SUPPLEMENTARY FILES

SUPPLEMENTARY FILE 1: SEARCH TERMS, STRATEGIES, AND RESULTS

SEARCH TERMS AND STRATEGIES

1. Population: Sport Injury
2. Injury Type: Lower body Musculoskeletal injury
3. Concept: Non-Physical Needs
4. Limits and exclusions

a) Search Strategy for Medline

Database: Medline via OVID <1946 to Present
(Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present)
Search mode: Medical subject headings (MeSH)
Date Searched: May 28, 2018

Limits: English Language
Results: 2088, After duplicates removed: 2063

Search Strategy for MEDLINE (Ovid)

No.	Searches
1	Athletic Injuries/
2	(Athlet* injur* or sport* injur* or recreation* injur*).mp.
3	1 or 2
4	"Sprains and Strains"/
5	(tear* or rupture* or ligament* or sprain* or strain* or dislocation*).mp.
6	4 or 5
7	foot joints/ or hip joint/ or knee joint/
8	(lower extremit* or lower limb* or hip* or thigh* or leg* or knee* or ankle* or foot or feet or toe* or ((anterior or posterior) adj cruciate adj2 ligament*) or ((medial or lateral) adj collateral adj2 ligament*) or femoracetabular or femur or menisc* or patellofemoral).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
9	7 or 8
10	hip injuries/ or hip dislocation/ or leg injuries/ or ankle injuries/ or foot injuries/ or knee injuries/ or medial tibial stress syndrome/ or tibial meniscus injuries/
11	hip dislocation/ or knee dislocation/ or patellar dislocation/
12	6 and 9
13	10 or 11 or 12
14	Psychology, Sports/
15	adaptation, psychological/ or attitude/ or behavior/ or emotions/ or motivation/ or personality/ or psychology, social/
16	social environment/ or community networks/ or social support/
17	(psycholog* or psychosocial or psycholog* response or psycholog* readiness or social support).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
18	(cognition* or affect or behav* or motiv* or emotion* or patient belief* or confiden* or attitude* or personalit* or self esteem or locus of control or self efficacy or autonomy or kinesiophob* or fear* of reinjur* or avoidance or anxiet* or frustrat* or coping or cope or stress* or optimism or quality of life or patient satisfaction or goal setting or goal* or

	expectation* or perception* or patient prefer* or athlet* identit* or wellbeing or mindfulness or resilienc* or catastrophi* or accept* or compassion* or hope or achiev* or education or knowledge or relationship* or interaction* or alliance* or feedback or encourag* or trust or communicat* or rapport or respect or caring or connection or socioeconomic status or cultural or ethnicity or urban rural).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
19	14 or 15 or 16 or 17 or 18
20	3 and 13 and 19
21	limit 20 to english language

b) Search Strategy for PsycINFO

Database: PsycINFO®
Search mode: Medical subject headings (MeSH)
Date Searched: May 28, 2018
Limits: English Language
Results: 155, After duplicates removed: 131

Search Strategy for PsychINFO

No.	Searches
1	injuries/
2	(Athlet* injur* or sport* injur* or recreation* injur*).mp.
3	sports/
4	1 or 2 or 3
5	musculoskeletal system/
6	(tear* or rupture* or ligament* or sprain* or strain* or dislocation*).mp.
7	5 or 6
8	Ankle/ or knee/
9	"feet (anatomy)"/ or hips/ or "leg (anatomy)"/
10	(lower extremit* or lower limb* or hip* or thigh* or leg* or knee* or ankle* or foot or feet or toe* or ((anterior or posterior) adj cruciate adj2 ligament*) or ((medial or lateral) adj collateral adj2 ligament*) or femoracetabular or femur or menisc* or patellofemoral).mp.
11	8 or 9 or 10
12	7 and 11
13	psychological needs/
14	sport psychology/ or sports medicine/
15	psychosocial factors/
16	social support/
17	(psycholog* or psychosocial or psycholog* response or psycholog* adaptation or psycholog* readiness or social support).mp.
18	(cognition* or affect or behav* or motiv* or emotion* or patient belief* or confiden* or attitude* or personalit* or self esteem or locus of control or self efficacy or autonomy or kinesiophob* or fear* of reinjur* or avoidance or anxiet* or frustrat* or coping or cope or stress* or optimism or quality of life or patient satisfaction or goal setting or goal* or expectation* or perception* or patient prefer* or athlet* identit* or wellbeing or mindfulness or resilienc* or catastrophi* or accept* or compassion* or hope or achiev* or education or knowledge or relationship* or interaction* or alliance* or feedback or encourag* or trust or communicat* or rapport or respect or caring or connection or socioeconomic status or cultural or ethnicity or urban rural).mp.

19	13 or 14 or 15 or 16 or 17 or 18
20	4 and 12 and 19
21	limit 20 to english language

c) Search Strategy for CINAHL Plus with Full Text

Database: CINAHL® Plus with Full Text
Search mode: Boolean/Phrase
Date Searched: May 28, 2018
Limits: English Language
Results: 1917, After duplicates removed: 1256

Search Strategy for CINAHL

No.	Searches
1	(MH "Athletic Injuries+")
2	Athlet* injur*" OR "sport* injur*" or "recreation* injur*"
3	S1 OR S2
4	(MH "Soft Tissue Injuries+") OR (MH "Sprains and Strains+") OR (MH "Rupture+") OR (MH "Ligament Injuries+") OR (MH "Dislocations+") OR (MH "Tears and Lacerations+
5	tear* or rupture* or ligament* or sprain* or strain* or dislocation*
6	S4 OR S5
7	(MH "Ankle Joint") OR (MH "Hip Joint") OR (MH "Knee Joint+") OR (MH "Tarsal Joint+") OR (MH "Toe Joint+")
8	"lower extremit*" or "lower limb*" or hip* or thigh* or leg* or knee* or ankle* or foot or feet or toe* or "anterior cruciate ligament" or "posterior cruciate ligament" or "medial collateral ligament" or "lateral collateral ligament" or femoracetabular or femur or menisc* or patellofemoral
9	S7 OR S8
10	("Medial Collateral Ligament Sprain") OR (MH "Ankle Sprain, Syndesmosis") OR (MH "Calf Strain") OR (MH "Ankle Sprain+") OR (MH "Leg Injuries+") OR (MH "Anterior Cruciate Ligament Injuries") OR (MH "Posterior Cruciate Ligament Injuries")
11	(MH "Hip Dislocation") OR (MH "Knee Dislocation+") OR (MH "Ankle Dislocation")
12	S6 AND S9
13	S10 OR S11 OR S12
14	(MH "Adaptation, Psychological+") OR (MH "Behavior+") OR (MH "Emotions+") OR (MH "Motivation+") OR (MH "Personal Values") OR (MH "Personality+") OR (MH "Psychology, Social+"
15	(MH "Psychology, Sports")
16	psycholog* OR psychosocial OR "psycholog* response*" OR "psycholog* adaptation" or "psycholog* readiness" or "social support"
17	cognition* or affect or behav* or motiv* or emotion* or "patient belief*" or confiden* or attitude* or personalit* or "self esteem" or "locus of control" or "self efficacy" or autonomy or kinesiophob* or "fear* of reinjur*" or avoidance or anxiet* or frustrat* or coping or cope or stress* or optimism or "quality of life" or "patient satisfaction" or "goal setting" or goal* or expectation* or perception* or "patient prefer*" or "athlet* identit*" or wellbeing or mindfulness or resilienc* or catastrophi* or accept* or compassion* or hope or achiev* or education or knowledge or relationship* or interaction* or alliance* or feedback or encourag* or trust or communicat* or rapport or respect or caring or connection or "socioeconomic status" or cultural or ethnicity or "urban rural"
18	S14 OR S15 OR S16 OR S17
19	S3 AND S13 AND S18
20	Limiters - English Language

