Supplemental material.

Full search strategy

- CINAHL (number of hits: 842, 3 duplicates, 839 imported)
- Medline (number of hits: 1029, 548 duplicates, 481 imported)
- PsycINFO (number of hits 298, 257 duplicates,41 imported)
- Web of science: (number of hits: 1317, 884 duplicates, 433 imported)
- Scopus: (number of hits 1218; 963 duplicates, 255 imported)
- Embase: (number of hits 762, 751 duplicates, 11 imported)
- Review of reference lists (new articles 3)

Search date: May 20th 2022

Search strategy for CINAHL: (including MeSH terms, Boolean and wildcard operators)

TI OR AB: "brain injur*" OR ABI OR TBI OR Stroke OR CVA OR "cerebrovascular accident*" OR "cerebro-vascular accident*" OR "cerebro vascular accident*"
OR MH "brain injuries" OR "Stroke" OR "stroke patients"

AND

TI OR AB: Communit* OR Outpatient* OR out-patient*
OR MH "Outpatients"

AND

TI OR AB: (Group* near/3 (activit* OR art* OR ball* OR boxing OR bookclub* OR bowl* OR “book club” OR “board game*” OR beach* OR coffee* OR café* OR choir* OR church OR creativ* OR chess OR club* OR cinema* OR collecting OR country OR cooking OR concert* OR communit* OR craft* OR cultur* OR danc* OR dining OR drink* OR exerci* OR eat* OR film* OR function* OR farm* OR goal* OR gaming OR game* OR garden* OR hiking OR health* OR hobbies OR intervention* OR jigsaw* OR knitting OR kayak* OR karate OR lifestyle* OR “life style*” OR leisure* OR meal* OR music* OR mobility OR museum* OR meditat* OR martial OR manag* OR mindfulness OR movies OR network* OR occupation* OR outdoor* OR origami OR program* OR Pilates OR participat* OR pet* OR play* OR puzzle* OR park* OR peer* OR prayer* OR paddl* OR rehabilitati* OR restaurant* OR relax* OR sail* OR support* OR social* OR sing* OR song* OR spirit* OR sewing OR swim* OR surf* OR sport* OR therap* OR “tai chi” OR travel* OR volunteer* OR weaving OR wellness OR walking OR water OR writing OR yoga)

OR

MH: “group exercise” OR “peer group” OR “group processes” OR “support groups” OR “social participation” OR “social skills” OR “social skills training” OR “team sports”

Data Collection Form

(that was uploaded, collated and extracted through Covidence)

General Information
Study ID
Title
Lead author/s
Country in which study is conducted
Year of publication
Characteristics of included studies:
Methods
Aim of study
Study design
Method of recruitment of participants
Participants
Population description: type of ABI
Participants' gender and mean age/age range (for treatment and control)
Time since injury
Total number of participants
Group Characteristics:
Intervention focus
Group size
Group setting
Duration/frequency of groups
Student/Volunteer involvement
Group activities
Existing group program modified for ABI: yes, no, not specified
Manualised, set structure or not specified
Caregiver involvement in group: yes, no, not specified
Group theory if reported

Outcome being measured (group purpose)
Outcome measure reported: yes, no, not specified
Primary outcome measure
Secondary outcome measures
Participants experience of group membership?
Participant goals identified; yes, no, not specified
Group targeted participant goals
Participant selected group activities
Homework Provided: yes, no, not specified
Group facilitators
Training provided to group facilitators: yes, no, not specified
Findings quantitative
Findings qualitative
Identified barriers to group
Identified facilitators to group
Reflections (of data extractor)

