

Table 1. Study Comparison Table

Author, year, study design, class rating, purpose	Population studied	Intervention & Assessment methods*	Results/ outcomes	Conclusions / limitations/ Application
1. Stice, Rohde, Durant & Shaw. 2012.  Meta analysis? + II	n=107 female college students experiencing body dissatisfaction, who did not meet criteria for ED Dx (DSM-IV).	4 groups: Internet Dissonance-based ( <i>e-Body Project</i> , 6 modules), group ( <i>Body Project</i> , 4, 1-hour sessions), brochure (NEDA 2002 brochure), or video ( <i>Dying to be Thin</i> , documentary).  Assessment: IBSS-R, SD-BPS, DRES, BDI, BMI	Internet & group participants had greater reduction in ED risk versus brochure and video controls. The <i>Body Project</i> had marginally greater pre-to-post reductions in all areas over the <i>eBody Project</i> . The only non-significant pre-to-post for the body project versus video control was negative affect (p=0.096). The <i>eBody Project</i> was significant for all areas versus brochure or video with exceptions of thin-ideal (p= 0.07, and 0.09, respectively), body dissatisfaction (p=0.07 video), negative affect (p=0.13 video), and ED symptoms (p=0.25, p=0.47).	Authors concluded that the internet-based program had the same effect as the in-person group program. Internet programs are easier to implement in many situations where trained professionals are not available.  The <i>Body Project</i> still had slightly greater reductions in all areas of assessment than <i>eBody Project</i> , and should be used where available.
2. Becker, Bull, Smith & Ciao. 2008.  Experimental - II	N=83 sorority members (aka: female college students) (over 3 year recruitment) as “peer leaders” without current ED or “significant body image concerns” <sup>2</sup>	Leaders had previously completed course as a participant, then had 9 hours of training before leading groups themselves. These groups were either cognitive-dissonance based, or a passive media advocacy intervention.  Assessment: EDE-Q, EDE,BSQ, & IBSS-R	All participants showed significant decrease in ED dependant variables over time (p<0.01) - showing that there is a risk-reducing benefit to being a peer leader.	Authors concluded that longer/more intense programs may reduce ED risk factors to a greater extent. Both groups saw a significant decrease in risk factors, indicating that it is more the exposure and time spent with the ideas than the specific program type.  Limitations - leaders self-selected, and self-reported. The groups were not randomized.
3. Stice, Rohde, Shaw & Gau. 2011.  RCT	n=306 Female, age 14-19 with body image issues, who did not meet criteria for ED	Randomized into dissonance-based group intervention (4, 1-hour sessions) or control (NEDA brochure) groups. They were assessed pre- and post-intervention, then at 6 months, and then annually	Dissonance-based program participants showed significant decrease in body dissatisfaction (p=0.019), and ED symptoms (p= 0.02) at a 2 and 3-year follow-ups versus the control. Thin-idealization and self-reported dieting improvements did not maintain after 1 year.	Authors concluded that dissonance-based prevention programming (4 hours) showed a reduction in eating disorder symptoms and body dissatisfaction at 2 and 3 year follow-ups. This proves that dissonance-based programs can be effective long-term.  Limitations: facilitators were not psychologists (as trained).