d) Search Strategy for SportDiscus

Database: SPORTDiscus ® Plus with Full Text
Search mode: Boolean/Phrase

Date Searched: May 28, 2018
Limits: English Language
Results: 971, After duplicates removed: 500

Search Strategy for SPORTDiscus

No.	Searches
1	Athlet* injur*" OR "sport* injur*" or "recreation* injur*"
2	DE "SPORTS injuries"
3	S1 OR S2
4	DE "DISLOCATIONS (Anatomy)" OR DE "RUPTURE of organs, tissues, etc." OR DE "SOFT tissue injuries" OR DE "STRAIN (Physiology)"
5	tear* or rupture* or ligament* or sprain* or strain* or dislocation*
6	S4 OR S5
7	DE "ANKLE" OR DE "HIP joint" OR DE "KNEE" OR DE "PATELLOFEMORAL joint" OR DE "TARSAL joint" OR DE "TOE joint"
8	"lower extremit*" or "lower limb*" or hip* or thigh* or leg* or knee* or ankle* or foot or feet or toe* or "anterior cruciate ligament" or "posterior cruciate ligament" or "medial collateral ligament" or "lateral collateral ligament" or femoracetabular or femur or menisc* or patellofemoral
9	S7 OR S8
10	DE "ANTERIOR cruciate ligament injuries" OR DE "POSTERIOR cruciate ligament injuries" OR DE "COLLATERAL ligament injuries"
11	DE "HIP joint injuries" OR DE "KNEE injuries" OR DE "PATELLOFEMORAL joint injuries" OR DE "ANKLE injuries"
12	S6 AND S9
13	S10 OR S11 OR S12
14	DE "PSYCHOLOGY of athletes" OR DE "ATHLETIC identity (Psychology)"
15	DE "SPORTS psychology" OR DE "MOTIVATION (Psychology)"
16	DE "ATHLETIC ability -- Psychological aspects"
17	psycholog* OR psychosocial OR "psycholog* response*" OR "psycholog* adaptation" or "psycholog* readiness" or "social support"
18	cognition* or affect or behav* or motiv* or emotion* or "patient belief*" or confiden* or attitude* or personalit* or "self esteem" or "locus of control" or "self efficacy" or autonomy or kinesiophob* or "fear* of reinjur*" or avoidance or anxiet* or frustrat* or coping or cope or stress* or optimism or "quality of life" or "patient satisfaction" or "goal setting" or goal* or expectation* or perception* or "patient prefer*" or "athlet* identit*" or wellbeing or mindfulness or resilienc* or catastrophi* or accept* or compassion* or hope or achiev* or education or knowledge or relationship* or interaction* or alliance* or feedback or encourag* or trust or communicat* or rapport or respect or caring or connection or "socioeconomic status" or cultural or ethnicity or "urban rural"
19	S14 OR S15 OR S16 OR S17 OR S18
20	S3 AND S13 AND S19
21	Limiters - English Language

e) Scopus
Database: Scopus

Date Searched: May 28, 2018
Limits: English Language

Results: 1826, After duplicates removed: 488

Search Strategy for Scopus

(TITLE-ABS-KEY ("athlet* injur*" OR "sport* injur* or recreation* injur*")

AND TITLE-ABS-KEY (tear* OR rupture* OR ligament* OR sprain* OR strain* OR dislocation*)
AND TITLE-ABS-KEY ("lower extremit*" OR "lower limb*" OR hip* OR thigh* OR leg* OR knee* OR ankle* OR foot OR feet OR toe* OR "anterior cruciate ligament" OR "posterior cruciate ligament" OR "medial collateral ligament" OR "lateral collateral ligament" OR femoracetabular OR femur OR menisc* OR patellofemoral)

AND TITLE-ABS-KEY (psycholog* OR psychosocial OR "psycholog* response*" OR "psycholog* adaptation" OR "psycholog* readiness" OR "social support" OR cognition* OR affect OR behav* OR motiv* OR emotion* OR "patient belief*" OR confiden* OR attitude* OR personalit* OR "self esteem" OR "locus of control" OR "self efficacy" OR autonomy OR kinesiophob* OR "fear* of reinjur*" OR avoidance OR anxiet* OR frustrat* OR coping OR cope OR stress* OR optimism OR "quality of life" OR "patient satisfaction" OR "goal setting" OR goal* OR expectation* OR perception* OR "patient prefer*" OR "athlet* identit*" OR wellbeing OR mindfulness OR resilienc* OR catastrophi* OR accept* OR compassion* OR hope OR achiev* OR education OR knowledge OR relationship* OR interaction* OR alliance* OR feedback OR encourag* OR trust OR communicat* OR rapport OR respect OR caring OR connection OR "socioeconomic status" OR cultural OR ethnicity OR "urban rural"))

f) ProQuest
Database: ProQuest

Date Searched: May 28, 2018
Limits: English Language
Results: 319, After duplicates removed: 295

Search Strategy for ProQuest

noft(sport* injur* OR athlet* injur* OR recreation* injur*)

AND noft(tear* OR rupture* OR ligament* OR sprain* OR strain* OR dislocation*)
AND noft(lower extremit* OR lower limb* OR hip* OR thigh* OR leg* OR knee* OR ankle* OR foot OR feet OR toe* OR anterior cruciate ligament OR posterior cruciate ligament OR medial collateral ligament OR lateral collateral ligament OR femoracetabular OR femur OR menisc* OR patellofemoral)
AND noft (sycholog* OR psychosocial OR psycholog* response OR psycholog* adaptation OR psycholog* readiness OR social support OR cognition* OR affect OR behav* OR motiv* OR emotion* OR patient belief* OR confiden* OR attitude* OR personalit* OR self esteem OR locus of control OR self efficacy OR autonomy OR kinesiophob* OR fear* of reinjur* OR avoidance OR anxiet* OR frustrat* OR coping OR cope OR stress* OR optimism OR quality of life OR patient satisfaction OR goal setting OR goal* OR expectation* OR perception* OR patient prefer* OR athlet* identit* OR wellbeing OR mindfulness OR resilienc* OR catastrophi* OR accept* OR compassion* OR hope OR achiev* OR education OR knowledge OR relationship* OR interaction* OR alliance* OR feedback OR encourag* OR trust OR communicat* OR rapport OR respect OR caring OR connection OR socioeconomic status OR cultural OR ethnicity OR urban rural)