Table 3: Group Focus, Activities and Outcome Measures

Study & country	Intervention focus	WHAT Group activities	HOW Mode of intervention	Outcome measure reported	Outcome being measured (group purpose)	Primary outcome measure	Secondary outcome measures
Attard et al., 2018 Australia [62]	Aphasia	communication therapy, conversation, participation, psychological and social support, and stroke/aphasia education.	Face to face	Yes	improve psychological & social support	Therapeutic Factors Inventory-19	WAB-R AQ (Western Aphasia Battery-Revised Aphasia Quotient) Assessment of Living with Aphasia, Measure of participation in conversation, measure of skill in supported conversation, Bakas Caregiving outcomes scale
Attard et al., 2020 Australia [39]	Aphasia	communication therapy, conversation, participation, psychological and social support, and stroke/aphasia education.	Face to face	No	To reduce depressive symptoms		
Batcho et al., 2013 Belgium [87]	Functional improvement (brisk walking)	brisk walking around an outside track	Face to face	Yes	improved functional recovery	Beck Depression Inventory - II	Patient Health Questionnaire (PHQ-9), The Philadelphia Mindfulness Scale (PHLMS)
Bedard et al., 2014 Canada [88]	Mental Health	topics included meditation techniques, breathing exercises, gentle yoga, awareness of thoughts and feelings, acceptance, and staying in the present.	Face to face	Yes	Improve function (ADLs, mobility, mood)	ACITLIM-Stroke questionnaire and the 6minute walk test (^MWT).	Stroke impairment assessment set (SIAS), the Hospital Anxiety and Depression Scale (HADS), and the Berg Balance Scale (BBS)
Bek 2016 et al., USA [89]	Physical (conductive education)	repetitive gross and fine movements with auditory cues (5,,4,,3,2,1)	Face to face	Yes	Overall functional performance	Barthel Index, the Stroke Impact Scale, the Timed Up and Go test, and the Hospital Anxiety and Depression Scale.	
Bonn 2022 et al., Canada [50]	Functional improvement	each BrainEx90 session comprised 90-minutes of circuit training, with 5- or 10-minute stations that addressed common impairments in cognition, balance, endurance, vision, vestibular function, and self-management. Therapists tailored station activities to each participants needs/abilities' during each session. Each session also included an education section on recovery-related topics, such as anxiety, nutrition, and mindfulness.	Face to face	Yes	increase in healthy behaviours	COPM	

Brenner et al., 2012, USA [38]	Health Promotion	Healthy choices – healthy lives group wellness program. Participant sharing, goal setting, relaxation, physical activity, review of food log and pyramid, positive thinking emotional health	Face to face	Yes	promote wellbeing and communicative success	HPLP-II (Health Promoting Lifestyle Profile - II)	Self-Rated Abilities for Health Practices Scale (SHAHP) - The Perceived Wellness Survey, Diener Satisfaction With Life Scale, The Medical Outcomes Study Health Status Survey Short Form (SF-12)5, The Neurobehavioral Functioning Inventory , The Barriers to Health Promoting Activities for Disabled Scale,. The Personal Resource Questionnaire-Adapted (PRQa)The Participation Assessment With Recombined Tools Objective (PART-O), WHO's Alcohol, Smoking and Substance involvement screening test
Caute et al., 2021, UK [44]	Aphasia	The group activities aimed to promote wellbeing, give participants experiences of communicative success and foster social connection. EVA park is an online virtual reality	Virtual world accessed from home computers		providing modified yoga to people with TBI		
Chauhan et al., 2020, USA [73]	Yoga	yoga			community integration and quality of life		
Chinchai et al., 2020 Thailand [84]	Functional improvement	cooking, gardening in trays, and Thai traditional games to stroke clients once a week to promote social relationships and participation among peer groups.	Face to face	Yes	Improve subjective wellbeing	community integration questionnaire	World Health Organization Quality of Life Brief Test (Thai version) (WHOQOLBREF-THAI)
Dam et al., 2020 UK [58]	Physical	community-based group exercise sessions offered gentle/low-intensity exercise, which were either yoga and/or Tai-Chi/Chi-Kung and/or gym sessions, which varied among boroughs	Face to face	No	improved memory		
das Nair et al., 2012 UK [33]	Cognitive	Participants in both memory intervention programmes were taught the use of internal memory aids and errorless learning techniques. In addition, those in the compensation group were taught how to use external memory aids. The restitution group engaged in exercises to practise encoding and retrieval, which also included attention retraining exercises, such as letter and number cancellation tasks	Face to face	Yes	improve memory	Everyday Memory Questionnaire	Memory functions, mood, and activities of daily living were assessed at baseline and five and seven months after randomization
das Nair et al.,	Cognitive	Strategies taught included restitution (including attention retraining) and strategies to improve encoding and	Face to face	Yes	improve health and wellbeing of participants	Patient-reported Everyday Memory Questionnaire	Secondary outcomes were an objective evaluation of everyday memory (Rivermead Behavioural Memory Test General Memory Index), patient-

