportives de risc: 1) *Esports perillosos o de perill*. Aquests són identificats per una perillositat inherent, que es manifesta en un elevat potencial d'accidents o lesions (Soreide et al., 2007). Aquesta categoria comprèn una diversitat d'activitats físiques les quals, a causa de les seves condicions específiques de pràctica, incorporen riscos significatius per als seus participants (Monasterio, 2013). La caracterització d'aquests esports no sols depèn de la presència de risc, sinó també de la percepció pública i la contextualització social d'aquest risc. Cal diferenciar el terme “perill” del “risc”. Pot resultar il·lustratiu l'exemple següent: anar a la muntanya a esquiar fora pista un dia que hi ha un perill elevat d'allaus; la perillositat de l'activitat és objectiva en aquest cas, i és decisió de l'esquiador/a d'assumir el risc de realitzar el descens, o no, un cop coneix les conseqüències reals del perill; 2) *Activitats Físiques d'Aventura a la Natura* (AFAN). Les AFAN promouen una interacció amb el medi natural, oferint una experiència d'aventura marcada per l'exploració (Olivera & Olivera, 2016). La gestió del risc apareix com un element central d'aquestes pràctiques, amb l'objectiu de minimitzar els perills mentre es gaudeix de l'entorn natural.

Aquest enfocament sobre la gestió del risc evidencia una responsabilitat davant la seguretat personal i dels altres; 3) *Esport de risc o alt risc*. És tracta d'una denominació molt utilitzada en la literatura existent. Es caracteritza per una alta probabilitat de provocar lesions greus o la mort en cas d'error o accident; l'esport de risc implica una consciència aguda dels perills inherents a l'activitat (Gomà-i-Freixanet et al., 2012; McEwan, Boudreau, Curran & Rhodes, 2019). Els participants d'aquests esports adopten estratègies específiques per gestionar el risc associat, mostrant una complexa interacció entre la percepció del risc i les habilitats individuals (Pereira, 2009); 4) *Esport Extrem*. Aquesta és una de les terminologies més utilitzades en els darrers anys per referir-se a esports caracteritzats per la cerca intencionada d'experiències que traspassin els límits, mitjançant l'exposició a riscos elevats (Monasterio et al., 2016). Les motivacions per a la participació en esports extrems inclouen la cerca de sensacions fortes i la superació personal; el risc es percep com a component integral de l'experiència i font de creixement personal (Scarpi, D., Pizzi, G., Raggiotto, F. y Mason, 2018).

En la present tesi doctoral, s'ha optat per utilitzar indistintament “esports extrems” i “esports de risc” i “d'alt risc”, agafant de referència les definicions proposades per la literatura existent. L'anàlisi terminològica efectuada en els usos dels conceptes esmentats: esports perillosos, Activitats Físiques d'Aventura a la Natura (AFAN), esports de risc, i esports extrems, mostra, doncs, una àmplia coincidència conceptual, únicament diferenciada per l'evolució de les pràctiques esportives, evidenciant-se una progressió cap a una major complexitat de les activitats i uns límits a superar cada vegada més inimaginables.

2.1.1 Taxonomia de les modalitats

L'increment de pràctiques fisicoesportives, incloent tant les noves com les adaptacions de disciplines tradicionals, ha provocat una expansió en la varietat de les seves denominacions, tal i com s'ha exposat, i comparant sigui d'una gran complexitat, també, la seva classificació i taxonomia. Aquesta situació ha incentivat diversos treballs previs, amb el propòsit de desenvolupar sistemes de classificació, taxonomies, així com i aclariments terminològics, que facilitin estructurar aquest camp tan divers.

Olivera i Olivera (2016) van proposar una taxonomia de les activitats físico-esportives d'aventura en la natura (AFAN), dividint-les segons els àmbits d'actuació i les dimensions corpòreo-emocionals. Funollet (1995) va proposar com a criteris fonamentals de classificació la importància dels instruments del practicant, el material, i l'espai de pràctica.

Partint dels elements teòric citats i amb la intenció d'assolir una comprensió més integrada del concepte esport extrem, es proporciona una taula de classificació. La proposta engloba gran part de les modalitats existents, ordenades segons el medi on es practiquen: terrestre, aquàtic i aeri, i afegint les variants de cada activitat segons el risc que s'assumeix. En aquesta aproximació no s'hi inclouen aspectes subjectius de la persona practicant, sinó que s'han tingut en compte els aspectes objectius de l'activitat: l'entorn de la pràctica i els seus perills, la dificultat tècnica i les conseqüències d'un error al practicar-la.

Aquestes modalitats incorporades a la taula poden canviar amb el temps, tant per l'aparició de noves activitats com per la combinació d'unes amb les altres. Aquesta combinació ja s'està produint amb exemples tals com: Solo Base (escalada sense corda i Salt Base un cop a dalt), esquí-alpinisme (l'esquí de muntanya combinat amb alpinisme tècnic), Alpin-running (combinació d'alpinisme i trail running), entre molts d'altres.

Aquesta proposta de classificació, doncs, pretén ser un punt de partida que serveixi de base per a incloure-hi les noves activitats que puguin sorgir, categoritzant-les segons els criteris establerts.

ESPORTS DE RISC					
ESPORTS NO MOTORITZATS	TERRESTRES	Modalitat	Baix risc	Risc mig	Alt Risc
		Escalada	Escalada esportiva	Escalada tradicional	Escalada en solitari
			Boulder indoor	Boulder outdoor	Boulder gran alçada
			Dry tooling indoor	Dry tooling outdoor	Dry tooling en solitari
			Escalada en gel artificial	Escalada en gel natural	Escalada en gel en solitari
			Alpinisme tradicional	Alpinisme ràpid	Alpinisme ràpid en solitari
			Escalada artificial	Escalada artificial (A2 – A4)	Escalada artificial extrema (A5, C6)
			Escalada tradicional		Escalada tradicional extrema
		A peu	Senderisme	Muntanyisme	Alpinisme
		Carrera	Carrera per asfalt	Trail Running	Alpin-running
			Curta distància	Mitja distància	Ultramaratons
			Raids aventura urbans	Raids aventura a la muntanya	Raids aventura extrems
			Parkour indoor	Parkour outdoor	Extrem parkour
		Esquí i Snowboard	Esquí de pista	Esquí de muntanya (freeride)	Esquí-alpinisme
			Snowboard de pista	Splitboard (freeride)	Split-alpinisme
		Patinatge	Patinatge indoor	Patinatge outdoor	Descens patinatge
			Longboard indoor	Longboard outdoor	Descens longobard extrem
			Patinatge sobre gel indoor	Patinatge sobre gel outdoor	Ice downhill
		Bicicleta	Bicicleta de muntanya	BTT	Mountain downhill MTB
			Bicicleta de carrer	BMX	Urban DownHill MTB
			Monocicle indoor	Monocilce Outdoor	Extrem Mountain Unicycle
		Coves	Espeleologia	Espeleïsme	Espeleïsme Extrem
		Cavall	Hípica	Hípica clàssica	Raids amb Cavall
		Slackline	Slackline	Slackline freestyle	High-line Freesolo
			Slackline amb monocicle	Highline amb monocicle	Monocilce Higline Freesolo
			Slackline amb bicicleta	Highline amb bicicleta	MTB Highline Freesolo
	AQUÀTICS	Kayak	Kayak aigües tranquiles	Kayak aigües braves	Descens extrem Kayak
		Barrancs	Barrancs fàcils (I , II)	Barrancs mitjans (III, IV)	Barrancs Extrems (V, VI)
		Kite surf	Kite surf aigües tranquiles	Kite surf freestyle	Extrem Kite Surf
		Wake board	Wakeboard circuit	Wakeboard Outdoor	Extrem Wakeboard
		High Diving	Salts (<20m)	Salts (20m a 30m)	Salts (>30m)
		Surf	Surf onades petites	Surf onades mitjanes	Surf onades gegants
		Windsurf	Windsurf aigües tranquiles	Windsurf aigües braves	Windsurf extrem
		Vela	Vela	Travesses	Travesses en solitari
		Submarinisme	Poca profunditat	Mitja profunditat	Grans profunditats
		Ràfting	Aigües tranquiles	Aigües braves	Ràfting extrem
Apnea		Apnea en piscina		Apnea grans profunditats	
Hydrospeed		Aigües tranquil·les	Aigües braves	Hydrospeed extrem	
Natació		Natació al mar	Natació aigües obertes	Grans travesses	
AERIS	Parapent	Parapent entorn controlat	Parapent acrobàtic	Proximity, Speedriding	
	Paracaigudes	Salt des d'un avió	Salt BASE	Salt BASE/Solo BASE	
	Wingsuit	Gran altitud	Mitja altitud	Baixa altitud - Proximity	
	Ala delta	Curta distància	Mitja distància	Llargues distàncies	
	Speed Riding	Terreny fàcil	Terreny complex	Terreny extrem	
	Salt BASE	Gran altitud	Salt des de baixa altitud	Solo Base	
	Globus	Curta durada	Llarga durada	Travesses en solitari	

Taula 1- Taxonomia Esports Extrems. Elaboració pròpia

2.2 La història de l'esport extrem

2.2.1 Els orígens

Per entendre el comportament humà cal fixar-se en la seva trajectòria i evolució al llarg dels anys. L'assumpció de riscos és una conducta humana que observem des dels inicis de la nostra existència. Si ens remuntem 70.000 anys enrere, *Homo Sapiens* va iniciar el seu procés de migració fora d'Àfrica, tal com mostren els estudis antropològics que determinen com aquestes poblacions van colonitzar progressivament diversos continents (Stringer, 2000). Aquesta expansió geogràfica va ser motivada, principalment, per la cerca de nous recursos, en el marc d'una vida nòmada i en un constant descobriment de nous entorns i territoris. L'avenç cap a allò desconegut, implicava assumir grans riscos i la supervivència constituïa l'objectiu primordial dels individus.

L'evolució de l'espècie humana va afavorir que les seves habilitats passessin de ser molt rudimentàries a ser cada vegada més sofisticades. La necessitat de supervivència els obligava a explorar i moure's en un entorn d'incertesa i de perills constants. Les primeres migracions confirmen la capacitat humana per adaptar-se a noves situacions i condicions tot superant les adversitats; posant de manifest que l'aventura i l'exploració son comportaments inherents als humans (Cavalli-Sforza, 2000).

2.2.2 L'exploració: els pioners | S.XV – S.XVIII

Entre el segle XV i el final del segle XVIII es va produir una transformació significativa, a tots els nivells socials, deguda als avenços generats per l'exploració de nous territoris. Aquest període es va iniciar amb el descobriment d'Amèrica per part de Cristòfol Colom el 1492, tot ampliant els límits geogràfics d'Europa, i va significar un fet heroic dels exploradors i conqueridors de l'època. En conseqüència, es van començar a invertir molts recursos humans i econòmics per enviar aventurers cap a territoris inexplorats. Expedicions remarcables com la primera volta al món per l'expedició de Magallanes i Elcano (1519-1522), va permetre demostrar la viabilitat de la navegació global i la connexió entre oceans i l'avenç amb materials i cartografia.

Anys més tard, els països més desenvolupats van apostar per expedicions a muntanyes inexplorades. L'ascensió al Mont Blanc per Michel-Gabriel Paccard i

Jacques Balmat el 1786 va marcar l'inici de l'alpinisme com a disciplina i va demostrar l'interès creixent per l'exploració de les muntanyes, considerades durant molt de temps com a inaccessibles. Aquestes expedicions requerien d'una gran valentia per afrontar els perills tenint en compte la desinformació de les condicions del terreny i els materials precaris dels que disposaven. Aquest període d'exploració intensiva va expandir el coneixement geogràfic, tot desafiant els límits que es coneixien fins el moment. Els exploradors pioners de l'època continuen inspirant els esportistes extrems de l'actualitat, recordant les grans fites assolides en aquells temps sense accés a la tecnologia ni als recursos dels que disposem a dia d'avui.

La combinació de valentia, innovació i perseverança demostrada durant aquestes expedicions estableix un precedent històric per a l'exploració i la conquesta, elements que continuen sent essencials en la pràctica dels esports extrems contemporanis (Brymer & Schweitzer, 2013).

2.2.3 Desenvolupament i popularització de l'esport extrem | S.XIX – XX

A finals del segle XIX, i fins als primers anys del segle XX, es comencen a popularitzar les competicions esportives. Aquest va ser un moment de transició en l'evolució cap als esports extrems afavorit per la innovació tecnològica, la millora dels materials i un interès creixent per l'aventura i la superació. Modalitats com el paracaigudisme o l'espeleologia van sorgir com activitats de lleure i exploració, al mateix temps que comença l'auge dels esports de motor. El conjunt d'aquests canvis condueix a l'aparició dels pioners dels que avui considerem com esportistes extrems.

En aquest inici de segle XX es duen a terme gestes remarcables com la conquesta del Pol Sud al 1911 per Roald Amundsen, assolida superant les duríssimes condicions de l'Antàrtida. Aquesta expedició va destacar per la seva excepcional planificació i la capacitat d'adaptació a un dels entorns més extrems del planeta. Un altre exemple és el primer vol transatlàntic en solitari l'any 1927 aconseguit per Charles Lindbergh, que va significar una combinació de valentia i innovació extrema. Aquest esdeveniment va representar un punt d'inflexió en l'exploració aèria. A meitats de segle, al 1953, es produeix la primera ascensió i arribada al cim de l'Everest per Edmund Hillary i Tenzing Norgay, una mostra més del desig humà d'anar sempre més lluny, ara també a les muntanyes; endinsant-se en allò desconegut i enfrontant-se a les condicions més extremes.

L'interès per aquestes aventures i els seus protagonistes va contribuir a un canvi en la percepció social respecte a l'aventura, l'exploració i el desafiament físic. L'heroïcitat mostrada en aquestes conquestes va inspirar una generació amb una creixent passió per superar els límits establerts i fonamentar les bases per al desenvolupament de l'alpinisme del segle XX.

2.2.4 Revolució i reivindicació | Anys 60 i 70

Els anys 60 i 70 van marcar un punt d'inflexió en la percepció social i la pràctica dels esports extrems, reflectint una transformació profunda tant en l'àmbit social com en la filosofia de vida pròpia de cada individu. Durant aquest període, es fa evident una creixent desil·lusió amb les convencions socials establertes i un rebuig als valors tradicionals per part d'un sector de la societat (Hunt, 1989). El moviment *hippie*, caracteritzat pel seu rebuig a normes establertes, l'experimentació amb drogues, i la creació de "comunes", va ser l'expressió més extrema d'aquesta nova cultura. Aquests canvis van venir acompanyats d'un posicionament contra l'autoritat en totes les seves formes i la cerca d'una identitat pròpia fora dels límits tradicionals (Hebdige, 1979).

Aquest context de transformació va fer dels esports extrems un espai per a la descoberta de límits individuals i col·lectius. La pràctica d'aquests esports es va convertir en una metàfora de la lluita contra les restriccions convencionals i la superació de les pròpies capacitats, reflectint una desconexió amb el món material i una cerca de significat més profund en l'existència humana (Brymer & Schweitzer, 2017). En aquest sentit, els esports extrems van oferir una via d'escapament i una forma d'expressió per a aquells que se sentien alienats per una societat que percebien com a restrictiva i deshumanitzada (Farber, 1994).

Aquest període històric va ser clau per entendre com els esports extrems van ser i continuen sent influenciats no només per les necessitats físiques de l'aventura i el risc, sinó també per un context social i cultural que valora la independència, la rebel·lia contra l'establert, i la necessitat de cercar noves experiències i desafiaments.

2.2.5 Modernitat dels esports extrems | Finals del S.XX i inicis del S.XXI

L'evolució dels esports extrems, especialment des de l'inici dels anys 2000, reflecteixen nombrosos canvis en la pràctica esportiva, entre d'altres transformacions

profundes. En aquest context, la creixent popularitat i diversificació dels esports extrems simbolitza una adaptació a la incertesa que caracteritza la societat contemporània (Bauman, 2000). La creació dels *X Games* el 1995, per exemple, va ser fonamental per a aquesta transformació, oferint un gran impuls al món de la competició en disciplines com el BMX, el *skateboarding* o l'esquí acrobàtic, promocionant i mostrant aquests esports dins l'esfera pública (Rinehart & Sydnor, 2003). La visibilitat aconseguida mitjançant aquests esdeveniments ha provocat un reconeixement d'aquestes pràctiques i ha contribuït significativament a posicionar els esports extrems al focus mediàtic per l'espectacularitat de la pràctica i l'admiració envers els seus protagonistes.

Les noves tecnologies han suposat un altre factor clau en l'expansió dels esports extrems. Innovacions en l'equipament i materials que permeten experiències més segures i espectaculars. La fusió entre diferents modalitats esportives, com el *wingsuit flying*, o el solo-BASE, reflecteixen la combinació entre habilitat, creativitat i tecnologia, i amplien els límits del que és possible dins el món dels esports extrems (Brymer & Schweitzer, 2017).

La influència d'internet i les xarxes socials en la difusió i la popularització dels esports extrems en els darrers anys ha permès compartir instantàniament vídeos d'activitats de risc i ha transformat la manera en què els esportistes s'interconnecten, mostren les seves experiències, inspiren a altres i fins i tot, s'hi guanyen la vida. Plataformes com YouTube i Instagram han jugat un paper crucial en aquesta dinàmica, fent que els esports extrems siguin més accessibles a un públic més ampli i generant un interès renovat per aquestes pràctiques (Wheaton, 2013).

2.3 Teories psicològiques i sociològiques

Dins l'àmbit dels esports extrems, la comprensió del comportament humà i les decisions que porten als individus a participar en aquestes activitats on s'hi juguen la vida, requereix una aproximació multidisciplinària integrant perspectives psicològiques i sociològiques. Aquesta tesi doctoral parteix de múltiples teories que ofereixen coneixements profunds sobre les motivacions, percepcions i influències socials que incideixen en els esportistes extrems.

2.3.1 Teoria de la cerca de sensacions

La Teoria de la Cerca de Sensacions de Marvin Zuckerman (1979) s'ha convertit en un pilar fonamental per entendre per què certes persones són atretes cap a comportaments d'alt risc, incloent la participació en esports extrems. Zuckerman defineix la cerca de sensacions com un tret de personalitat que motiva als individus a buscar experiències noves, variades, complexes i intenses, així com la disposició voluntària a prendre riscos físics, socials, legals i financers derivats de la realització d'aquestes pràctiques.

Dins el context dels esports extrems, aquesta teoria proporciona un marc que justifica l'atractiu que aquestes activitats tenen per a alguns individus. Els esportistes extrems, sovint busquen l'adrenalina i l'emoció que s'obté a l'intentar superar els propis límits físics i psicològics. Aquesta necessitat, es detectable en diferents trets de personalitat de determinats individus. Diverses investigacions mostren com els esportistes considerats extrems solen obtenir resultats superiors en escales de cerca de sensacions que la població general, suggerint, a més, que aquest tret de personalitat pot ser un indicador significatiu per predir la participació en esports extrems d'una persona (Castanier, Le Scanff, & Woodman, 2010).

La cerca de sensacions també s'ha relacionat amb altres aspectes de la personalitat i el comportament humà, com ara la percepció del risc i l'autoeficàcia. D'aquesta manera, resulta que els esportistes amb un alt grau de motivació per reptes que impliquen gran risc el poden percebre més com una oportunitat per assolir creixement personal que no pas com una amenaça a evitar (Zuckerman, 2007).

Aquesta teoria, doncs, posa el focus en la psicologia dels esportistes extrems, i ens apropa a comprendre les motivacions que impulsen cada vegada a més individus a exposar-se a activitats que gran part de societat interpreta com innecessàriament perilloses o temeràries. Entendre el mecanisme de la cerca de sensacions pot ajudar a explicar la participació en esports extrems, a més de contribuir a dissenyar estratègies per gestionar el risc i promoure pràctiques més segures dins d'aquestes comunitats.

2.3.2 Teoria de la modernitat líquida

La teoria de la Modernitat Líquida de Zygmunt Bauman (2000) permet endinsar-se en el coneixement de les transformacions que experimenta la societat contemporània, caracteritzada per una transició que parteix de formes “sòlides” i previsibles d’organització social, cap a altres més “líquides” i flexibles.

Aquesta teoria aporta un marc teòric per a l'anàlisi dels practicants d'esports extrems, ja que aquests comportaments i pràctiques desafiants es poden considerar com a manifestacions que son el reflex de la societat i la vida moderna.

Zygmunt Bauman, en la seva obra sobre la modernitat líquida, utilitza cinc categories per descriure la societat contemporània, que son decisives per entendre que la solidesa i la previsibilitat han anat sent substituïdes per la fluïdesa i la transitorietat. Aquests canvis afecten directament les estructures institucionals, les relacions socials i les identitats individuals (Bauman, 2000).

- 1) *Emancipació i alliberació*. A la societat líquida, l'emancipació implica el desig de trencar amb normes i tradicions preestablertes, prioritzant l'autenticitat i l'autorealització personal per sobre de la conformitat amb expectatives socials. Aquest impuls d'emancipació és una cerca de llibertat i autodeterminació en un món caracteritzat per la fluïdesa i la incertesa.
- 2) *Individualitat*. Procediment on els individus busquen més autonomia i autenticitat, prioritzant la seva identitat personal per sobre de les normes socials. A la societat líquida, les estructures col·lectives perden pes, fomentant relacions efímeres i una lògica consumista. Encara que guanyen llibertat, també pot generar ansietat i falta de connexió social. Fenomen clau en la modernitat líquida.
- 3) *Temps i espai*. La societat líquida ha condensat el temps a causa de la tecnologia i la globalització, accelerant la vida quotidiana i dissociant la percepció del temps i l'espai. Guanya valor tot allò que resulta immediat i instantani.
- 4) *Feina*. La societat líquida ha transformat la feina en una activitat més efímera, precària i individualitzada. Antigament, la feina es vinculava a relacions sòlides i una identitat comunitària, però ara prevalen la flexibilitat i la mobilitat. L'èmfasi en l'interès personal i el consumisme ha reduït la cohesió laboral. Aquesta evolució de la feina genera inestabilitat i falta de sentit de propòsit en la vida laboral.
- 5) *Comunitat*. La comunitat és una entitat més fràgil i efímera, fruit de la pèrdua de solidesa i cohesió en les relacions socials. L'individualisme i el consumisme dificulten la formació de comunitats sòlides, al mateix temps que la tecnologia crea

una il·lusió de comunitat virtual. En la societat contemporània, els vincles humans esdevenen més superficials, canviants i volàtils, dificultant l'establiment de relacions duradores pròpies de les comunitats tradicionals, que van sent reemplaçades.

La teoria de la Modernitat Líquida, per tant, permet utilitzar la seva estructura per analitzar com els esports extrems esdevenen pràctiques a través de les quals, els individus interactuen i donen sentit a la vida en la societat actual.

2.3.3 Teoria de l'autoeficàcia

A mitjans dels anys 70, el psicòleg Albert Bandura (1977) va realitzar nombrosos estudis sobre l'aprenentatge humà i va elaborar la seva teoria cognitiva social, a més de desenvolupar la teoria de l'autoeficàcia. Bandura identifica quatre variables sobre les que es fonamenta el procés d'aprenentatge: les experiències d'èxit anterior, l'aprenentatge vicari (observació dels èxits dels altres), la persuasió verbal (ànim o encoratjament d'altres), i l'estat emocional i fisiològic de la persona. Afegeix l'autoeficàcia com a nou concepte central, fent èmfasi sobre la importància de la percepció que té cada individu sobre les seves pròpies capacitats per executar les accions necessàries per aconseguir els objectius que es proposa. Bandura (1977) considera que l'autoeficàcia determina la manera en què les persones pensen, se senten i actuen. Un individu amb un grau elevat d'autoeficàcia pot generar una major motivació, realitzar major esforç i ser més persistent per assolir els reptes; mentre que una baixa autoeficàcia pot comportar la desmotivació i l'abandonament d'objectius. No es tracta només de ser capaç d'aconseguir un propòsit, sinó de creure's capaç d'aconseguir-lo.

L'autoeficàcia resulta aplicable de manera significativa en el context dels esports extrems, on la superació d'un repte anterior pot reforçar la confiança per afrontar futurs objectius. A més, observar a altres esportistes superant obstacles similars pot reforçar la percepció d'un mateix per sentir-se capaç de fer-ho. Així, els esportistes de disciplines on cal superar enormes reptes, tant físics com mentals, es consideren amb majors possibilitats com més alt sigui el seu grau de confiança (Bandura, 1997).

Aquesta teoria permet descobrir una altra perspectiva en l'intent de comprendre les motivacions dels esportistes extrems i la seva capacitat per gestionar el risc i la por. La percepció d'autoeficàcia pot influenciar decisivament la manera en què aquests esportistes s'aproximen als seus límits, ressaltant la importància de la confiança en ells mateixos.

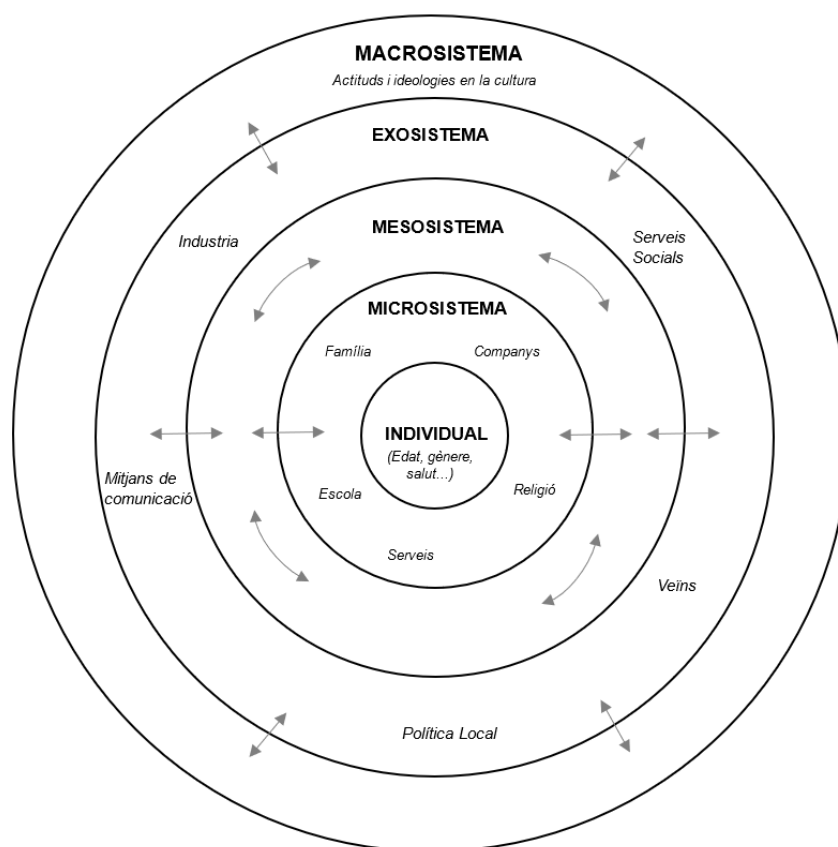
2.3.4 Teoria ecològica

La teoria ecològica del desenvolupament humà, formulada per Urie Bronfenbrenner (1979), analitza com els diferents entorns socials interactuen i influeixen el desenvolupament individual al llarg de la vida. Dibuixa un model ecològic que identifica diversos sistemes que varien segons la proximitat a l'individu, i cadascun juga un paper únic en el procés del seu desenvolupament (Bronfenbrenner, 1979). Aquest model estructura l'entorn en diferents nivells, que són decisius per comprendre el comportament dels esportistes extrems. El primer nivell l'anomena *Microsistema*: es refereix als entorns més propers al subjecte i influeixen directament en la vida d'un individu, com la família, els amics, la parella, la feina o els entrenadors. En el cas dels esportistes extrems, les relacions interpersonals i els suports socials en aquest nivell tant poden proporcionar suport i motivació, ans al contrari, suposar restriccions i límits a la pràctica d'esports de risc. En segon lloc es troba el *Mesosistema*: representa les connexions entre els diferents microsistemes de l'individu, com la interacció entre la família i l'entrenador o entre els amics i el context laboral. Aquestes relacions que es van produint al llarg del temps influeixen en diferent mesura en la motivació, la progressió i la confiança de l'individu tant per afrontar nous reptes envers la pràctica d'esports extrems com en la seva postura en altres àmbits de la pròpia vida. Posteriorment parla de l'*Exosistema*: aquest nivell inclou factors que, tot i no interactuar directament amb l'individu, tenen un impacte en el seu microsistema. Per als esportistes extrems això podria incloure familiars secundaris, administracions i xarxes socials. Els canvis en aquest nivell poden afectar els recursos disponibles per a la pràctica dels esports extrems i, fins i tot, la percepció social de la seva activitat. Per últim descriu el *Macrosistema*: que és l'estadi més allunyat del subjecte, però amb capacitat de condicionar-lo, ja que engloba les normes culturals, les ideologies polítiques i les creences religioses, entre altres, que defineixen cada societat. En el

context dels esports extrems, les diferents polítiques, normatives i actituds d'una societat poden incidir en l'esportista, determinar el grau de suport a un projecte, la seva popularitat i el reconeixement que se li atorga o les limitacions que se li imposen.