SUPPLEMENTARY FILE 2: MIXED METHOD APPRAISAL TOOL

MMAT 2018 Clarifications (to be used in conjunction with tool)

Qualitative studies

1.1. Is the qualitative approach appropriate to answer the research question? (describes the approach and rationale for using that method)

1.2. Are the qualitative data collection methods adequate to address the research question? (refers to the process of how they sampled and collected data: sampling method, description of participants, interviewers, methods/data collection, location)

1.3. Are the findings adequately derived from the data? (report how data was derived/analyzed (e.g., inductive/deductive approaches, software, consultation, road map of how themes/theory were derived, reflexivity)

1.4. Is the interpretation of results sufficiently substantiated by data? (defines data "saturation" or data/theoretical sufficiency)

1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?

Quantitative randomized controlled trials

2.1. Is randomization appropriately performed? (explains randomization, allocation concealment)

2.2. Are the groups comparable at baseline? (sampling procedures, inclusion/exclusion criteria, baseline demographics/characteristics)

2.3. Are there complete outcome data? (complete data with appropriate measures and justified tools, power calculation, RCT reports >80% complete data, or <20% drop-out rates)

2.4. Are outcome assessors blinded to the intervention provided? (assessors and interventionists, attempt to blind where possible or reports why they could not blind)

2.5 Did the participants adhere to the assigned intervention? (reports a measurement tool to assess compliance, reports compliance >60%)

Quantitative non-randomized controlled trials (cohorts, case-control cross-sectional)

3.1. Are the participants representative of the target population? (sampling procedures, inclusion/exclusion)

3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)? (explanation of appropriate measures and justified tools)

3.3. Are there complete outcome data? (at least 80% follow up, power calculation)

3.4. Are the confounders accounted for in the design and analysis? (multi-variable analyses)

3.5. During the study period, is the intervention administered (or exposure occurred) as intended? (reports adherence to protocol, limited cross-contamination (e.g., unplanned co-interventions), for cross-sectionals automatic NO)

Quantitative descriptive studies (incidence/prevalence, case series, case study, surveys)

4.1. Is the sampling strategy relevant to address the research question?

4.2. Is the sample representative of the target population? (sampling, inclusion/exclusion)

4.3. Are the measurements appropriate? (explanation of appropriate measures and justified tools)

4.4. Is the risk of nonresponse bias low? (include completion rates, adherence rates)

4.5. Is the statistical analysis appropriate to answer the research question? (If no statistical analyses reported, automatic NO)

Mixed Methods Studies

5.1. Is there an adequate rationale for using a mixed methods design to address the research question?

5.2. Are the different components of the study effectively integrated to answer the research question?

5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?

5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? (Discuss both divergence for both consistency and inconsistency. Rate Yes if there is no divergence)

5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved (Minimum criteria: Give it a 1 if both individual qualitative and quantitative ratings are greater than 4)

SUPPLEMENTARY FILE 3: MODIFIED OXFORD CENTRE OF EVIDENCE BASED MEDICINE

Table 1. Modified Oxford Centre of Evidenced-based Medicine (2009)

Level of evidence	Definition
1B	Individual RCT (with narrow Confidence Interval) Individual inception cohort study with > 80% follow-up Prospective cohort study with good follow-up
2b	Individual cohort study Low quality RCT; e.g., <80% follow-up, prone to many bias Retrospective cohort study Low quality cohort study
3b	Case-Control Study Poor quality cohort studies (limited population, identified control group)
4	Case series Cross-sectional Pilot prospective cohort (no control group)

*1a, 2a, 3a, 5 level of evidence were not included due to study exclusion/inclusion criteria

SUPPLEMENTARY FILE 4: DATA EXTRACTION TABLE

Study Features (author, year, design, country)	Participants (injury type, sport, level, sample size, gender, age*)	Aims of Study	Stage of Recovery**	Non-Physical Domain§	Non-Physical Factors Identified	Non-Physical Outcome Measure***	Level of Evidence§§	MMAT Rating§§§
Quantitative - Randomized Controlled Trials (n=3)								
Cupal & Brewer, 2001 *Intervention – RCT* *USA*	ACLR Sport: basketball, alpine skiing, soccer, volleyball, hockey, rodeo Level: competitive, recreation n=30 (Men=16, Women=14) 28.2±8.2 (18-50) years	evaluate the effectiveness of an intervention featuring relaxation and imagery on psychological and physical aspects of rehabilitation following ACL reconstructive surgery using both placebo and standard, no-treatment control groups	Rehabilitation	Psychological	Fear	Re-injury Anxiety Scale	2b	1
Maddison et al., 2012 *Intervention – RCT* *USA*	ACLR Sport: not reported Level: not reported n=21 (Men=13, Women=18) 34.86±8.84 years	evaluate the effectiveness of a guided imagery intervention to improve functional outcomes post-ACLR, and explore potential psychological and psychobiological mechanisms	Rehabilitation	Psychological	Self-Efficacy	Rehabilitation Self-Efficacy Rehabilitation Self-Imagery	2b	2
Thomee et al., 2010 *Intervention – RCT* *Sweden*	ACL Sport: not reported Level: Competitive, recreation n=40 (Men=19, Women=18) 30 (16-53) years	compare the effects of 2 rehabilitation models on patients' knee function 1 year after ACL injury	Rehabilitation	Psychological	Self-Efficacy	Knee Self-efficacy Scale Multidimensional Health Locus of Control	2b	0
Quantitative – Non-Randomized Studies: Cohort Studies (n=23)								
Mainwaring et al., 2010 *Prospective Cohort* *Canada*	ACL Sport: not reported Level: competitive n=7 (Men=1, Women=6) 21.2±2.94 (17.5-37.0) years	examine and compare emotional disturbance and depression following sports concussion and musculoskeletal injury relative to un-injured controls	Acute	Psychological	Affect	Shortened POMS	3b	2
Ardern et al., 2013 *Pilot Prospective Cohort* *Australia*	ACLR Sport: Not reported Level: Not reported n=187 (Men=115, Women=73) 27.3±8.7 (15.1-60.1) years	assess preoperative psychological responses and its association with returning to the preinjury level of sports participation at 12 months after ACL reconstruction	RTS	Psychological	Psychological Readiness Fear Self-Efficacy	ACL-RSI TSK Incredibly Short Profile of Mood States ERAIQ Sport Rehabilitation LOC	4	4
Baranoff et al., 2015 *Pilot Prospective Cohort*	ACLR Sport: Australia rules football, netball, basketball Level: Not reported n=44 (Men=27, Women=17) 27±9.4 years	assess the roles of catastrophizing and acceptance in relation to depression, pain intensity, and substance use to cope with injury within 2 weeks post-surgery and after 6 months of ACLR rehabilitation	Rehabilitation	Psychological	Coping Catastrophizing Pain Identity	Acceptance & Action Questionnaire Pain Catastrophizing Scale AIMS Depression Anxiety and Stress Scale Brief Coping Orientations to the Problem Experience Inventory	4	2