2019 UK [48]		retrieval (such as deep-level processing). Compensation strategies taught included mnemonics (chunking, use of first letter cues, rhymes), use of external devices (diaries, mobile phones, calendars) and ways of coping with memory problems. The use of errorless learning was also taught.			in the chronic phase		reported outcomes of mood (General Health Questionnaire â€“ 30-item version),experience of brain injury (European Brain Injury Questionnaire â€“ patient version modified version), and personal short- and long-term goal attainment.
Domensino et al., 2020 the Netherlands [3]	Functional improvement	Cognitive modules (Dealing with change; Getting a grip on your energy; Thinking and doing) and two physical modules (Getting active A and Getting active B).	Face to face	Yes	quality of life	SER-P, Need of Care and RSES	(COOP/WONCA
Donnelly et al., 2017 USA [90]	Yoga	Modified yoga program - breathing exercises, yoga activities, guided meditation, facilitated discussion with psychoeducation (didactic material, question prompts, and activities that the yoga teacher is trained to introduce to the group).	Face to face	Yes	community integration	Quality of Life After Brain Injury (QOLIBRI) measure pre- and post-intervention;	participants report in interview: sustained and improved community connection - almost 1/2 participants indicated they sustained relationships built during LoveYourBrain Yoga and were more capable of accessing other activities in their community.
Donnelly et al., 2020 USA [55]	Yoga	breathing exercises, yoga activities, guided meditation, facilitated discussion with psychoeducation (didactic material, question prompts, and activities that the yoga teacher is trained to introduce to the group).	Face to face	Yes			
Donnelly et al., 2021 USA [37]	Yoga	Modified Yoga Program Briefly, each class is 1.5 h and has a specific structure: 10 min of breathing exercises (pranayama) to calm the nervous system, 45 min of gentle yoga (asana) to improve strength, flexibility, and balance, 15 min of guided meditation to enhance attention control, emotional regulation, and self-efficacy, and 20 min of facilitated discussion with psychoeducation to cultivate skills in resilience.	Face to face	Yes	change in physical activity	QOLIBRI-O	
Driver et al., 2016 USA [68]	Health Promotion	informational (eg, importance of activity, link to rehabilitation), social (eg, being active with friends and family),and behavioral strategies (eg, goal setting, identification of barriers, rewards) to facilitate increased activity.	Face to face but promoted through smart phone app	Yes	physical activity, nutrition	The primary outcome was the amount of time spent in weekly activity,	secondary outcomes included self-efficacy to be active and rehabilitation outcomes

Driver et al., 2017 USA [40]	Health Promotion	Education regarding food and exercise - tracking/monitoring food/exercise choices	Face to face	Yes	5%-7% weight loss	weight loss between 5%-7%	Adherence (ie. Session attendance and self-monitoring of dietary behaviours) Phsiologic changes (ie. Weight loss, blood pressure, waist and arm circumference; lip provfile) Quality of health (ie. Self-reported health, quality of life & step count)
Driver et al., 2018 USA [91]	Health Promotion	goal setting, identification of behavioural cues, calorie counting, and TBI-specific physical activity guidelines Education regarding food and exercise - tracking/monitoring food/exercise choices	Face to face	No	upper limb function	weight loss between 5%-7%	Adherence (ie. Session attendance and self-monitoring of dietary behaviours) Phsiologic changes (ie. Weight loss, blood pressure, waist and arm circumference; lip provfile) Quality of health (ie. Self-reported health, quality of life & step count)
English et al., 2021 Australia [92]	Physical	stimulation, strength training, modified constraint induced movement therapy, mirror box therapy, mental practice and sensory retraining	Face to face	Yes	no of memory problems	Motor assessment scale (MAS)	Box and block test, 9-hole peg test, Jamar dynamometer and pinch gauge, Visual analogue scale
Evald, 2018 Denmark [93]	Cognitive	Group activities were designed to boost learning around use of platforms on the phone (internet, e-mail, social networks) calendar appointments.	Face to face but use of smart phone app as a memory aid	Yes	improving community mobility	Use of target behaviours	Self-reported prospective memory questionnaire, European Brain Injury Questionnaire and Cognitive Failure Questionnaire.
George et al., 2022 Australia [47]	Community mobility	information sharing, group discussion, speakers, practical sessions, mindfulness relaxation techniques, CBT approaches, lifestyle planning, alternative transport, community outing	Face to face	Yes		Global positioning system (GPS) devise to record location and number of outings from home	CarFreeMe TI Transport Questionnaire, Community Mobility Self-efficacy Scale, quality of life measures, Modified Canadian Occupational Performance Measure for gaols (importance & satisfaction), participant satisfaction survey results, researcher logs
Gerber et al.,2015 Canada [94]	Social support	exercise, discussion groups, workshops, bobbies, crafts, games and skill training sessions, community outings as well as caregiver support	Face to face	Yes	improving physical activity	Community Integration Questionnaire (CIQ) [	Overt Behaviour Scale (OBS), Burden Assessment, GAS
Givon et al., 2016 Israel [51]	Physical	intervention group played video games with consoles (Microsoft Xbox Kinect, Sony Play-Station 2 Eyetoy, Sony PlayStation 3 MOVE, Nintendo Wii Fit and the SeeMe VR system), traditional upper limb activities in control group were exercises and functional activities were adopted from existing community group programs such as the Fitness and Mobility Exercise Program, the Graded Repetitive Arm Supplementary Program and the task-oriented intervention	Video games incorporated in face-to-face therapy session	Yes	reintegration to normal living and improved function	Compliance (session attendance), satisfaction and adverse effects were feasibility measure. Grip strength and gait speed were measures of physical activity.	Hip accelerometers quantified steps/day and the Action Research Arm Test assessed the functional ability of the upper extremity.