Bronfenbrenner, amb la seva teoria ecològica (1979), proporciona una eina molt útil per comprendre com els factors ambientals i socials configuren les decisions i comportaments dels esportistes extrems. Permet examinar com els diferents nivells d'interacció social influeixen des de la motivació fins a la percepció del risc i la presa de decisions (Bronfenbrenner & Morris, 2006).

Aplicant la Teoria de Bronfenbrenner al present estudi, s'aconsegueix aprofundir en l'anàlisi de l'entorn social i cultural, i valorar com les interaccions entre els diversos agents poden repercutir en l'actitud, la motivació, la presa de decisions i el comportament dels esportistes extrems.



Il·lustració 1 – Esquema dels entorns socials que influeixen sobre una persona. Bronfenbrenner (1979)

3. Mètode



Es detallen les particularitats metodològiques dels dos estudis. Es proporciona informació sobre el disseny de l'estudi, els participants, els mètodes de recollida de dades, els procediments seguits i les tècniques d'anàlisi de dades aplicades.

3.1 Disseny dels estudis

Ambdós estudis s'han basat en una anàlisi qualitativa per entendre el fenomen dels esports extrems des d'un punt de vista psicosocial. La investigació qualitativa permet aprofundir en les dades, la contextualització de l'entorn, els detalls i experiències úniques. El propòsit d'aquesta investigació és descriure situacions determinades, és a dir, explicar com és manifesta un fenomen en un moment determinat, en aquest cas, els esportistes extrems. Així doncs, a través d'un estudi descriptiu, es mesuren i avaluen diversos aspectes, dimensions o components del fenomen a investigar (Hernández, Fernández & Baptista, 2014).

L'enfocament qualitatiu es basa en mètodes de recol·lecció de dades no estandarditzats i no s'efectua mesurament numèric, per la qual cosa l'anàlisi no és estadística. La recol·lecció de les dades consisteix a obtenir les perspectives i punts de vista dels participants (les seves emocions, experiències, percepcions i altres aspectes subjectius).

3.2 Participants

En el primer estudi, la mostra es composava de 13 esportistes, entre professionals i amateurs, 10 homes i 3 dones, practicants habituals d'activitats extremes, amb edats compreses entre els 25 i els 65 anys ($M = 42$; $SD = 12,49$). Es van considerar els criteris d'inclusió següents: 1. Practicar activament esport extrem; 2. Major experiència que la considerada per a participants primaris. 3. Realitzar una activitat considerada de risc extrem (Gomà-i-Freixanet, Martha i Muro, 2012). La selecció dels participants en esports extrems inclou: Salt BASE ($n = 2$), esquí extrem ($n = 2$), caiac extrem ($n = 1$), escalada en solitari (sense corda) ($n = 5$), alpinisme extrem ($n = 5$) i navegació en solitari ($n=1$).

En el segon estudi es van mantenir els criteris d'inclusió del primer estudi (Sparkes & Smith, 2014); un total de 18 persones (15 homes i 3 dones) van accedir a participar en l'estudi. Al moment de la recollida de dades, tenien entre 25 i 70 anys ($M = 43.0$, $SD = 13.59$). Per mantenir l'anonimat dels subjectes se'ls va anomenar amb noms ficticis. Les modalitats van ser variades com s'aprecia a la següent taula.

3.3 Instruments

Per a la realització dels dos estudis es va fer servir un disseny descriptiu transversal (Montero & León, 2007). El mètode utilitzat en tots dos casos va ser l'entrevista qualitativa, no estandarditzada i cara a cara. Aquesta tècnica permet un elevat grau de flexibilitat i llibertat en les respostes, donant el protagonisme de la conversa a la persona entrevistada (Heinemann, 2003). Amb l'acceptació prèvia de cada subjecte, es va programar l'entrevista i la seva gravació.

En el cas del primer estudi, l'inici de l'entrevista consistia en un estímul inicial en forma de la qüestió següent: *Quina és l'última ocasió en què t'has vist en una situació que consideris de risc?* A partir d'aquest punt de partida, s'emprava una guia d'entrevista gràfica per conduir la conversa (Inglés & Puig, 2015), amb l'objectiu de descobrir la influència dels agents socialitzadors de l'entorn proper en el desenvolupament de la seva activitat de risc.

En el segon estudi, també es disposava d'una guia d'entrevista per conduir-la en cas que fos necessari. En aquesta ocasió es va incorporar una taula d'avaluació de factors d'influència així com una pregunta tancada, però amb l'objectiu de convertir-se, també, en un estímul generador de la conversa: *"Amb quines tres paraules vincularies l'esport extrem?"*. Els instruments emprats es troben a l'apartat d'annexes del document.

3.4 Procediment

En ambdós estudis es va contactar als participants per correu electrònic, explicant el propòsit de la recerca, així com els diferents aspectes ètics i logístics. Les entrevistes es van dur a terme a diferents espais d'acord amb les preferències i possibilitats dels participants. Les entrevistes van durar una mitjana de 43 minuts. Abans de començar les entrevistes, se'ls va recordar als participants l'objectiu de l'estudi, la confidencialitat de les dades i el tractament; finalment, van llegir i signar documents de consentiment informat.

Totes les entrevistes van ser enregistrades, transcrites i codificades mitjançant l'ús del programari QSR NVivo (Hutchisona, Johnston & Breckon, 2010) per a la seva posterior anàlisi de contingut. En el cas del primer estudi, la categorització de les

dades es va fer a partir de la classificació que proposa Bronfenbrenner (1979) en el seu model ecològic. En el segon estudi, es va utilitzar el mateix procediment d'anàlisi, tanmateix es van modificar els nodes de classificació separant les respostes en aspectes rellevants de les entrevistes en relació a la teoria de la modernitat líquida de Bauman (2000).

3.5 Anàlisi de dades

L'anàlisi de dades en els dos estudis va ser tant deductiva com inductiva, i es va realitzar de la manera següent: (1) familiarització amb les dades i lectura de les transcripcions de les entrevistes; (2) ús del programari d'anàlisi de dades qualitatives assistit pel programa QSR NVivo 12, i disseny d'una primera proposta de codificació basada en la teoria del model ecològic de Bronfenbrenner (1979), en el primer cas, i en la teoria de la modernitat líquida de Bauman (2000); (3) organització de les dades en la categorització pertinent, diferent en cadascun dels estudis; (4) Revisió de les dades estructurades inicials resultants, i modificació dels codis mitjançant una anàlisi inductiva, tenint en compte tant la informació del marc teòric com noves aportacions dels subjectes entrevistats (Dávila, 2006; Guest, MacQueen & Namey 2012); (5) Agrupació de les dades en les diferents categories temàtiques establertes en cada l'estudi.

4. Estudis realitzats



En el proper capítol s'exposa el compendi dels dos estudis científics que
conformen la present tesi doctoral.

4.1 Estudi I

Títol de l'estudi:

Decision-making by extreme athletes: The influence of their social circle.

Referència de l'article:

Vande Vliet, È. & Inglés, E. (2021). Decision-making by extreme athletes: The influence of their social circle. *Heliyon*, 7(1). <https://doi.org/10.1016/j.heliyon.2021.e06067>

Revista de la publicació:

Heliyon: SJR | Q1.

QR de l'article:



Decision-making by extreme athletes: the influence of their social circle

Eric Vande Vliet^a, Eduard Inglés^{a,b,*}

^a Institut Nacional d'Educació Física de Catalunya (INEFC), Universitat de Barcelona (UB)
^b GISEAFE (Grup d'Investigació Social i Educativa de l'Activitat Física i l'Esport)

ARTICLE INFO

Keywords:

Influence

Extreme sports

Risk

Social circle

ABSTRACT

We explored the influence of the social circle on decision-making in regard to risk by 13 extreme athletes from different sports (Free solo climbing, Base-jumping, Longboarding, Solo seafaring, Alpinism, Extreme skiing, Extreme kayaking), all considered extreme due to the high risk of injury or death during practice. In-depth qualitative interviews were conducted with each participant individually in order to determine the influence of members of their social circle (parents, children, partner, friends, etc) on their behaviour. Our results show that their influence is insufficient to substantially modify the practice of extreme sport or the exposure to extreme risk or to lead them to give up their sport. Friends linked to extreme sports are the only ones capable of understanding and promoting these practices. The influence of the rest of the agents will go in the direction of reducing risk taking. The passion for thrill-seeking activities is what imbues the lives of extreme athletes with meaning and this passion is broadly immune to influences from their immediate social circle.

ABSTRACT

We explored the influence of the social circle on decision-making in regard to risk by 13 extreme athletes from different sports (Free solo climbing, Base-jumping, Longboarding, Solo seafaring, Alpinism, Extreme skiing, Extreme kayaking), all considered extreme due to the high risk of injury or death during practice. In-depth qualitative interviews were conducted with each participant individually in order to determine the influence of members of their social circle (parents, children, partner, friends, etc) on their behaviour. Our results show that their influence is insufficient to substantially modify the practice of extreme sport or the exposure to extreme risk or to lead them to give up their sport. Friends linked to extreme sports are the only ones capable of understanding and promoting these practices. The influence of the rest of the agents will go in the direction of reducing risk taking. The passion for thrill-seeking activities is what imbues the lives of extreme athletes with meaning and this passion is broadly immune to influences from their immediate social circle.

INTRODUCTION

Recent years have seen an exponential increase in the practice of sports involving extreme risk (Brymer and Schweitzer, 2013; Florenthal and Shoham, 2001; Mata, 2002). Experiencing new sensations, breaking with routine, enhancing self-control capacities and pushing one's limits (Kern et al., 2014) are becoming highly attractive to many people who, as a consequence of practising extreme sports, are exposed to greater risk (Allman et al., 2009).

In the 1990s, the German sociologist Ulrich Beck affirmed that our lives unfold in a “risk society” (Beck, 1998). The fact of facing and overcoming the various dangers we naturally live with allows us as individuals and our society to advance. In extreme sports, however, individuals deliberately seek out extreme situations and challenges and, in the drive to achieve a goal or a reward, seek to live new experiences (Allman et al., 2009).

The current trend in the relentless search for thrills is to renounce safety elements (harnesses, ropes, etc) and so explore the limit of one's abilities at the risk of making a mistake that could prove fatal (Huertas, 2013). The extreme athlete, on the basis of practice, acquires experience and confidence, which, in turn, gradually reduces the perception of risk. This subjective assessment of risk results in an underestimation of objective risk (Demirhan, 2005).

A number of studies have explored the psychological profiles of extreme sportspeople in depth in order to establish classifications and categorizations. Monasterio et al. (2016), for instance, studied the relationship between personality types, traits and stress levels in extreme sportspeople. Zuckerman (2007), from another perspective, linked the desire to experience danger and to push one's limits to socialization processes and sometimes to a need for rewards.

Today's society admires and values people who leave their comfort zone (Laurendeau, 2006), considering them heroes with extraordinary capacities and abilities (Pereira, 2009). Risk behaviours are positively reinforced by the social admiration and are inspired by extreme practices. “Thus, multimedia objects assume a key role due to the fact that they are an effective medium, permitting users to easily interact among them” (Amato et al., 2017, p.844). Social networks positively reinforce

and provide feedback on risky behaviours (Huertas, 2013). To determine possible influences on individuals exposure to the risk posed by extreme activities, numerous studies have analysed the sociological profiles of extreme athletes in an endeavour to identify what motivates them to face enormous risks and to determine whether the motivations arise in the individual or have a social origin (Zuckerman, 1979); this endeavour has included analysing social factors such as partners, immediate family, friends and communication and social media (Bronfenbrenner, 2005).

While there has been a proliferation of psychological profiling studies of extreme athletes in recent years, lacking is a scientific analysis of their socio-personal profiles. With the aim of understanding relationships between extreme athletes and the people closest to them, we explore the socio-personal settings of thrill-seekers who practise sports or other activities in conditions of great difficulty and/or in non-existent, reduced or highly debatable safety conditions.

This empirical study was inspired by various questions raised in previous analyses (Hunt, 1996; Martin and Leary, 2001; Nicholson, Soane, Fenton-O'Creevy and Willman, 2005), as follows: How is it possible that the people closest to an extreme athlete do not manage to make them desist from the risky activity? Do extreme athletes have an inappropriate perception of fear or an excessive love of pleasure? Does having children change the behaviour of extreme athletes in relation to the assumed risk? Could empathy with significant others who show fear and pain at the possibility of an accident be a factor in making people rethink their extreme risk activities?

It seems indisputable that, in relation to the personal decision to assume risk (Huertas, 2013), people close to the athlete might exert some influence on their decisions regarding extreme risk activities. This study tries to respond to the above questions by analysing the perceptions of extreme athletes themselves. Thus, the objective of the study was to determine how the immediate social circle of the extreme athlete influences their behaviour and their decisions regarding extreme risk activities.

THEORETICAL PERSPECTIVE

Extreme sports

High-risk or extreme sports are defined as sports that require extraordinary skills and courage and a capacity to act in situations implying a great risk for health and even

of death. (Guszkowska and Boldak, 2010), i.e., dangerous activities that involve exposure to physical danger (Klinar et al., 2017). In categorizing the degree of risk associated with certain sports, Gom`a-i-Freixanet et al. (2012) state that high-risk sports are those considered to imply a high probability of serious injury or death when practised. They include activities such as climbing, paragliding, caving, white-water rafting, alpine mountaineering, extreme kayaking, diving, ski jumping, parachuting, downhill skiing, mountain biking, and snowboarding (Kajtana, 2013).

People who seek risk in any area of life are driven by the need to constantly experience new, complex and varied sensations (Leary and Hoyle, 2009). Extreme athletes, as seekers of thrills, feel a greater than normal need for stimuli. This need may be a strategy to redirect attention away from their low self-esteem (Woodman et al., 2010), to divert attention from the psychological root causes of negative emotions (Cas- tanier et al., 2010), or to self-regulate emotions (Klinar et al., 2017).

Although the emotional preferences of extreme athletes share com- mon features, not all athletes can be analysed in the same way, since each extreme sports discipline has its own differentiating characteristics (Barlow et al., 2013). For instance, parachutists enjoy the sensation of free falling, while high-altitude alpine mountaineers, in contrast, enjoy being in control when dealing with uncertainty, whether it is over their feelings, actions or decisions (Monasterio et al., 2014).

Thrill-seeking through extreme sports

Marvin Zuckerman is the psychologist who has probably had most influence on studies of risk taking, as his Sensation Seeking Scale (SSS-V) and his theory of sensation seeking (Zuckerman, 1994) have inspired many research papers. Brymer and Schweitzer (2012) have compiled analytical frameworks from studies of the motivations of extreme ath- letes from the perspectives of sensations (Zuckerman and Kuhlman, 2000) psychoanalysis (Hunt, 1996) and neo-tribes and subcultures (Maffesoli, 1996).

Leaving aside the conditioning factors of the environment and the psychosocial profile of each individual, another issue is how extreme

athletes face fear. Brymer and Schweitzer (2012) pointed out that “extreme sports participants perceive the experience of fear as an essential element to their

survival” (p.481), with each participant determining their limits according to their own subjective perceptions of the risk to which they are exposed (Laurendeau, 2008).

Extreme sports: from seeking thrills to dicing with death

Previous studies from perspectives as diverse as philosophy defy social perceptions of extreme athletes as “crazy”. Existential philosophers conceive of risk sports as “part of the modern art of living” (Müller, 2012, p.80) and of extreme athletes as artists capable of producing works of art. Psychologists try to understand the personal motivations that lead to the assumption of risk (Jack and Ronan, 1998), while sociologists like Beck (1998) try to understand the great influence exerted by the social environment on human behaviour.

Gom`a-i-Freixanet et al. (2012), in an exhaustive review of 27 articles based on empirical data collected on athletes exposed to great physical risk, reported that these individuals enjoy extreme environments and stimulation of the mind and senses through extremes, whether of heights, depths, speeds, light, dark, or weather. Also documented was the fact that these individuals seek new experiences, are intolerant of repetitive experiences, and invariably have low anxiety levels. Those qualities do not interfere with the demanding requirements for concentration and control required for extreme sports. The study concluded by defining the social profile of this type of athlete as unconventional, even as they respect social rules and are well socialized, because, after all, many high-risk sports (e.g., alpinism, climbing, speleology, parachuting) are practised in small groups. One's behaviour may therefore impinge on others in the group and one's life might even depend on the companionship and loyalty of the group members (Gom`a-i-Freixanet et al., 2012).

Psychosocial determinants influencing decision-making

The psychosocial profile of a person is drawn on the basis of the numerous interactions that occur in their daily life, according to Bronfenbrenner's social ecological model (1979). Human development is the ongoing accommodation of an active human being to their immediate and changing surroundings (Torrico et al., 2002) Bronfenbrenner's model reflects a set of systems that interrelate and interact with each other (Figure 1):

- Microsystem. This encompasses the participant's most immediate circle, including family, friends, school and work colleagues, etc.

- Exosystem. This refers to two or more interrelated and interacting environments in which the participant is immersed.

- Macrosystem. This overarching system includes cultural, historical and religious factors associated with the society in which the participant belongs.

Bronfenbrenner's model suggests that what is essential is how the person perceives the environment more than how they exist in objective reality (Fuster and Elizalde, 1995) The psychosocial profile of an extreme athlete is drawn from their daily interactions with the agents in their environment, but, above all, from the perceptions and interpretations of those interactions by the selfsame individual. In the case of more extreme athletes, influences from the macrosystem and exosystem, reflecting public opinion from the general social environment, may be less direct; as one example, Lupton and Tulloch (2002) conclude that Australian society's perceptions of risk associated with BASE-jumping is positive, because this activity involves values such as overcoming difficulties, commitment, and emotional control. Such perceptions could suppose positive reinforcement for the extreme athlete that would affect their development and their decisions.

It is the social agents in the microsystem, however, who will have the greatest influence on decisions made by extreme athletes. Those referred to as significant others (Ntoumanis et al., 2007) are the persons closest to the participant and making up their social circle, i.e., family, friends, school and work colleagues, coaches, sports colleagues, sponsors, etc.

(Figure 2) The agents in this circle are frequently or continuously interacting with each other as they typically share spaces and experiences that further shape the behaviour and development of the extreme athlete and that configure their psychosocial profile over time. Each significant other will play a different role and will affect to different degrees the construction of the psychosocial profile of the extreme athlete and, consequently, their decisions in general, and risktaking decisions in particular. As demonstrated elsewhere (Sánchez et al., 2012) "the immediate social

circle containing parents, coaches, teachers, colleagues ... of the young athlete play a key role in the acquisition of healthy habits and adaptive behaviours” (p.17).

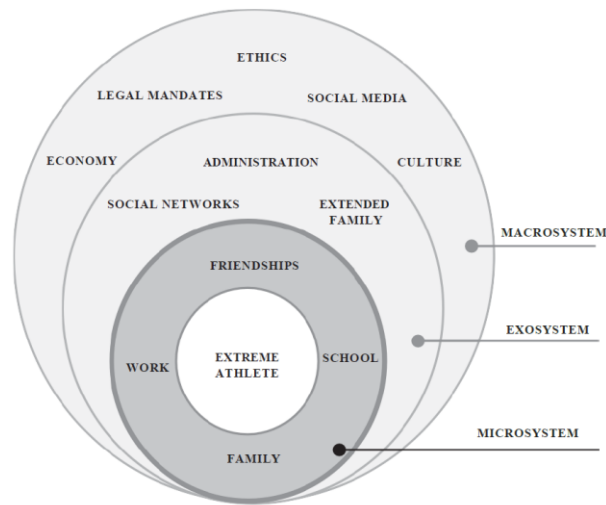


Figure 1. Adaptation of social ecological model of Bronfenbrenner for extreme athletes. Agents from the microsystem, exosystem and macrosystem.

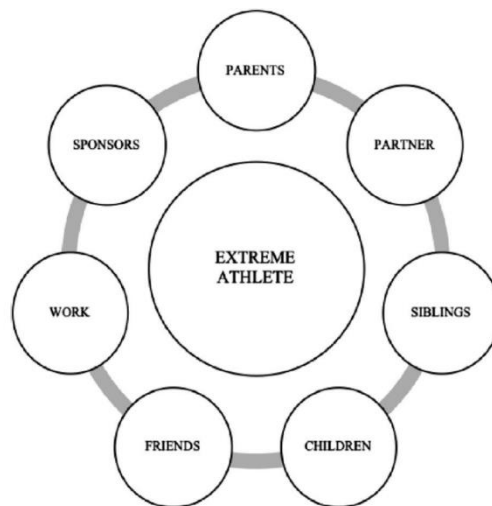


Figure 2. Microsystem. Significant others of social circle of extreme athletes.

Table 1. Identification and classification of the participants. Sociodemographics and extreme sport practiced.

Interviewed subjects						
Code	Age	Sex	Children	Marital status	Profession	Activity
S1	42	Man	No	Single	Teacher	Free solo climbing
S2	26	Woman	No	Single	Student	BASE-jumping
S3	25	Man	No	Single	Doctor	Longboarding
S4	45	Man	Si	Single	Mountain guide	Solo seafaring
S5	65	Man	Si	Single	Mountain guide	Alpinism
S6	47	Man	Si	Single	Industrial	Alpinism
S7	56	Man	Si	Married	Computer scientist	Alpinism/free solo climbing
S8	35	Man	No	Single	Fireman	BASE-jumping/free solo climbing
S9	43	Man	Si	Single	Nurse	Free solo climbing
S10	27	Woman	No	Single	Mountain guide	Extreme skiing
S11	50	Man	Si	Couple	Teacher	Alpinism/extreme skiing/free solo climbing
S12	50	Woman	Si	Single	Elite athlete	Alpinism
S13	29	Man	No	Single	Teacher	Extreme kayaking

METHOD

Ontology and epistemology

This study, based on a qualitative analysis, adopts an interpretivist ontological stance, since the social perceptions of extreme athletes draw on different subjective realities (Vasilachis, 2009) Also adopted is a subjectivist and constructivist epistemological approach, since we understand that values both from researcher and interviewees can influence and shape what is understood and interpreted (Sparkes and Smith, 2014).

Participants

The study sample was composed of 13 professional and amateur athletes (10 men and 3 women), aged 25–65 years (mean 42 years, standard deviation 12.49 years), all regular practitioners of extreme sports. Inclusion criteria were as follows: (1) to actively practice extreme sports; (2) to have more experience than the average casual athletes (3) to perform activities considered to place them at extreme risk (Gomà-i-Freixanet et al., 2012). Participants can be considered of medium socioeconomic status, born and living in the Western lifestyle, and practice extreme sports as a hobby. The extreme sports represented (Table 1) were BASE-jumping ($n = 2$), extreme skiing ($n = 2$), extreme kayaking ($n = 1$), free solo climbing (without ropes) ($n = 5$), alpinisme (extreme mountaineering) ($n = 5$), longboarding ($n = 1$) and solo seafaring ($n = 1$). In some cases, the athletes practised more than one of those extreme sports.

3.3 Instrument and procedure

This descriptive study with a cross-sectional design (Montero & Leon, 2007) was methodologically based on the qualitative non-standardized face-to-face interview. Unlike the traditional methodology, which uses standardized interviews for data collection, limiting the range of responses, a qualitative methodology has been used. Unstructured interviews allow us to delve into more personal aspects of the subjects, giving freedom and fluidity to their stories. (Hernández et al., 2014). A schematic in-depth interview guide was designed with the aim of encouraging the participants to express themselves by addressing the issues in question (Figures 1 and 2).

This approach ensured a high degree of flexibility and freedom in responses and allowed the interviewee to play a leading role in the conversation (Heinemann, 2003).

By agreement with each participant, interviews were recorded. Each interview consisted of an initial icebreaker in the form of the following question: “When was the last time you found yourself in a situation that you considered to imply risk?” After this initial prompt, the interview continued along the lines laid down by a graphic interview guide (Inglés and Puig, 2015), aimed at uncovering the influence of persons in the immediate social circle on extreme athletes and the risk activities they participate in.

Interviews were recorded, using a conventional recording system, transcribed and encoded using QSR NVivo 12 assisted qualitative data analysis software (Hutchisona et al., 2010) for subsequent content analysis. The data were categorized according to the classification proposed in Bronfenbrenner's social ecological model (1979).

Participants were contacted individually by email and the purpose of the research was explained along with ethical and logistical aspects. The median (M) duration of the interviews was 43 min with a standard deviation (SD) of 14. Interviews took place in different venues according to the preferences and possibilities of the participants. Before beginning the interviews, participants were reminded of the purpose of the study and were guaranteed the confidentiality of the data and its treatment. Participants then read and signed informed consent documents. After the interviews, the recordings were transcribed verbatim.

Data analysis

Data analysis, which was both deductive and inductive, took place in stages as follows:

1. Familiarization with the data through reading of the interview transcripts.
2. Design of an initial coding proposal based on Bronfenbrenner's social ecological model (1979) using QSR NVivo software.
3. Deductive organization of the data in six predefined categories: parents, partner siblings, children, friends, job.

4. Re-reading of the resulting initial structured data and code modification using inductive analysis (Da'vila, 2006). The category "professional" was divided into two different subcategories: work and sponsors.
5. Data review and grouping into the seven resulting thematic areas: parents, partner siblings, children, friends, work and sponsors.
6. Research report.

Criteria for excellent qualitative research

This work has followed the eight criteria proposed by Tracy (2010) for excellence in qualitative research: a) Worthy topic: the subject of this study is considered relevant since extreme sports have recently suffered a significant increase (Brymer and Schweitzer, 2013) and there is little research in the psychosocial field; b) Rich rigor: this study has been based on theories with recognized foundation and rigor, such as Bronfenbrenner's Ecological Theory or Zuckerman's sensation seeking, among others used in different fields of research; c) Sincerity: the research is marked by honesty and transparency in the collection and treatment of data exclusively extracted from the interviewees, without any manipulation or influence on the interpretation by the interviewer; d) Credibility: the methods used to obtain and treat the results allow the reliability of the study. Results are also shown extensively and with textual citations to highlight the credibility of this research; e) Resonance: simple language is used in the writing of the study so that it is understandable for any reader unfamiliar with extreme sports, generating empathy and interest in its content; f) Significant contribution: the research contributes to new knowledge in the psychosocial field of extreme sports and generates new incentives for future studies; g) Ethics: The ethical principle has prevailed throughout the entire investigation process, being endorsed by the Ethical Investigation Committee of the Sports Administration of Catalonia (28/CEICGC/2020); h) Meaningful coherence: the principle of coherence is based on rigorous work with the use of resources and techniques, in this case non-standardized interviews, adapted to the purpose of this research with the aim of delving into the psychosocial aspect of athletes extremes.

RESULTS

The results underline different levels of influence by the significant others in the extreme athlete's microsystem, providing evidence of the variability between them.

Based on extreme athletes' self-perception, the capacity of influence of the significant others of their own social circle is analysed. Results are shown by the use of captions from the unstructured in-depth interviews with each of the participants. Thus, light is shed to our initial questions by the use of qualitative data empirically found, as follows.

Parents

All the interviewees agreed that their parents' influence over them was not enough to modify any of their decisions regarding the practice of extreme sports.

For eight of the athletes the father or mother or both were sports- people themselves who introduced their offspring to outdoor sea or mountain activities: *"At home, mountains were always very present and when I was little I was taken trekking and skiing"* (S8); *"I started mountaineering because of my father and school"* (S6). For the remaining five interviewees, the parents did not practice sports and so did not exert any direct influence in this regard. S13 explained that *"at the family level, there was no history of practising sport"* and, along the same lines, S7 stated that *"in my closest family circle, no one had ever done this activity."* None of the interviewees had a parent who had practised the same extreme activity.

The general opinion, shared by most of the participants, was that mothers more than fathers were more concerned and afraid of the extreme risk practices of their offspring. In some reflections regarding their childhood and youth, the interviewees reported having deceived their parents in that they chose not to explain anything in much detail or only after it was done: *"My mother doesn't know a thing, because she would worry a lot; when it's done, then she finds out"* (S4). S5 explained: *"It was my mother who first took me to the mountains. But I always told her that I was just going on an excursion, no matter whether it was Everest, K2 or a trek near home, it was always an excursion and that was that."* In many cases, while parents would prefer that their offspring did not assume risks, they accepted the decision: *"For sure no family would like for their child to do this activity, but it is respected"* (S2). Two of the interviewees, S12 and S7, have experienced the deaths of family members in alpine mountaineering and climbing activities. Even so, the fact that they have carried on suggests that this did not lead them to cut back or give up on their own activity. In referring to critical moments in lived extreme situations implying a risk to life, none of

the interviewees said they thought of their parents, affirming that they focused solely on resolving the risk situation.

Partner

The eight interviewees who had a partner at the time of the study affirmed that they were not influenced by this significant other in reference to their extreme activity. For all the interviewees, the fact of having a partner does not lead them to consider reducing risk to any degree, never mind giving up altogether. The partnered interviewees recognized that their partner accepted and respected both their activity and their attitude, emphasizing that they felt very free to do as they considered best in their sports career.