Brewer et al., 2000 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: competitive, recreational n=80 (Men=55, Women=25) 27.22±8.17 years	replicate the findings of Laubach et al. (1996) regarding the relationship between causal attributions and sport injury recovery rate and, more importantly, to extend the findings of Laubach et al. regarding the relationship between causal attributions for recovery and adherence to sport injury rehabilitation by using a prospective research design	Rehabilitation	Psychological	Perceptions	Revised Casual Dimension Scale II Sport Injury Rehabilitation Adherence Scale	4	2
Brewer et al., 2007 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: Not reported n=91 (Men=58, Women=33) 29.73±10.24 (14-54) years	examine predictors of daily pain and negative mood over the first 6 weeks of rehabilitation following ACL reconstruction	Acute	Psychological	Identity Affect	AIMS Shortened POMS Life Orientation Test-Revised	4	2
Brewer & Cornelius 2010 *Pilot Prospective Cohort* *USA*	ACLR Sport: soccer, basketball, football, skiing Level: competitive, recreational n=108 (Men=72, Women=36) 29.38±9.93 (14-54) years	examine the possibility of self-protective changes in athletic identity (AI) being initiated after the occurrence of a severe injury	RTS	Psychological	Identity	AIMS Self-reported perceived recovery	4	1
Brewer et al, 2013 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: Not reported n=91 (Men=58, Women=33) 29.73±10.24 (14-54) years	identify predictors of adherence to home rehabilitation exercises following ACL reconstruction	Acute	Psychological	Affect Identity	AIMS Shortened POMS Life Orientation Test-Revised Self-designed adherence measure	4	3
Brewer et al., 2017 *Pilot Prospective Cohort* *USA*	ACLR Sport: soccer, basketball, football, skiing Level: competitive, recreational n=108 (Men=72, Women=36) 29.38±9.93 (14-54) years	examine longitudinally perceived adversarial growth after a single type an anterior cruciate ligament injury using a multidimensional measure of adversarial growth	RTS	Psychological	Affect Perceptions	POMS-B Post Traumatic Growth inventory	4	2
Chmielewski et al., 2011 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: Not reported n=97 (Men=56, Women=41) Group 1: 22.4±7.1 years Group 2: 27.3±9.0 years	examine changes in selected psychosocial factors and the association with knee pain and function over 12 weeks in people with ACL reconstruction	Rehabilitation	Psychological	Fear Catastrophizing Pain Self-Efficacy	TSK-11 Pain Catastrophizing Scale Self-efficacy for Rehabilitation Outcome Scale	4	3
Gignac et al., 2015 *Pilot Prospective Cohort* *Canada*	ACLR Sport: soccer, basketball, skiing, ultimate frisbee, football, rugby, baseball, softball, volleyball Level: Not reported	examine perceptions of importance of exercise and fears of reinjury presurgery and at three-year intervals post ACLR	RTS	Psychological	Fear Perceptions	ACL-QOL Exercise Identity Scale	4	3

	n=121 (Men=77, Women=44) 27.6±6.2 (18-40) years							
Langford et al., 2009 *Pilot Prospective Cohort* *Australia*	ACLR Sport: Mot reported Level: competitive, recreational n=87 (Men=55, Women=32) 27.48±5.72 (18-40) years	determine whether the psychological responses of athletes who had undergone ACL reconstruction surgery change during the rehabilitation period, and whether these psychological responses are related to returning to competitive sport	RTS	Psychological	Psychological Readiness Affect	ACL-RSI ERAIQ	4	2
Lepley et al., 2018 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: Not reported n=20 (Men=9, Women=11)	examine the contributions of presurgical levels of quadriceps strength, pain, and activation to self-reported knee function and readiness to return to functional activity collected when individuals with an ACLR returned to unrestricted physical activity	RTS	Psychological	Psychological Readiness Affect	ACL-RSI ERAIQ	4	3
Masten et al., 2014 *Pilot Prospective Cohort* *Slovenia*	Mixed knee injuries Sport: Not reported Level: professional, competitive n=68 (Men=47, Women=21) 23.4 (16-40) years	to measure patients' expectations of knee surgery and to develop and test the reliability of patient-derived knee surgery expectations surveys in a large sample of patients undergoing various types of operations on the knee	Rehabilitation	Psychological Social	Affect Coping Identity Beliefs Social support	State Anxiety Questionnaire SIP AIMS Sports Injury Rehabilitation Beliefs Survey Self-designed questionnaire on social support	4	2
Morrey et al., 1999 *Pilot Prospective Cohort* *USA*	ACLR Sport: football, basketball, soccer, volleyball, baseball Level: competitive, recreational n=27 (Men=15, Women=12) 24±7.3 years	to determine the emotional and cognitive impact of injury and surgery on physical recovery	Rehabilitation	Psychological	Affect Coping Fear	ERAIQ Incredibly Short Profile of Mood States SIP	4	2
Niven et al., 2012 *Pilot Prospective Cohort* *United Kingdom*	ACLR Sport: Gaelic rugby, soccer, hockey Level: professional, recreational, competitive n=87 (Men=65, Women=22) 28.95±7.7 years	to consider changes in adherence behavior over an 8-week period in athletes who have had ACL reconstructive surgery and to investigate the value of the TPB in explaining intention to adhere and actual rehabilitation adherence behavior, and to consider the role of age, sport and performance level on behavior	Acute	Psychological Social	Perceptions Self-Efficacy Social support	Self-developed Attitudes Towards ACL Rehabilitation Questionnaire Self-reported diary on adherence	4	1
Paterno et al., 2018 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: Not reported n=40 (gender not reported) 16.2±3.4 years	to determine whether self-reported fear at time of RTS was related to activity level at time of RTS, objective clinical measures of function at time of RTS, and incidence of second ACL injury within the first 24 months after RTS	RTS	Psychological	Fear	TSK-11	4	2
Roessler et al., 2015 *Pilot Prospective Cohort* *Denmark*	ACLR Sport: soccer, alpine skiing, floor hockey, other Level: competitive, recreational	to assess the significance of psychological motives for sports participation as predictors of: (a) levels of pain; (b) symptoms; (c) function; (d) quality of life;	RTS	Psychological	Motivation	Self-designed motives survey SF-36	4	3