Harel-katz et al. 2020 Israel [95]	Health Promotion	learning and practicing self-management skills, such as problem-solving and decision-making, along with elements for improving participants self-efficacy to manage their medical and emotional condition and participation. These are followed by seven stroke-specific sessions that focus on applying the SM skills that were practiced, along with a process of analyzing difficulties in performing daily activities and finding strategies, to improve participation at home, community, work, and social activities.	Face to face		improve self-efficacy	Feasibility was based on attendance rate and a feedback questionnaire.	Effectiveness was evaluated with the Functional Independence Measure (FIM), the Reintegration to Normal Living Index (RNLI) and self-efficacy questionnaires
Hawley et al., 2022 USA [52]	Health Promotion	goal setting, wellness plan, communication skills	Face to face	Yes	support adjustment and quality of life	The Self-Advocacy Scale (SAS) (primary)	General Self-Efficacy Scale (GSE); Personal Advocacy Activity Scale (PAAS); Satisfaction with Life Scale (SWLS).
Jones et al., 2019 USA [36]	Mental Health (Art)	Mask making, expressive writing, montage painting, remembrance, and mourning	Face to face	No	improve communication		
Keegan et al., 2020 USA [21]	Social interactions	collaborative goal setting, community outings and conversations to address client goals	Face to face	Yes	self-management of personal goals	Goal Attainment Scaling (GAS)	Exchange structure analysis
Lee et al., 2017 USA [96]	Functional improvement	An Activity-Barriers-Changes-Doing (ABCD) framework was newly added to the IPASS-R program to provide easy-to-follow problem-solving and goal setting steps. Participants (1) identify an activity that they want to improve or re-engage in (A); (2) list barriers that hinder their engagement (B);(3) identify changes within the PEOP model that they can make to improve their engagement (C); and (4) decide which change they are going to pursue as an action plan and do (D). This framework was used repetitively in each session throughout the program. Had a community outing in final session	Face to face	Yes	improved quality of life, wellness	Primary outcome measures were the Reintegration to Normal Living Index (RNLI), Stroke Impact Scale (SIS), and Participation Strategies Self-Efficacy Scale	Qualitative feedback was collected post-treatment.
Lexell et al., 2013 Sweden [61]	Functional improvement	The group sessions give the opportunity for the participants to meet with others in the same situation, to share similar experiences and to help	Face to face		improve participation in life roles		

		one another to learn new strategies in their daily lives					
Liu-ambrose et al., 2015 Canada [97]	Leisure: (recreation activities)	Getting on with the rest of your life program: Exercise group based on the Fitness and Mobility Exercise (FAME) program) and 1 hour recreation leisure activities included social activities as well as specific group activities that emphasize planning, strategy, decision making, and learning, such as playing billiards, bowling, arts and crafts, and cooking.	Face to face	Yes	improved upper limb function/control	Stroop Test	Set shifting & working memory as well as mood, functional capacity and general balance and mobility
Mandehgary Najafabadi et al., 2019 Iran [34]	Leisure: (volleyball)	The control group only underwent a traditional rehabilitation program. Both competitive and noncompetitive volleyball exercise groups participated in volleyball exercise (60min/d, 3d/wk for7wk), in addition to traditional rehabilitation (30min/d, 3d/wk). The only difference between the noncompetitive and competitive groups was introducing competition by scoring points only in the competitive group	Face to face	Yes	wellbeing and communication success	Reach and grasp motor control measures were evaluated through kinematic analysis.	Functional outcomes were assessed via Motor Activity Log, Wolf Motor Function Test (WMFT), Box and Block Test, and Wrist Position Sense Test
Marshall et al., 2020 UK [45]	Aphasia	activities designed to promote social engagement in a virtual setting	Virtual world accessed through home computer	Yes	community integration and QOL	attendance, WMEWBS (Warwick-Edingburgh Mental Well-being Scale and the CADL-S Communication Activities of Daily Living Scale	Social Connectedness Scale-Revised (SCS-R), Western Aphasia Battery-Revised (WAB-R), Stroke and Aphasia Quality ofLife-39 (SAQOL-39g) generic version
Mayo et al., 2015 Canada [98]	Functional improvement	Leisure activities based on Mission possible, the exercise component was based on the interventions in the FAME program (45 minutes of continuous exercise 2 x week: group exercise, circuits and dance)	Face to face	No	improve memory	hours spent in meaningful activity measured using the Community Healthy Activities Model Program for Seniors (CHAMPS) questionnaire (for this study we considered time spent in meaningful	Secondary outcomes were generic and stroke-specific HRQL as measured by the EuroQuol EQ-5D26 and the Preference-Based Stroke Index (PBSI).27