Even so, in some cases, there was accommodation, i.e., an adaptation of some kind or a reduction in time spent on an activity to be able to spend more time with the partner: *“My partner is my partner... I try to balance my sport with that”* (S1). In cases where pressure from a partner was perceived as excessive, it was conceded that the relationship was affected: *“Yes, it conditioned me; in order to spend more time together, I had to cut back on my activity. And now I am no longer with that person”* (S10); *“A partner must allow me to do what I have to do, I cannot commit to a person who places limits on me”* (S3).

In three cases (S2, S5, S8), the partner practised the same extreme sport. This was a very important boost for the relationship, but it also implied greater concern or fear for the other. At times, it translated into greater protectiveness that was not always well received: *“When he showed me, he suffered more for me as his partner than if we had not been together, but now we share projects and this reinforces our relationship and we are healthily competitive with each other”* (S2).

Four of the five unpartnered athletes at the time of the study underlined that in previous relationships they had moderated their behaviours, but once the relationship ended, they returned to their extreme sport with even more conviction and with a greater sense of freedom and emotional tranquillity. *“Maybe now, when I don’t have a partner, is when I allow myself to do a bit more than I did in my life as a couple, when I can go more my own way”* (S6).

Siblings

Despite the close bond that typically exists between brothers and sisters, their influence on a sibling's practice of extreme sports is generally non-existent. Of the interviewees, nine had siblings, whose influence in childhood and adolescence, when older than the interviewee, was evident. Several interviewees mentioned a sibling as responsible for having launched them in activities in nature: *"At the age of 15 years, it was with my brother that I first put on climbing shoes, but no harness or anything"*. None, however, indicated that they were directly introduced to extreme activities by a sibling.

Remarkable for its direct influence on one interviewee (S7) was the death of a brother at a very young age, not for sports-related reasons; according to S7: *"The death led me to reflect deeply on life and death, and that gives meaning to and explains my practice of risk activities"*.

Children

A more protective attitude was detected for children than for the remaining significant others analysed. While their influence was perceived as greater by some of the interviewees, this was not translated into substantial behavioural changes in the athletes. Modification was generally limited only to a reduction in time spent on the extreme activity due to the need to care for children: *"At the beginning, that absorbs many hours and it seems that you will have to give up on projects, but the truth is that your goal eventually comes to mind again and you do it"* (S9).

In no case did children condition the level of exposure to extreme risk. One interviewee (S12), recalling a conversation with her son – *"Don't go! What if you have an accident?"* – reported that *"the answer I gave was a reasoned explanation so that the child could understand and accept my decision, but in no case did that plea influence my decision."*

Children were acknowledged to somehow always be present. S5 related, for example, that *"as a tribute, I dedicated successful summits to each of my three children, because they also suffer, and I recognize that."* Even so, all the interviewees affirmed that their children never substantially modified their extreme risk practices.

Switching the perspective, it was interesting to analyse interviewee thoughts about the possibility that their own children might take up an extreme sport. Several

confessed that they would prefer their children to avoid high-risk activities. S7 comments: "Selfishly, I have never insisted. They do ski, they do some climbing... but for me that's enough. I've experienced the high-risk situations, and I prefer it that way." S11 explains: "While I have absolutely forbidden my son to climb without a rope, sometimes it's inevitable that he does so somewhere". In view of their children's desire to follow in their parents' footsteps, two interviewees encourage them, sharing their experience and offering advice, especially on how to act as safely as possible: "Of my two children, who both like the mountain a lot, there is one son who, without knowing it, is already a mountaineer. We see it in his relationship with the mountain, how he views it... I will try to teach him what I can from my own experience" (S11).

The five interviewees without children all agreed that if they had children, they would teach them everything they could about their sport and leave the choice to them. Regarding the influence parenthood might have on their sport, everyone felt that while it might limit the time spent on their sport, it would never lead them to consider abandoning it altogether: "If I had children, I would not stop, but I would not continue at the same level, for obvious reasons... Children would have to go to school from Monday to Friday... and this would require more stability than what I currently have in my life" (S2); "I would reduce frequency, not for fear of leaving my children fatherless, but for the time required" (S13). One of the interviewees did concede that they would be extra careful: "It is very possible that, if I had a child, I would reduce both the difficulty and the frequency somewhat" (S10).

Friends

All the interviewees classified their friends in two groups in terms of their influence. As pointed out by S7, a climber: "*The mountaineering friends are mountaineering friends, and the rest are the rest*" (S7). The first group, composed of other extreme athletes practising the same activity, was attributed with a great reciprocal influence, in terms of motivation and positive reinforcement, as a consequence of the shared experiences: "*Friendship is everything, it is feedback, it is motivation, it is the people who are with you all the way, it also adds a healthy competitive component*" (S1). As for the second group, composed of other friends, conversations about the extreme sport were usually avoided because, in most cases, those friends did not understand and maybe were even critical: "*At the level of friends*

there are all sorts – some damn you, blame you for risking your life, while others understand it” (S9); “Most of the friends who don’t do the sport see you as a weirdo; they constantly remind you that you could get hurt” (S10).

Seven of the interviewees started their activity with friends with whom they have shared many experiences, while the remaining six started out in different ways. However, all of them, once they started in their sport, considered the attachment to friends who regularly practise their sport to be very important: *“My friend and the only expedition companion saved my life putting his own life at risk. He saw the stone, the fall... I have eight plates and 19 screws in my face, just to give you an idea... He was hanging there too... but fate made him come down to see if I was still alive... He kept me from death and bore with me two days... There are only two people in the world capable of doing that” (S11).* The interviewees likewise recognized the great ability of these friends to influence risk-taking, whether by reducing or reinforcing it. Some affirmed that they sometimes assumed greater risk than they would have if on their own: *“If he was clear about it, it was because he saw it clearly. That led me to put on the skis too. If I hadn’t been with him, I swear I wouldn’t have worn them!” (S11).*

Most interviewees have experienced the loss of someone – a family member, close friend or acquaintance – doing their sport. All agreed that the emotional impact was great, but they saw it as temporary; in no case did misfortunes lead to the abandonment or modification of an extreme activity programme: *“We have had several deaths of friends and it is true that it affects you, but, at least in our group, it does not affect us enough to stop practising” (S2); “Close friends have died climbing... it is traumatic, you have it in your head, it is as if you were seeing their photo. But at no time have I ever considered giving up” (S7).*

Work

Work exerts a great influence and inevitably modifies certain decisions regarding extreme risk activities undertaken by both professional and amateur athletes. While this influence is not reflected in any change in attitude towards the sport, it does condition practice by reducing the time available or because of the issue of funding for projects.

For amateurs, work is perceived as a limiting factor, because it restricts availability. In some cases, the interviewees changed careers or jobs to mitigate this

negative influence: *"I left my job and hometown to dedicate myself to my sport. I looked for a new job that would allow me to earn the money I needed and to work flexible hours. I have shaped my whole life around my passion"* (S2).

In other cases, the interviewees had turned their sport into a job: *"Thanks to my experience in risk activities, I now have a job with a mountain rescue group"* (S9). Others had become mountain guides: *"I was a mountain instructor at the age of 22, and with more experience I became a guide, so I have dedicated my whole life to that"* (S5). Some compete at a professional level in their respective disciplines, or work on sponsored projects that, in addition to being a motivation, often generate additional income: *"At 18 I was already competing internationally, and this has allowed me to make a living from my sport"* (S13).

Sponsors

Although sponsors could initially be considered to be outside the microsystem of athletes, the interviewees' responses suggested that we should include them as a significant other given their remarkable influence: twelve of the thirteen people interviewed acknowledged having a direct and very early relationship with sponsors.

All the interviewees agreed that brands and companies that provided financial resources inevitably asked for something in return: *"That conditions your projects, sometimes it forces you to modify your initial idea to adapt to a commercial strategy and, well, if you want the money, you must adapt"* (S8). In most cases, the demand is for images that reflect the values of the sponsor, although some sponsors ask for good results in competitions to continue providing funds. According to S10, *"the demand for results adds a lot of pressure."*

Only one of the interviewees (S7) indicated that they had carried out activities using their own resources and had never sought sponsorship. Each of the remaining interviewees had experiences with sponsors, but affirmed never agreeing to carry out activities with risk additional to what they themselves were willing to assume: *"However much they offer you or boost your ego, it's never worth your life"* (S8); *"If a brand demands too much of you in a risky situation, forget it! To risk your life for money, that's to completely prostitute your philosophy regarding whatever sport you practice"* (S11).

Summary

The analyses of each class of significant other revealed that, despite differences in their personal histories, the responses of the athletes were very similar. In the case of parents, the influence ceased to be relevant once the person came of age, when the athletes decided for themselves according to their own interests. As for partners, there were differences depending on whether or not the activity was shared by the couple, although the actual impact in terms of modifying risk behaviours was practically nil. The same applied to the siblings, whose influence was likewise nil. Friends who shared the same passion had the greatest influence on the athletes, reinforcing complicities and underpinning motivations to seek new challenges; other friends were not at all influential in decisions related to the assumption of risks. As for sponsors who sought to profit from the use of spectacular images depicting risk for publicity purposes, if their demands exceeded the athlete's own perceived capacity for assuming a risk, then the latter would not assume the additional risk in exchange for money. Our findings, in summary, are that nobody in the close social circle of extreme athletes is capable of exerting sufficient influence on them to lead them to modify goals set on the basis of their own convictions.

DISCUSSION

Our research has explored the influence exerted by people in the immediate social circle of athletes who practise extreme sports and the impact of affective social relationships on the athletes. Our results, pointing to the complexity of human behaviour, corroborate results reported in studies by Smith et al. (2007) and Weiss et al. (2009) which confirm that their microsystem and interpersonal relationships influence the psychosocial and motivational development of young athletes, who are susceptible to the influence of third parties, especially coaches, colleagues, and parents. In contrast, for extreme athletes there is little evidence

of modified behaviours in relation to risky activities. The fact that many of their parents were sportspeople themselves seems to facilitate their comprehension on their desire of risk-taking. In the case of partners, results show that love life seems to be difficult with someone out from the extreme sports way of living and thinking.

The great influence of the family on decisions has been confirmed for medical scenarios in which people face death directly, due to cancer (Torrico et al., 2002). For extreme athletes, in contrast, our results show that the influence of family (parents, partner or children) is much less important than that exercised by friends, colleagues, and sponsors.

This finding corroborates the study by Hurtado et al. (2004), which concludes that the practice of risk sports enables young people to identify with others with similar interests. Our research also documents those extreme athletes, each in their modality, tend to be part of small related groups that could be considered neo-tribes (Maffesoli, 1996), with our results confirming this bond between sports colleagues. In some cases, colleagues will have experienced situations on the edge in which their lives depended on each other; as concluded by the study by Gomà-i-Freixanet et al. (2012), sometimes one's life relies on the companionship and loyalty of the group (p.228).

However, discrepancies were evident between our results and those of Hurtado et al. (2004), who affirmed that the media play an important role in extreme sports: athletes configure their identity around their sport and the consumption of the associated cultural goods. Although it is true that sponsors can give extreme athletes visibility and publicity, 90% of our interviewees did not feel influenced by them; rather, they try to make their decisions independently of sponsors and undertake their challenges thinkingly and away from the pressures of third parties. Any public repercussion is considered a consequence of their activity, rather than a cause.

Our results have showed and underlined different levels of influence by the significant others in the extreme athlete's microsystem and have provided evidence of the existing variability between them based on their own perception of the capacity of influence. Thus, our results have enabled us to collect a great amount of subjective information from extreme athletes, at the expense of more numerical and objective data. The possibility of using technological measurement tools, such as biofeedback, was assessed, due to the high potential of this research tool (Kos and Umek, 2018). Even so, this technology was not definitely used due to the difficulty of monitoring sensations, memories, interpersonal relationships and external influences. The possibility of applying technological systems such as computational intelligence (Fister

et al., 2015) is open to future research to deepen the decision-making of extreme athletes.

CONCLUSIONS

We sought to respond to the questions initially raised in relation to the influence of the social circle of the extreme athlete on their behaviour and decision-making regarding maximum risk practices. Our results show how none of the significant others closest to extreme sports practitioners has enough influence to substantially modify extreme sport practices nor to condition decisions regarding the assumption of, and exposure to, extreme risk to health or life. While each significant other conditions a participant in different ways, to different degrees, and according to individual characteristics, we have been able to detect threads common to practitioners of extreme sports. They are aware of and accept that their social circle has influenced them at some point in their career, but not to the point of making them abandon their sport, reduce their exposure to risk, or modify their plans.

Extreme athletes are people who pursue, above all else, a fusion with the environment, reducing artifice as much as possible while seeking sensations of freedom, tranquillity, and mental relaxation. Their bodies and minds behave and respond in a balanced and harmonious way to achieving goals that for most may seem unattainable. Even in activities where a great deal of adrenaline is generated, extreme athletes have enormous self-control in ensuring extreme concentration and focus of all their senses on overcoming a challenge and surviving. They combine mental preparation with exhaustive physical preparation and meticulous preparatory work in such a way that it becomes difficult to label them crazy or irresponsible. Our results would suggest that extreme sportspeople are very consistent in terms of their life philosophy, to the point that almost nothing or nobody will make them give up their convictions and intentions.

In this research, a limitation was collecting data exclusively from extreme athletes and not from significant others, as the two kinds of data would have offered a global vision of the phenomenon. Another issue was the complexity implied by delimiting the very concept of extreme risk, since it is not clear how to draw distinctions between, for instance, those who make a single annual expedition to the Himalayas versus those who regularly climb without ropes. Nonetheless, the sociological

approach underlying this research suggests that the frequency of risk exposure should not affect interpretation of the results. Another limitation of our study has been the reduced size of the sample, which restricts the generalisation of the results. Even so, this qualitative study has provided a great amount of in-depth information.

Finally, because we had difficulties in recruiting women who practise extreme sports, we had insufficient empirical data to add a gender perspective to our results, so data had to be treated in an undifferentiated way.

Those limitations suggest future studies of extreme athletes that delve further into microsystem influences to include the experiences and opinions of significant others themselves and samples that, not only extends the number of participants, but also include more women who practice extreme sports.

The literature review has included psychological and biological studies on extreme athletes (Zuckerman and Kuhlman, 2000), based on qualitative tests that measure sensations and analyse psychological aspects and physiological reactions. The most interesting issue is the consensus that exists in all spheres regarding the importance of relating social and environmental factors with psychological and biological profiles. Opening up future interdisciplinary lines of research would undoubtedly lead to a better understanding of extreme athletes.

This study can be considered as an initial step to as a broader line of research, not only by extending the number of participants, but also directly interviewing the agents of their social circle. This may help to overcome the limitation of the present study, that is only based on the self-perception of the participants.

Climbing mountains of more than 8000 m, crossing the Atlantic alone in a 6-metre boat, rafting in rivers with 15-metre-high waterfalls, skateboarding down steep roads at 120 kmph, climbing huge iced-over waterfalls, free solo climbing, wingsuit flying, mogul or halfpipe skiing, etc., are activities that inspire passion. In this study investigating athletes attracted to extreme sports and willing to risk their lives for their passion, we show that none of their significant others influence them to the point of separating them from their life project.

4.2 Estudi II

Títol de l'estudi:

Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners

Referència de l'article:

Vande Vliet, È., Inglés, E., Mateu, P. & Montull, Ll. (2023). Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners. *World Leisure Journal*, 1-12.

<https://doi.org/10.1080/16078055.2023.2261896>

Revista de la publicació:

World Leisure Journal: SJR | Q1.

QR de l'article:





World Leisure Journal

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/wlaj20>



Routledge
Taylor & Francis Group

Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners

Éric Vande-Vliet, Eduard Inglés, Pau Mateu & Lluc Montull

To cite this article: Éric Vande-Vliet, Eduard Inglés, Pau Mateu & Lluc Montull (27 Sep 2023): Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners, *World Leisure Journal*, DOI: [10.1080/16078055.2023.2261896](https://doi.org/10.1080/16078055.2023.2261896)

To link to this article: <https://doi.org/10.1080/16078055.2023.2261896>

ABSTRACT

In recent decades, the number of extreme outdoor sports in the natural environment has notably increased. Extreme outdoor practitioners engage in high-risk projects, assuming that any mistake can have deadly consequences. This research explores, from a sociological point of view, the motivations and perceptions of extreme outdoor sports practitioners in the context of liquid modernity. Eighteen semi-structured interviews were conducted with practitioners of outdoor sports of different modalities. The results were interpreted on the basis of categories proposed by Zygmunt Bauman in his theory of liquid modernity, and grouped into two central themes: individual freedom and the search for intense sensations. The practitioners of extreme outdoor sports consider that these sensations in risky activities and although the motivations that lead them to these practices are plural. They share similar aspects: attraction for the unknown, search for adventure and sensations, awareness and use of time in life, passion for sport and acceptance of risks as part of the path to personal satisfaction. Therefore, this study contributes to a better understanding of the phenomenon of extreme outdoor sports from a liquid modernity point of view.

Keywords: extreme outdoor sports, risk-taking, sensation-seeking, liquid modernity.

THEORETICAL PERSPECTIVE

A critical rethink of risk-taking by exploring extreme outdoor practitioners' perceptions from liquid modernity

Fresh air mingled with silence on the summit of the Aiguille d'Argentière in the Mont Blanc massif. Kilian Jornet and Stéphane Brosse were moving between the peaks, breathing deeply, watching the condensation coming out of their mouths and turning regularly to admire the breathtaking landscape under their feet. Suddenly, a rustling sound broke the silence and the two men looked at each other. Instantly, the ledge broke beneath their feet, separating them forever. Fortunately, Jornet found himself on the inside and saved his life. Brosse, on the other hand, was on the outside of the cornice and fell into the void. The last glance between the two mountaineers, shortly before the mountain claimed Brosse's life, would remain frozen forever in Jornet's mind.

The above paragraph tells the story of the accident in which the mountaineer and skier Stéphane Brosse lost his life. It was June 2012, and Brosse was on a trek as part of the "Summits of my life" project of the well-known athlete Kilian Jornet. Shortly afterwards, Jornet resumed this project, which consisted of attempting to set records for the ascent and descent of some of the most emblematic summits on the planet, once again exposing himself to high-risk situations.

In recent decades, more and more people have decided, like Jornet and Brosse, to participate in "extreme sports" (Brymer & Schweitzer, 2013; Barlow et al., 2013; Clough et al., 2016). The term "extreme sports", according to Brymer & Schweitzer (2012), encompasses a variety of non-traditional, independent, organised and adventuring physical activities and sports. However, due to their rapid evolution and growing popularity, there is no clear consensus on how to name and classify these practices (Cohen, Baluch & Duffy, 2018; Keane, Eastman & Iyer, 2020).

British sociologist Chris Rojek (1999) talks about the concept of "wild leisure". He considers that there is an elective affinity between leisure culture and transgressive behaviour. Leisure encourages us to "be ourselves" and to get in touch with those areas of the self that are repressed by the needs of work and family life. Leisure is therefore, an area of life in which the expansion of human potential is strongly

encouraged. We feel that we have a duty to engage in self-expression and self-exploration. According to Lavolette (2011), in recent years there has been an increased engagement in the social sciences with the study of extreme practices. Dangerous games and adventure travel have gone from being marginal, exotic or crazy to being more than acceptable, exemplary and mainstream (Lavolette, 2011). For the author, adventure sports represent an escape from the seriousness of everyday life, as in most cases, as they require "life and death" decision making.

In this article, we adopt the concept of extreme sports proposed by Brymer (2005), which refers to independent leisure activities in which death is the most likely outcome of a poorly mismanaged error or accident. As we are particularly interested in extreme sports practised in natural environments, we could even speak of "extreme outdoor sports". For conceptual clarity, it is essential to note that one of the defining elements of the so-called extreme sports is that they derive from a specific lifestyle, which is central to the meaning and experience of their practice (Sky, 2001; Lewis, 2003; Robinson, 2008).

Extreme sports could be considered a subcategory within the term Wheaton (2004a) refers to as "lifestyle sports". It allows us not only to distinguish the characteristics of extreme outdoor sports as high-risk physical and sporting activities performed in natural environments, but also to understand that there is a socio-cultural significance that goes beyond the technical, logistical and other specificities of each practice (Wheaton, 2004a).

Many recognised extreme sports, such as climbing, mountain biking, snowboarding or windsurfing, emerged from the countercultural movements of the 1960s and 1970s (Maguire, 1999; McEwan & Muller, 2020; Midol & Broyer, 1995; Ness, 2022). Works such as Langseth (2011) or Pereira (2009) explain that many extreme sportsmen and women recognise themselves in an anti-conventional, anti-authoritarian, counter-cultural, transgressive and freedom-oriented philosophy of life. By practising extreme sports, and even making them their way of life, extreme sportsmen and women claim to fight against a life constrained by routine and social institutions perceived as rigid. However, the advent and unfolding of so-called liquid modernity during the second half of the 20th century may now question the transgressive narrative of extreme sports practitioners. In this sense, Bauman (2000)

warned that, in the context of liquid modernity, the anti-conventional becomes convention. Bauman (2000) argued that there was an early modernity characterised by a solid and durable organisation, which provided a sense of stability and security to a significant part of society. In contrast, today we find ourselves in a liquid modernity characterised by instability and uncertainty. Bauman (2000) suggested that liquid modernity is characterised by rapid changes in values and social structures. In this context, individualism and competitiveness become fundamental elements of culture. The individualist narrative argues that social agents are less and less challenged by social structures (except for the market). They must choose what life they want to live while being fully responsible for its consequences (Bauman, 2000; Rosa, 2010). For Rosa (2010), individualism and competitiveness are related to an accelerated society, which can lead to problems such as alienation, loneliness and fragmentation. In light of this perspective, the formation of groups of extreme sports practitioners, in the form of what Maffesoli (1996) called "neo-tribes" (people who share a similar state of mind expressed through particular lifestyles and certain behavioural rituals), may not respond to a desire to break away from a solid, standardised society. Rather, it is an identity anchoring to recognise oneself in a turbulent and uncertain era, in which everything changes at a speed that is difficult to assimilate. As Wheaton (2004a) pointed out, in contemporary Western society, practices and cultures linked to extreme sports (as lifestyle sports) constitute one of the new forces on which to build one's identity.

In line with the previous paragraph, McEwan & Muller (2020) showed how postmodernity has been associated with a pluralisation of sporting practices and practitioners. In extreme sports, practices that pursue aesthetic ends and move away from the *sporting ethos* coexist alongside others that, having emerged as counter-cultural and self-managed activities, have undergone a process of sportivisation and are marked by competition. McEwan's (2016) work on mountain biking highlights two narratives related to practitioners: on the one hand, the "athlete" as a competitor who relates to other practitioners based on the degree of success or failure in regulated events. On the other hand, the "neo-sportman or woman", which refers to those who focus on personal results without an orientation towards the comparison of prowess and achievements with other participants.

Extreme sports have been the subject of analysis and debate in academic fields such as psychology, sociology and sports science (Immonen et al., 2018). Several research studies have tried to explain how different factors do or do not influence the decision to participate in extreme sports, but also by investigating the main traits of these practitioners. In psychology, for example, the meta-analysis by McEwan et al. (2019) showed that those who participate in high-risk sports are more likely to exhibit higher levels of sensation seeking, extraversion and impulsivity. Conversely, they are less likely to show neuroticism, sensitivity to punishment and telic dominance compared to individuals who do not participate in these activities (Kerr & Houge Mackenzie, 2012). Zuckerman's (2007) work, on the other hand, showed higher rates of emotional and adventurous feelings in mountaineers, skydivers and open-water canoeists compared to other groups of athletes, such as karate or ice hockey players. The review by Gomà-i-Freixanet, Martha et al. (2012) found that practitioners of high-risk sports scored high on attributes related to danger seeking, adventure, experience seeking and disinhibition.

For Breivik (2010), who analysed the behaviour of adventure sports practitioners, control and safety are closely balanced with freedom and excitement. In his work, Breivik found that adventure sports practitioners perceived a certain trade-off in risky practices as they understood that greater risk could lead to greater reward, but also to greater loss. Lyng (2005) analysed risk management in different life situations and interpreted risk-taking as a manifestation linked to the exploration and negotiation of *edges*. These *edges were situated* at different levels, such as what is socially perceived as sanity and insanity, consciousness and unconsciousness, and so on. The author explained that the boundary between life and death is one of the spaces that some people or groups explore and challenge.

Puig & Vilanova (2011) showed that extreme athletes expressed passion for their practices, a feeling that made them find meaning in taking risky decisions. The authors showed that some extreme athletes declared themselves to be addicted to high-risk sports practices and that these were part of their identity to the point that they could not imagine their life without them. In this line, Vande-Vliet & Inglés (2021) discussed that the close social influence of the practitioners (parents, partner, children, friends, etc.) was insufficient to substantially modulate the practice of extreme sports

or exposure to risk. Cajina-Guedeat & Reyes-Bossio (2021) stated that the fear experienced by extreme athletes, far from being a problematic issue, was perceived as a rewarding experience that promoted personal transformations.

While psychological research on extreme sports and their practitioners is more frequent, studies with a sociological profile are scarcer (Vande-Vliet & Inglés, 2021). For example, works such as those developed by McEwan (2016) or McEwan & Muller (2020) are interesting to understand these practices in the framework of postmodern societies. Likewise, some chapters of the book coordinated by Wheaton (2004a) address essential issues such as commodification (Palmer, 2004) or gender (Kay & Laberge, 2004; Robinson, 2008, Wheaton, 2004b). This paper aims to continue this research tradition by exploring, through a sociological approach, the perceptions and experiences of extreme outdoor practitioners.

Extreme sports from Zygmunt Bauman's perspective of liquid modernity

The theory of liquid modernity, developed by sociologist and philosopher Zygmunt Bauman (2000) refers to a way of understanding contemporary society, characterised by fluidity, instability and a lack of solid and lasting structures. Bauman introduced this concept to describe the evolution of modern society from "solid modernity" to a more liquid and changing state. Bauman (2000) develops his theory of liquid modernity dividing it into five categories.

1) First category refers to emancipation and liberation. In this sense, liquid society has a desire to break with pre-established norms and traditions, prioritising authenticity and personal self-realisation over conformity to social expectations. This drive for emancipation is a search for freedom and self-determination in a world characterised by fluidity and uncertainty.

2) Second category is individuality. Bauman defines it as the process where individuals seek greater autonomy and authenticity, prioritising their personal identity over social norms. In the liquid society, collective structures weaken, fostering ephemeral relationships and a consumerist logic. While gaining freedom, it can also generate anxiety and a lack of social connection.

3) Third category refers to the Time/Space relationship. The liquid society has condensed time due to technology and globalisation, accelerating everyday life and

dissociating the perception of time and space. It introduces the notion of "non-places", transitional areas without symbolic identity. Instantaneity has transformed our relationship to time and space, creating a sense of acceleration and fragmentation in contemporary life.

4) Fourth category focuses on work. The liquid society has transformed work into a more ephemeral, precarious and individualised activity. In the past, work was linked to strong relationships and a communal identity, but now flexibility and mobility prevail. The emphasis on self-interest and consumerism has undermined work cohesion. This development generates instability and a lack of a sense of purpose in working life.

5) Fifth category describes changes in communities. It considers them to be more fragile and ephemeral entities, having lost the cohesion and solidity of social relations. Individualism and consumerism affect the formation of strong communities, while technology creates an illusion of virtual community. Human bonds are more superficial and changeable, making it difficult to build meaningful and lasting relationships. Traditional community has been replaced by more volatile connections in contemporary society.

METHOD

Participants

Participants in this study were recruited by criterion (Sparkes & Smith, 2014), in person and via the internet (emails and social media messaging). Subsequently, the sample was expanded through snowball sampling (Parker et al., 2019). The criterion for being part of this research was to be an extreme practitioner of outdoor activities. A total of 18 people (15 men and three women; 43.00 ± 13.59 years) agreed to participate in the study (see Table 1 for more of their characteristics). All participants were given a pseudonym to maintain their anonymity and respect their privacy. Beyond a few descriptive characteristics, table 1 shows, table 1 introduces the participants with a brief self-description through phrases extracted from their interviews.

Table 1

Characteristics of the participants

Participant	Age	Sex	Activity	Self-description
Manuel	42	M	Climbing	When I climb, I am free like a primitive animal.
Maria	26	W	BASE Jumping	Base jumping is flying.
John	25	M	Longboard	On my board, it's all about adrenaline and control.
Paul	45	M	Candle	Loneliness in the ocean gives me peace.
Francisco	65	M	Mountaineering	Climbing to 8,000m without oxygen is a parallel world.
Victor	47	M	Mountaineering	Culminating the highest peaks is happiness.
Jorge	56	M	Mountaineering, climbing	Climbing routes without material makes me feel alive.
Peter	35	M	Climbing and Base Jumping	Climbing and BASE jumping is to feel like an animal.
David	43	M	Climbing	The <i>free solo</i> is like a meditation.
Anna	27	W	Skiing	Going down these slopes is freedom and control.
Daniel	50	M	Mountaineering, climbing, skiing	Climbing like this makes me feel more alive.
Marta	50	W	Mountaineering	The adventure involves risk, but it is worth it.
Oriol	29	M	Kayak	Extreme waterfalls require a long preparation.
Pol	28	M	Mountaineering, climbing	If I die, let it be climbing.
Albert	32	M	Mountaineering, climbing, skiing	Every extreme project involves a lot of work and planning.
Ramon	70	M	Climbing	Opening climbing routes is art on the rock.
Toni	53	M	Mountaineering, climbing	Climbing is not climbing if it lacks risk.
Enrique	31	M	Kayak	I seek escape and adventure travelling with my kayak.