	n=121 (Men=89, Women=32) 26.03±4.92 years	and (e) overall mental well-being measured using the Knee Injury and Osteoarthritis Outcome Score (KOOS) and the SF-36 Mental Component Score (MCS) 2 years after the knee injury						
Rosenberger et al., 2005 *Pilot Prospective Cohort* *USA*	Mixed knee injuries Sport: Not reported Level: Not reported n=98 (Men=52, Women=46) ACLR group= 31.9 years Meniscectomy group = 44.8 years	to compare preoperative predictions and subsequent postoperative outcomes as rated by physicians and patients in 2 commonly performed elective operative procedures: arthroscopic meniscectomy and ACL reconstruction	Acute	Psychological	Recovery Expectations	Self-rating of expected recovery for pain and function	4	1
Scherzer et al., 2001 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: competitive, recreation n=54 (Men=37, Women=17) 28.0±8.33 years	to examine the relationship between self-reported use of psychological skills and adherence to a sport-injury rehabilitation regimen	Rehabilitation	Psychological Contextual	Coping Environment	Sports Injury Survey Sport Injury Rehabilitation Adherence Scale	4	1
Shapiro et al., 2017 *Pilot Prospective Cohort* *USA*	ACLR Sport: Not reported Level: Not reported n=73 (gender not reported) 14-54 years	to examine patterns of emotional response to ACL reconstruction surgery for people with low levels of negative mood before surgery	Acute	Psychological	Affect	Shortened POMS-B	4	1
Sonesson et al., 2016 *Pilot Prospective Cohort* *Sweden*	ACLR Sport: football, handball, floorball, motocross, alpine skiing Level: professional, recreational, competitive n=65 (Men=34, Women=31) Median 22 (15-45) years	to describe individuals' expectations, motivation, and satisfaction before, during and after rehabilitation for ACL reconstruction and to explore how these factors were associated with return to pre-injury sport activity at 1-year follow-up	RTS	Psychological	Motivation Recovery Expectations	Self-designed questionnaire on expectations, motivation and satisfaction	4	1
Thomee et al., 2007 *Pilot Prospective Cohort* *Sweden*	ACLR/ACL Sport: Not reported Level: professional, recreational, competitive n=63 (Men=35, Women=28) ACL deficient group : 32.9 (17-54) years Surgery group: 29.2 (17-55) years	to describe the patients' perceived self-efficacy at various times post injury and surgery respectively for responsiveness of the K-SES and to correlate the K-SES score with the patients' subjective symptoms	Rehabilitation	Psychological	Self-Efficacy	KSES	4	2
Thomee et al., 2008 *Pilot Prospective Cohort* *Sweden*	ACLR Sport: Not reported Level: professional, recreational, competitive n=38 (Men=25, Women=13) 29.7 (16-55) years	to explore the potential for pre-operative self-efficacy of knee function measured by the K-SES to predict patient outcome in terms of physical activity, knee symptoms and muscle function 1 year after an ACL reconstruction	RTS	Psychological	Self-Efficacy	KSES	4	2
Quantitative – Non-Randomized Studies: Case Control/Retrospective Cohort Studies (n=3)								

Lentz et al., 2014 *Case control* *USA*	ACLR Sport: not reported Level: competitive n=73 (Men=45, Women=28) 23.2±9.7 years	to compare physical impairment, functional, and psychosocial measures during the return-to-sport stage after ACL reconstruction among 3 return-to-sport subgroups	RTS	Psychological	Fear	TSK-11	3b	3
Nwachukwu et al., 2017 *Case Control* *USA*	ACLR Sport: basketball, football, lacrosse, skiing, soccer, tennis Level: competitive n=232 (Men=119, Women=112) 26.7±12.5 years	to investigate the role of preoperative patient-reported outcome scores for predicting the MCID and RTP after ACLR	RTS	Psychological	Psychological Readiness	Self-designed questionnaire on RTP SF-12	3b	2
McAllister et al., 2003 *Retrospective Cohort* *USA*	ACLR/ACL Sport: Not reported Level: Not reported n=66 (gender not reported) Age: Not reported	evaluated knee function and quality of life at a minimum of 2 years' follow-up in a group of elite collegiate athletes who had sustained an ACL injury	RTS	Psychological	Perceptions	Self-designed questionnaire on perceptions of performance SF-36	3b	1
Quantitative – Non-Randomized Studies: Cross-Sectional Studies (n=21)								
Ardern et al., 2012 *Cross-sectional* *Australia*	ACLR Sport: Australian football, netball, soccer, basketball Level: Not reported n=209 (Men=121, Women=88) 31.7±9.7 years	to examine whether athletes who had returned to regular sport participation following anterior cruciate ligament reconstruction surgery still feared re-injury	RTS	Psychological	Fear	Self-designed questionnaire on fear ACL-QOL	4	2
Ardern et al., 2014 *Cross-sectional* *Australia*	ACLR Sport: football, floorball, handball, martial arts, basketball, hockey Level: professional, recreational, competitive n=164 (Men=99, Women=65) 26 (18-45) years	to examine whether psychological, appraisal of knee function, and demographic factors were related to returning to the pre-injury sport and recreational activity after ACL reconstruction	RTS	Psychological	Psychological Readiness Fear Self-Efficacy Motivation Affect	ACL-RSI TSK KSES Multidimensional Health Locus of Control ACL-QOL	4	4
Bennell et al., 2016 *Cross-sectional* *Australia*	ACLR/ACL Sport: not reported Level: professional, recreational, competitive n=233 (Men=163, Women=70) 32.1±8.5 years	to describe their general knowledge of knee OA, beliefs about their risk of developing knee OA, and history of health professional advice, including any recommended treatments aiming to reduce OA risks after ACL injury	RTS	Psychological Social	Beliefs Social support	Self-designed survey about beliefs, knowledge, education received	4	1
Brewer et al., 2002 *Cross-sectional* *USA*	ACLR Sport: Not reported Level: competitive, recreational n=72 (Men=50, Women=22) 26.27±7.94 years	to examine the extent to which orthopedic surgery experience, general psychological distress, and two personal factors (i.e., age and gender) were related to surgery-specific anxiety prior to ACLR examine the concerns and anticipated benefits associated with ACLR	Acute	Psychological Social	Affect Social support Recovery Expectations	Surgery-Specific Anxiety Scale Self-designed questionnaire on concerns and benefits of ACLR	4	2