+ II	Dx (DSM-IV).	for 3 years.  Assessment: IBSS-R, SD-BPS, DRES, CES-D, EDDI, BMI, items form the Social Adjustment Scale, and health care utilization in the past 6 months.		However, the school facilitators still created significant reductions in ED symptoms. This shows that dissonance-based programs can be effective despite who is leading.
4.  Linville, Cobb, Lenee-Bluhm, Lopez-Zeron, Gau & Stice. 2015.  Quasi- RCT - III	n= 66 females age 13-17, English or Spanish speaking, with some self-reported body image dissatisfaction. Recruited from primary care clinics. 20% had a full or partial ED Dx at recruitment.	Randomly assigned to the dissonance-based group intervention ( <i>Body Project</i> , 4, 1-hour sessions), or a video documentary control ( <i>Dying to be Thin</i> ).  Assessment: IBSS-R, PSPS, SD-BPS, DRES, PANAS-X, EDDS.  Pre and post test assessments, and a 3 month follow up (71%).	Participants who did not complete the follow-up assessments had higher (pre-intervention) levels of dieting (p=0.014), body dissatisfaction (p=0.007), negative affect (p=0.022), and ED symptoms (p=0.018). Video (control) group showed no major difference in pre- to post- intervention results.	Authors concluded that the <i>Body Project</i> proved to be effective at reducing ED risk factors and symptoms over the control.  Larger studies need to be done to see if individuals are self-selecting for following-up.
5.  Eating Disorders Task Force, Ohio University. 2008.  Cross-sectional survey - II	n=853 undergraduate students, self-reported athletes from introductory classes in "recreation and sports sciences and nutrition."  Majority female (n=587, 68.8%)	Undergraduate students were surveyed.  Assessment: EAT-26 + 5 questions about exercise.	n=290, 34% self-reported as participating in intramural athletics. n=224, 26.3% reported recreational sports. n=215, 25.2% did not report participating in athletic activities. n=42, 4.9% participated in club or intercollegiate sports.  13.5% of participants had EAT-26 scores of over 17, indicating significant ED risk. Highest scores correlated with females participating in recreational athletic activity (p<.05).  Higher scores also correlated with the more sports the student participates in (4 or	The study did not look at cause of ED risk factors - raising the question of high-risk students choose to engage in more recreational (unstructured) activity, or if activity increases ED risk.  Authors concluded that students in structured sports tend to have more nutrition/exercise information, and more support from teammates and coaches. This can help with accountability and early intervention.  Female athletes are not necessarily the highest risk for EDs. Counselors should pay attention to those exercising on their own (not as part of an organized team). The authors noted that previous research explained that many female students do not view excessive exercise as a problem.

			<p>more).</p> <p>Highest scores for males correlated with participation in club sports.</p>	<p>Practice applications: groups that teach coping skills and give support, can help offset EDs because stress is a large contributing factor(106). Increasing awareness of disordered behaviors to those participating in unstructured activity.</p> <p>Limitations: self-reporting. Potential selection bias of students in fitness/nutrition courses.</p>
<p>6.</p> <p>Muller &amp; Stice. 2012.</p> <p>RCT 0 II</p>	<p>n=977 female high school &amp; college students with self-reported body image issues.</p>	<p>Participants were randomized into either a dissonance-based program challenging the thin-ideal (3, 1-hour sessions in groups of 5-10 participants), or an assessment-only control.</p> <p>Assessment: IBSS-R, SD-BPS, DSM-5,</p>	<p>50 (5.1%) participants were DSM-5 ED diagnosable, and another 38(3.9%) were OSFED, at baseline.</p> <p>Those with higher baseline body-dissatisfaction scores had a modestly significant (p=0.054) greater reduction in ED symptoms.</p> <p>Those with baseline ED diagnoses likewise had a greater reduction in ED symptoms with intervention (p=0.004).</p> <p>Intervention effects were also greater on older participants (p=0.034).</p>	<p>Authors concluded that the dissonance-based intervention had a stronger effect on those with higher baseline body-dissatisfaction, and those with eating disorders. It was also noted that older adolescents were better able to grasp the concept of society pushing the thin-ideal.</p> <p>Limitations - the data was collected from 3 trials, which may have had slight differences in recruitment and intervention “noise.”<sup>6</sup> Surveys were self-reported.</p>
<p>7.</p> <p>(follow-up from 101)</p>	<p>n=107 female college students experiencing</p>	<p>Participants were randomized into 4 groups: group (<i>Body Project</i>), internet (<i>e-Body Project</i>), educational video</p>	<p>5 participants did not complete the 1 and 2 year assessments.</p> <p>The <i>Body Project</i> had a greater effect on</p>	<p>Authors concluded that if the <i>e-Body Project</i> was designed to take more time to complete the results would likely be stronger/longer lasting.</p>