Data collection

Data were collected through 18 semi-structured interviews. This method is suitable for obtaining information about people's experiences and perceptions. As stated by Sparkes and Smith (2014), the semi-structured interview provides greater control to participants than other methods, such as questionnaires or structured interviews, allowing them to tell their stories in their own words and without measurement constraints. To encourage participant input, we designed a research diagram (Crilly et al., 2006). The interviews were always conducted under the direction of the interviewer, although this did not imply rigidity in terms of content or in the way the conversation unfolded (Salinas & Cárdenas, 2006). (Salinas & Cárdenas, 2009).. This graphic elicitation tool acted as a flexible guide for the interview and sought to encourage contributions that are sometimes difficult to elicit through simple verbal exchanges. After conducting an exploratory interview with an extreme athlete, in which we reviewed several elements and concepts present in the theoretical framework, the

research team designed a first draft of the research diagram. After some adjustments, we agreed on a final diagram consisting of a central circle surrounded by five other circles connected by straight lines. In the central circle was the word "extreme practitioner". Connecting to this central figure, the diagram encouraged discussion of topics such as the psychological aspects of extreme sport, the social environment, economic issues, or the life philosophies of each participant.

Procedure

After receiving approval of the study protocol from the Clinical Research Ethics Committee of the Catalan Sports Council, we contacted the participants to explain the aim of the study. Before conducting the interviews, we asked participants to read and sign an informed consent document. We assigned a code to each participant to guarantee their anonymity. Interviews were conducted between December 2019 and December 2020, and took place in different locations to accommodate participants' needs and preferences. All interviews were conducted by the first author in quiet settings, such as coffee shops or the homes of some participants. The interviews, which lasted on average 55 minutes (between 30 and 80 minutes), were recorded and transcribed verbatim.

Data analysis

We conducted a hierarchical deductive-inductive content analysis. Following Sparkes & Smith (2014), the process followed several steps. The first immersion step consisted of a close reading of the transcripts with the intention of familiarising ourselves with the data. Then, we deductively organised relevant fragments of the transcripts into the five categories proposed by Bauman (2000) for understanding liquid modernity. In the third step, the authors contrasted and connected the coded information by grouping it around two higher-order themes that seemed to make sense: a) freedom and intensity and b) plurality of practices. The fourth step consisted of re-examining the original transcripts, cross-checking them with the generated themes and discussing their coherence. After reaching an agreement, the authors sought the opinion of a critical friend who is an expert in applied social research in sport and qualitative studies. This person agreed that the analysis resulted in a reliable interpretation of the perceptions of outdoor extreme sports practitioners. The final step was the writing of the research report. For the qualitative analysis of the coding work,

the QSR software NVivo 12 was used. The American Psychological Association's Reporting Standards for Qualitative Research (2020) were observed during this phase of the work.

RESULTS AND DISCUSSION

Freedom and intensity

One of the aspects on which the practitioners agreed was the feeling of freedom and autonomy that they perceive during the practice of these modalities. Some mentioned the freedom of movement, others the freedom of decision and others the freedom to make exclusively individual decisions without external conditioning. Overcoming unthinkable challenges for the general population while defying prejudices and negative public comments was highly related to these feelings of freedom. This apparent separation from mainstream society, understood as less free by the participants, can be associated with the work of Pereira (2009), in which he interprets the phenomenon of extreme sports as an anti-conventional, counter-cultural and transgressive philosophy of life.

Most of the interviewees stated that they needed to practice extreme outdoor sports very often. The constant search for new outdoor experiences and challenges was part of what they associated with the aforementioned sense of freedom. Ramón recounts:

I was lucky enough to find a passion. A real adventure. It's a feeling you have to experience. You've just opened a 1000m solo route, and yes, it's absurd because you don't win any money, no glory, no applause. But the feeling of looking back, seeing the wall and saying you've climbed here, you can't pay for it with money. Total happiness!

These findings coincide with Puig & Vilanova (2011) in the fact that extreme practitioners of outdoor activities recognised themselves as addicted to these high-risk practices, giving meaning to their lives and identity.

The freedom reported by participants was mainly related to the dominant conception of individual freedom that characterises postmodern societies (Rosa, 2010). It can also be interpreted from the perspective of Bauman (2000), who highlighted instability and the lack of solid forms of identity as central attributes of liquid societies. In this sense, the practice of extreme outdoor sports could be understood as

an expression through which some people seek their individual freedom with the highest degree of autonomy (without submitting to rules and external influences). Likewise, it is an activity that builds a stable identity through the characteristics of the practice itself and the interactions it promotes.

Several participants referred to concepts as contact with/return to nature, purity, social abstraction, lightness, minimalism or survival in a hostile environment:

Daniel: "I don't want to be like an animal, I want to be an animal. The animal lives in the mountain, you don't want to imitate it, you want to be part of the environment in a natural way. That's why this light mountaineering is not to beat the clock, but to reach a mountain without anything.

Most of the interviewees agreed on the concept of living an intense life, and considered the continuous experience of exciting experiences to be a prerequisite for a meaningful life. Many participants could not conceive of boredom or experiences that they considered bland (e.g. a stable job with fixed hours or family care work). Consequently, they argued that going out into the natural environment to experience intense emotions through extreme outdoor sports was necessary to feel that they were making the most of their time.

Oriol: "I would rather die today knowing that I have lived to the fullest doing what I love than live a long life working and without emotions".

This perception, far from being a countercultural or transgressive characteristic, is aligned with a dominant cultural logic of late Western modernity (Bauman, 2000), which is fundamentally secular, according to which a good life is full of developed experiences and capabilities (Rosa, 2010). For García (2018), living intensely is the ideal that governs our societies and, therefore, the contemporary intense persona hardly perceives the unchanging and prefers change to established certainties.

Albert: "Living from our passion is incredible. Sport and the mountains are my creative space, like a painter's canvas or a musician's instrument. Emotions are the basis for feeling alive".

The participants in this study pursued a lifestyle characterised by the abandonment of comfort and a break with monotony. To do so, they tried to act creatively and to position themselves, through their physical-sports practices, away from other normative and socially widespread practices. Bauman (2000) describes this

lifestyle as belonging to individuals who wish to find freedom in personal self-realisation and emancipation. Regardless of the modality they practised, they all carried out activities seeking their limits and exposed themselves to risks that, despite involving distressing and even terrifying situations, they associated with pleasurable sensations (Cajina-Guedeat & Reyes-Bossio, 2021).

Toni: "I'd like to be happy walking the child in the street or going shopping, but I'm not happy like that. To be happy, I need to feel alive and do what makes me tick. However, what makes me tick can also cost me my life".

The risk of dying in these activities is always present, and the practitioners interviewed had a reflexive view of death. They saw the possibility of dying as part of the "game" and as a condition of opportunity to enjoy the lifestyle they have chosen:

Pablo: "The great danger of sailing single-handed is falling into the sea. If you're not moored, you'll probably die, and the boat keeps sailing. There is a risk, and you take it. Life itself is a risk. If you reach the goal, it's worth it".

Another participant interpretation of death is consistent with that of Breivik (2010): extreme outdoor sports practitioners took risk by balancing the perception of risk and its consequences with the likelihood of rewards. In this sense, greater risk may lead to greater rewards and, at the same time, worse effects.

Practitioners associated high exposure to risk as a relevant transgression of the social order and as a central element of their identity (Pereira, 2009). In this sense, most participants in this study had experienced the death of friends or family members. The behaviour is typical of the individualism expounded in sociologist Bauman's theory of liquid modernity. Extreme practitioners seek greater autonomy and authenticity, prioritising their personal identity over social norms.

Athletes continued to engage in extreme outdoor sports, despite pleas from people close to them to reduce their exposure to risk (Vande-Vliet & Inglés, 2021).

Toni: "I won't judge anyone who gives up extreme riding after living through an accident, but I have decided to live life to the fullest. I believe in the life of time and not the time of life. If my time is short, I want to live it to the fullest. It pays off more than if I can live 200 years with my ass in a chair".

Participants were confronted on a daily basis with situations where the line between life and death was very thin (Lyng, 2005). These experiences gave them the opportunity to improve their skills and abilities, but also to experience intense emotions that represented the reward for the risk taken.

A plurality of practices

Several participants who undertook the same practice showed different perspectives. For example, while Francisco was a very competitive participant, with clear objectives linked to physical and sporting performance, Enrique opted for a more personal practice, without media or economic aspirations. In fact, Francisco said: "I want to be the first mountaineer to climb the 14 eight-thousanders without using oxygen", while Enrique said "I want to live a personal experience and discover remote areas of the planet, testing myself physically and mentally". Bauman (2000) argues that in liquid societies, individuality and personal freedom prevail, and personal growth is sought by distancing oneself from the community, differentiating one's practices and being creative and transgressive.

This is consistent with McEwan (2016) and McEwan & Muller (2020) in considering that, in the context of postmodernity, physical and sporting practices (including extreme outdoor sports) are as plural as their practitioners. For example, for several participants, extreme outdoor sports represented a kind of symbolic return to an ancestral way of acting and relating, i.e. to a more primitive way of life (Breivik, 2010):

Ramón: "In another era, people went to the mountains in search of adventure and self-improvement. I think I also have a very primitive personality. This attracts me a lot because this is where I find adventure and I can't find it anywhere else. I don't know if anyone will find it on Wall Street, maybe they will, I'm sure they will, but I find it in the mountains".

All these elements, diverse within the field of extreme outdoor sports, contribute to a shared imaginary upon which practitioners construct their identities. Based on the particularities of these identities, participants claimed to belong to small communities of practice that shared values, ambitions and lifestyles to the point of considering themselves a 'family'. This is a phenomenon that Maffesoli (1996) called "neo-tribes",

and resonates with Bauman's (2010) understanding of communities under the liquid modernity era.

Daniel: "Lightness, very minimal resources, just enough, low technology, no fixed ropes, research, discovery, new places: that's mountaineering. We don't have it written down, but it's there.

Some participants perceived that they were judged as irrational, reckless and selfish. However, they understood their practices as a way of surrendering to a higher form, following Rinehart and Sydnor (2003).

Pedro: "In general, society considers us selfish for risking our lives, which is partly true, because we do what we like to do. But we don't do it in a crazy way. The more risky our challenge, the greater the preparation in all aspects.

Conclusions

This research is a description from a sociological perspective of the practitioners of extreme outdoor sports about the risky activities they engage in. The results suggested that individual freedom, intensity and plurality of practice are important elements to understand some characteristic behaviours of this social group. For the practitioners of extreme outdoor sports, the passion they felt for their activity, the constant experience of new challenges and the sense of freedom justified risk-taking to the point of putting their lives at stake. In the context of liquid modernity, Western societies are characterised by the pursuit of intensity, and although they identified themselves as outsiders to mainstream society, extreme outdoor sports practitioners represent a clear expression of our times.

The findings of this study may have some practical implications. For example, a better understanding of the perceptions of extreme outdoor sports practitioners may contribute to raising awareness of risk and personal safety among the population interested in extreme outdoor sports activities. On the other hand, this work can contribute to the development of training and education programmes for practitioners of extreme outdoor sports, offering a more social and detailed view of their practice. In addition, the information obtained in this research can provide data of interest to organisations such as sponsors and other companies related not only to extreme outdoor sports, but also to the sports industry in general.

The findings and discussion in this paper can serve as a basis for future research to contribute to a better understanding of the phenomenon of extreme outdoor sports and its practitioners. For example, it would be interesting to develop ethnographic work in specific communities of practice, single case narrative research or longitudinal studies. Furthermore, the study of members of the immediate social environment may also contribute to a better understanding of these risky activities, which despite being individualistic seem to have a clear impact on the social sphere of the practitioners. Future research, which may consider other theoretical perspectives and methodological approaches, can study interrelated phenomena of extreme outdoor sports. For example, issues such as male dominance in this type of social space or the lack of concern for family care among practitioners.

5. Discussió



En aquest capítol es duu a terme una discussió integradora que engloba els dos estudis inclosos en la tesi doctoral actual, contrastant els resultats obtinguts en ambdós casos amb els d'altres estudis previs relacionats.

Aquesta discussió planteja una reflexió sobre com l'entorn social dels esportistes extrems i les tendències culturals modernes poden modificar la seva experiència, tant vital com en relació a la pràctica d'aquestes activitats; tot analitzant elements clau com la presa de decisions, la importància de les relacions interpersonals, l'impacte de la societat moderna i les xarxes socials, així com la cerca de sensacions intenses per a la realització personal. Aquesta discussió global busca oferir una visió integradora que aprofundeixi en la comprensió dels esports extrems com a fenomen.

5.1 L'entorn social i la seva influència

La relació entre els esportistes extrems i el seu entorn personal més pròxim ofereix l'oportunitat de comprendre com les interaccions socials afecten la presa de decisions en l'esport de risc. Contràriament al que podria esperar-se, figures habitualment influents com la família i la parella juguen un paper secundari en la presa de decisions respecte a l'assumpció de riscos. Aquest resultat, en consonància amb els estudis de Smith et al. (2007) i Weiss et al. (2009), suggereix una disminució de la influència del microsystema familiar en el context dels esports extrems en relació a d'altres esferes socials, apuntant cap a una major autonomia dels esportistes provocada per l'experiència i l'autoconeixement de les pròpies capacitats. Així doncs, aquestes influències poden modificar la pràctica, però en cap cas s'ha constatat que sigui el motiu principal per a l'abandonament d'aquestes activitats de risc.

El concepte de neotribus (Maffesoli, 1996), referint-se a les agrupacions amb interessos i experiències compartides, emergeix com a element clau per entendre la cohesió dins dels grups d'esportistes extrems. Les relacions interpersonals en aquestes agrupacions socials on, sovint, la vida d'un depèn de l'altre, remarquen la importància del suport al grup i confirmen la dinàmica especial que es desenvolupa en els esports de risc (Gomà-i-Freixanet et al., 2012). Aquesta cohesió proporciona suport emocional i facilita un entorn on la presa de riscos és entesa i acceptada.

Contràriament a les afirmacions que destaquen el paper dels mitjans de comunicació i els patrocinadors en la configuració de la identitat dels esportistes extrems als estudis d'Hurtado (2004), els resultats obtinguts indiquen una independència dels esportistes en relació a aquestes influències externes. La major part dels subjectes mostra una preferència per prendre decisions de manera

autònoma, enfocant-se en l'autenticitat de la seva pràctica esportiva per sobre de la visibilitat o els beneficis econòmics que els patrocinadors poden oferir. Això demostra un compromís amb els principis i valors propis, on qualsevol repercussió pública es considera una conseqüència secundària de la seva activitat.

Aquesta discussió remarca la complexa interacció entre l'autonomia personal i les influències socials dins del món dels esports extrems. Tot i la presència d'un cert grau d'influència social, especialment dins dels grups d'iguals o neotribus, els esportistes extrems tendeixen a viure aquestes activitats amb una considerable independència, equilibrant les expectatives externes amb les seves pròpies motivacions. El sentiment de llibertat que es desprèn de l'elecció d'acceptar el risc i les seves conseqüències implícites és quelcom que es destaca en ambdós estudis d'aquesta tesi.

5.2 La pràctica d'esports extrems en una modernitat líquida

La relació entre la teoria de la modernitat líquida de Zygmunt Bauman i la pràctica dels esports extrems ofereix una nova perspectiva sobre les motivacions i percepcions dels seus practicants. En el marc de la modernitat líquida, caracteritzada per la fluïdesa, la incertesa i la transitorietat de les relacions i identitats (Bauman, 2000), els esportistes extrems emergeixen com a agents actius que busquen, a través de l'assumpció de riscos, donar sentit a la seva vida.

Els esportistes extrems, en aquest context, no es veuen simplement com a individus que busquen l'adrenalina per ells mateixos, sinó com a persones que utilitzen la pràctica d'activitats d'alt risc com a mitjà, no només per superar-se a nivell físic i mental, sinó sobretot per experimentar un sentiment de llibertat i realització personal davant d'un món cada vegada més caracteritzat per la inestabilitat i la fugacitat (Allman et al., 2009). Aquesta cerca de sensacions intenses i experiències viscudes al límit pot interpretar-se com un esforç per afirmar la identitat i la presència en el món modern, aspectes essencials per sentir-se viu en el marc d'una societat limitada per les normes i el confort. Aquest és el punt de vista, la creença, la idealització sobre la que alguns esportistes extrems afirmen la seva identitat de persones "especials" o "úniques"

La modernitat líquida també planteja qüestions sobre les relacions socials i la cerca d'una comunitat. En aquest sentit, els resultats obtinguts coincideixen amb els de l'estudi de Maffesoli (1996), on la pràctica dels esports extrems es pot interpretar

com una forma de construir neotribus o comunitats basades en interessos i experiències compartides; on la solidaritat i la confiança mútua són essencials.

D'altra banda, hem pogut constatar com la pràctica d'esports extrems reflecteix una crítica implícita a la societat de consum i superficial. Els practicants trien una forma de vida basada en generar experiències més autèntiques i úniques, a més de creatives, on la interacció amb l'entorn natural i la superació de reptes personals esdevenen l'objectiu principal, tal i com es mostra, també, al treball de Huertas (2013).

Així doncs, l'anàlisi de la pràctica dels esports extrems des de la perspectiva de la modernitat líquida revela una interacció entre les motivacions personals, les dinàmiques socials i culturals, i les estratègies per donar sentit i desenvolupar-se en la societat actual. Aquest enfocament amplia la comprensió dels esports extrems i contribueix al debat més ampli sobre com els individus poden trobar autenticitat, la comunitat i un sentit a la seva existència en un món en evolució i canvis constants.

5.3 La cerca de sensacions i la identitat dins dels esports extrems

La cerca de sensacions i aventura són aspectes fonamentals en la pràctica dels esports extrems, i es considera, a més, un element clau en la construcció de la identitat dels esportistes.

Zuckerman (1994) defineix la cerca de sensacions com l'afinitat per experiències noves, variades, complexes i intenses, i la voluntat d'assumir riscos físics, socials, legals i financers per obtenir aquestes experiències. Dins el marc dels esports extrems, aquesta predisposició es tradueix en un desig d'experimentar els límits físics i mentals. Coincidint amb les conclusions dels nostres estudis, Castanier, Le Scanff, i Woodman (2010) identifiquen aquesta tendència com una de les principals motivacions per a la pràctica d'esports de risc; exposen que les modalitats esportives com l'escalada sense corda, el salt BASE, el surf de grans ones o el caiac extrem, són idònies per viure sensacions intenses i desafiar els propis límits.

La participació en esports extrems contribueix significativament a la formació de la identitat dels esportistes, tal i com assenyalen Allman et al. (2009). La pràctica d'aquests esports serveix no només com una expressió de valors i preferències personals, sinó també com una forma d'expressió identitària.

A més, la gestió del risc, inherent a l'essència dels esports extrems, es percebuda de manera totalment subjectiva i influenciada tant per factors psicològics

com per l'experiència individual. En contraposició a la percepció general del risc com a element negatiu, l'avaluació i superació dels riscos associats amb aquestes activitats és percebut pels propis esportistes extrems com una font d'autorealització i creixement personal (Demirhan, 2005). Tal i com han demostrat els nostres resultats, Demirhan (2005) coincideix en afirmar que el perill no és considerat com un obstacle, sinó com una oportunitat d'evolució.

D'aquesta manera, la cerca de sensacions i d'experiències intenses en els esports extrems posen de manifest les motivacions intrínseques que impulsen els individus cap a realitzar aquestes pràctiques i com aquests elements contribueixen de manera significativa a la configuració de la seva identitat.

5.4 Impacte cultural i social dels esports extrems

El creixement dels esports extrems ha tingut un gran efecte en la cultura i la societat actuals; es tracta d'un fenomen que cal abordar des de múltiples dimensions. Aquest impacte inclou la forma en la qual aquests esports són representats als mitjans de comunicació, les estratègies de comercialització que els envolten, la difusió a través de xarxes socials, així com la manera en què són percebuts per un públic cada vegada més ampli.

La representació dels esports extrems en els mitjans de comunicació ha jugat un paper clau en la percepció pública d'aquestes activitats. Segons Wheaton (2013), la cobertura mediàtica, especialment a través de plataformes digitals i xarxes socials, ha contribuït significativament a construir una imatge dels esports extrems plena, al mateix temps, d'admiració i de controvèrsia. Sovint, aquesta representació es presenta com un espectacle d'alta intensitat i captiva l'atenció del gran públic a més d'inspirar a molts a explorar els seus propis límits (Coates, Clayton & Humberstone, 2010); per contra, aquesta representació omet aspectes com l'entrenament rigorós i la preparació necessaris, així com els riscos inherents, donant una imatge errònia dels esports extrems com a merament perillosos o irresponsables.

El patrocini d'esportistes per part de marques que inverteixen molts recursos econòmics en promocionar-se per transmetre una determinada imatge o missatge, juntament amb la creació d'esdeveniments com els *X-Games*, ha donat als esports extrems una visibilitat sense precedents, transformant-los en una gran indústria

lucrativa. Tot i que aquesta comercialització ha ofert noves oportunitats per als esportistes, també ha generat preguntes sobre l'equilibri entre l'autenticitat de la pràctica esportiva i les demandes del màrqueting, així com sobre el potencial d'explotació comercial (Rinehart & Sydnor, 2003).

Mentre que hi ha qui veu aquests esports com una expressió d'autonomia, valentia i superació personal, d'altres expressen preocupació pels riscos i les conseqüències evidents d'aquestes activitats. Aquesta dualitat d'opinió, reflecteix tensions més àmplies dins de la societat, que s'estenen a debats en relació als valors de seguretat davant del dret de llibertat, així com sobre l'acceptació de comportaments que desafien les normes convencionals (Lyng, 1990).

L'impacte cultural i social dels esports extrems és indiscutible, i ofereix una via d'escapament de les dinàmiques de la societat contemporània. La difusió mediàtica, la comercialització i la percepció social d'aquests esports mostren la creixent fascinació per la cerca d'allò que esdevé cada vegada més difícil d'aconseguir: la superació de límits i rècords.

6. Conclusions



En aquest capítol, s'exposen les conclusions conjuntes de la recerca presentada, derivades dels dos estudis inclosos en la tesi doctoral, juntament amb les seves limitacions, les direccions per a investigacions futures i les seves principals aplicacions pràctiques.

6.1 Conclusions

La present investigació ha intentat explicar alguns dels elements que, des d'una perspectiva psicosocial, tenen relació amb la pràctica d'activitats de risc extrem, on la possibilitat de morir és realment elevada. I ho ha fet de la veu de les pròpies persones practicants. Com és possible que hi hagi persones que puguin arribar a comprometre la seva vida de forma voluntària per una mera pràctica recreativa i de lleure? Reflexionar i analitzar el comportament social dels esportistes extrems, a més de les influències que podien rebre per part dels seus entorns propers, ha estat el centre d'aquesta investigació. Així doncs, en aquest apartat final, volem aportar les conclusions principals sobre la temàtica plantejada, generadora d'una gran controvèrsia dins la nostra societat.

Els diversos enfocaments teòrics, ens han permès estudiar el fenomen dels esportistes extrems des d'una perspectiva àmplia. Hem pogut constatar que la cerca de sensacions és el motiu que els impulsa a assumir riscos; i, al mateix temps, emprant una visió social, que responen la tendència d'una societat caracteritzada per la incertesa permanent i la fluïdesa. Podem concloure que el fenomen de l'esport extrem no és quelcom que sorgeix espontàniament; s'ha produït una evolució social en les darreres dècades, facilitada per la revolució tecnològica dels materials, del coneixement esportiu, dels mitjans de comunicació i de les xarxes socials, entre d'altres. La tendència és clarament a l'alça en quant a popularitat i afecció a la pràctica, afavorint que aquest fenomen sigui molt més visible i atractiu a un major nombre de persones.

Anys enrere, els practicants d'esports extrems eren socialment considerats com a bojos o inconscients fins i tot, en ocasions, eren rebutjats i menyspreats. Actualment, en alguns casos, han aconseguit un reconeixement social i un estatus que els han convertit en ídols i referents de masses per les seves increïbles fites. Els patrocinis, les competicions i la superació de reptes inimaginables, fan que aquestes persones aconsegueixin fer de la seva passió una professió. Altres, al seu torn, prefereixen mantenir l'anonimat i practicar aquestes activitats perquè són feliços amb la filosofia de vida que han adoptat. La societat moderna tendeix a ser més tolerant a la diversitat de pensaments i de pràctiques esportives; teories com la modernitat líquida de Bauman, exposen que ja no són només els esportistes extrems els que busquen sortir

de la seva zona de confort, sinó que és una tendència social generalitzada perquè les persones necessiten explorar, fluir, viure experiències per sentir-se lliures i no estancar-se en una vida de comoditats i rigidesa com en èpoques anteriors.

L'anàlisi de les relacions interpersonals i les influències que reben els esportistes extrems del seu l'entorn ens han permès una comprensió profunda d'aquestes persones. Família, parella, amics, feina, entre d'altres agents socials, tenen una gran importància per a ells i elles però, tot i així, l'estudi ens ha permès veure la baixa capacitat d'influència en la seva presa de decisions en relació a l'exposició a activitats de risc.

En la majoria de casos, no es consideren activitats aïllades ni puntuals; es considera una filosofia de vida, quelcom que va més enllà de l'esport, allò que els omple de satisfacció i els permet viure grans emocions; ho consideren l'únic espai on poden sentir la sensació de llibertat.

El comportament humà és profundament influenciat per les emocions, les quals configuren les decisions i, per extensió, els estils de vida. Aquesta influència emocional es manifesta tant en reaccions negatives com l'estrès, l'ansietat, i la por, com en reaccions positives com l'alegria, la satisfacció, i la llibertat. Els éssers humans tendeixen a cercar experiències que provoquin emocions positives, tot i que això pot representar un repte arriscat en alguns casos. En el context dels esports extrems, ofereixen als participants una oportunitat única de viure emocions positives i sensacions molt intenses. Aquesta combinació no només contribueix a la satisfacció personal, sinó que també motiva als esportistes a seguir buscant aquestes experiències de manera continuada, cercant viure de manera plena. Aquesta recerca de sensacions fortes es pot veure com una expressió de la necessitat humana de superació i d'exploració dels propis límits psicològics i físics.

Omplir la vida amb el màxim nombre d'experiències positives podria ser l'objectiu de moltes persones. Hi ha qui les troba llegint un llibre, passejant vora el mar, contemplant una obra de teatre o sortint amb bicicleta per la muntanya. En definitiva, la cerca de la felicitat és el que impulsa a les persones a portar un estil de vida o un altre, tal i com hem pogut comprovar en el cas dels esportistes extrems. Els esportistes extrems troben aquesta sensació de plenitud, adrenalina o llibertat, practicant activitats que comporten un risc molt elevat però, no per això, se'ls pot considerar poc

sensats o conscients, és la seva forma de cercar el que, per essència, tot ésser humà persegueix.

Escalar sense corda, llançar-se a volar amb un vestit d'ales, pujar muntanyes de més de 8.000 metres sense oxigen, travessar l'Atlàntic en solitari en una petita embarcació, remar per rius amb grans cascades d'aigua, baixar amb esquís per pendents impossibles, patinar per carreteres pendents a 120 Km/h o escalar enormes cascades de gel; la present tesi doctoral ha permès conèixer de primera mà i de forma profunda, allò que mou als esportistes extrems a arriscar la seva vida per la seva passió. I és després del desenvolupament d'aquesta tesi doctoral que, des d'un punt de vista psicosocial, podem concloure que són persones amb una gran consciència del risc que comporten les activitats que practiquen i de les seves conseqüències, amb una excel·lent capacitat de gestió emocional, fidels a una filosofia de vida particular. Es tracta de persones que han decidit viure el camí de l'aventura i de l'autosuperació, addictes a les emocions que els fan sentir vius.

6.2 Limitacions i futures línies d'investigació

En aquest apartat, s'exposen les limitacions d'aquest estudi que, al mateix temps, proposem de convertir en punts de partida de nous projectes de recerca que donin un pas més en l'àmbit estudiat.

La varietat d'esports extrems i les diferències culturals en les quals es practiquen podrien implicar una sèrie de matisos que no han pogut ésser contemplats en aquesta tesi, com per exemple, en països orientals on la pesca submarina a gran profunditat en apnea és quelcom habitual, en països africans on recorren deserts sense mapes durant mesos, la vida dels esquimals a les zones polars amb temperatures extremes, sherpes nepalís pujant a 8.000m sense oxigen, entre altres, poden ser vistos com activitats extremes per a una gran part de la societat. La mostra del present estudi està formada per individus exclusivament occidentals i, en gran part, homes. Aquest fet, podria no tenir en compte dinàmiques que sorgeixen en contextos culturals diferents o en grups demogràfics que no han pogut ser representats.

