| Supplementary Table. Description of studies and example strategies to increase socio-cultural relevance. | | |
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| **Study design overview** |  | **Example strategies to increase socio-cultural relevance a** |
| **SHED-IT (18, 22, 23)**  *Pilot RCT (N = 65 overweight/obese university staff/students)*  Study arms:   1. Online group: One group face-to-face information session plus program handbook, study website to self-monitor and personalized e-feedback. 2. Resources-only group: Information session and program handbook only.   *Community RCT (N = 159 overweight/obese community men)*  Study arms:   1. Online group: Self-directed weight loss pack (handbook, log book, DVD, pedometer). Website for self-monitoring plus personalized e-feedback. 2. Resources group: As above, but paper-based self-monitoring. No feedback provided. 3. Wait-list control group | | *Recruitment:*   * Emphasized the program was developed specifically for men (6, 24) * Promoted opportunity to lose weight without having to give up beer (6, 24) * Highlight scientific credibility of the program (6, 29)   *Content*:   * Resources included pictures of men and statistics about men (28) * Emphasized scientific basis for recommendations (6, 29) * Sensitive use of humor and a direct frank and realistic approach (24, 29) * Information ‘masculinized’ using anecdotes men could relate to (28)   *Format:*   * Predominantly self-administered to appeal to men’s sense of autonomy and self-sufficiency (2)   *Facilitator:*   * Information session (pilot) and DVD (community) delivered by male chief investigator with expertise in men’s health and teaching qualifications (20).   *Pedagogy*:   * DVD presenter lived a ‘day in the life’ with a middle aged, overweight man (relatable model) and provided him with strategies to avoid common weight loss pitfalls (i.e., narrative technique) (8). |
| **HDHK (19, 21)**  *Pilot RCT (N = 53 overweight/obese fathers and their children)*  Study arms:   1. Intervention: Fathers attended eight 90-minute face-to-face group sessions (three with their children) and received program resources (e.g., booklets, pedometers). 2. Wait-list control group   *Community RCT (N = 93 overweight/obese fathers and their children)*  Study arms:   1. Intervention: As above, but fathers attended seven sessions (three with their children). 2. Wait-list control group | | *Recruitment:*   * ‘Father-only’ focus (6, 24) and targeted paternal motivators (e.g. spend quality time with children, improve their self-esteem, engage in fun, rough-and-tumble play activities) (7).   *Content*:   * Use of ‘reciprocal reinforcement’ (i.e., fathers and children independently encouraged to motivate and model health behaviors for the benefit of the other). * Messages targeted valued paternal outcomes (e.g., child social-emotional benefits, bonding time). * Fathers and children taught enjoyable and physically active games that aligned with the typical masculine interaction style of fathers (7).   *Format:*   * Most group sessions were for fathers (and their children) only. * Number of father-child interactive nights increased in response to participant feedback.   *Facilitator:*   * Males with expertise in men’s health (pilot RCT) and male PE teachers (community RCT).   *Pedagogy*:   * ‘Built-in’ opportunities for facilitator to share their own stories (narrative), to engage participants in interactive discussion and activities (substantive communication) (8). * Facilitators role play common child responses to parenting efforts to engage fathers in real life examples, some of which may connect deeply with their own life experiences (8). * Use of humor and relevant, informative and persuasive examples and motivators for behavior change discussed |
| **NEAT Girls (5, 14, 16)**  *Pilot RCT (N = 124 adolescents)*  Study arms:   1. Intervention: Ten enhanced school sport sessions, one researcher-led seminar, pedometers, handbooks and weekly emails. Parents received six newsletters. 2. Control: Minimal school sport intervention.   *Cluster RCT (N = 357 low-active adolescent girls attending schools in low-income communities).*  Study arms:   1. Intervention: One day professional learning workshop for teachers and fitness equipment for schools. Girls received 40 enhanced school sport sessions, three researcher-led seminars, three nutrition workshops, 30 lunch-time activity mentoring sessions, pedometers and motivational texts. Parents received four newsletters. 2. Wait-list control: Usual PE and school sport program. | | *Recruitment*:  Focus on enjoyable lifelong physical activities (e.g., yoga) in a female-only environment (1, 10, 17, 25).  No cost to students (15).  *Content:*  Focus on mastery rather than competition (3).  Student selection of music during sport sessions (27).  *Format:*  Delivered at schools (no cost for transport) (15).  Text messaging to encourage activity and healthy eating (32).  *Facilitator:*   * Delivered by female teachers (4). * Professional learning for teachers regarding desired program delivery.   *Pedagogy*   * Focus on student-directed opportunities for peer leadership. * Seminars included interactive learning activities (e.g., interactive quiz). |
| **ATLAS (13, 30)**  *Pilot RCT (N = 100 adolescent boys attending schools in low-income communities)*  Study arms:   1. Intervention: Boys participated in 3 x researcher-led seminars, 10 x enhanced school sport sessions, 8 x lunch-time physical activity sessions, 6 x leadership sessions and were provided with handbooks and pedometers for self-monitoring. 2. Wait list control: Usual PE and school sport program.   *Cluster RCT (N = 353 low-active adolescent boys attending schools in low-income communities)*  Study arms:   1. Intervention: School received professional learning for teachers and fitness equipment. Boys received 3 x researcher-led seminars, 20 x enhanced sport sessions, 6 x lunch activity mentoring sessions, pedometers, smartphone app and website. Parents received 4 x newsletters. 2. Wait-list control group: Usual PE and school sport program. | | *Recruitment:*  Focus on developing strength and fitness in a male-only environment (9, 12, 31).  No cost to students (15).  *Content:*  Focus on autonomy and personal mastery but included co-operative and competitive games.  Student selection of music during sport sessions.  Focus on resistance training to improve strength.  *Format:*  Delivered at schools (no cost for transport) (15).  Smartphone app/website developed. Motivational SMS messages using colloquial language (26)  ‘CrossFit’-style workouts named after video games, superheroes and males athletes (28)  *Facilitator:*   * Delivered by male teachers (4). * Professional learning for teachers and accredited professional learning hours. * First sport session in each school modelled by a member of research team.   *Pedagogy*   * Promotion of autonomy-supportive teaching strategies and opportunities for peer leadership (11). * Professional learning informed teachers of ‘SAAFE’ teaching principles used to guide the delivery of the program (Supportive, Active, Autonomous, Fair, and Enjoyable). * Researcher-led seminars included engaging learning opportunities (e.g., interactive polling). * Observations of sport sessions to support teachers and provide feedback. |
| RCT, randomized controlled trial; PE, physical education.  a Example strategies provided that were based on insights obtained through pilot work, focus groups, interviews, process evaluations, observations, personal researcher reflections and examination of existing literature. | | |

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