<p>Stice, Durant, Rohde &amp; Shaw. 2014.</p> <p>RCT 0 II</p>	<p>body dissatisfaction, who did not meet criteria for ED Dx (DSM-IV).</p>	<p>(<i>Dying To Be Thin</i>), or brochure (NEDA 2-page).</p> <p>Assessment: IBSS-R, SD-BPS, DRES, BDI, BMI</p>	<p>reducing ED risk factors &amp; thin-body ideal, the <i>e-Body Project</i> had greater weight gain prevention effects.</p> <p><i>E-Body Project</i> had marginally sig. effects on body dissatisfaction (<math>p=0.013</math>), ED symptoms (<math>p=0.052</math>) at 2 years, and (<math>p=0.071</math>) at 1 year follow-up.</p>	<p>Sample population was too small to detect much significance. Monetary compensation for completing the assessments may alter results from those intrinsically motivated.</p> <p>The (face-to-face) group <i>Body Project</i> intervention produced greater desirable effects over the other 3 groups.</p>
<p>8.</p> <p>Gupta, Rosenthal, Mancini, Cheavens &amp; Lynch. 2008.</p> <p>Cross-sectional (no intervention) - III</p>	<p>n=154 undergraduate females (Duke Univ.).</p>	<p>A female practitioner met the participants and administered the questions in varied order. Participants were also given a list of community resources.</p> <p>Assessment: EDI, AIM, TOSCA-3, DERS,</p>	<p>All variables were positively correlated (<math>p&lt;0.05</math>) for ED symptoms and emotion regulation difficulties, negative affect, and chronic (perceived) shame.</p>	<p>Authors concluded that chronic shame had the greatest correlation to ED symptoms, and proved to be the greatest predictor of EDs.</p> <p>Above and beyond shame, difficulty regulating emotions added to ED symptoms.</p> <p>“The ability to...identify and discriminate between emotional states, accept unpleasant emotions, inhibit impulsive behavior when emotionally aroused, behave consistently with goals even when emotionally aroused, and access a range of strategies to regulate emotions when upset...contribute to the regulation of emotion.”<sup>8</sup></p> <p>Limitations: Those with diagnosed EDs may have more difficulty with emotion regulation than subclinical EDs.</p> <p>Application: using emotion regulation skills in the treatment of EDs.</p>
<p>9.</p> <p>Stice, Rohde, Durant, Shaw &amp; Wade. 2013.</p> <p>Double-blind RCT + II</p>	<p>2 studies of female undergraduate students in Texas with body image issues.</p> <p>Study 1: n=171 Study 2: n=148</p> <p>Exclusion: DSM-IV ED diagnosis.</p>	<p>Study 1 randomized into peer-led groups, clinician-led groups, or educational (NEDA) brochure control. Study 2 randomized into peer-led groups, or waitlist control.</p> <p>Groups consisted of 4, 1-hour sessions (the <i>Body Project</i>) with 6-8 participants. All sessions were video recorded for compliance.</p> <p>Assessments at pre-test, post-</p>	<p>Study 1: peer-led groups had significant reductions in ED risk over controls at post-test <math>p&lt;0.02</math>, but this did not last through the 1-year follow-up. Clinician-led groups showed significant reductions (over controls) at post-test (<math>p&lt;0.001</math>) and 1-year follow-up (<math>p&lt;0.05</math>).</p> <p>Study 2: peer-led groups had significant reduction in ED risk over controls (<math>p&lt;0.02</math>).</p>	<p>Authors concluded that clinician-led groups had the greatest outcomes in ED risk factor reduction, and higher attendance than peer-led groups. However, the peer-led groups still had significant results for reduction of ED risk, and may be more realistic for reaching more students.</p> <p>Limitations: self-reported. Study 2 did not have clinician leaders. Length to follow-up was short.</p>