No disposar d'entrevistes als agents socials més propers als esportistes, descrits com agents propers o *significant others* suposa també una limitació de l'estudi, en el sentit que podria contribuir a entendre de forma més completa les

interaccions socials dels esportistes, que hem analitzat, exclusivament, a través del seu propi punt de vista.

Així doncs, partint d'aquestes limitacions esmentades, i de cara al futur, es presenten diverses línies d'investigació que hi podrien donar solució, a més d'obrir nous horitzons en l'estudi d'aquest fenomen.

L'elaboració d'estudis quantitatius complementaris podrien completar els resultats qualitius d'aquesta tesi, oferint una visió més àmplia i completa sobre les motivacions, percepcions i impactes socials dels esports extrems permetent, a més, una generalització dels resultats.

La tecnologia com a eina d'anàlisi. En cas de tenir la capacitat d'investigar els processos neurològics dels esportistes extrems reaccionant a diferents estímuls, amb un aparell de ressonància magnètica, permetria entendre d'una forma més detallada el comportament dels esportistes i les reaccions cerebrals envers el risc.

Una altra proposta de futur per a propers estudis relacionats seria reclutar un major nombre d'esportistes extrems atenent a la diversitat cultural i de gènere, establint mostres internacionals i interculturals, a més d'equilibrar la representació d'homes i dones en la investigació. A més, la possible aplicació de mètodes quantitatius sobre una mostra representativa ens permetria aconseguir, també, uns resultats més generalitzables en relació a la complexitat de la societat actual.

A més de la generalització de resultats a través d'estudis que abastin una mostra representativa, també ens plantejem la possibilitat d'endinsar-nos, encara més, en la profunditat de la informació personal i detallada d'un grup reduït d'esportistes extrems; però, en aquest cas, amb la realització d'estudis longitudinals. Seguint el desenvolupament i l'evolució dels esportistes extrems al llarg del temps podríem proporcionar un estudi de casos sobre com es modifica la seva relació amb la pràctica i l'anàlisi de tot el seu entorn pròxim a mesura que va madurant en la seva vida personal, al mateix temps que es modifica el seu entorn social. Al mateix temps, aquest disseny longitudinal podria ser complementat per la inclusió a l'estudi d'entrevistes en profunditat als agents clau de l'entorn social dels esportistes per entendre i complementar, encara millor, l'anàlisi de la seva influència sobre l'assumpció de riscos per part dels esportistes extrems.

Una altra línia d'investigació, aprofitant la modernització dels esports extrems, seria examinar el paper de les noves tecnologies, tant en la pròpia pràctica dels esports extrems, amb millors equipaments, major facilitat d'accés a la informació o comunicació global, entre d'altres, com en la seva difusió mitjançant xarxes socials. Una anàlisi d'aquesta tipologia, oferiria una visió sobre l'adaptació i el futur d'aquestes modalitats esportives.

El desenvolupament de les línies futures d'investigació suggerides permetrien superar algunes de les limitacions d'aquesta tesi i, al mateix temps, contribuir a un coneixement més ampli pel que fa als esportistes extrems, enriquint així el camp de la psicologia i la sociologia amb noves perspectives sobre aquest fenomen.

7. Referències



Allman, T. L., Mittelstaedt, R. D., Martin, B., & Goldenberg, M. (2009). Exploring the motivations of base jumpers: Extreme sport enthusiasts. *Journal of Sport and Tourism*, 14(4), 229–247. <https://doi.org/10.1080/14775080903453740>

Amato, F., Moscato, V., Picariello, A., & Sperlì, G. (2017). Diffusion algorithms in multimedia social networks: A preliminary model. *Proceedings of the 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2017*, 844–851. <https://doi.org/10.1145/3110025.3116207>

Barlow, M., Woodman, T., & Hardy, L. (2013). Great expectations: Different high-risk activities satisfy different motives. *Journal of Personality and Social Psychology*, 105(3), 458-475. <https://doi.org/10.1037/a0033542>

Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191-215.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/ Henry Holt & Co.

Bauman, Z. (2000). *Liquid Modernity*. Polity Press.

Beck, U. (1998). *La sociedad del Riesgo- Hacia una nueva modernidad*. Barcelona, Buenos Aires y México: Paidós Ibérica.

Breivik, G. (2010). Trends in adventure sports in a post-modern society. *Sport in Society*, 13(2), 260-273. <https://doi.org/10.1080/17430430903522970>

Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments By Nature and Design*. Harvard University Press.

Bronfenbrenner, U. (2005). *Making human beings human: bioecological perspectives on human development*. SAGE Publications Ltd.

Bronfenbrenner, U., & Morris, P.A. (2006). The Bioecological Model of Human Gevelopment. En R.M. Lerner, *Handbook of Child Psychology, Vol. 1: Theoretical Models of Human Development** (6th ed., pp. 793-828). Wiley.

Brymer, E. (2005). *Extreme dude! A phenomenological perspective on the extreme sport experience* (Doctoral dissertation). University of Wollongong.

Brymer, E., & Schweitzer, R. (2012). Extreme sports are good for your health: A phenomenological understanding of fear and anxiety in extreme sport. *Journal of Health Psychology*, 18(4), 477–487. <https://doi.org/10.1177/1359105312446770>

Brymer, E., & Schweitzer, R. (2013). The search for freedom in extreme sports: A phenomenological exploration. *Psychology of Sport and Exercise*, 14(6), 865–873. <https://doi.org/10.1016/j.psychsport.2013.07.004>

Brymer, E., & Schweitzer, R. D. (2017). Evoking the ineffable: The phenomenology of extreme sports. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1), 63-74.

Cajina-Guedeat, M., & Reyes-Bossio, M. (2021). Subjective Emotional Experience in Extreme Sports Participants: A Qualitative Study. *Experiência Emocional Subjetiva em Atletas Extremos: Um Estudo Qualitativo*. *Cuadernos de Psicología Del Deporte*, 21(1), 01-17. <https://doi.org/10.6018/CPD.418141>

Castanier, C., Scanff, C. Le, & Woodman, T. (2010). Beyond Sensation Seeking: Affect Regulation as a Framework for Predicting Risk-Taking Behaviors in High-Risk Sport. *Journal of Sport & Exercise Psychology*, 32, 731–738.

Cavalli-Sforza, L. L. (2000). **Genes, peoples, and languages**. North Point Press.

Clough, P., Mackenzie, S. H., Mallabon, L., & Brymer, E. (2016). Adventurous Physical Activity Environments: A Mainstream Intervention for Mental Health. *Sports Medicine*, 46, 963-968. <https://doi.org/10.1007/s40279-016-0503-3>

Coates, J., Clayton, B. & Humberstone, B. (2010). Reflecting the Sky: The Interdisciplinary Nature of Skyrunning. *Journal of Outdoor Recreation and Tourism*.

Cohen, R., Baluch, B., & Duffy, J. (2018). Defining Extreme Sport: Conceptions and Misconceptions. *Frontiers in Psychology*, 9:1974. <https://doi.org/10.3389/fpsyg.2018.01974>

Crilly, N., Blackwell, F., & Clarkson, J. (2006). Graphic elicitation: Using research diagrams as interview stimuli. *Qualitative Research* 6(3), 341-366. <https://doi.org/10.1177/1468794106065007>

Dávila, G. (2006). El razonamiento inductivo y deductivo dentro del proceso investigativo en ciencias experimentales y sociales. *Laurus*, 12(6), 180–205.

Demirhan, G. (2005). Mountaineers' Risk Perception in Outdoor-Adventure Sports: a Study of Sex and Sports Experience. *Perceptual and Motor Skills*, 100(4). <https://doi.org/10.2466/PMS.100.4.1155-1160>

Farber, D. (1994). *The Age of Great Dreams: America in the 1960s*. Hill and Wang.

Fister, I., Ljubič, K., Suganthan, P. N., Perc, M., & Fister, I. (2015). Computational intelligence in sports: Challenges and opportunities within a new research domain. *Applied Mathematics and Computation*, 262, 178–186. <https://doi.org/10.1016/j.amc.2015.04.004>

Florenthal, B., & Shoham, A. (2001). The impact of persuasive information on changes in attitude and behavioral intentions toward risky sports for arousal- seeking versus arousal-avoidance individuals. *Sport Marketing Quarterly*, 10, 83–95.

Funollet, F. (1995). Propuesta de clasificación de las actividades deportivas en el medio natural. *Apunts. Educación Física y Deportes*, 41, 124-129.

Fuster, J., & Elizalde, B. (1995). Riesgo y actividades físicas en el medio natural: un enfoque multidimensional. *Apunts: Educación Física y Deportes*, 1995(41), 94–107. Retrieved from

Garcia, T. (2018). *The Life Intense. A Modern Obsession*. Edinburgh University Press.

Guest, G., MacQueen, K., & Namey, E. (2012). *Applied thematic analysis*. Sage Publications.

Gomà-i-Freixanet, M., Martha, C., & Muro, A. (2012). Does the Sensation-Seeking trait differ among participants engaged in sports with different levels of physical risk? *Anales de Psicología*, 28(1), 223-232. <https://doi.org/hdl.handle.net/10201/26415>

Guszkowska, M., & Boldak, A. (2010). Sensation seeking in males involved. *Biology of Sport*, (January). <https://doi.org/10.5604/20831862.919331>

Hebdige, D. (1979). *Subculture: The Meaning of Style*. Routledge

Heinemann, K. (2003). *Introducción a la metodología de la investigación empírica en las ciencias del deporte*. Barcelona: Paidotribo.
<https://doi.org/10.1016/j.sbspro.2015.02.049>

Hernández, R., Fernández, C., & Baptista, P. (2014). *Metodología de la investigación* (6th ed.). México: Mc Graw Hill.

Huertas, J. (2013). Deportes Extremos en el Discurso Mediático de las Sociedades Contemporáneas. *Lúdica Pedagógica*, 2(18), 8.
<https://doi.org/10.17227/01214128.18ludica103.110>

Hunt, J. (1996). Diving the wreck: risk and injury in sport scuba diving. *The Psychoanalytic Quarterly*, 65.
<https://doi.org/https://doi.org/10.1080/21674086.1996.11927507>

Hunt, J. (1989). *The Spirit of Adventure: A Journey Beyond the Whymper Route*. Adventure Press.

Hurtado, D. R., Jaramillo, L. G., & Ocampo, R. P. (2004). Deporte extremo como práctica social y posibilidad de adscripción identitaria en jóvenes urbanos. *Efdeportes, Revista Digital*. Retrieved from <https://www.efdeportes.com/efd73/extremo.htm>

Hutchisona, A., Johnston, L., & Breckon, J. (2010). Using QSR-NVivo to facilitate the development of a grounded theory project: An account of a worked example. *International Journal of Social Research Methodology*, 13(4), 283–302.
<https://doi.org/10.1080/13645570902996301>

Immonen, T., Brymer, E., Davids, K., Liukkonen, J., & Jaakkola, T. (2018). An ecological conceptualization of extreme sports. *Frontiers in Psychology*, 9(JUL), 1-9.
<https://doi.org/10.3389/fpsyg.2018.01274>

Inglés, E., & Puig, N. (2015). Sports management in coastal protected areas. A case study on collaborative network governance towards sustainable development. *Ocean and Coastal Management*, 118, 178–188.
<https://doi.org/10.1016/j.ocecoaman.2015.07.018>

Jack, J., & Ronan, R. (1998). Sensation seeking among high- and low-risk sports participants. *Personality and Individual Differences*, 25(6), 1063–1083.
[https://doi.org/10.1016/S0191-8869\(98\)00081-6](https://doi.org/10.1016/S0191-8869(98)00081-6)

Kajtna, T., 2013. Some psychological aspects of high-risk sports. Scientific Monography. University of Ljubljana, Ljubljana, Slovenia.

Kay, J., & Laberge, S. (2004). Mandatory equipment': Women in adventure racing. In B. Wheaton (Ed.), *Understanding Lifestyle Sports. Consumption, identity and difference* (pp. 154-174). Routledge.

Keane, M., Eastman, J. K., & Iyer, R. (2020). Predicting adventure seeking of young adults: The role of risk, innovativeness and status consumption. *Sport Management Review*, 23(5), 952-963. <https://doi.org/10.1016/j.smr.2019.12.009>

Kern, L., Geneau, A., Laforest, S., Dumas, A., Tremblay, B., Goulet, C., Barnett, T. A. (2014). Risk perception and risk-taking among skateboarders. *Safety Science*, 62, 370–375. <https://doi.org/10.1016/j.ssci.2013.08.009>

Kerr, H., & Houge Mackenzie, S. (2012). Multiple motives for participating in adventure sports. *Psychology of Sport and Exercise*, 13(5), 649-657. <https://doi.org/10.1016/j.psychsport.2012.04.002>

Klinar, P., Burnik, S., & Kajtna, T. (2017). Personality and sensation seeking in high-risk sports. *Acta Gymnica*, 47(1), 41–48. <https://doi.org/10.5507/ag.2017.005>

Kos, A., & Umek, A. (2018). *Biomechanical Biofeedback Systems and Applications*. Ljubljana, Slovenia: Springer.

Langseth, T. (2011). Risk sports - social constraints and cultural imperatives. *Sport in Society*, 14(5), 629-644. <https://doi.org/10.1080/17430437.2011.574366>

Laurendeau, J. (2006). "He Didn't Go in Doing a Skydive": Sustaining the Illusion of Control in an Edgework Activity. *Sociological Perspectives*, 49(4), 583–605. <https://doi.org/10.1525/sop.2006.49.4.583>

Laurendeau, J. (2008). "Gendered Risk Regimes": A Theoretical Consideration of Edgework and Gender. *Sociology of Sport Journal*, 25(3), 293–309. <https://doi.org/10.1123/ssj.25.3.293>

Laviolette, P. (2011). *Extreme Landscapes of Leisure: Not a Hap-Hazardous Sport*. Ashgate. London and New York: Ashgate Publishing.

Leary, M. R., & Hoyle, R. H. (2009). *Individual Differences in Social Behavior*. (G. Press, Ed.). New York.

Lewis, J. (2003). In search of the postmodern surfer: Territory, terror and masculinity. In J. Skinner, K. Gilbert, and A. Edwards (Eds.), *Some Like it Hot: The Beach as a Cultural Dimension* (pp. 58-76). Meyer & Meyer.

Lupton, D., & Tulloch, J. (2002). "Life would be pretty dull without risk": Voluntary risk-taking and its pleasures. *Health, Risk and Society*, 4(2), 113–124. <https://doi.org/10.1080/13698570220137015>

Lyng, S. (1990). Edgework: A social psychological analysis of voluntary risk-taking. *American Journal of Sociology*, 95(4), 851-886. <https://doi.org/10.1086/229379>

Lyng, S. (2005). *Edgework. The Sociology of Risk-Taking*. Routledge.

Maffesoli, M. (1996). *The Time of the Tribes: The Decline of Individualism in Mass Society*. 1 Oliver's Yard, 55 City Road, London EC1Y 1SP United Kingdom: SAGE Publications Ltd. <https://doi.org/10.4135/9781446222133>

Maguire, J. (1999). *Global Sport: Identities, Societies, Civilizations*. Polity Press.

Martin, K. A., & Leary, M. R. (2001). Self-presentational determinants of health risk behavior among college freshmen. *Psychology and Health*, 16(1), 17–27. <https://doi.org/10.1080/08870440108405487>

Mata, D. (2002). El equipo deportivo desde una perspectiva sociocultural. *Kronos*, (1), 4–9.

McEwan, K. (2016). The future of sportsmanship: A narrative expression of in-group support and respect in the postmodern sport of mountain biking. In T. Delaney (Ed.), *Sportsmanship: Multidisciplinary Perspectives* (pp. 269-280). McFarland.

McEwan, D., Boudreau, P., Curran, T., & Rhodes, R. (2019). Personality traits of high-risk sport participants: A meta-analysis. *Journal of Research in Personality*, 79, 83-93. <https://doi.org/10.1016/j.jrp.2019.02.006>

McEwan, K., & Muller, J. (2020). Cycling. In J. Nauright & S. Zipp (Eds.), *Routledge Handbook of Global Sport* (pp. 273-288). Routledge.

Midol, N., & Broyer, G. (1995). Towards an anthropological analysis of new sport cultures: The case of whiz sports in France. *Sociology of Sport Journal*, 12, 204-212. <https://doi.org/10.1123/ssj.12.2.204>

Monasterio, E., Alamri, Y. A., & Mei-Dan, O. (2014). Personality characteristics in a population of mountain climbers. *Wilderness and Environmental Medicine*, 25(2), 214–219. <https://doi.org/10.1016/j.wem.2013.12.028>

Monasterio, E., & Mei-Dan, O. (2013). Risk and severity of injury in a population of BASE jumpers. *New Zealand Medical Journal*, 126, 18-26.

Monasterio, E., Mei-Dan, O., Hackney, C., Lane, R., Zwir, I., Rozsa, S., & Cloninger, R. (2016). Stress reactivity and personality in extreme sport athletes: The psychobiology of BASE jumpers. *Physiology and Behavior*, 167, 289–297. <https://doi.org/10.1016/j.physbeh.2016.09.025>

Montero, I., & León, O. G. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology*, 7(3), 847-862.

Müller, A. (2012). Wenn Sporttreiben extrem gefährlich wird – ein philosophischer Blick auf die Todesnahe im Sport. *Sport Orthopädie Traumatologie*, 81, 79–81. <https://doi.org/10.1016/j.orthtr.2012.02.009>

Ness, S. (2022). Like a shark in the ocean: the semiotics of extreme precarity in Joshua Tree rock climbing. *Semiotica*, 248, 209-226. <https://doi.org/10.1515/sem-2022-0074>

Nicholson, N., Soane, E., Fenton-O'Creevy, M., & Willman, P. (2005). Personality and domain-specific risk taking. *Journal of Risk Research*, 8(2), 157–176. <https://doi.org/10.1080/1366987032000123856>

Ntoumanis, N., Vazou, S., & Duda, L. (2007). Peer-Created Motivational Climate. *Social Psychology in Sport*. <https://doi.org/10.5040/9781492595878.ch-011>.

Olivera, J. & Olivera, A. (2016). Adventure Physical Activities in Nature (APAN): Review of the Taxonomy (1995-2015) and Tables for Classification and Identification of Practices. *Apunts. Educación Física y Deportes*, 124, 53-88. [https://doi.org/10.5672/apunts.2014-0983.es.\(2016/2\).124.06](https://doi.org/10.5672/apunts.2014-0983.es.(2016/2).124.06)

Palmer, C. (2004). Death, danger and the selling of risk in adventure sports. In B. Wheaton (Ed.), *Understanding Lifestyle Sport: Consumption, Identity and Difference* (pp. 55-69). Routledge.

Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. In P. Atkinson, S. Delamont, A. Cernat, J. W. Sakshaug, & R. A. Williams (Eds.), Sage research methods foundations. Sage.

Pereira, A. L. (2009). Sport and risk: the case of high-altitude climbing Sport and risk: the case of high-altitude climbing. *European Journal for Sport and Society*, 6 (2), 167-178. <https://doi.org/10.1080/16138171.2009.11687836>

Puig, N., & Vilanova, A. (2011). Positive functions of emotions in achievement sports. *Research Quarterly for Exercise and Sport*, 82(2), 334-344. <https://doi.org/10.1080/02701367.2011.10599761>

Rinehart, R. E., & Sydnor, S. (2003). *To the Extreme. Alternative Sports Inside and Out*. New York Press, Albany: State University of New York Press.

Robinson, V. (2008). *Everyday Masculinities and Extreme Sport. Male Identity and Rock Climbing*. Berg.

Rojek, C. (1999). *Loisir déviant: Formes envahissante, méphitique ou Sauvage*. *Loisir et Societe*, 22(1), 21. <https://doi.org/10.1080/07053436.1999.10715574>

Rosa, H. (2010). *Alienation and Acceleration: Towards a Critical Theory of Late-Modern Temporality*. NSU Press Publications.

Salinas, P., & Cárdenas, M. (2009). *Métodos de investigación social*. Quito - Ecuador: Quipus. Retrieved from <https://biblio.flacsoandes.edu.ec/catalog/resGet.php?resId=55376>

Sánchez, P. A., Leo, F. M., Sánchez, D., Amado, D., & García, T. (2012). Influence of environment on persistence in the sport physical activity. *Cuadernos de Psicología Del Deporte*, 12(1), 17–24.

Scarpi, D., Pizzi, G., Raggiotto, F. y Mason, M. (2018). Un análisis cualitativo comparativo (QCA) de la satisfacción hacia los eventos deportivos extremos. *Revista de marketing de Australasia (AMJ)*, 26 (4), 358–368. <https://doi.org/10.1016/j.ausmj.2018.09.003>

Sky, M. (2001). *The influence of media marketing in the intrinsic culture of 'extreme' sport* (B. Sc. Thesis). University of Surrey Roehampton.

Smith, R. E., Smoll, F. L., & Cumming, S. P. (2007). Effects of a motivational climate intervention for coaches on young athletes' sport performance anxiety. *Journal of Sport and Exercise Psychology*, 29(1), 39–59. <https://doi.org/10.1123/jsep.29.1.39>

Soreide, K., Ellingsen, C. L., & Knutson, V. (2007). How dangerous is BASE jumping? An analysis of adverse events in 20,850 jumps from the Kjerag Massif, Norway. *Journal of Trauma and Acute Care Surgery*, 62(4), 1113-1117.

Sparkes, A., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: from process to product* /Andrew C. Sparkes and Brett Smith. Taylor & Francis.

Stringer, C. (2000). Coasting out of Africa. *Nature*, 405(6782), 24-27.

Torrico, E., Santín, C., Andrés, M., & López, M. J. (2002). El modelo ecológico de Bronfrenbrenner como marco teórico de la Psicooncología. *Anales de Psicología*, 18, 45–59.

Tracy, S.J., 2010. Qualitative quality: eight a "big-tent" criteria for excellent qualitative research. *Qual. Inq.* 16 (10), 837–851.

Vande Vliet, È., & Inglés, E. (2021). Decision-making by extreme athletes: the influence of their social circle. *Heliyon*, 7(1). <https://doi.org/10.1016/j.heliyon.2021.e06067>

Vasilachis, I. (2009). Los fundamentos ontológicos y epistemológicos. *Forum Qualitative Social Research*, 10(2), 1–26. Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/1299/2779>

Weiss, M., Amorose, A., & Wilko, A. (2009). Coaching behaviors, motivational climate, and psychosocial outcomes among female adolescent athletes. *Pediatric Exercise Science*, 21(4), 475–492. <https://doi.org/10.1123/pes.21.4.475>

Wheaton, B. (2004a). Introduction. Mapping the lifestyle sport-scape. In B. Wheaton (Ed.), *Understanding Lifestyle Sport: Consumption, Identity and Difference* (pp. 1-28). Routledge.

Wheaton, B. (2004b). *Understanding Lifestyle Sport: Consumption, Identity and Difference*. Routledge.

Wheaton, B. (2013). *The Cultural Politics of Lifestyle Sports*. Routledge.

Woodman, T., Hardy, L., Barlow, M., & Le Scanff, C. (2010). Motives for participation in prolonged engagement high-risk sports: An agentic emotion regulation perspective. *Psychology of Sport and Exercise*, 11(5), 345–352. <https://doi.org/10.1016/j.psychsport.2010.04.002>

Zuckerman, M. (1979). *Sensation Seeking: Beyond the Optimal Level of Arousal*. Erlbaum, Hillsdale, NJ.

Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation seeking*. Cambridge University Press.

Zuckerman, M., & Kuhlman, D. M. (2000). Personality and risk-taking: Common biosocial factors. *Journal of Personality*, 68(6), 999–1029. <https://doi.org/10.1111/1467-6494.00124>

Zuckerman, M. (2007). *Sensation seeking and risky behavior*. American Psychological Association.

8. Anexos



8.1 Comitè ètic pel tractament de dades

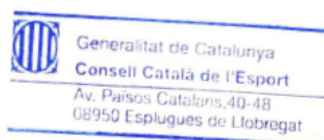


DR. RAMON BALIUS MATAS,
ACTING AS SECRETARY OF THE ETHICS COMMITTEE
FOR CLINICAL RESEARCH
OF THE CATALAN SPORTS COUNCIL.

CERTIFIES

At the meeting on 15 December 2020, the Ethics Committee agreed to favorably assess the project presented by Èric Vande Vliet Gómez PhD, Susanna Soler Prat PhD and Dr. Eduard Inglés Yuba PhD, number 28/CEICGC/2020, entitled "La influència de l'entorn social pròxim en esportistes extrems: de la construcció a l'assumpció de risc vital".

We note this favorable assessment for the appropriate purposes.



Dr. Ramon Balius Matas
Esplugues de Llobregat, 15 December 2020

8.2 Guia d'entrevista Estudi I

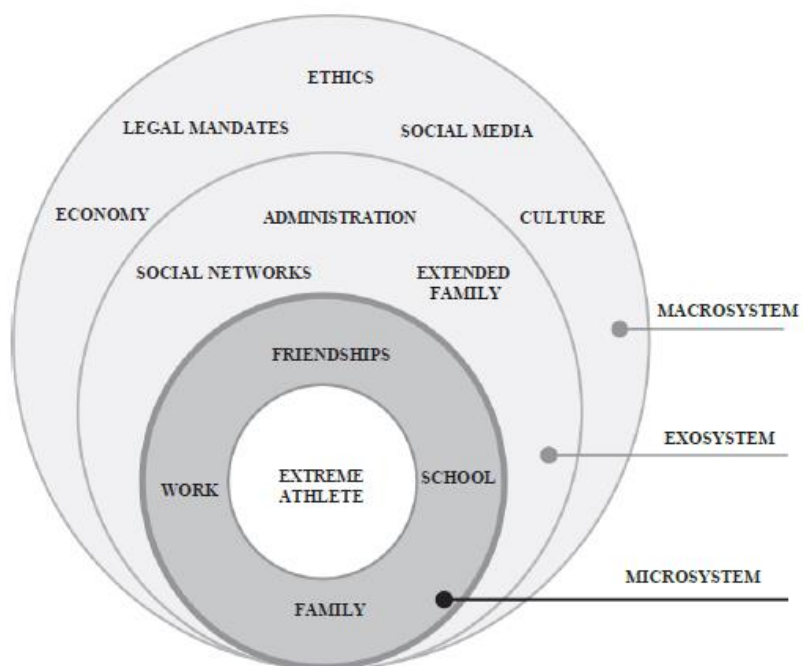


Figure 1. Adaptation of social ecological model of Bronfenbrenner for extreme athletes. Agents from the microsystem, exosystem and macrosystem.

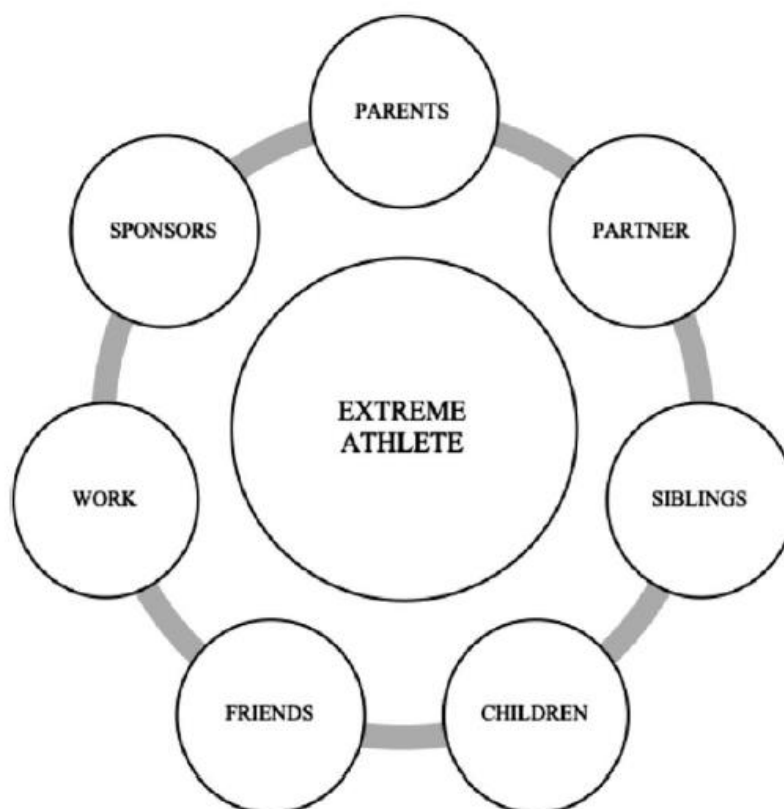


Figure 2. Microsystem. Significant others of social circle of extreme athletes.

8.3 Guia d'entrevista Estudi II



8.4 Sol·licitud d'entrevista

SOL·LICITUD D' ENTREVISTA

El meu nom és Èric Vande Vliet Gómez i estic cursant el primer any del programa de Doctorat Activitat Física, Educació Física i Esport HDK02 a l'INEFC de Barcelona.