Brewer et al, 2003 *Cross-sectional* *USA*	ACLR Sport: not reported Level: competitive, recreational n=61 (Men=40, Women=21) 26.03±7.99 (14-47) years	to investigate whether prospective associations among psychological factors and rehabilitation adherence differ as a function of age through reanalysis of data from a previously published report	Acute	Psychological Social	Motivation Identity Social support	Self-Motivation Inventory AIMS Brief Symptom Inventory Social Support Inventory Sport Injury Rehabilitation Adherence Scale	4	2
Chan et al., 2009 *Cross-sectional* *Hong Kong*	ACLR Sport: soccer, basketball Level: Not reported n=115 (Men=94, Women=21) Men group: 27.05±3.99 years Women group: 23.38±4.01 years	to examine the relationship between patients' perceptions of their physiotherapists' autonomy-supportive behaviors and patients' autonomous motivation on adherence to home-based rehabilitation exercise	Rehabilitation	Psychological Social Contextual	Autonomy Social support Therapeutic Alliance Motivation Environment	Health Care Climate Questionnaire Treatment Self-Regulation Questionnaire Sport Injury Rehabilitation Adherence Scale Self-reported Adherence Scale	4	2
Chan et al., 2011 *Cross-sectional* *Hong Kong*	ACLR Sport: association football, basketball, volleyball, athletics Level: Not reported n=115 (Men=94, Women=21) Men group: 27.05±3.99 years Women group: 23.38±4.01 years	to examine the effect of sport motivation on treatment motivation (i.e., the trans-contextual process) among recreational sport participants who ruptured their ligaments in sport	Rehabilitation	Psychological Social Contextual	Motivation Autonomy Social support Therapeutic Alliance Environment	Behavioral Regulation in Sport Questionnaire Health Care Climate Questionnaire Treatment Self-Regulation Questionnaire Sport Injury	4	2
Chmielewski et al., 2008 *Cross-sectional* *USA*	ACLR Sport: Not reported Level: Not reported n=97 (Men=61, Women=36) Group 1: 26.2±9.2 years Group 2: 25.3±11.0 years Group 3: 24.0±7.7 years	to measure fear of movement/reinjury levels and determine the association with self-report of function at different time frames during ACL reconstruction rehabilitation	RTS	Psychological	Fear	TSK-11 SF-8	4	4
Feucht et al., 2016 *Cross-sectional* *Germany*	ACLR Sport: Not reported Level: professional, recreational, competitive n=181 (Men=125, Women=5) 31.2±10.6 years	to prospectively analyze and to compare patient expectations of primary and revision ACLR (R-ACLR), and to assess associated factors	Acute	Psychological Contextual	Recovery Expectations Environment	Self-designed survey of recovery expectations	4	2
Flanigan et al., 2013 *Cross-sectional* *USA*	ACLR Sport: softball, football, rugby, volleyball, soccer, athletics Level: professional, recreational, competitive n=135 (Men=67, Women=68) 28.3±10.4 (15-56) years	to determine patient-cited reasons for lack of return to sport after ACLR	RTS	Psychological	Fear	Self-designed survey of RTP status and related Factors	4	1
George et al., 2012 *Cross-sectional* *USA*	ACLR Sport: Not reported Level: Not reported	to investigate the TSK and PCS to determine if use of shortened versions of these questionnaires is warranted in	Rehabilitation	Psychological	Fear Catastrophizing Pain	TSK-11 Pain Catastrophizing Scale	4	2

	n=289 (Men=180, Women=109) Early post op group: 25.5±9.9 years Late post op group: 24.6±10.3 years	patients with ACLR						
Hart et al., 2015 *Cross-sectional* *Australia*	ACLR Sport: Not reported Level: not reported n=66 (gender not reported) OA group: 45±11 years No OA group: 39±9 years	to compare knee confidence and kinesiophobia between those with and without knee OA after ACLR; secondly, to investigate the relationship between knee confidence and kinesiophobia, knee-related symptoms, and functional impairments in those with knee OA after ACLR	RTS	Psychological	Confidence Fear	KOOS QOL TSK	4	2
Kvist et al., 2005 *Cross-sectional* *Sweden*	ACLR Sport: soccer, handball, ice hockey, floorball, American football Level: Not reported n=62 (Men=34, Women=28) median 27 (18-37) years	to investigate whether fear of re-injury is a factor of significance for returning to previous level of activity in patients who have undergone ACL reconstruction	RTS	Psychological	Fear	TSK	4	1
Lam et al., 2017 *Cross-sectional* *USA*	Mixed knee injuries Sport: baseball, basketball, soccer Level: competitive n=87 (Men=39, Women=48) Mild Group: (M 19.3±1.7; F 19.4 ±1.2) years Severe Group: (M 20.0±2.1; F 18.8±1.1) years	to determine whether knee-specific function, as measured by the IKDC and HRQOL differs in collegiate athletes based on the severity of a previous knee injury	Rehabilitation	Psychological	Affect	SF-12	4	2
Lentz et al., 2012 *Cross-sectional* *USA*	ACLR Sport: Not reported Level: competitive n=94 (Men=60, Women=34) 22.4± 8.6 years	to examine differences in clinical variables between those who return to preinjury level of sports participation and those who do not at 1 year following ACL reconstruction and to determine the factors most strongly associated with return-to-sport status in a multivariate model, and to explore the discriminatory value of clinical variables associated with return to sport at 1-year post surgery	RTS	Psychological	Fear	TSK-11	4	3
Mancuso et al., 2001 *Cross-sectional* *USA*	Mixed knee injuries Sport: Not reported Level: Not reported n=216 (gender not reported) Age not reported	to measure patients' expectations of knee surgery and to develop and test the reliability of patient-derived knee surgery expectations surveys in a large sample of patients undergoing various types of operations on the knee	Acute	Psychological Contextual	Recovery Expectations Environment	Self-designed survey on recovery expectations and environment	4	2

McGuine et al., 2012 *Pilot Prospective Cohort* *USA*	Mixed knee injuries Sport: soccer, basketball, running, track and field, volleyball, softball, cheer/dance, snow skiing Level: Not reported n=255 (Men=0, Women=255) 17.4±2.4 years	to document the changes in knee function and self-reported HRQOL in a cohort of women athletes who have sustained a knee injury	Rehabilitation	Psychological	Affect	SF-12	4	2
Thomee et al., 2007 *Cross-sectional* *Sweden*	ACLR/ACL Sport: Not reported Level: recreational n=116 (Men=70, Women=46) 31.3±8.9 (18-55) years	to explore physical and psychological measures believed to determine patients perceived self-efficacy in the rehabilitation of patients with an ACL injury	RTS	Psychological	Self-Efficacy Coping	KSES Coping Strategies Questionnaires SF-36 Multidimensional Health Locus of Control	4	4
Tripp et al., 2011 *Cross-sectional* *USA*	ACLR Sport: soccer, basketball, hockey, skiing, baseball, squash, rugby, karate, volleyball, football Level: competitive, recreation n=49 (Men=27, Women=22) 29.15±11.5 (16-53) years	to develop exploratory regression models for confidence in returning to sport and return to sport in athletes at 1 year after ACL reconstruction	RTS	Psychological	Fear Affect Confidence Catastrophizing Pain	TSK Shortened POMS Pain Catastrophizing Scale Sport Self-Confidence inventory	4	1
Udry et al., 2003 *Cross-sectional* *USA*	ACLR Sport: Not reported Level: not reported n=121 (Men=78, Women=43) 21.6±8.0 (15-48) years	to describe the mood-disturbance levels and psychological readiness levels of preoperative ACL patients and examine differences between adolescent and adult sports medicine patients relative to psychological readiness for ACL surgery	Acute	Psychological	Psychological Readiness Self-Efficacy Affect Beliefs	Processes of Change to Injury Rehabilitation Questionnaire Self-Efficacy Injury Rehabilitation Shortened POMS-B Decisional Balance Questionnaire	4	1
Webster et al., 2008 *Cross-sectional* *Australia*	ACLR Sport: Not reported Level: Not reported n=220 (Men=124, Women=96) 29.2±9.7 (16-54) years	to develop a scale which measured athletes' emotions, confidence and risk appraisal when returning to sport after ACL reconstruction surgery	RTS	Psychological	Psychological Readiness	ACL-RSI	4	2
Quantitative – Descriptive Studies: Case Series (n=4)								
Ardern et al., 2015 *Case Series* *Australia*	ACLR Sport: Australian football, netball, soccer, basketball Level: competitive, recreational n=122 (Men=76, Women=46) 28.3±8.4 (15.1-60.1) years	to investigate the sports participation outcomes of a group of athletes who had not returned to their preinjury level sport at 1 year after ACL reconstruction	RTS	Psychological	Psychological Readiness Fear Affect	ACL-RSI TSK ERAIQ Incredibly Short Profile of Mood States	4	4
Mankad et al., 2009 *Case Study – Pilot Intervention* *Australia*	ACLR Sport: football Level: professional n=1 (Men=1, Women=0) 26 years	explore the acceptability and effectiveness of the written emotional disclosure paradigm within the context of professional sport	Rehabilitation	Psychological Social	Affect Social support	Impact of Event Scale Shortened POMS Rosenberg Self-esteem Scale	4	2