		test, and 1-year follow-up (study 1, only).  Assessment: EDDS, IBSS-R, SD-BPS, DRES, BDI, EDDI		
10.  Becker, McDaniel, Bull, Powell & McIntyre. 2012.  Exploratory (Double-blind) RCT + I	n=157 female college varsity athletes (NCAA Div. III)  Exclusion: ED diagnosis based on EDE-Q, or incomplete baseline data.	Participants randomized into either an “athlete-modified” dissonance program (AM-DBP) or “athlete-modified” healthy weight intervention (AM-HWI). <sup>10</sup> Coaches were not involved or present during interventions.  Each team (sport) was randomized into the 2 interventions 50/50).  Interventions were 3, 60-80 minute sessions, peer-led by 2-4 peer leaders.  Assessment pre- and post-intervention, 6-weeks, 1 year.  Assessment: IBSS-R, DRES, EDE-Q, PANAS-X, manipulation check & evaluation questionnaire	AM-HWI was more positively received than the AM-DBP intervention.  Unexpectedly, 7 students came forward with concerns that they might have female-athlete-triad, despite what they wrote on the initial medical questionnaire.  All independent variables were significant for time (p<0.001).	Authors noted that, at the time of the study, it was the first study that found positive reductions in ED risk among athletes at a year-out. More sessions would have likely resulted in stronger results.  Authors concluded that trained peer leaders were found to be well-suited for educating, and had inside knowledge of their peers. However, peer leaders may not have the counseling skills to work with difficult participants.  The AM-DBP was more positively accepted by team-sport players, versus individual-sport players. Likely due to personality types.  Limitations - since individuals were randomized within teams, there may have been some exchange of information, skewing the results. There was no control group. It was limited to div III athletes. Similar programs in school’s sorority may have had cross-over in some individuals.
11.  Stice, Rohde, Butryn, Shaw & Marti. 2015.  RCT (cross-sectional) 0 II	n= 408 female university students from 8 universities, with body image concerns.  Exclusion: DSM-IV ED diagnosis.	Participants were randomized into either 4, 1-hour sessions of dissonance-based prevention group ( <i>Body Project</i> ), or a control (NEDA brochure, and American Psychological Association brochure) group.  Assessment: Pre-test, post-test (1% missing), 1 year (8%	No significant difference in DSM-IV Dx at 3 year follow up between groups (12.9% of participants in each group) (p=0.165).  All independent variables were significant for time (p<0.001) at 3 year follow-up for <i>Body Project</i> participants, exceptions: BMI, healthcare utilization, and mental health care utilization.	Authors concluded that college clinicians can effectively facilitate the <i>Body Project</i> to produce more significant effects versus control.  Limitations: likely selection-bias. Lack of clinician contact with control group.  Practice: proved feasibility of college clinicians implementing the body project on campuses. Larger studies should be done.

		missing), 2 years (15% missing), and 3 year follow ups. EDDI, DSM-IV		
12. Greif, Becker & Hildebrandt. 2015. Longitudinal study - II	n=64 sorority girls over age 18 at a university.  Exclusion: DSM-IV ED diagnosis.	All eligible students (n=64) were participants of the body project (in 2, 2-hour sessions). Only 46 completed the second session and post-test. Only 28 participants answered the 5 month follow-up assessment.  Assessment: IBSS-R, PANAS, SD-BPS, EDE-Q	High rate of participant drop-out. Analysis of “missing at random,” “Diggle-Kenward,” and “Pattern Mixture Model,” all show significant decrease in thin-ideal internalization, body dissatisfaction, and bulimic pathology (all p<0.05). <sup>12</sup> No significant change in negative affect.	Authors noted that participants of the <i>Body Project</i> did show reductions in key ED risk factors.  Limitations: small sample size and retention rate. Mean BMI was 25, which may influence bias. No control group.  Practice: “train the trainer” programs increase “scalability” of reaching more individuals. <sup>12</sup>