Estic elaborant la investigació sota la tutorització del doctor Eduard Inglés, membre del Grup d'Investigació Social i Educativa de l'Activitat Física i l'Esport (GISEAFE) de l'INEFC de Barcelona. Aquest estudi forma part d'un projecte de recerca que tracta d'analitzar els esports extrems al medi natural des d'una vessant psicosocial. L'objectiu de l'estudi és entendre la influència de l'entorn social de l'esportista en la pràctica d'aquest tipus d'activitats i en l'exposició a situacions de risc.

T'envio aquest correu amb la intenció de poder **concertar una cita** per tal de dur a terme una entrevista cara a cara d'una duració aproximada d'entre 30 minuts i una hora. Per tal de seguir el calendari previst ens seria de molta utilitat poder realitzar l'entrevista durant el mes d'abril, si et fos possible. Evidentment, garantirem la confidencialitat de les respostes en la redacció dels resultats del treball.

Et deixo el meu telèfon per si desitges contactar-me més directament per poder concertar el dia, hora i lloc de l'entrevista o per si vols comentar amb més detall els objectius de l'estudi.

Èric Vande Vliet: 685010744

Moltes gràcies per la teva col·laboració.

Cordialment,

Èric Vande Vliet Gómez
Eduard Inglés Yuba



8.5 Consentiment informat

Consentiment informat

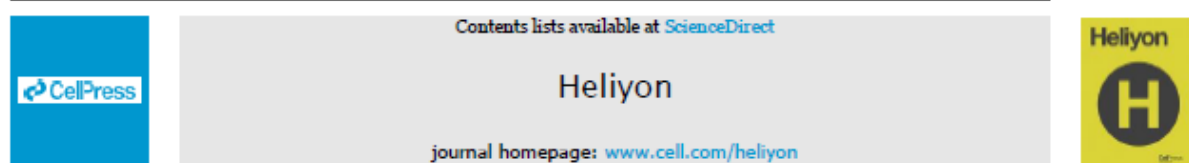
Éric Vande Vliet Gómez, estudiant del Programa de Doctorat HDK02 "Activitat Física, Educació Física i Esport", amb DNI 78098832D, i Dr. Eduard Inglés, amb DNI 46756165V, Sotsdirector de l'Institut Nacional d'Educació Física de Catalunya (INEFC) i membre del Grup d'investigació Social i Educativa de l'Activitat Física i l'Esport (GISEAFE, 2017, SGR 1162), havent manifestat el seu disseny d'obtenir dades relatives a la influència de l'entorn social proper als esportistes extrems, assumeixen els següents en virtut del present document, i en relació amb la obtinguda a través de la informació personal i la seva gravació en àudio. La persona entrevistada, accepta ser entrevistada i registrada en compliment dels següents compromisos per part de la investigadora:

- 1) A tractar les dades amb finalitats exclusives d'investigació
- 2) Exercir el dret de cancel·lació de dades, o quan la persona entrevistada ho consideri oportú i assegui, s'haurà d'interrompre el tractament de les dades cedides, que seran esborrats.
- 3) Qualsevol tractament de les dades que no s'ajusti a la finalitat per a la qual són cedits, serà responsabilitat excusa de la persona signant, que respon ràpid a tercers i davant la pitjor entrevistada sense perjudicis dels danys i perjudicis que es puguin generar.
- 4) La persona signant es compromet a aplicar a les dades les mesures de seguretat previstes a la Llei Orgànica 3/2018, de 5 de setembre, de Protecció de Dades Personals i garantia dels drets digitals.
- 5) La persona signant no realitzarà, en cap cas, una cessió de les dades proporcionades.

Signatura de conformitat

Éric Vande Vliet Gómez Personal Investigador INEFC Contacte: 685010744 evandevliet@gencat.cat	Persona entrevistada Nom: Cognoms:

Lloc: _____, a _____ de _____ de 20__



Research article

Decision-making by extreme athletes: the influence of their social circle

Éric Vande Vliet^a, Eduard Inglés^{a,b,*}^a Institut Nacional d'Educació Física de Catalunya (INEFC), Universitat de Barcelona (UB)^b GISEAFE (Grup d'Investigació Social i Educativa de l'Activitat Física i l'Esport)

ARTICLE INFO

Keywords:

Influence

Extreme sports

Risk

Social circle

ABSTRACT

We explored the influence of the social circle on decision-making in regard to risk by 13 extreme athletes from different sports (Free solo climbing, Base-jumping, Longboarding, Solo seafaring, Alpinism, Extreme skiing, Extreme kayaking), all considered extreme due to the high risk of injury or death during practice. In-depth qualitative interviews were conducted with each participant individually in order to determine the influence of members of their social circle (parents, children, partner, friends, etc) on their behaviour. Our results show that their influence is insufficient to substantially modify the practice of extreme sport or the exposure to extreme risk or to lead them to give up their sport. Friends linked to extreme sports are the only ones capable of understanding and promoting these practices. The influence of the rest of the agents will go in the direction of reducing risk taking. The passion for thrill-seeking activities is what imbues the lives of extreme athletes with meaning and this passion is broadly immune to influences from their immediate social circle.

1. Introduction

Recent years have seen an exponential increase in the practice of sports involving extreme risk (Brymer and Schweitzer, 2013; Florenthal and Shoham, 2001; Mata, 2002). Experiencing new sensations, breaking with routine, enhancing self-control capacities and pushing one's limits (Kern et al., 2014) are becoming highly attractive to many people who, as a consequence of practising extreme sports, are exposed to greater risk (Allman et al., 2009).

In the 1990s, the German sociologist Ulrich Beck affirmed that our lives unfold in a 'risk society' (Beck, 1998). The fact of facing and overcoming the various dangers we naturally live with allows us as individuals and our society to advance. In extreme sports, however, individuals deliberately seek out extreme situations and challenges and, in the drive to achieve a goal or a reward, seek to live new experiences (Allman et al., 2009).

The current trend in the relentless search for thrills is to renounce safety elements (harnesses, ropes, etc) and so explore the limit of one's abilities at the risk of making a mistake that could prove fatal (Huertas, 2013). The extreme athlete, on the basis of practice, acquires experience and confidence, which, in turn, gradually reduces the perception of risk. This subjective assessment of risk results in an underestimation of objective risk (Demirhan, 2005).

A number of studies have explored the psychological profiles of extreme sportspeople in depth in order to establish classifications and categorizations. Monasterio et al. (2016), for instance, studied the relationship between personality types, traits and stress levels in extreme sportspeople. Zuckerman (2007), from another perspective, linked the desire to experience danger and to push one's limits to socialization processes and sometimes to a need for rewards.

Today's society admires and values people who leave their comfort zone (Laurendeau, 2006), considering them heroes with extraordinary capacities and abilities (Pereira, 2009). Risk behaviours are positively reinforced by the social admiration and are inspired by extreme practices. "Thus, multimedia objects assume a key role due to the fact that they are an effective medium, permitting users to easily interact among them" (Amato et al., 2017, p.844). Social networks positively reinforce and provide feedback on risky behaviours (Huertas, 2013). To determine possible influences on individuals exposure to the risk posed by extreme activities, numerous studies have analysed the sociological profiles of extreme athletes in an endeavour to identify what motivates them to face enormous risks and to determine whether the motivations arise in the individual or have a social origin (Zuckerman, 1979); this endeavour has included analysing social factors such as partners, immediate family, friends and communication and social media (Bronfenbrenner, 2005).

While there has been a proliferation of psychological profiling studies of extreme athletes in recent years, lacking is a scientific analysis of their

* Corresponding author.

E-mail address: eduard.ingles@gencat.cat (E. Inglés).

<https://doi.org/10.1016/j.heliyon.2021.e06067>

Received 25 September 2020; Received in revised form 29 November 2020; Accepted 19 January 2021

2405-8440/© 2021 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

socio-personal profiles. With the aim of understanding relationships between extreme athletes and the people closest to them, we explore the socio-personal settings of thrill-seekers who practise sports or other activities in conditions of great difficulty and/or in non-existent, reduced or highly debatable safety conditions.

This empirical study was inspired by various questions raised in previous analyses (Hunt, 1996; Martin and Leary, 2001; Nicholson, Soane, Fenton-O'Creevy and Willman, 2005), as follows: How is it possible that the people closest to an extreme athlete do not manage to make them desist from the risky activity? Do extreme athletes have an inappropriate perception of fear or an excessive love of pleasure? Does having children change the behaviour of extreme athletes in relation to the assumed risk? Could empathy with significant others who show fear and pain at the possibility of an accident be a factor in making people rethink their extreme risk activities?

It seems indisputable that, in relation to the personal decision to assume risk (Huertas, 2013), people close to the athlete might exert some influence on their decisions regarding extreme risk activities. This study tries to respond to the above questions by analysing the perceptions of extreme athletes themselves. Thus, the objective of the study was to determine how the immediate social circle of the extreme athlete influences their behaviour and their decisions regarding extreme risk activities.

2. Theoretical perspective

2.1. Extreme sports

High-risk or extreme sports are defined as sports that require extraordinary skills and courage and a capacity to act in situations implying a great risk for health and even of death. (Guszkowska and Boldak, 2010), i.e., dangerous activities that involve exposure to physical danger (Klinar et al., 2017). In categorizing the degree of risk associated with certain sports, Gomà-i-Freixanet et al. (2012) state that high-risk sports are those considered to imply a high probability of serious injury or death when practised. They include activities such as climbing, paragliding, caving, white-water rafting, alpine mountaineering, extreme kayaking, diving, ski jumping, parachuting, downhill skiing, mountain biking, and snowboarding (Kajtna, 2013).

People who seek risk in any area of life are driven by the need to constantly experience new, complex and varied sensations (Leary and Hoyle, 2009). Extreme athletes, as seekers of thrills, feel a greater than normal need for stimuli. This need may be a strategy to redirect attention away from their low self-esteem (Woodman et al., 2010), to divert attention from the psychological root causes of negative emotions (Castanier et al., 2010), or to self-regulate emotions (Klinar et al., 2017).

Although the emotional preferences of extreme athletes share common features, not all athletes can be analysed in the same way, since each extreme sports discipline has its own differentiating characteristics (Barlow et al., 2013). For instance, parachutists enjoy the sensation of free falling, while high-altitude alpine mountaineers, in contrast, enjoy being in control when dealing with uncertainty, whether it is over their feelings, actions or decisions (Monasterio et al., 2014).

2.2. Thrill-seeking through extreme sports

Marvin Zuckerman is the psychologist who has probably had most influence on studies of risk taking, as his Sensation Seeking Scale (SSS-V) and his theory of sensation seeking (Zuckerman, 1994) have inspired many research papers. Brymer and Schweitzer (2012) have compiled analytical frameworks from studies of the motivations of extreme athletes from the perspectives of sensations (Zuckerman and Kuhlman, 2000) psychoanalysis (Hunt, 1996) and neo-tribes and subcultures (Maffesoli, 1996).

Leaving aside the conditioning factors of the environment and the psychosocial profile of each individual, another issue is how extreme

athletes face fear. Brymer and Schweitzer (2012) pointed out that "extreme sports participants perceive the experience of fear as an essential element to their survival" (p.481), with each participant determining their limits according to their own subjective perceptions of the risk to which they are exposed (Laurendeau, 2008).

2.3. Extreme sports: from seeking thrills to dicing with death

Previous studies from perspectives as diverse as philosophy defy social perceptions of extreme athletes as "crazy". Existential philosophers conceive of risk sports as "part of the modern art of living" (Müller, 2012, p.80) and of extreme athletes as artists capable of producing works of art. Psychologists try to understand the personal motivations that lead to the assumption of risk (Jack and Ronan, 1998), while sociologists like Beck (1998) try to understand the great influence exerted by the social environment on human behaviour.

Gomà-i-Freixanet et al. (2012), in an exhaustive review of 27 articles based on empirical data collected on athletes exposed to great physical risk, reported that these individuals enjoy extreme environments and stimulation of the mind and senses through extremes, whether of heights, depths, speeds, light, dark, or weather. Also documented was the fact that these individuals seek new experiences, are intolerant of repetitive experiences, and invariably have low anxiety levels. Those qualities do not interfere with the demanding requirements for concentration and control required for extreme sports. The study concluded by defining the social profile of this type of athlete as unconventional, even as they respect social rules and are well socialized, because, after all, many high-risk sports (e.g., alpinism, climbing, speleology, parachuting) are practised in small groups. One's behaviour may therefore impinge on others in the group and one's life might even depend on the companionship and loyalty of the group members (Gomà-i-Freixanet et al., 2012).

2.4. Psychosocial determinants influencing decision-making

The psychosocial profile of a person is drawn on the basis of the numerous interactions that occur in their daily life, according to Bronfenbrenner's social ecological model (1979). Human development is the ongoing accommodation of an active human being to their immediate and changing surroundings (Torricio et al., 2002). Bronfenbrenner's model reflects a set of systems that interrelate and interact with each other (Figure 1):

- *Microsystem*. This encompasses the participant's most immediate circle, including family, friends, school and work colleagues, etc.
- *Exosystem*. This refers to two or more interrelated and interacting environments in which the participant is immersed.
- *Macrosystem*. This overarching system includes cultural, historical and religious factors associated with the society in which the participant belongs.

Bronfenbrenner's model suggests that what is essential is how the person perceives the environment more than how they exist in objective reality (Fuster and Elizalde, 1995). The psychosocial profile of an extreme athlete is drawn from their daily interactions with the agents in their environment, but, above all, from the perceptions and interpretations of those interactions by the selfsame individual. In the case of more extreme athletes, influences from the macrosystem and exosystem, reflecting public opinion from the general social environment, may be less direct; as one example, Lupton and Tulloch (2002) conclude that Australian society's perceptions of risk associated with BASE-jumping is positive, because this activity involves values such as overcoming difficulties, commitment, and emotional control. Such perceptions could suppose positive reinforcement for the extreme athlete that would affect their development and their decisions.

It is the social agents in the microsystem, however, who will have the greatest influence on decisions made by extreme athletes. Those referred

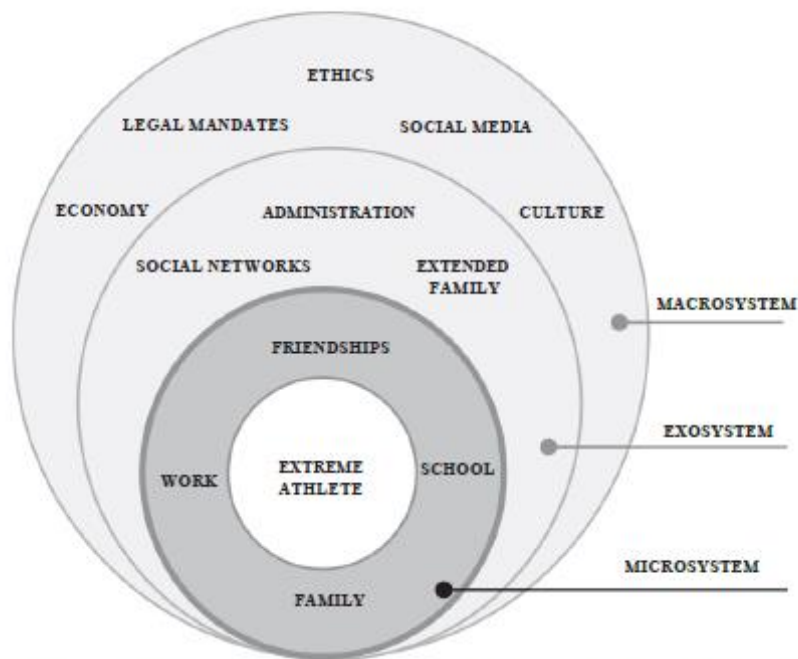


Figure 1. Adaptation of social ecological model of Bronfenbrenner for extreme athletes. Agents from the microsystem, exosystem and macrosystem.

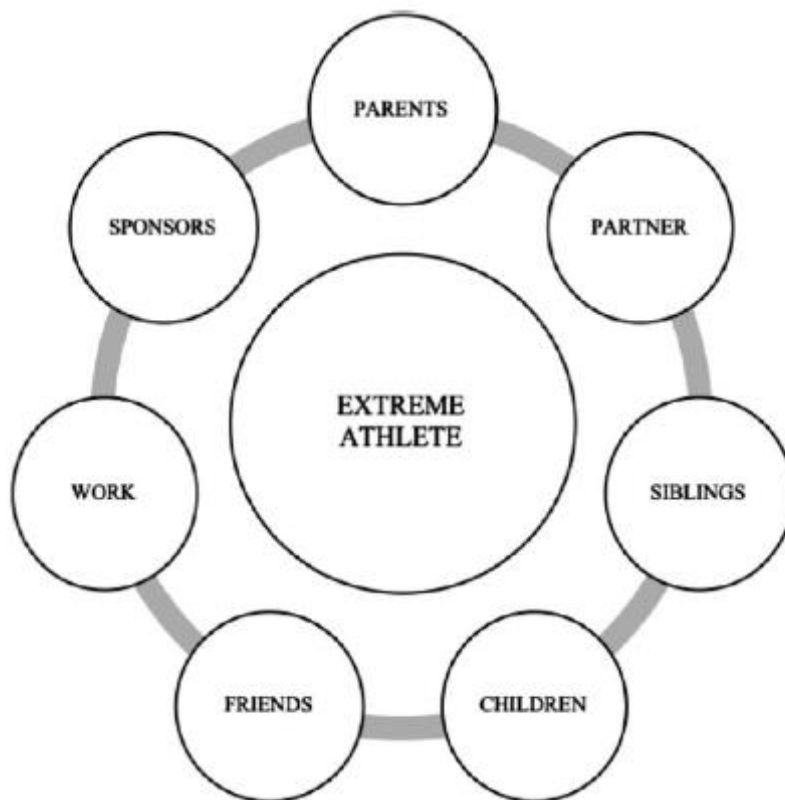


Figure 2. Microsystem. Significant others of social circle of extreme athletes.

Table 1. Identification and classification of the participants. Sociodemographics and extreme sport practiced.

Interviewed subjects						
Code	Age	Sex	Children	Marital status	Profession	Activity
S1	42	Man	No	Single	Teacher	Free solo climbing
S2	26	Woman	No	Single	Student	BASE-jumping
S3	25	Man	No	Single	Doctor	Longboarding
S4	45	Man	Si	Single	Mountain guide	Solo seafaring
S5	65	Man	Si	Single	Mountain guide	Alpinism
S6	47	Man	Si	Single	Industrial	Alpinism
S7	56	Man	Si	Married	Computer scientist	Alpinism/free solo climbing
S8	35	Man	No	Single	Fireman	BASE-jumping/free solo climbing
S9	43	Man	Si	Single	Nurse	Free solo climbing
S10	27	Woman	No	Single	Mountain guide	Extreme skiing
S11	50	Man	Si	Couple	Teacher	Alpinism/extreme skiing/free solo climbing
S12	50	Woman	Si	Single	Elite athlete	Alpinism
S13	29	Man	No	Single	Teacher	Extreme kayaking

to as significant others (Ntoumanis et al., 2007) are the persons closest to the participant and making up their social circle, i.e., family, friends, school and work colleagues, coaches, sports colleagues, sponsors, etc. (Figure 2) The agents in this circle are frequently or continuously interacting with each other as they typically share spaces and experiences that further shape the behaviour and development of the extreme athlete and that configure their psychosocial profile over time.

Each significant other will play a different role and will affect to different degrees the construction of the psychosocial profile of the extreme athlete and, consequently, their decisions in general, and risk-taking decisions in particular. As demonstrated elsewhere (Sánchez et al., 2012) “the immediate social circle containing parents, coaches, teachers, colleagues ... of the young athlete play a key role in the acquisition of healthy habits and adaptive behaviours” (p.17).

3. Method

3.1. Ontology and epistemology

This study, based on a qualitative analysis, adopts an interpretivist ontological stance, since the social perceptions of extreme athletes draw on different subjective realities (Vasilachis, 2009). Also adopted is a subjectivist and constructivist epistemological approach, since we understand that values both from researcher and interviewees can influence and shape what is understood and interpreted (Sparkes and Smith, 2014).

3.2. Participants

The study sample was composed of 13 professional and amateur athletes (10 men and 3 women), aged 25–65 years (mean 42 years, standard deviation 12.49 years), all regular practitioners of extreme sports. Inclusion criteria were as follows: (1) to actively practice extreme sports; (2) to have more experience than the average casual athletes (3) to perform activities considered to place them at extreme risk (Gomà-i-Freixanet et al., 2012). Participants can be considered of medium socioeconomic status, born and living in the Western lifestyle, and practice extreme sports as a hobby. The extreme sports represented (Table 1) were BASE-jumping ($n = 2$), extreme skiing ($n = 2$), extreme kayaking ($n = 1$), free solo climbing (without ropes) ($n = 5$), alpinism (extreme mountaineering) ($n = 5$), Longboarding ($n = 1$) and solo seafaring ($n = 1$). In some cases, the athletes practised more than one of those extreme sports.

3.3. Instrument and procedure

This descriptive study with a cross-sectional design (Montero & León, 2007) was methodologically based on the qualitative non-standardized face-to-face interview. Unlike the traditional methodology, which uses standardized interviews for data collection, limiting the range of responses, a qualitative methodology has been used. Unstructured interviews allow us to delve into more personal aspects of the subjects, giving freedom and fluidity to their stories. (Hernández et al., 2014). A schematic in-depth interview guide was designed with the aim of encouraging the participants to express themselves by addressing the issues in question (Figures 1 and 2).

This approach ensured a high degree of flexibility and freedom in responses and allowed the interviewee to play a leading role in the conversation (Heinemann, 2003).

By agreement with each participant, interviews were recorded. Each interview consisted of an initial icebreaker in the form of the following question: “When was the last time you found yourself in a situation that you considered to imply risk?” After this initial prompt, the interview continued along the lines laid down by a graphic interview guide (Inglés and Puig, 2015), aimed at uncovering the influence of persons in the immediate social circle on extreme athletes and the risk activities they participate in.

Interviews were recorded, using a conventional recording system, transcribed and encoded using QSR NVivo 12 assisted qualitative data analysis software (Hutchinson et al., 2010) for subsequent content analysis. The data were categorized according to the classification proposed in Bronfenbrenner's social ecological model (1979).

Participants were contacted individually by email and the purpose of the research was explained along with ethical and logistical aspects. The median (M) duration of the interviews was 43 min with a standard deviation (SD) of 14. Interviews took place in different venues according to the preferences and possibilities of the participants. Before beginning the interviews, participants were reminded of the purpose of the study and were guaranteed the confidentiality of the data and its treatment. Participants then read and signed informed consent documents. After the interviews, the recordings were transcribed verbatim.

3.4. Data analysis

Data analysis, which was both deductive and inductive, took place in stages as follows:

1. Familiarization with the data through reading of the interview transcripts.
2. Design of an initial coding proposal based on Bronfenbrenner's social ecological model (1979) using QSR NVivo software.
3. Deductive organization of the data in six predefined categories: parents, partner siblings, children, friends, job.
4. Re-reading of the resulting initial structured data and code modification using inductive analysis (Dávila, 2006). The category "professional" was divided into two different subcategories: work and sponsors.
5. Data review and grouping into the seven resulting thematic areas: parents, partner siblings, children, friends, work and sponsors.
6. Research report.

3.5. Criteria for excellent qualitative research

This work has followed the eight criteria proposed by Tracy (2010) for excellence in qualitative research: a) *Worthy topic*: the subject of this study is considered relevant since extreme sports have recently suffered a significant increase (Brymer and Schweitzer, 2013) and there is little research in the psychosocial field; b) *Rich rigor*: this study has been based on theories with recognized foundation and rigor, such as Bronfenbrenner's Ecological Theory or Zuckerman's sensation seeking, among others used in different fields of research; c) *Sincerity*: the research is marked by honesty and transparency in the collection and treatment of data exclusively extracted from the interviewees, without any manipulation or influence on the interpretation by the interviewer; d) *Credibility*: the methods used to obtain and treat the results allow the reliability of the study. Results are also shown extensively and with textual citations to highlight the credibility of this research; e) *Resonance*: simple language is used in the writing of the study so that it is understandable for any reader unfamiliar with extreme sports, generating empathy and interest in its content; f) *Significant contribution*: the research contributes to new knowledge in the psychosocial field of extreme sports and generates new incentives for future studies; g) *Ethics*: The ethical principle has prevailed throughout the entire investigation process, being endorsed by the Ethical Investigation Committee of the Sports Administration of Catalonia (28/CEICGC/2020); h) *Meaningful coherence*: the principle of coherence is based on rigorous work with the use of resources and techniques, in this case non-standardized interviews, adapted to the purpose of this research with the aim of delving into the psychosocial aspect of athletes extremes.

3.6. Ethics statement

The studies involving human participants were reviewed and approved by the Comité d'Ètica d'Investigacions Clíniques de l'Administració de Catalunya (28/CEICGC/2020). The participants provided their written informed consent to participate in this study.

4. Results

The results underline different levels of influence by the significant others in the extreme athlete's microsystem, providing evidence of the variability between them. Based on extreme athletes' self-perception, the capacity of influence of the significant others of their own social circle is analysed. Results are shown by the use of captions from the unstructured in-depth interviews with each of the participants. Thus, light is shed to our initial questions by the use of qualitative data empirically found, as follows.

4.1. Parents

All the interviewees agreed that their parents' influence over them was not enough to modify any of their decisions regarding the practice of extreme sports.

For eight of the athletes the father or mother or both were sports-people themselves who introduced their offspring to outdoor sea or mountain activities: "At home, mountains were always very present and when I was little I was taken trekking and skiing" (S8); "I started mountaineering because of my father and school" (S6). For the remaining five interviewees, the parents did not practice sports and so did not exert any direct influence in this regard. S13 explained that "at the family level, there was no history of practising sport" and, along the same lines, S7 stated that "in my closest family circle, no one had ever done this activity." None of the interviewees had a parent who had practised the same extreme activity.

The general opinion, shared by most of the participants, was that mothers more than fathers were more concerned and afraid of the extreme risk practices of their offspring. In some reflections regarding their childhood and youth, the interviewees reported having deceived their parents in that they chose not to explain anything in much detail or only after it was done: "My mother doesn't know a thing, because she would worry a lot; when it's done, then she finds out" (S4). S5 explained: "It was my mother who first took me to the mountains. But I always told her that I was just going on an excursion, no matter whether it was Everest, K2 or a trek near home, it was always an excursion and that was that." In many cases, while parents would prefer that their offspring did not assume risks, they accepted the decision: "For sure no family would like for their child to do this activity, but it is respected" (S2). Two of the interviewees, S12 and S7, have experienced the deaths of family members in alpine mountaineering and climbing activities. Even so, the fact that they have carried on suggests that this did not lead them to cut back or give up on their own activity. In referring to critical moments in lived extreme situations implying a risk to life, none of the interviewees said they thought of their parents, affirming that they focused solely on resolving the risk situation.

4.2. Partner

The eight interviewees who had a partner at the time of the study affirmed that they were not influenced by this significant other in reference to their extreme activity. For all the interviewees, the fact of having a partner does not lead them to consider reducing risk to any degree, never mind giving up altogether. The partnered interviewees recognized that their partner accepted and respected both their activity and their attitude, emphasizing that they felt very free to do as they considered best in their sports career.

Even so, in some cases, there was accommodation, i.e., an adaptation of some kind or a reduction in time spent on an activity to be able to spend more time with the partner: "My partner is my partner... I try to balance my sport with that" (S1). In cases where pressure from a partner was perceived as excessive, it was conceded that the relationship was affected: "Yes, it conditioned me; in order to spend more time together, I had to cut back on my activity. And now I am no longer with that person" (S10); "A partner must allow me to do what I have to do, I cannot commit to a person who places limits on me" (S3).

In three cases (S2, S5, S8), the partner practised the same extreme sport. This was a very important boost for the relationship, but it also implied greater concern or fear for the other. At times, it translated into greater protectiveness that was not always well received: "When he showed me, he suffered more for me as his partner than if we had not been together, but now we share projects and this reinforces our relationship and we are healthily competitive with each other" (S2).

Four of the five unpartnered athletes at the time of the study underlined that in previous relationships they had moderated their behaviours, but once the relationship ended they returned to their extreme sport with even more conviction and with a greater sense of freedom and emotional tranquillity. "Maybe now, when I don't have a partner, is when I allow myself to do a bit more than I did in my life as a couple, when I can go more my own way" (S6).

4.3. Siblings

Despite the close bond that typically exists between brothers and sisters, their influence on a sibling's practice of extreme sports is generally non-existent. Of the interviewees, nine had siblings, whose influence in childhood and adolescence, when older than the interviewee, was evident. Several interviewees mentioned a sibling as responsible for having launched them in activities in nature: "At the age of 15 years, it was with my brother that I first put on climbing shoes, but no harness or anything". None, however, indicated that they were directly introduced to extreme activities by a sibling.

Remarkable for its direct influence on one interviewee (S7) was the death of a brother at a very young age, not for sports-related reasons; according to S7: "The death led me to reflect deeply on life and death, and that gives meaning to and explains my practice of risk activities".

4.4. Children

A more protective attitude was detected for children than for the remaining significant others analysed. While their influence was perceived as greater by some of the interviewees, this was not translated into substantial behavioural changes in the athletes. Modification was generally limited only to a reduction in time spent on the extreme activity due to the need to care for children: "At the beginning, that absorbs many hours and it seems that you will have to give up on projects, but the truth is that your goal eventually comes to mind again and you do it" (S9).