						activity outside of the home excluding activities directly provided by the program) A related participation outcome was the Reintegration to Normal Living (RNL) Index, which queries the extent to which an individual was able to accomplish common activities in and outside of the house	
Miller et al., 2014 Australia [99]	Cognitive	each session involved education (about memory and the factors influencing optimal memory function) and training in the use of compensatory strategies (both internal/mental strategies and external memory aids	Face to face	Yes	improve leisure satisfaction, self-esteem and QOL	tests of anterograde memory (Rey Auditory Verbal Learning Test: RAVLT; Complex Figure Test) and prospective memory (Royal Prince Alfred Prospective Memory Test);	the Comprehensive Assessment of Prospective Memory (CAPM) questionnaire and self-report of number of strategies used
Mitchell et al., 2014 Australia [100]	Leisure: (leisure exploration)	With the assistance of Centre Active Recreation Network based in North East Victoria, a variety of activities was planned including sailing, clay target shooting, bushwalking, tai chi, golf, fishing, pool, tennis, table tennis, Wii Nintendo, volleyball, netball, soccer games, movies, socialising and eating out.	Face to face	Yes	physical activity and quality of life	Leisure Satisfaction Scale (LSS),	World Health Organisation Quality of Life Bref (WHOQOL-BREF) and Rosenberg Self Esteem Scale (RSES
Nayak et al., 2021 India [43]	Leisure: (adapted sports)	Volleyball, badminton, throwball, football penalty shoots, basketball shootouts, bowling game	Face to face	Yes	creating hope and improving motivation	Participation in physical activities (PASIPD - Physical activity scale for individuals with physical disabilities	Quality of life (SSQoL - stroke specific quality of life)
Nemeth et al., 2015 USA [101]	Mental health	group activities: goal setting, education of psychological theories, redefining self, coping strategies	Face to face	No	maximise recovery and return to activities		

Nicholas et al., 2021 USA [42]	Aphasia	The program addressed the activity participation goals of 35 participants. Programming consisted of individual and group speech-language and occupational therapy, adaptive sports, swimming, music therapy, and a wellness mindfulness group	Face to face	Yes	experiences of participants	11 Standardized instruments assessing performance and self-perception of abilities were used to evaluate aspects of participants communication relative to each of the four domains of the ICF model (Impairment: Western Aphasia Battery-Revised WAB-R, Assessment of Language -Related Functional Activities (ALFA), Communicative Effectiveness Index (CETI), Cognitive Linguistic Quick Test (CLQT), Participation: Activity Card Sort (ACS), Stroke Impact Scale, COPM, Measure of Environmental Support (Medical Outcomes Study MOS, Social support Scale, Measure of Person-level Factors: Aphasia Communication outcome Measure ACOM, Communication Confidence Rating Scale for Aphasia, Visual Analog