Samuel et al., 2015 *Case Series* *Israel*	ACLR Sport: basketball, judo, track and field, gymnastics Level: Professional n=6 (gender not reported) Age not reported	to examine competitive athletes' experiences of severe injuries	Rehabilitation	Psychological Social Contextual	Coping Perceptions Motivation Social support Environment	Change-Event Inventory Brief Coping Orientations to the Problem Experience Inventory AIMS	4	3
Tagesson & Kvist, 2016 *Case Series* *Sweden*	ACLR Sport: Not reported Level: competitive, recreation n=19 (Men=11, Women=8) Re-injury group: 21 (17-25) years No re-injury group: 21 (16-31) years	to compare fear of re-injury, patient reported knee function and static and dynamic tibial translation assessed before and 5 weeks after the ACL reconstruction, and muscle strength assessed before the ACL reconstruction, between the individuals who sustained a new knee injury, and those with intact ACL reconstruction (i.e. no subsequent injury)	RTS	Psychological	Fear Confidence	TSK Modified KOOS and ACL-QOL	4	4
Mixed Methods Studies (n=5)								
Carson & Polman, 2008 *Mixed Methods* *United Kingdom*	ACLR Sport: Rugby Level: Professional n=1 (Men=1, Women=0) Age not reported	to provide a more holistic view of cognitive appraisal related to serious sports injury	Rehabilitation	Psychological Social	Affect Coping Self-efficacy Autonomy Fear Social support	ERAIQ SIP Coping with Health, Injuries, and Problems Inventory Social Support Survey Semi-structured Interviews	N/A	3
Carson & Polman, 2010 *Mixed Methods* *United Kingdom*	ACLR Sport: Rugby Level: Professional n=4 (Men=4, Women=0) 18-27 years	to investigate longitudinally the possible benefits of avoidance coping during rehabilitation from an ACL injury	Rehabilitation	Psychological Social	Coping Social support	Self-Reported Diary Coping with Health, Injuries, and Problems Inventory Semi-Structured Interviews	N/A	2
Rock & Jones, 2002 *Mixed Methods* *USA*	ACLR Sport: badminton, football Level: competitive n=3 (Men=2, Women=1) median 35 (31-40) years	to explore the impact of counselling skills interventions on the experiences of participants undergoing rehabilitation from ACL-reconstruction surgery	Rehabilitation	Psychological Social	Motivation Coping Social support Recovery expectations	ERAIQ Social Support Behaviors Survey Sport Injury Rehabilitation Adherence Scale Self-Reported Diary Semi-structured Interviews	N/A	2
Ross et al., 2017 *Mixed Methods* *South Africa*	ACLR Sport: skiing, netball, motocross, rugby, soccer, hockey Level: professional, recreational, competitive n=12 (Men=10, Women=2) 33.9 (19-45) years	to explore factors influencing or informing athletes' experience of fear of reinjury post ACL reconstruction, albeit normal knee function	RTS	Psychological	Fear	Self-designed questionnaire on fear Semi-structured Interviews	N/A	2

Tjong et al., 2014 *Mixed Methods* *Canada*	ACLR Sport: soccer, football, ultimate frisbee, basketball, other Level: professional, recreational, competitive n=31 (Men=22, Women=9) 18-40 years	to understand the factors affecting the cessation of sport participation after ACL reconstruction	RTS	Psychological Social Contextual	Fear Perceptions Identity Confidence Social support Environment	Self-designed questionnaire on RTS status Semi-structured interviews	N/A	1
Qualitative Studies (n=18)								
Carson & Polman, 2012 *Qualitative – Case Study* *Australia*	ACLR Sport: Rugby Level: Professional n=5 (Men=4, Women=0) Median 24 (18-27) years	to investigate the experience of five professional men rugby union players during their return to competition, in order to ascertain the emotional reactions and coping strategies actually utilized during their return	RTS	Psychological Social Contextual	Coping Affect Fear Confidence Social support Environment	Self-Reported Diary Semi-structured Interviews	N/A	4
Evans & Hardy, 2002 *Qualitative – Case Study* *United Kingdom*	ACL Sport: tennis, rugby football, soccer, netball Level: not reported n=7 (Men=5, Women=2) 27.22±6.96 (19-39) years	a study to expand on the findings from an earlier goal-setting intervention study	Rehabilitation	Psychological Social	Coping Affect Motivation Social support Therapeutic alliance		N/A	4
Ezzat et al, 2018 *Qualitative – Phenomenology* *Canada*	Mixed knee injuries Sport: Not reported Level: Not reported n=20 (Men=10, Women=10) median 22.3 (16.5-26.4)	to understand the influence of the injury experience on current attitudes and beliefs about PA and PTOA 3-10 years after intra-articular knee injury	RTS	Psychological Social	Beliefs Identity Confidence Fear Perceptions Resiliency Social support		N/A	4
Filbay et al., 2016 *Qualitative – Descriptive* *Australia*	ACLR Sport: AFL football, netball, soccer, rugby, skiing, dancing, weight lifting, running, yoga Level: Not reported n=17 (Men=7, Women=10) 36±8 (25-50) years	to examine how do people describe their QoL 5-20 years after ACLR and what factors affect QoL	RTS	Psychological	Fear		N/A	4
Ford & Gordon, 1999 *Qualitative – Descriptive* *Australia*	Mixed knee injuries Sport: Australian football, volleyball, basketball Level: professional, recreational, competitive n=4 (Men=2, Women=2) Age not reported	to describe athletes' responses to rehabilitation, experience of loss and assistance to facilitate their recovery process	Rehabilitation	Psychological Social	Identity Coping Social support Therapeutic alliance		N/A	2