In no case did children condition the level of exposure to extreme risk. One interviewee (S12), recalling a conversation with her son – "Don't go! What if you have an accident?" – reported that "the answer I gave was a reasoned explanation so that the child could understand and accept my decision, but in no case did that plea influence my decision".

Children were acknowledged to somehow always be present. S5 related, for example, that "as a tribute, I dedicated successful summits to each of my three children, because they also suffer, and I recognize that". Even so, all the interviewees affirmed that their children never substantially modified their extreme risk practices.

Switching the perspective, it was interesting to analyse interviewee thoughts about the possibility that their own children might take up an extreme sport. Several confessed that they would prefer their children to avoid high-risk activities. S7 comments: "Selfishly, I have never insisted. They do ski, they do some climbing... but for me that's enough. I've experienced the high-risk situations, and I prefer it that way." S11 explains: "While I have absolutely forbidden my son to climb without a rope, sometimes it's inevitable that he does so somewhere". In view of their children's desire to follow in their parents' footsteps, two interviewees encourage them, sharing their experience and offering advice, especially on how to act as safely as possible: "Of my two children, who both like the mountain a lot, there is one son who, without knowing it, is already a mountaineer. We see it in his relationship with the mountain, how he views it... I will try to teach him what I can from my own experience" (S11).

The five interviewees without children all agreed that if they had children, they would teach them everything they could about their sport and leave the choice to them. Regarding the influence parenthood might have on their sport, everyone felt that while it might limit the time spent on their sport, it would never lead them to consider abandoning it altogether: "If I had children, I would not stop, but I would not continue at the same level, for obvious reasons... Children would have to go to school from Monday to Friday... and this would require more stability than what I currently have in my life" (S2); "I would reduce frequency, not for fear of leaving my children fatherless, but for the time required" (S13). One of the interviewees did concede that they would be extra careful: "It is very possible that, if I had a child, I would reduce both the difficulty and the frequency somewhat" (S10).

4.5. Friends

All the interviewees classified their friends in two groups in terms of their influence. As pointed out by S7, a climber: "The mountaineering friends are mountaineering friends, and the rest are the rest" (S7). The first group, composed of other extreme athletes practising the same activity, was attributed with a great reciprocal influence, in terms of motivation and positive reinforcement, as a consequence of the shared experiences: "Friendship is everything, it is feedback, it is motivation, it is the people who are with you all the way, it also adds a healthy competitive component" (S4). As for the second group, composed of other friends, conversations about the extreme sport were usually avoided because, in most cases, those friends did not understand and maybe were even critical: "At the level of friends there are all sorts – some damn you, blame you for risking your life, while others understand it" (S9); "Most of the friends who don't do the sport see you as a weirdo; they constantly remind you that you could get hurt" (S10).

Seven of the interviewees started their activity with friends with whom they have shared many experiences, while the remaining six started out in different ways. However, all of them, once they started in their sport, considered the attachment to friends who regularly practise their sport to be very important: "My friend and the only expedition companion saved my life putting his own life at risk. He saw the stone, the fall... I have eight plates and 19 screws in my face, just to give you an idea... He was hanging there too... but fate made him come down to see if I was still alive... He kept me from death and bore with me two days... There are only two people in the world capable of doing that" (S11). The interviewees likewise recognized the great ability of these friends to influence risk-taking, whether by reducing or reinforcing it. Some affirmed that they sometimes assumed greater risk than they would have if on their own: "If he was clear about it, it was because he saw it clearly. That led me to put on the skis too. If I hadn't been with him, I swear I wouldn't have worn them!" (S11).

Most interviewees have experienced the loss of someone – a family member, close friend or acquaintance – doing their sport. All agreed that the emotional impact was great, but they saw it as temporary; in no case did misfortunes lead to the abandonment or modification of an extreme activity programme: "We have had several deaths of friends and it is true that it affects you, but, at least in our group, it does not affect us enough to stop practising" (S2); "Close friends have died climbing... it is traumatic, you have it in your head, it is as if you were seeing their photo. But at no time have I ever considered giving up" (S7).

4.6. Work

Work exerts a great influence and inevitably modifies certain decisions regarding extreme risk activities undertaken by both professional and amateur athletes. While this influence is not reflected in any change in attitude towards the sport, it does condition practice by reducing the time available or because of the issue of funding for projects.

For amateurs, work is perceived as a limiting factor, because it restricts availability. In some cases, the interviewees changed careers or jobs to mitigate this negative influence: "I left my job and hometown to dedicate myself to my sport. I looked for a new job that would allow me to earn the money I needed and to work flexible hours. I have shaped my whole life around my passion" (S2).

In other cases, the interviewees had turned their sport into a job: "Thanks to my experience in risk activities, I now have a job with a mountain rescue group" (S9). Others had become mountain guides: "I was a mountain instructor at the age of 22, and with more experience I became a guide, so I have dedicated my whole life to that" (S5). Some compete at a professional level in their respective disciplines, or work on sponsored projects that, in addition to being a motivation, often generate additional

income: "At 18 I was already competing internationally, and this has allowed me to make a living from my sport" (S13).

4.7. Sponsors

Although sponsors could initially be considered to be outside the microsystem of athletes, the interviewees' responses suggested that we should include them as a significant other given their remarkable influence: twelve of the thirteen people interviewed acknowledged having a direct and very early relationship with sponsors.

All the interviewees agreed that brands and companies that provided financial resources inevitably asked for something in return: "That conditions your projects, sometimes it forces you to modify your initial idea to adapt to a commercial strategy and, well, if you want the money, you must adapt" (S8). In most cases, the demand is for images that reflect the values of the sponsor, although some sponsors ask for good results in competitions to continue providing funds. According to S10, "the demand for results adds a lot of pressure."

Only one of the interviewees (S7) indicated that they had carried out activities using their own resources and had never sought sponsorship. Each of the remaining interviewees had experiences with sponsors, but affirmed never agreeing to carry out activities with risk additional to what they themselves were willing to assume: "However much they offer you or boost your ego, it's never worth your life" (S8); "If a brand demands too much of you in a risky situation, forget it! To risk your life for money, that's to completely prostitute your philosophy regarding whatever sport you practice" (S11).

4.8. Summary

The analyses of each class of significant other revealed that, despite differences in their personal histories, the responses of the athletes were very similar. In the case of parents, the influence ceased to be relevant once the person came of age, when the athletes decided for themselves according to their own interests. As for partners, there were differences depending on whether or not the activity was shared by the couple, although the actual impact in terms of modifying risk behaviours was practically nil. The same applied to the siblings, whose influence was likewise nil. Friends who shared the same passion had the greatest influence on the athletes, reinforcing complicities and underpinning motivations to seek new challenges; other friends were not at all influential in decisions related to the assumption of risks. As for sponsors who sought to profit from the use of spectacular images depicting risk for publicity purposes, if their demands exceeded the athlete's own perceived capacity for assuming a risk, then the latter would not assume the additional risk in exchange for money. Our findings, in summary, are that nobody in the close social circle of extreme athletes is capable of exerting sufficient influence on them to lead them to modify goals set on the basis of their own convictions.

5. Discussion

Our research has explored the influence exerted by people in the immediate social circle of athletes who practise extreme sports and the impact of affective social relationships on the athletes. Our results, pointing to the complexity of human behaviour, corroborate results reported in studies by Smith et al. (2007) and Weiss et al. (2009) which confirm that their microsystem and interpersonal relationships influence the psychosocial and motivational development of young athletes, who are susceptible to the influence of third parties, especially coaches, colleagues, and parents. In contrast, for extreme athletes there is little evidence of modified behaviours in relation to risky activities. The fact that many of their parents were sportspeople themselves seems to facilitate their comprehension on their desire of risk-taking. In the case of partners, results show that *love life* seems to be difficult with someone out from the extreme sports way of living and thinking.

The great influence of the family on decisions has been confirmed for medical scenarios in which people face death directly, due to cancer (Torricco et al., 2002). For extreme athletes, in contrast, our results show that the influence of family (parents, partner or children) is much less important than that exercised by friends, colleagues, and sponsors.

This finding corroborates the study by Hurtado et al. (2004), which concludes that the practice of risk sports enables young people to identify with others with similar interests. Our research also documents that extreme athletes, each in their modality, tend to be part of small related groups that could be considered neo-tribes (Maffesoli, 1996), with our results confirming this bond between sports colleagues. In some cases, colleagues will have experienced situations on the edge in which their lives depended on each other; as concluded by the study by Gomà-i-Freixanet et al. (2012), sometimes one's life relies on the companionship and loyalty of the group (p.228).

However, discrepancies were evident between our results and those of Hurtado et al. (2004), who affirmed that the media play an important role in extreme sports: athletes configure their identity around their sport and the consumption of the associated cultural goods. Although it is true that sponsors can give extreme athletes visibility and publicity, 90% of our interviewees did not feel influenced by them; rather, they try to make their decisions independently of sponsors and undertake their challenges thinking and away from the pressures of third parties. Any public repercussion is considered a consequence of their activity, rather than a cause.

Our results have showed and underlined different levels of influence by the significant others in the extreme athlete's microsystem and have provided evidence of the existing variability between them based on their own perception of the capacity of influence. Thus, our results have enabled us to collect a great amount of subjective information from extreme athletes, at the expense of more numerical and objective data. The possibility of using technological measurement tools, such as biofeedback, was assessed, due to the high potential of this research tool (Kos and Umek, 2018). Even so, this technology was not definitely used due to the difficulty of monitoring sensations, memories, interpersonal relationships and external influences. The possibility of applying technological systems such as computational intelligence (Fister et al., 2015) is open to future research to deepen the decision-making of extreme athletes.

6. Conclusions

We sought to respond to the questions initially raised in relation to the influence of the social circle of the extreme athlete on their behaviour and decision-making regarding maximum risk practices. Our results show how none of the significant others closest to extreme sports practitioners has enough influence to substantially modify extreme sport practices nor to condition decisions regarding the assumption of, and exposure to, extreme risk to health or life. While each significant other conditions a participant in different ways, to different degrees, and according to individual characteristics, we have been able to detect threads common to practitioners of extreme sports. They are aware of and accept that their social circle has influenced them at some point in their career, but not to the point of making them abandon their sport, reduce their exposure to risk, or modify their plans.

Extreme athletes are people who pursue, above all else, a fusion with the environment, reducing artifice as much as possible while seeking sensations of freedom, tranquillity, and mental relaxation. Their bodies and minds behave and respond in a balanced and harmonious way to achieving goals that for most may seem unattainable. Even in activities where a great deal of adrenaline is generated, extreme athletes have enormous self-control in ensuring extreme concentration and focus of all their senses on overcoming a challenge and surviving. They combine mental preparation with exhaustive physical preparation and meticulous preparatory work in such a way that it becomes difficult to label them crazy or irresponsible. Our results would suggest that extreme

sportspeople are very consistent in terms of their life philosophy, to the point that almost nothing or nobody will make them give up their convictions and intentions.

In this research, a limitation was collecting data exclusively from extreme athletes and not from significant others, as the two kinds of data would have offered a global vision of the phenomenon. Another issue was the complexity implied by delimiting the very concept of extreme risk, since it is not clear how to draw distinctions between, for instance, those who make a single annual expedition to the Himalayas versus those who regularly climb without ropes. Nonetheless, the sociological approach underlying this research suggests that the frequency of risk exposure should not affect interpretation of the results. Another limitation of our study has been the reduced size of the sample, which restricts the generalisation of the results. Even so, this qualitative study has provided a great amount of in-depth information.

Finally, because we had difficulties in recruiting women who practise extreme sports, we had insufficient empirical data to add a gender perspective to our results, so data had to be treated in an undifferentiated way.

Those limitations suggest future studies of extreme athletes that delve further into microsystem influences to include the experiences and opinions of significant others themselves and samples that, not only extends the number of participants, but also include more women who practice extreme sports.

The literature review has included psychological and biological studies on extreme athletes (Zuckerman and Kuhlman, 2000), based on qualitative tests that measure sensations and analyse psychological aspects and physiological reactions. The most interesting issue is the consensus that exists in all spheres regarding the importance of relating social and environmental factors with psychological and biological profiles. Opening up future interdisciplinary lines of research would undoubtedly lead to a better understanding of extreme athletes.

This study can be considered as an initial step to as a broader line of research, not only by extending the number of participants, but also directly interviewing the agents of their social circle. This may help to overcome the limitation of the present study, that is only based on the self-perception of the participants.

Climbing mountains of more than 8000 m, crossing the Atlantic alone in a 6-metre boat, rafting in rivers with 15-metre high waterfalls, skateboarding down steep roads at 120 kmph, climbing huge iced-over waterfalls, free solo climbing, wingsuit flying, mogul or halfpipe skiing, etc., are activities that inspire passion. In this study investigating athletes attracted to extreme sports and willing to risk their lives for their passion, we show that none of their significant others influence them to the point of separating them from their life project.

Declarations

Author contribution statement

E. Inglés Yuba: Conceived and designed the experiments; Contributed reagents, materials, analysis tools or data; Wrote the paper.

E. V. Vliet: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Wrote the paper.

Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability statement

Data will be made available on request.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

Acknowledgements

This study was supported by the Institut Nacional d'Educació Física de Catalunya (INEFC), of the Generalitat de Catalunya.

References

- Allman, T.L., Mittelstaedt, R.D., Martin, B., Goldenberg, M., 2009. Exploring the motivations of base jumpers: extreme sport enthusiasts. *J. Sport Tourism* 14 (4), 229–247.
- Amato, F., Moscato, V., Picariello, A., Sperli, G., 2017. Diffusion algorithms in multimedia social networks: a preliminary model. In: Proceedings of the 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2017, pp. 844–851.
- Barlow, M., Woodman, T., Hardy, L., 2013. Great expectations: different high-risk activities satisfy different motives. *J. Pers. Soc. Psychol.* 105 (3), 458–475.
- Beck, U., 1998. La sociedad del Riesgo- Hacia una nueva modernidad. Paidós Ibérica, Barcelona, Buenos Aires y México.
- Bronfenbrenner, U., 1979. The Ecology of Human Development: Experiments by Nature and Design. Harvard University Press.
- Bronfenbrenner, U., 2005. Making Human Beings Human : Biocultural Perspectives on Human Development. SAGE Publications Ltd.
- Brymer, E., Schweitzer, R., 2012. Extreme sports are good for your health: a phenomenological understanding of fear and anxiety in extreme sport. *J. Health Psychol.* 18 (4), 477–487.
- Brymer, E., Schweitzer, R., 2013. The search for freedom in extreme sports: a phenomenological exploration. *Psychol. Sport Exerc.* 14 (6), 865–873.
- Castanier, C., Scanniff, C. Le, Woodman, T., 2010. Beyond sensation Seeking : affect regulation as a framework for predicting risk-taking behaviors in high-risk sport. *J. Sport Exerc. Psychol.* 32, 731–738.
- Dávila, G., 2006. El razonamiento inductivo y deductivo dentro del proceso investigativo en ciencias experimentales y sociales. *Laurus* 12 (6), 180–205.
- Demirhan, G., 2005. Mountaineers' risk perception in outdoor-adventure sports: a study of sex and sports experience. *Percept. Mot. Skills* 100 (4), 1155–1160.
- Fister, I., Ljubić, K., Suganthan, P.N., Perc, M., Fister, I., 2015. Computational intelligence in sports: challenges and opportunities within a new research domain. *Appl. Math. Comput.* 262, 178–186.
- Florentin, B., Shoham, A., 2001. The impact of persuasive information on changes in attitude and behavioral intentions toward risky sports for arousal - seeking versus arousal-avoidance individuals. *Sport Market.* 10, 83–95.
- Fuster, J., Elizalde, B., 1995. Riesgo y actividades físicas en el medio natural: un enfoque multidimensional. *Apunts: Educación Física y Deportes* 1995 (41), 94–107.
- Gombi-Freixanet, M., Martha, C., Muro, A., 2012. Does the Sensation-Seeking trait differ among participants engaged in sports with different levels of physical risk? *Am. Psicolog.* 28 (1), 223–232.
- Guszkowska, M., Boldak, A., 2010. Sensation seeking in males involved. *Biol. Sport* (January).
- Heinemann, K., 2003. Introducción a la metodología de la investigación empírica en las ciencias del deporte. Paidotribo, Barcelona.
- Hernández, R., Fernández, C., Baptista, P., 2014. Metodología de la investigación, sixth ed. Mc Graw Hill, México.
- Huertas, J.D., 2013. Deportes Extremos en el Discurso Mediático de las Sociedades Contemporáneas. *Lógica Pedagógica* 2 (18), 8.
- Hunt, J.C., 1996. Diving the wreck: risk and injury in sport scuba diving. *Psychoanal. Q.* 65 (3).
- Hurtado, D.R., Jaramillo, L.G., Ocampo, R.P., 2004. June. Deporte extremo como práctica social y posibilidad de adscripción identitaria en jóvenes urbanos. *Efdeportes, Revista Digital*. Retrieved from: <https://www.efdeportes.com/efd73/extremo.htm>.
- Hutchinson, A.J., Johnston, L.H., Breckon, J.D., 2010. Using QSR-NVivo to facilitate the development of a grounded theory project: an account of a worked example. *Int. J. Soc. Res. Methodol.* 13 (4), 283–302.
- Inglés, E., Puig, N., 2015. Sports management in coastal protected areas. A case study on collaborative network governance towards sustainable development. *Ocean Coast Manag.* 118, 178–188.
- Jack, S.J., Roman, K.R., 1998. Sensation seeking among high- and low-risk sports participants. *Pers. Individ. Differ.* 25 (6), 1063–1083.
- Kajtna, T., 2013. Some psychological aspects of high-risk sports. Scientific Monography. University of Ljubljana, Ljubljana, Slovenia.

- Kern, L., Geneau, A., Laforest, S., Dumas, A., Tremblay, B., Goulet, C., Barnett, T.A., 2014. Risk perception and risk-taking among skateboarders. *Saf. Sci.* 62, 370–375.
- Klinar, P., Burnik, S., Kajtna, T., 2017. Personality and sensation seeking in high-risk sports. *Acta Gym.* 47 (1), 41–48.
- Kos, A., Umek, A., 2018. *Biomechanical Biofeedback Systems and Applications*. Springer, Ljubljana, Slovenia.
- Laurendeau, J., 2006. "He didn't go in doing a skydive": sustaining the illusion of control in an edgework activity. *Socio. Perspect.* 49 (4), 583–605.
- Laurendeau, J., 2008. "Gendered risk regimes": a theoretical consideration of edgework and gender. *Sociol. Sport J.* 25 (3), 293–309.
- Leary, M.R., Hoyle, R.H., 2009. *Individual Differences in Social Behavior*. In: Press, G. (Ed.). New York.
- Lupton, D., Tulloch, J., 2002. "Life would be pretty dull without risk": voluntary risk-taking and its pleasures. *Health Risk Soc.* 4 (2), 113–124.
- Maffesoli, M., 1996. *The Time of the Tribes: the Decline of Individualism in Mass Society*. 1 Oliver's Yard, 55 City Road, London EC1Y 1SP United Kingdom. SAGE Publications Ltd.
- Martin, K.A., Leary, M.R., 2001. Self-presentational determinants of health risk behavior among college freshmen. *Psychol. Health* 16 (1), 17–27.
- Mata, D., 2002. El equipo deportivo desde una perspectiva sociocultural. *Kronos* (1), 4–9.
- Monasterio, E., Alamri, Y.A., Mei-Dan, O., 2014. Personality characteristics in a population of mountain climbers. *Wilderness Environ. Med.* 25 (2), 214–219.
- Monasterio, E., Mei-Dan, O., Hackney, A.C., Lane, A.R., Zwir, I., Rozsa, S., Cloninger, C.R., 2016. Stress reactivity and personality in extreme sport athletes: the psychobiology of BASE jumpers. *Physiol. Behav.* 167, 289–297.
- Montero, I., León, O.G., 2007. A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology* 7 (3), 847–862.
- Müller, A., 2012. Wenn Sporttreiben extrem gefährlich wird – ein philosophischer Blick auf die Todesarten im Sport. *Sport Orthopädie Traumatologie* 81, 79–81.
- Nicholson, N., Soane, E., Fenton-O'Creevy, M., Willman, P., 2005. Personality and domain-specific risk taking. *J. Risk Res.* 8 (2), 157–176.
- Ntoumanis, N., Vazou, S., Duda, J.L., 2007. Peer-created motivational climate. *Soc. Psychol. Sport*.
- Pereira, A.L., 2009. Sport and risk : the case of high-altitude climbing Sport and risk : the case of high-altitude climbing. *Eur. J. Sport. Soc.* 6 (2), 167–178. August.
- Sánchez, P.A., Leo, F.M., Sánchez, D., Amado, D., García, T., 2012. Influence of environment on persistence in the sport physical activity. *Cuad. Psicol. del Deporte* 12 (1), 17–24.
- Smith, R.E., Smoll, F.L., Cumming, S.P., 2007. Effects of a motivational climate intervention for coaches on young athletes' sport performance anxiety. *J. Sport Exerc. Psychol.* 29 (1), 39–59.
- Sparkes, A.C., Smith, B., 2014. *Qualitative Research Methods in Sport, Exercise and Health : from Process to Product*/Andrew C. Sparkes and Brett Smith. Taylor & Francis.
- Torricio, E., Santín, C., Andrés, M., López, M.J., 2002. El modelo ecológico de Bronfenbrenner como marco teórico de la Psicooncología. *Am. Psicolog.* 18, 45–59.
- Tracy, S.J., 2010. Qualitative quality: eight a "big-test" criteria for excellent qualitative research. *Qual. Inq.* 16 (10), 837–851.
- Vasilachis, I., 2009. Los fundamentos ontológicos y epistemológicos. *Forum Qual. Soc. Res.* 10 (2), 1–26. Retrieved from. <http://www.qualitative-research.net/index.php/fqs/article/view/1299/2779>.
- Weiss, M.R., Amorose, A.J., Wilko, A.M., 2009. Coaching behaviors, motivational climate, and psychosocial outcomes among female adolescent athletes. *Pediatr. Exerc. Sci.* 21 (4), 475–492.
- Woodman, T., Hardy, L., Barlow, M., Le Scanniff, C., 2010. Motives for participation in prolonged engagement high-risk sports: an agentic emotion regulation perspective. *Psychol. Sport Exerc.* 11 (5), 345–352.
- Zuckerman, M., 1979. *Sensation Seeking: beyond the Optimal Level of Arousal*. Erlbaum, Hillsdale, NJ.
- Zuckerman, M., 1994. *Behavioral Expressions and Biosocial Bases of Sensation Seeking*. Cambridge University Press.
- Zuckerman, M., Kuhlman, D.M., 2000. Personality and risk-taking: common biosocial factors. *J. Pers.* 68 (6), 999–1029.
- Zuckerman, M., 2007. *Sensation Seeking and Risky Behavior*. American Psychological Association, Washington DC.

8.7 Estudi II | Revista World Leisure Journal



World Leisure Journal



ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/rwle20>

Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners

Èric Vande-Vliet, Eduard Inglés, Pau Mateu & Lluç Montull

To cite this article: Èric Vande-Vliet, Eduard Inglés, Pau Mateu & Lluç Montull (27 Sep 2023): Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners, World Leisure Journal, DOI: [10.1080/16078055.2023.2261896](https://doi.org/10.1080/16078055.2023.2261896)

To link to this article: <https://doi.org/10.1080/16078055.2023.2261896>



Published online: 27 Sep 2023.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

Full Terms & Conditions of access and use can be found at
<https://www.tandfonline.com/action/journalInformation?journalCode=rwle20>



Risk-Taking: Liquid Modernity and Extreme Outdoor Practitioners

Èric Vande-Vliet^{a,b,c}, Eduard Inglés^{a,b,c}, Pau Mateu^{a,c,d} and Lluç Montull^{a,d}

^aInstitut Nacional d'Educació Física de Catalunya (INEFC), Barcelona, Spain; ^bUniversity of Barcelona (UB), Barcelona, Spain; ^cGrup d'Investigació Social i Educativa de l'Activitat Física i l'Esport (GISEAFE) (Physical Activity and Sport Social and Educational Research Group); ^dUniversity of Lleida (UdL), Lleida, Spain

ABSTRACT

In recent decades, the number of extreme outdoor sports in the natural environment has increased significantly. It could be said that, nowadays, extreme outdoor sports are more popular than ever. Part of the explanation probably lies in the fact that we find ourselves in the socio-historical context that Zygmunt Bauman called liquid modernity, which has transformed several activities, previously considered as marginal and/or exclusive, into mainstream. The concept of liquid modernity illustrates how social structures and identities are characterized by unpredictability and change in contemporary societies, and among its consequences we find the pluralization of outdoor physical-sports practices. Through 18 semi-structured interviews, this study set out to better understand the impact liquid modernity has had on extreme outdoor practitioners. A hierarchical content analysis led to the identification of two main themes: (a) freedom and intensity, and (b) a plurality of practices. The paper concludes with a number of practical implications and suggestions for further research that would continue to shed light on the phenomenon of extreme outdoor sports and their practitioners.

ARTICLE HISTORY

Received 26 November 2022
Accepted 19 September 2023

KEYWORDS

Extreme outdoor sports; risk-taking; sensation-seeking; liquid modernity

A critical rethink of risk-taking by exploring extreme outdoor practitioners' perceptions from liquid modernity

Fresh air mingled with silence on the summit of the Aiguille d'Argentièr in the Mont Blanc massif. Kilian Jornet and Stéphane Brosse were moving between the peaks, breathing deeply, watching the condensation coming out of their mouths and turning regularly to admire the breathtaking landscape under their feet. Suddenly, a rustling sound broke the silence and the two men looked at each other. Instantly, the ledge broke beneath their feet, separating them forever. Fortunately, Jornet found himself on the inside and saved his life. Brosse, on the other hand, was on the outside of the cornice and fell into the void. The last glance between the two mountaineers, shortly before the mountain claimed Brosse's life, would remain frozen forever in Jornet's mind.

CONTACT Eduard Inglés  eduard.ingles@gencat.cat  Institut Nacional d'Educació Física de Catalunya (INEFC), Av. de l'Estadi 12-22, 08038 Barcelona, Spain

© 2023 World Leisure Organization

The above paragraph tells the story of the accident in which the mountaineer and skier Stéphane Brosse lost his life. It was June 2012, and Brosse was on a trek as part of the “Summits of my life” project of the well-known athlete Kilian Jornet. Shortly afterwards, Jornet resumed this project, which consisted of attempting to set records for the ascent and descent of some of the most emblematic summits on the planet, once again exposing himself to high-risk situations.

In recent decades, more and more people have decided, like Jornet and Brosse, to participate in “extreme sports” (Barlow et al., 2013; Brymer & Schweitzer, 2013; Clough et al., 2016). The term “extreme sports”, according to Brymer and Schweitzer (2012), encompasses a variety of non-traditional, independent, organized and adventuring physical activities and sports. However, due to their rapid evolution and growing popularity, there is no clear consensus on how to name and classify these practices (Cohen et al., 2018; Keane et al., 2020).

British sociologist Rojek (1999) talks about the concept of wild leisure. He considers that there is an elective affinity between leisure culture and transgressive behaviour. Leisure encourages us to “be ourselves” and to get in touch with those areas of the self that are repressed by the needs of work and family life. Leisure is therefore, an area of life in which the expansion of human potential is strongly encouraged. We feel that we have a duty to engage in self-expression and self-exploration. According to Laviolette (2011), in recent years there has been an increased engagement in the social sciences with the study of “extreme practices”. Dangerous games and adventure travel have gone from being marginal, exotic or crazy to being more than acceptable, exemplary and mainstream (Laviolette, 2011). For the author, adventure sports represent an escape from the seriousness of everyday life, as in most cases, as they require “life and death” decision making. However, neither the concept of wild leisure nor that of extreme practices adequately capture the seriousness of sport and the skill involved in being able to do it.

In this article, we adopt the concept of extreme sports proposed by Brymer (2005), which refers to independent leisure activities in which death is the most likely outcome of a poorly mismanaged error or accident. As we are particularly interested in extreme sports practised in natural environments, we could even speak of “extreme outdoor sports”. For conceptual clarity, it is essential to note that one of the defining elements of the so-called extreme sports is that they derive from a specific lifestyle, which is central to the meaning and experience of their practice (Lewis, 2003; Robinson, 2008; Sky, 2001). Extreme sports could be considered a subcategory within the term Wheaton (2004a) refers to as lifestyle sports. It allows us not only to distinguish the characteristics of extreme outdoor sports as high-risk physical and sporting activities performed in natural environments, but also to understand that there is a socio-cultural significance that goes beyond the technical, logistical and other specificities of each practice (Wheaton, 2004a).