						Mood Scale (VAMS)	
Niraj et al., 2020 UK [59]	Mental health	mindfulness skills (body scans, breathing, practicing skills in daily life)	Face to face	No	promotes functional independence and physical fitness		
Norris et al., 2013 UK [54]	Functional improvement	intense exercises (including aerobic endurance, strengthening, range of movement, balance, coordination and other aspects of sensorimotor function,) and self-efficacy, exploring attitudes and beliefs; functionally-oriented activities; problem-solving; and experientially devised compensation strategies	Face to face		functional recovery and QOL		
Perez-Rodriguez et al., 2021 Spain [102]	Leisure: (adapted sports)	water activity, swimming, paddle tennis, initiation to football and initiation to athletics.	Face to face	Yes	improve participation	SF-36 (QOL)	6-minute walk test, profile of mood states, beck's inventory, CPAQ, registration forms (considering personal and environmental factors)
Poncet et al., 2017 France [103]	Functional improvement	The PMR program-trains the patient in activities in the natural environment to resume activities of everyday life. It includes activities such as cooking, sports and leisure activities (e.g., swimming pool, ping-pong), outings(e.g., public transport, orientation in the city),newspaper, communication, speaking groups, and relaxation	Face to face	Yes	use of strategies and improved memory	Perception of Quality of Rehabilitation Services [PQRS-Montreal]]	interviews (structured around a SWOT analysis) involving program participants and service providers.
Radford et al., 2012 Australia [104]	Cognitive	training in the use of compensatory strategies as well as education regarding memory function, neurological damage, sleep and lifestyle factors that have an impact on memory.	Face to face	Yes	increasing physical activity	reported strategy use	the Rey Auditory Verbal Learning Test (total learning and delayed recall) and self-report on the Comprehensive Assessment of Prospective Memory
Rand et al., 2018 Canada [57]	Physical	Participants played games in alternating pairs using two different VG consoles per session. All games were played while standing (to improve standing balance) while each individual participant with stroke was closely supervised or supported and encouraged to use his or her weaker upper extremity to play and interact with the virtual	Face to face	Yes	support community participation and social integration	interviews	

		objects (to improve upper-extremity motor and functional activity).					
Raukola-Lindblom 2020 [67]	Social support	The intervention periods include education, reflection, and practical experiential exercises and can be multidisciplinary with both speech-language pathologists and neuropsychologists providing oversight and direction. The main goal of the described group interventions is to support community participation and social reintegration. Our groups also go on community field trips to art galleries, cafeterias, or other socially active places together with the therapists	Face to face	No	impact on weight loss		
Reynolds et al., 2018 USA [46]	Health Promotion	The sessions concentrate on healthy food choices, calorie and fat intake, and physical activity promotion to help the participant achieve and maintain a 5-7% weight loss by following federal guidelines for physical activity participation (safe and progressive increase to achieve 150 min of moderate intensity activity each week) and USDA My Plate dietary/calorie recommendations	Facebook	Yes	25 perceived benefits of participating in groups for adults with aphasia that fell into five categories: psychosocial, communication, participation, information, and other.	BMI	Weight
Rotherham et al., 2015 New Zealand [56]	Aphasia	Individuals with aphasia may participate in a variety of types of groups including peer-facilitated aphasia, volunteer-facilitated aphasia, stroke, and general groups.	Face to face	No	safe, supportive space to belong and grow		
Salas et al., 2021 UK [53]	Functional improvement	Head Forward includes cognitive activities (e.g., Team Pub Quizzes, Group Crossword or Group Scrabble) to provide the opportunity for attendees to practice their cognitive and social skills in a group setting. During well-being activities (How was your week? and Brain Injury discussion groups) the focus is to facilitate the interpersonal connection between attendees, by	Face to face	No	QOL, community integration, employment status and stability		

		sharing individual experiences and receiving feedback from peers					
Shany-Ur et al., 2020 Israel [105]	Mental health	Cognitive interventions included group sessions addressing attention, memory, communication, logical reasoning (executive functioning), and psychoeducation about the brain and BI. Additional interventions addressed functional skills, such as arithmetic, reading comprehension, and basic computer use, tailored to meet individual needs. Psychological interventions included individual psychotherapy, group therapy, and vocational counselling. Family members participated in monthly psychoeducational group meetings, and family therapy was optional.	Face to face	Yes	physical cognitive functions and QOL	Employment status and vocational stability	Community Integration Questionnaire, Wimbledon Self-Report Scale, Perceived Quality of Life questionnaire
Song et al., 2021 S Korea [106]	Tai chi	Each session consisted of a 5-min warm up, a 5-min of qigong, a 35-min of Tai Chi movements in a seated or standing position, and a 5-min cool-down.	Face to face		improve perceived occupational performance, balance & mobility	A standardized questionnaire for obtaining information about demographic characteristics, cognitive function, stroke-specific QOL, and symptom clusters was admin-istered via face-to-face interviews	K-MOCA, Muscle strength (knee muscle strength - isokinetic muscle testing), Balance - Berg Balance Scale, Korean MBI, QOL - Stroke-Specific Quality of Life (SS-QOL)
Stephens et al., 2020 USA [49]	Yoga	yoga included physical postures, breath work, affirmations, and meditation/relaxation. Yoga was practiced seated in a chair and then progressively became more challenging over the 8 weeks to include standing and floor postures (supine only)	Face to face			COPM	Balance (Berg Balance Scale), Mobility (6 min walk), Balance confidence (ABC), Pain PEG
Tamplin et al., 2013 Australia [41]	Leisure (Choir)	Choir members participated in a weekly 2-hour rehearsal. Each rehearsal consisted of 90 minutes of singing songs and simple vocal exercises and a 30minute coffee break for rest and socialization. It was considered important to clarify with the group	Face to face	Yes		Instruments used to assess mood were the General Health Questionnaire-12 (Goldberg et al., 1997) and the Visual Analogue Mood	Three of the Stroke Impact Scale (SIS-3) subscales were used, he 33-item Sense of Belonging Instrument (SOBI)was used to assess social participation