Heijne et al., 2008 *Qualitative – Descriptive* *Sweden*	ACLR Sport: Not reported Level: competitive n=12 (Men=9, Women=1) Median 29 (23-41) years	to explore and describe patients' experiences of the rehabilitation process after ACL reconstruction	Rehabilitation	Psychological Social Contextual	Coping Affect Social support Recovery expectations Environment	N/A	3
Ivarsson et al., 2016 *Qualitative – Narrative/Case study* *Sweden*	ACLR Sport: handball Level: professional n=1 (Men=1, Women=0) 28 years	to explore an athlete's career development, including the impact of injuries, and (b) to explore that athlete's injury experiences in detail	Rehabilitation	Psychological Social	Coping identity Fear Social support Shared decision-making Recovery expectations	N/A	5
Johnson et al., 2016 *Qualitative - Narrative* *Sweden*	ACLR Sport: soccer Level: professional n=8 (Men=0, Women=8) 28±3.9 (25-35) years	to understand the psychosocial variables that characterize players who express a resilient behavior during rehabilitation after a first-time ACL injury and subsequent reconstruction	Rehabilitation	Psychological Social	Resilience Social support	N/A	4
Johnston & Carroll, 1998 *Qualitative – Grounded Theory* *United Kingdom*	Mixed knee injuries Sport: badminton, basketball, rugby, running Level: professional, recreational, competitive n=6 (Men=4, Women=2) 22.8±10.3 (18-60) years	to explain athletes' emotional response to injury as well as their situational and temporal contexts	Acute	Psychological Social	Affect Social support Beliefs Fear	N/A	4
Mainwaring 1999 *Qualitative – Grounded Theory* *Canada*	Mixed knee injuries Sport: down-hill skiing, ice hockey, tennis, squash, basketball, American football Level: professional, competitive n=10 (Men=6, Women=4) 20-29 years	to develop a grounded model of psychological reaction after severe knee-related injury	Rehabilitation	Psychological Social	Coping Fear Identity Affect Social support Therapeutic alliance	N/A	3
Nordahl et al., 2013 *Qualitative – Descriptive* *Sweden*	ACLR Sport: Skiing Level: Professional n=5 (Men=2, Women=3) 17.8 (16-19) years	to explore the experiences of Swedish ski high school students when returning to skiing at the elite level after ACL injury and ACL reconstruction	Rehabilitation	Psychological Social Contextual	Coping Self-efficacy Affect Social support Therapeutic alliance Environment	N/A	2
Olofsson et al., 2010 *Qualitative – Grounded Theory* *Sweden*	ACLR Sport: Not reported Level: competitive, recreation n=7 (Men=4, Women=3) 19-57 years	to illuminate ACL-reconstructed athletes' experience of their injury, rehabilitation and recovery	Rehabilitation	Psychological Social	Coping Fear Social support Shared decision-	N/A	3

					making Therapeutic alliance Recovery expectations		
Pizzari et al., 2002 *Qualitative – Descriptive* *Australia*	ACLR Sport: netball, soccer, TKD, basketball, football Level: competitive, recreation n=11 (Men=4, Women=7) 21-52 years	to identify variables that influence adherence to rehabilitation after ACL reconstruction	Rehabilitation	Psychological Social Contextual	Motivation Autonomy Fear Social support Therapeutic alliance Environment	N/A	3
Podlog et al., 2006 *Qualitative – Descriptive* *Australia*	Mixed knee injuries Sport: netball, athletics, Australian football Level: professional, competitive n=3 (Men=1, Women=2) Median 23 (19-24) years	to examine competitive athletes' experiences in returning to sport following a serious injury	RTS	Psychological Social	Fear Affect Social support Recovery expectations	N/A	3
Podlog et al., 2013 *Qualitative – Descriptive* *Australia*	Mixed knee injuries Sport: basketball, netball, soccer Level: professional, competitive n=4 (Men=1, Women=3) 15.3±1.55 (12-17) years	to explore adolescent athlete perspectives of their rehabilitation and return to sport experiences	RTS	Psychological Social Contextual	Coping Fear Social support Shared-decision making Sport culture Recovery expectations	N/A	4
Ronkainen & Ryba, 2017 *Qualitative – Narrative* *China*	Mixed knee injuries Sport: hockey Level: professional n=2 (Men=2, Women=0) 33 (29-37) years	to provide an in-depth analysis of how existential concerns are manifested and articulated in injury narratives	Rehabilitation	Psychological Social Contextual	Coping Identity Social support Sport culture	N/A	4
Scott et al., 2017 *Qualitative – Phenomenology* *New Zealand*	ACLR Sport: rugby, soccer, basketball, netball, martial arts Level: professional, recreational, competitive n=9 (Men=5, Women=4) Median 31 (21-37) years	to explore the perspectives of individuals who had ACLR less than 3 years, to gain a deeper understanding of the impact of this injury, surgery and rehabilitation had on their life and describe factors which influenced the perceived QoL since the surgery	Rehabilitation	Psychological Social Contextual	Identity Fear Social support Therapeutic alliance Environment Recovery expectations	N/A	3
Thing, 2006 *Qualitative – Phenomenology* *Denmark*	ACLR/ACL Sport: handball Level: professional, competitive n=17 (Men=0, Women=17) 25 (19-33) years	to investigate how do players interpret their lives and make meaning of what their injury experience	Rehabilitation	Psychological Social	Coping Identity Psychological readiness Social support	N/A	3

*Age reported as (mean ± SD, range) in years unless otherwise specified
**Rehabilitation stage: acute - immediately post-injury or peri-operative phase; rehabilitation – time to restore function back to pre-injury level; RTS – time where participants were returning back to sport or activity or long-term management
§ Classification into a non-physical domain (i.e. psychological, social, or contextual)
§§ Level of evidence using the Modified Oxford Centre of Evidenced-based Medicine (2009)
§§§ MMAT rating is out of a maximum of 5, with a rating of 5 indicating the highest methodological quality for that study design. Note that MMAT rating should only be used to compare similar study designs and ratings should not be used to compare across different study designs or categories.

***Abbreviations listed for commonly reported outcome measures in studies
ACL-RSI = Anterior Cruciate Ligament-Return to Sport Injury Scale
TSK = Tampa Scale of Kinesiophobia
ISP = incredibly short profile of mood states
ERAIQ = Emotional Responses of Athletes to Injury Questionnaire
POMS = Profile of Mood States Scale
KSES = Knee Self-Efficacy Scale
SRLC = sport-related locus of control
ACL-QOL = Anterior cruciate ligament quality of life scale
AIMS = Athletic Identity Measurement Scale
SIP = Sports Inventory for Pain Questionnaire
SF(8/12/36)= Short-Form Health Survey

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