Many recognized extreme sports, such as climbing, mountain biking, snowboarding or windsurfing, emerged from the countercultural movements of the 1960s and 1970s (Maguire, 1999; McEwan & Muller, 2020; Midol & Broyer, 1995; Ness, 2022). This period can be placed in the post-war years when consumer capitalism began to bring about important social changes. The world, according to Bauman (2000), was moving away from the rigid structures of solid modernity into the fluidity and unpredictability of liquid modernity. In the context of this new modernity, in which individualism and

autonomy have become central, works such as Langseth (2011) or Pereira (2009) explain that many extreme sportsmen and women recognize themselves in an anti-conventional, anti-authoritarian, counter-cultural, transgressive and freedom-oriented philosophy of life. By practising extreme sports, and even making them their way of life, extreme sportsmen and women claim to fight against a life constrained by routine and social institutions perceived as rigid. However, these needs for individual expression and self-affirmation, the transgressive drive against classical social institutions and mainstream culture, etc. are characteristic elements of liquid modernity (Bauman, 2000). In this way, it could be said that extreme sportspeople are, despite what they think, direct products of liquid modernity. Bauman (2000) synthesized this critical observation by stating that, in the context of liquid modernity, the anti-conventional becomes convention.

According to Bauman (2000), there was a first modernity characterized by a solid and durable organization, which provided a sense of stability and security to a significant part of society. In contrast, today we find ourselves in a liquid modernity characterized by instability and uncertainty. Bauman (2000) suggested that liquid modernity is characterized by rapid changes in values and social structures. In this context, individualism and competitiveness become fundamental elements of culture. The individualist narrative argues that social agents are less and less challenged by social structures (except for the market). They must choose what life they want to live while being fully responsible for its consequences (Bauman, 2000; Rosa, 2010). For Rosa (2010), individualism and competitiveness are related to an accelerated society, which can lead to problems such as alienation, loneliness and fragmentation. In light of this perspective, the formation of groups of extreme sports practitioners, in the form of what Maffesoli (1996) called “neo-tribes” (people who share a similar state of mind expressed through particular lifestyles and certain behavioural rituals), may not respond to a desire to break away from a solid, standardized society. Rather, it is an identity anchoring to recognize oneself in a turbulent and uncertain era, in which everything changes at a speed that is difficult to assimilate. As Wheaton (2004a) pointed out, in contemporary Western society, practices and cultures linked to extreme sports (as lifestyle sports) constitute one of the new forces on which to build one’s identity.

In line with the previous paragraph, McEwan and Muller (2020) showed how postmodernity has been associated with a pluralization of sporting practices and practitioners. In extreme sports, practices that pursue aesthetic ends and move away from the *sporting ethos* coexist alongside others that, having emerged as counter-cultural and self-managed activities, have undergone a process of sportivisation and are marked by competition. McEwan’s (2016) work on mountain biking highlights two narratives related to practitioners: on the one hand, the “athlete” as a competitor who relates to other practitioners based on the degree of success or failure in regulated events. On the other hand, the “neo-sportman or woman”, which refers to those who focus on personal results without an orientation towards the comparison of prowess and achievements with other participants.

Extreme sports have been the subject of analysis and debate in several academic fields (Immonen et al., 2018). In the social sciences, most studies have been carried out in the field of psychology, while sociological studies are more scarce (Vande Vliet & Inglés, 2021). From psychology, several research studies have tried to explain how different factors do or do not influence the decision to participate in extreme sports, but also by investigating the main traits of these practitioners. The meta-analysis conducted by

McEwan et al. (2019) showed that those who participate in high-risk sports are more likely to exhibit higher levels of sensation seeking, extraversion and impulsivity. Conversely, they are less likely to show neuroticism, sensitivity to punishment and telic dominance compared to individuals who do not participate in these activities (Kerr & Houge Mackenzie, 2012). Zuckerman's (2007) work, on the other hand, showed higher rates of emotional and adventurous feelings in mountaineers, skydivers and open-water canoeists compared to other groups of athletes, such as karate or ice hockey players. The review by Gomà-i-Freixanet et al. (2012) found that practitioners of high-risk sports scored high on attributes related to danger seeking, adventure, experience seeking and disinhibition.

For Breivik (2010), who analyzed the behaviour of adventure sports practitioners, control and safety are closely balanced with freedom and excitement. In his work, Breivik found that adventure sports practitioners perceived a certain trade-off in risky practices as they understood that greater risk could lead to greater reward, but also to greater loss. Lyng (2005) analyzed risk management in different life situations and interpreted risk-taking as a manifestation linked to the exploration and negotiation of *edges*. These *edges* were situated at different levels, such as what is socially perceived as sanity and insanity, consciousness and unconsciousness, and so on. The author explained that the boundary between life and death is one of the spaces that some people or groups explore and challenge.

Puig and Vilanova (2011) showed that extreme athletes expressed passion for their practices, a feeling that made them find meaning in taking risky decisions. The authors showed that some extreme athletes declared themselves to be addicted to high-risk sports practices and that these were part of their identity to the point that they could not imagine their life without them. In this line, Vande Vliet and Inglés (2021) discussed that the close social influence of the practitioners (parents, partner, children, friends, etc.) was insufficient to substantially modulate the practice of extreme sports or exposure to risk. Cajina-Guedeat and Reyes-Bossio (2021) stated that the fear experienced by extreme athletes, far from being a problematic issue, was perceived as a rewarding experience that promoted personal transformations.

With regard to studies with a sociological profile, works such as those developed by McEwan (2016) or McEwan and Muller (2020) are interesting to understand these practices in the framework of postmodern societies. Likewise, some chapters of the book coordinated by Wheaton (2004a) address essential issues such as commodification (Palmer, 2004) or gender (Kay & Laberge, 2004; Robinson, 2008; Wheaton, 2004b). This paper aims to continue this research tradition by exploring, through a sociological approach, the perceptions and experiences of extreme outdoor practitioners.

Method

This paper is framed in the work of sociologist Zygmunt Bauman, specifically in his concept of liquid modernity. This concept refers to a way of understanding contemporary society, characterized by fluidity, instability and the lack of solid and lasting structures. Bauman introduced this concept to describe the evolution of modern society from a "solid modernity" to a more liquid and changing state.

Bauman (2000) developed his concept of liquid modernity through five categories. The first category relates to emancipation and liberation, that is, the search for

authenticity and personal freedom above established norms in a fluid and uncertain world. The second category, individuality, has to do with focusing on personal identity over social norms, which can lead to ephemeral relationships and social anxiety. Thirdly, the space/time relationship refers to how technology and globalization accelerate everyday life, fragmenting the perception of time and space. Fourthly, there are changes in work, in the sense that it has become ephemeral, individualized and unstable, with an emphasis on self-interest and consumerism. The fifth and final category has to do with changes in communities, which become fragile and superficial as a result of individualism, consumerism and technology, making it difficult to form lasting relationships.

Participants

Participants in this study were recruited by criterion (Sparkes & Smith, 2014), in person and via the internet (emails and social media messaging). Subsequently, the sample was expanded through snowball sampling (Parker et al., 2019). The criterion for being part of this research was to be an extreme practitioner of outdoor activities. A total of 18 people (15 men and three women; 43.00 ± 13.59 years) agreed to participate in the study (see Table 1 for more of their characteristics).

All participants were given a pseudonym to maintain their anonymity and respect their privacy. Beyond a few descriptive characteristics, Table 1 shows, Table 1 introduces the participants with a brief self-description through phrases extracted from their interviews.

Data collection

Data were collected through 18 semi-structured interviews. This method is suitable for obtaining information about people's experiences and perceptions. As stated by Sparkes and Smith (2014), the semi-structured interview provides greater control to

Table 1. Characteristics of the participants.

Participant	Age	Sex	Activity	Self-description
Manuel	42	M	Climbing	When I climb, I am free like a primitive animal.
Maria	26	W	BASE Jumping	Base jumping is flying.
John	25	M	Longboard	On my board, it's all about adrenaline and control.
Paul	45	M	Candle	Loneliness in the ocean gives me peace.
Francisco	65	M	Mountaineering	Climbing to 8,000 m without oxygen is a parallel world.
Victor	47	M	Mountaineering	Culminating the highest peaks is happiness.
Jorge	56	M	Mountaineering, climbing	Climbing routes without material makes me feel alive.
Peter	35	M	Climbing and Base Jumping	Climbing and BASE jumping is to feel like an animal.
David	43	M	Climbing	The free solo is like a meditation.
Anna	27	W	Skiing	Going down these slopes is freedom and control.
Daniel	50	M	Mountaineering, climbing, skiing	Climbing like this makes me feel more alive.
Marta	50	W	Mountaineering	The adventure involves risk, but it is worth it.
Ofiol	29	M	Kayak	Extreme waterfalls require a long preparation.
Pol	28	M	Mountaineering, climbing	If I die, let it be climbing.
Albert	32	M	Mountaineering, climbing, skiing	Every extreme project involves a lot of work and planning.
Ramon	70	M	Climbing	Opening climbing routes is art on the rock.
Toni	53	M	Mountaineering, climbing	Climbing is not climbing if it lacks risk.
Enrique	31	M	Kayak	I seek escape and adventure travelling with my kayak.

participants than other methods, such as questionnaires or structured interviews, allowing them to tell their stories in their own words and without measurement constraints. To encourage participant input, we designed a research diagram (Crilly et al., 2006). The interviews were always conducted under the direction of the interviewer, although this did not imply rigidity in terms of content or in the way the conversation unfolded (Salinas Meruane & Cárdenas Castro, 2009). This graphic elicitation tool acted as a flexible guide for the interview and sought to encourage contributions that are sometimes difficult to elicit through simple verbal exchanges. After conducting an exploratory interview with an extreme athlete, in which we reviewed several elements and concepts present in the theoretical framework, the research team designed a first draft of the research diagram. After some adjustments, we agreed on a final diagram consisting of a central circle surrounded by five other circles connected by straight lines. In the central circle was the word “extreme practitioner”. Connecting to this central figure, the diagram encouraged discussion of topics such as the psychological aspects of extreme sport, the social environment, economic issues, or the life philosophies of each participant.

Procedure

After receiving approval of the study protocol from the Clinical Research Ethics Committee of the Catalan Sports Council, we contacted the participants to explain the aim of the study. Before conducting the interviews, we asked participants to read and sign an informed consent document. We assigned a code to each participant to guarantee their anonymity. Interviews were conducted between December 2019 and December 2020, and took place in different locations to accommodate participants’ needs and preferences. All interviews were conducted by the first author in quiet settings, such as coffee shops or the homes of some participants. The interviews, which lasted on average 55 min (between 30 and 80 min), were recorded and transcribed *verbatim*.

Data analysis

We conducted a hierarchical deductive-inductive content analysis. Following Sparkes and Smith (2014), the process followed several steps. The first immersion step consisted of a close reading of the transcripts with the intention of familiarizing ourselves with the data. Then, we deductively organized relevant fragments of the transcripts into the five categories proposed by Bauman (2000) for understanding liquid modernity. In the third step, the authors contrasted and connected the coded information by grouping it around two main themes: (a) freedom and intensity and (b) plurality of practices. The fourth step consisted of re-examining the original transcripts, cross-checking them with the generated themes and discussing their coherence. After reaching an agreement, the authors sought the opinion of a critical friend who is an expert in applied social research in sport and qualitative studies. This person agreed that the analysis resulted in a reliable interpretation of the perceptions of outdoor extreme sports practitioners. The final step was the writing of the research report. For the qualitative analysis of the coding work, the QSR software NVivo 12 was used. The American Psychological

Association's Reporting Standards for Qualitative Research (2020) were observed during this phase of the work.

Results and discussion

Freedom and intensity

One of the aspects on which the practitioners agreed was the feeling of freedom and autonomy that they perceive during the practice of these modalities. Some mentioned the freedom of movement, others the freedom of decision and others the freedom to make exclusively individual decisions without external conditioning. Overcoming unthinkable challenges for the general population while defying prejudices and negative public comments was highly related to these feelings of freedom. This apparent separation from mainstream society, understood as less free by the participants, can be associated with the work of Pereira (2009), in which he interprets the phenomenon of extreme sports as an anti-conventional, counter-cultural and transgressive philosophy of life.

Most of the interviewees stated that they needed to practice extreme outdoor sports very often. The constant search for new outdoor experiences and challenges was part of what they associated with the aforementioned sense of freedom. Ramón recounts:

I was lucky enough to find a passion. A real adventure. It's a feeling you have to experience. You've just opened a 1000 m solo route, and yes, it's absurd because you don't win any money, no glory, no applause. But the feeling of looking back, seeing the wall and saying you've climbed here, you can't pay for it with money. Total happiness!

These findings coincide with Puig and Vilanova (2011) in the fact that extreme practitioners of outdoor activities recognized themselves as addicted to these high-risk practices, giving meaning to their lives and identity.

The freedom reported by participants can be attributed to the dominant conception of individual freedom that characterizes liquid societies. Moreover, according to Bauman (2000) instability and the lack of solid forms of identity are central attributes of liquid modernity. In this sense, living and engaging in leisure today is to do so with an unstable sense of identity (or indeed identities). Given that liquid modernity entails an unstable life, all aspects of it are unstable, sport included. A positive aspect of this situation lies in the fact that people are less "tied" to identities that used to be extremely rigid (work, family religion ... but also the sport practiced!). On the other hand, the negative aspect is that the liquid persona is never sure of who he really is, because the possibility or the need to change quickly (also at the identity level) will always be present in this very reality. A different interpretation could be as follows: through the practice of extreme outdoor sports, some people seek to express their individual freedom to the highest degree of autonomy (without submitting to rules and external influences). Extreme outdoor sports would act in these cases as activities that build more or less stable identities, through the characteristics of the practice itself and the interactions it promotes.

Several participants referred to concepts as contact with/return to nature, purity, social abstraction, lightness, minimalism or survival in a hostile environment:

Daniel: "I don't want to be like an animal, I want to be an animal. The animal lives in the mountain, you don't want to imitate it, you want to be part of the environment in a natural

way. That's why this light mountaineering is not to beat the clock, but to reach a mountain without anything".

Most of the interviewees agreed on the concept of living an intense life, and considered the continuous experience of exciting experiences to be a prerequisite for a meaningful life. Many participants could not conceive of boredom or experiences that they considered bland (e.g. a stable job with fixed hours or family care work). Consequently, they argued that going out into the natural environment to experience intense emotions through extreme outdoor sports was necessary to feel that they were making the most of their time.

Oriol: "I would rather die today knowing that I have lived to the fullest doing what I love than live a long life working and without emotions".

This perception, far from being a countercultural or transgressive characteristic, is aligned with a dominant cultural logic of late Western modernity (Bauman, 2000), which is fundamentally secular, according to which a good life is full of developed experiences and capabilities (Rosa, 2010). For Garcia (2018), living intensely is the ideal that governs our societies and, therefore, the contemporary intense persona hardly perceives the unchanging and prefers change to established certainties.

Albert: "Living from our passion is incredible. Sport and the mountains are my creative space, like a painter's canvas or a musician's instrument. Emotions are the basis for feeling alive".

The participants in this study pursued a lifestyle characterized by the abandonment of comfort and a break with monotony. To do so, they tried to act creatively and to position themselves, through their physical-sports practices, away from other normative and socially widespread practices. Bauman (2000) describes this lifestyle as belonging to individuals who wish to find freedom in personal self-realization and emancipation. Regardless of the modality they practised, they all carried out activities seeking their limits and exposed themselves to risks that, despite involving distressing and even terrifying situations, they associated with pleasurable sensations (Cajina-Guedeat & Reyes-Bossio, 2021).

Toni: "I'd like to be happy walking the child in the street or going shopping, but I'm not happy like that. To be happy, I need to feel alive and do what makes me tick. However, what makes me tick can also cost me my life".

The risk of dying in these activities is always present, and the practitioners interviewed had a reflexive view of death. They saw the possibility of dying as part of the "game" and as a condition of opportunity to enjoy the lifestyle they have chosen:

Pablo: "The great danger of sailing single-handed is falling into the sea. If you're not moored, you'll probably die, and the boat keeps sailing. There is a risk, and you take it. Life itself is a risk. If you reach the goal, it's worth it".

Another participant interpretation of death is consistent with that of Breivik (2010): extreme outdoor sports practitioners took risk by balancing the perception of risk and its consequences with the likelihood of rewards. In this sense, greater risk may lead to greater rewards and, at the same time, worse effects.

Practitioners associated high exposure to risk as a relevant transgression of the social order and as a central element of their identity (Pereira, 2009). In this sense, most participants in this study had experienced the death of friends or family members. The behaviour is typical of the individualism expounded in sociologist Bauman's theory of liquid modernity. Extreme practitioners seek greater autonomy and authenticity, prioritizing their personal identity over social norms.

Athletes continued to engage in extreme outdoor sports, despite pleas from people close to them to reduce their exposure to risk (Vande Vliet & Inglés, 2021).

Toni: "I won't judge anyone who gives up extreme riding after living through an accident, but I have decided to live life to the fullest. I believe in the life of time and not the time of life. If my time is short, I want to live it to the fullest. It pays off more than if I can live 200 years with my ass in a chair".

Participants were confronted on a daily basis with situations where the line between life and death was very thin (Lyng, 2005). These experiences gave them the opportunity to improve their skills and abilities, but also to experience intense emotions that represented the reward for the risk taken.

A plurality of practices

Several participants who undertook the same practice showed different perspectives. For example, while Francisco was a very competitive participant, with clear objectives linked to physical and sporting performance, Enrique opted for a more personal practice, without media or economic aspirations. In fact, Francisco said: "I want to be the first mountaineer to climb the 14 eight-thousanders without using oxygen", while Enrique said "I want to live a personal experience and discover remote areas of the planet, testing myself physically and mentally". Bauman (2000) argues that in liquid societies, individuality and personal freedom prevail, and personal growth is sought by distancing oneself from the community, differentiating one's practices and being creative and transgressive.

This is consistent with McEwan (2016) and McEwan and Muller (2020) in considering that, in the context of postmodernity, physical and sporting practices (including extreme outdoor sports) are as plural as their practitioners. For example, for several participants, extreme outdoor sports represented a kind of symbolic return to an ancestral way of acting and relating, i.e. to a more primitive way of life (Breivik, 2010):

Ramón: "In another era, people went to the mountains in search of adventure and self-improvement. I think I also have a very primitive personality. This attracts me a lot because this is where I find adventure and I can't find it anywhere else. I don't know if anyone will find it on Wall Street, maybe they will, I'm sure they will, but I find it in the mountains".

All these elements, diverse within the field of extreme outdoor sports, contribute to a shared imaginary upon which practitioners construct their identities. Based on the particularities of these identities, participants claimed to belong to small communities of practice that shared values, ambitions and lifestyles to the point of considering themselves a "family". This is a phenomenon that Maffesoli (1996) called "neo-tribes", and resonates with Bauman's (2000) understanding of communities under the liquid modernity era.

Daniel: "Lightness, very minimal resources, just enough, low technology, no fixed ropes, research, discovery, new places: that's mountaineering. We don't have it written down, but it's there".

Some participants perceived that they were judged as irrational, reckless and selfish. However, they understood their practices as a way of surrendering to a higher form, following Rinehart and Sydnor (2003).

Pedro: "In general, society considers us selfish for risking our lives, which is partly true, because we do what we like to do. But we don't do it in a crazy way. The more risky our challenge, the greater the preparation in all aspects".

Conclusions

This research is a description from a sociological perspective of the practitioners of extreme outdoor sports about the risky activities they engage in. The results suggested that individual freedom, intensity and plurality of practice are important elements to understand some characteristic behaviours of this social group. For the practitioners of extreme outdoor sports, the passion they felt for their activity, the constant experience of new challenges and the sense of freedom justified risk-taking to the point of putting their lives at stake. In the context of liquid modernity, Western societies are characterized by the pursuit of intensity, and although they identified themselves as outsiders to mainstream society, extreme outdoor sports practitioners represent a dear expression of our times.

The findings of this study may have some practical implications. For example, a better understanding of the perceptions of extreme outdoor sports practitioners may contribute to raising awareness of risk and personal safety among the population interested in extreme outdoor sports activities. On the other hand, this work can contribute to the development of training and education programmes for practitioners of extreme outdoor sports, offering a more social and detailed view of their practice. In addition, the information obtained in this research can provide data of interest to organizations such as sponsors and other companies related not only to extreme outdoor sports, but also to the sports industry in general.

The findings and discussion in this paper can serve as a basis for future research to contribute to a better understanding of the phenomenon of extreme outdoor sports and its practitioners. For example, it would be interesting to develop ethnographic work in specific communities of practice, single case narrative research or longitudinal studies. Furthermore, the study of members of the immediate social environment may also contribute to a better understanding of these risky activities, which despite being individualistic seem to have a clear impact on the social sphere of the practitioners. Future research, which may consider other theoretical perspectives and methodological approaches, can study interrelated phenomena of extreme outdoor sports. For example, issues such as male dominance in this type of social space or the lack of concern for family care among practitioners.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Barlow, M., Woodman, T., & Hardy, L. (2013). Great expectations: Different high-risk activities satisfy different motives. *Journal of Personality and Social Psychology*, 105(3), 458–475. <https://doi.org/10.1037/a0033542>
- Bauman, Z. (2000). *Liquid modernity*. Polity Press.
- Breivik, G. (2010). Trends in adventure sports in a post-modern society. *Sport in Society*, 13(2), 260–273. <https://doi.org/10.1080/17430430903522970>
- Brymer, E. (2005). *Extreme dude! A phenomenological perspective on the extreme sport experience* [Doctoral dissertation]. University of Wollongong.
- Brymer, E., & Schweitzer, R. (2012). Extreme sports are good for your health: A phenomenological understanding of fear and anxiety in extreme sport. *Journal of Health Psychology*, 18(4), 477–487. <https://doi.org/10.1177/1359105312446770>
- Brymer, E., & Schweitzer, R. (2013). The search for freedom in extreme sports: A phenomenological exploration. *Psychology of Sport and Exercise*, 14(6), 865–873. <https://doi.org/10.1016/j.psychsport.2013.07.004>
- Cajina-Guedeat, M., & Reyes-Bossio, M. (2021). Subjective emotional experience in extreme sports participants: A qualitative study emotional subjective experience in extreme sports participants: A Qualitative Study Experiencia Emocional Subjetiva em Atletas Extremos: Um Estudo Qualitativo. *Cuadernos de Psicología Del Deporte*, 21(1), 1–17. <https://doi.org/10.6018/cpd.418141>
- Clough, P., Mackenzie, S. H., Mallabon, L., & Brymer, E. (2016). Adventurous physical activity environments: A mainstream intervention for mental health. *Sports Medicine*, 46(7), 963–968. <https://doi.org/10.1007/s40279-016-0503-3>
- Cohen, R., Baluch, B., & Duffy, L. J. (2018). Defining extreme sport: Conceptions and misconceptions. *Frontiers in Psychology*, 9, 1974. <https://doi.org/10.3389/fpsyg.2018.01974>
- Crilly, N., Blackwell, A. F., & Clarkson, P. J. (2006). Graphic elicitation: Using research diagrams as interview stimuli. *Qualitative Research*, 6(3), 341–366. <https://doi.org/10.1177/1468794106065007>
- Garcia, T. (2018). *The life intense. A modern obsession*. Edinburgh University Press.
- Gomà-i-Freixanet, M., Martha, C., & Muro, A. (2012). Does the sensation-seeking trait differ among participants engaged in sports with different levels of physical risk? *Anales de Psicología*, 28(1), 223–232. <https://doi.org/hdl.handle.net/10201/26415>
- Immonen, T., Brymer, E., Davids, K., Liukkonen, J., & Jaakkola, T. (2018). An ecological conceptualization of extreme sports. *Frontiers in Psychology*, 9, 1–9. <https://doi.org/10.3389/fpsyg.2018.01274>
- Kay, J., & Laberge, S. (2004). Mandatory equipment: Women in adventure racing. In B. Wheaton (Ed.), *Understanding lifestyle sports. Consumption, identity and difference* (pp. 154–174). Routledge.
- Keane, M., Eastman, J. K., & Iyer, R. (2020). Predicting adventure seeking of young adults: The role of risk, innovativeness and status consumption. *Sport Management Review*, 23(5), 952–963. <https://doi.org/10.1016/j.smr.2019.12.009>
- Kerr, J. H., & Houge Mackenzie, S. (2012). Multiple motives for participating in adventure sports. *Psychology of Sport and Exercise*, 13(5), 649–657. <https://doi.org/10.1016/j.psychsport.2012.04.002>
- Langseth, T. (2011). Risk sports – Social constraints and cultural imperatives. *Sport in Society*, 14(5), 629–644. <https://doi.org/10.1080/17430437.2011.574366>
- Lavolette, P. (2011). *Extreme landscapes of leisure: Not a Hap-hazardous sport*. Ashgate Publishing.
- Lewis, J. (2003). In search of the postmodern surfer: Territory, terror and masculinity. In J. Skinner, K. Gilbert, & A. Edwards (Eds.), *Some like it hot: The beach as a cultural dimension* (pp. 58–76). Meyer & Meyer.
- Lyng, S. (2005). *Edgework. The sociology of risk-taking*. Routledge.

- Maffesoli, M. (1996). *The time of the tribes: The decline of individualism in mass society. The time of the tribes: The decline of individualism in mass society*. SAGE Publications.
- Maguire, J. (1999). *Global sport: Identities, societies, civilizations*. Polity Press.
- McEwan, D., Boudreau, P., Curran, T., & Rhodes, R. (2019). Personality traits of high-risk sport participants: A meta-analysis. *Journal of Research in Personality*, 79, 83–93. <https://doi.org/10.1016/j.jrp.2019.02.006>
- McEwan, K. (2016). The future of sportsmanship: A narrative expression of in-group support and respect in the postmodern sport of mountain biking. In T. Delaney (Ed.), *Sportsmanship: Multidisciplinary perspectives* (pp. 269–280). McFarland.
- McEwan, K., & Muller, J. (2020). Cycling. In J. Nauright & S. Zipp (Eds.), *Routledge handbook of global sport* (pp. 273–288). Routledge.
- Midol, N., & Broyer, G. (1995). Toward an anthropological analysis of New sport cultures: The case of whiz sports in France. *Sociology of Sport Journal*, 12(2), 204–212. <https://doi.org/10.1123/ssj.12.2.204>
- Ness, S. (2022). Like a shark in the ocean: The semiotics of extreme precarity in Joshua Tree rock climbing. *Semiotica*, 2022(248), 209–226. <https://doi.org/10.1515/sem-2022-0074>
- Palmer, C. (2004). Death, danger and the selling of risk in adventure sports. In B. Wheaton (Ed.), *Understanding lifestyle sport: Consumption, identity and difference* (pp. 55–69). Routledge.
- Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. In P. Atkinson, S. Delamont, A. Cernat, J. W. Sakshaug, & R. A. Williams (Eds.), *Sage research methods foundations*. Sage.
- Pereira, A. L. (2009). Sport and risk: The case of high-altitude climbing. *European Journal for Sport and Society*, 6(2), 163–178. <https://doi.org/10.1080/16138171.2009.11687836>
- Puig, N., & Vilanova, A. (2011). Positive functions of emotions in achievement sports. *Research Quarterly for Exercise and Sport*, 82(2), 334–344. <https://doi.org/10.1080/02701367.2011.10599761>
- Rinehart, R. E., & Sydnor, S. (2003). *To the extreme. Alternative sports inside and out*. State University of New York Press.
- Robinson, V. (2008). *Everyday masculinities and extreme sport*. Male Identity and Rock Climbing.
- Rojek, C. (1999). Abnormal leisure: Invasive, mephitic and wild forms. *Loisir et Société / Society and Leisure*, 22(1), 21–37. <https://doi.org/10.1080/07053436.1999.10715574>
- Rosa, H. (2010). *Alienation and acceleration: Towards a critical theory of late-modern temporality*. NSU Press Publications.
- Salinas Meruane, P., & Cárdenas Castro, M. (2009). *Métodos de investigación social*. Quipus. <https://biblio.flacsoandes.edu.ec/catalog/resGet.php?resId=55376>
- Sky, M. (2001). *The influence of media marketing in the intrinsic culture of 'extreme' sport* [B. Sc. Thesis]. University of Surrey Roehampton.
- Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health. From process to product*. Routledge.
- Vande Vliet, É., & Inglés, E. (2021). Decision-making by extreme athletes: The influence of their social circle. *Heliyon*, 7(1), e06067. <https://doi.org/10.1016/j.heliyon.2021.e06067>
- Wheaton, B. (2004a). Introduction. Mapping the lifestyle sport-scape. In B. Wheaton (Ed.), *Understanding lifestyle sport: Consumption, identity and difference* (pp. 1–28). Routledge.
- Wheaton, B. (2004b). *Understanding lifestyle sport: Consumption, identity and difference*. Routledge.
- Zuckerman, M. (2007). *Sensation seeking and risky behavior*. American Psychological Association.

TESI DOCTORAL

ANÀLISI
PSICOSOCIAL
D'ESPORTISTES
EXTREMS



ÈRIC VANDE VLIET GÓMEZ
Barcelona, 2024



*Què seria d'una vida sense emocions,
sense risc ni aventures?*

*Muntanya, riu, cel i mar, espais de creació,
fulls en blanc; l'esport, l'eina d'expressió; i
l'activitat, l'obra mestra. La llibertat total i
absoluta de jugar amb la vida per sentir-
nos vius. El risc a morir, una conseqüència
acceptada.*