		members what they hoped to achieve from the choir to develop a sense of group ownership and cohesion				Scale (Stern, 1997). The General Health Questionnaire-12 (GHQ-12)	
Tielemans et al., 2016 the Netherlands [63]	Health Promotion	Sessions involve teaching the participants proactive action planning in the context of four themes: handling negative emotions, social relations and support, participation in society and less visible consequences of stroke	Face to face	Yes	change in body mass index, fruit/vegetable intake, and physical activity.	Session logs,	questionnaires for therapists, patients and their partners, and focus groups.
Towfighi et al., 2020 USA [65]	Health Promotion	Each session included 1) didactic presentations on a specific lifestyle practice; 2) peer exchange; 3) personal exploration (with assistance setting individualized, realistic, achievable short-term goals); and 4) direct experience through participation in a relevant activity. Activities included preparing nutritious drinks and meals, grocery shopping on a prespecified budget, walking at a park, stretching, strengthening, and yoga. Recommendations were based on secondary stroke prevention guidelines	Face to face	Yes	functional independence	Primary outcomes included three of the five key lifestyle practices: BMI, servings of fruits/ vegetables per day, and physical activity (alcohol use not included)	Secondary outcomes included smoking, waist circumference, systolic blood pressure, LDL, HDL, triglyceride, total cholesterol, and glycosylated haemoglobin levels, health-related quality of life (Short Form-6D),20 and perceptions of care
Vestri et al., 2014 Italy [66]	Functional improvement	Welcoming (an initial highly structured activity, to help the patient to develop a personalized agenda), reading newspapers, cognitive exercises (two levels of difficulty),watching movies (structured activity including cognitive work), expressive laboratory (focused on personal resources and on the components of divergent thinking of executive functions), technical workshop (focused on the components of convergent thinking of executive functions), activities on a personal computer, physical exercise, primary and secondary activities of daily living, cooking (from motivational aspects to the more complex executive functions), socialization(mainly free time activities to favour patient relaxation and relational wellbeing led by an educator)	Face to face		return to work	LCF (Rancho Los Amigos Level of Cognitive Functioning), DRS (Disability Rating Scale) and FIM (Functional Independence Measure).	

Vikane et al., 2017 Norway [107]	Functional improvement	The group interventions consisted of receiving education and addressing common problems in daily life after MTBI.	Face to face	Yes	improved coping strategy and quality of life	Primary outcome was sustainable return-to-work first year post-injury.	Secondary outcomes were post-concussion symptoms, disability, the patients' impressions of change and psychological distress
Visser et al., 2016 the Netherlands[108]	Mental health	Solving problems was structured by dividing the problem-solving process in 4 steps: ([1] define problem and goal; [2] generate multiple solutions; [3] select a solution; and [4] implement and evaluate. n our group therapy, positive problem orientations were encouraged during the interactive problem definition step.	Face to face	Yes	quality of life	Coping strategy was measured using the Coping Inventory for Stressful Situations.	Problem-solving skills were measured with the short version of the Social Problem Solving Inventory-Revised. HRQoL was measured using the Stroke-Specific Quality-of-Life Scale-12 and the EuroQol EQ-5D-5L. Depression was measured using the Centre for Epidemiological Studies Depression Scale
White 2020 USA [69]	Functional improvement	education topics, therapy activities EB, time management, creative expression	Face to face		improved occupational performance		
Wijekoon et al., 2020 Canada [60]	Social support	involve a structured lecture component, where speakers and professionals from the community discuss various topics such as taxes, personal security, dietary knowledge, and disability benefits, and provide relevant resources to the group. The group is then offered a chance to speak with peers over refreshments.	Face to face			Twelve open-ended interview questions were developed using the CMOP-E as the guiding framework, with 16 additional prompt questions.	
Wilson et al., 2015 S Africa [20]	Cognitive	Education regarding: brain injury and domains of cognition: memory skills, thinking skills, executive skills & awareness skills	Face to face	No	improve in person-centred memory goals		participants report in interview: the group experience seemed to break the cycle of social exclusion and declining self - esteem and support the acceptance of their new identity (regaining their sense of self)
Withiel et al., 2019 Australia [109]	Cognitive	memory skill group interventions take a compensatory approach to rehabilitation with a theoretical aim of lessening the disabling impact of impairment	Computerised cognitive training used as an intervention	Yes	reduced memory complaints	Attainment of personal, memory-specific rehabilitation goals was assessed using Goal Attainment Scaling (GAS)	The Rey Auditory Verbal Learning Task (RAVLT) (22) and the Brief Visuospatial Memory Test-Revised (BVMT-R
Withiel et al., 2020 Australia [35]	Cognitive	psychoeducation, training in internal and external compensator memory strategies, and discussion of lifestyle issues relevant to memory functioning.	Face to face	No	improve self-efficacy and participation in everyday life activities	The target behaviour was subjective every day and prospective memory failures, assessed using the Everyday Memory Questionnaire-	Functional memory goal attainment (GAS), The Rey Auditory Verbal Learning Test and the Brief Visuospatial Memory Test-Revised

						Revised [25] and Part A of the Comprehensive Assessment of Prospective Memory [26] respectively.	
Wolf et al., 2016 USA [110]	Health Promotion	The IPASS Intervention involves a participatory, small group, problem-solving process based upon the self-management and environmental management interventions. All concepts and contents of the chronic disease self-management program (CDSMP) were retained, and an additional seven sessions with an emphasis on home, community, and work management after stroke were supplemented to the original CDSMP. Focus on problem solving using PEOP model	Face to face	Yes	improve memory goals	Chronic disease self-efficacy scale (CDSES) Participation strategies self-efficacy scale (PS-SES)	Community participation indicators (CPI)
Wong et al., 2021 Australia [111]	Cognitive	Memory strategies are practiced during group sessions, and weekly homework tasks are set to encourage generalization of strategies to participants day- to-day activities	Face to face	Yes	balance, functional mobility, motor function, depression	GAS	Fidelity (adherence): session content checklist, eNACT group facilitation competency checklist, clinician & SMSG participant experience
Xie et al., 2018 China [112]	Tai chi	Each session comprised 45 min of exercise plus a 15-min warm-up and cool-down. To exercise wave hands in the cloud, one must stand straight, move arms and legs with the waist at the axis, and breathe in a relaxed manner. The balance rehabilitation training includes static balance training, dynamic balance training, bobath training, walking training and so on according to the patient's functional level and condition	Face to face	Yes	community participation, falls prevention	Berg Balance Scale (BBS)	Time up to go test (TUGTO) Modified Barthel Index (MBI)
Xu et al., 2021 Singapore [113]	Community mobility	Balance and strength exercises (stroke specific) a Home hazards solution Community safety Safe footwear Medication review Low vision and falls Vitamin D Public transport safety Coping strategies after stroke Safety in daily activities	Face to face	Yes	fatigue and anxiety/depression (addressing common needs of participants)	monthly falls calendar	pre-post programme evaluation questionnaire , Falls efficacy scale, falls behavioural scale, life-space assessment, reintegration to normal living index (MRNLI), GAS

		introducing new leisure activities (such as tai chi)					
Yeates et al., 2015 UK [114]	Yoga	Each group involved directed three-part diaphragmatic breathing practices, the repetition of five postures that were practiced from a seated or lying-down position, and finally, deep relaxation and a mental imagery protocol.	Face to face	Yes	improve functional fitness, balance and use of community resources	The Modified Fatigue Impact Scale (MFIS)	The Hospital Anxiety and Depression Scale (HADS)
Zoerink et al., 2015 USA [70]	Leisure: (golf)	15-20 minute warm-up period with exercises, goal setting, and risk and safety identification; 30-45 minute golf period with partners golfing one, two, and or three holes with the option to use the driving range and or putting green; and 15-20 minute debriefing period with identification of accomplishments, goal evaluation, and planning for next week.	Face to face	Yes		Functional Fitness Battery and the Berg Balance Test.	FIM