The Impact of Mental Toughness on Weight Loss Progress at a National Slimming Club

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Background

66.6% of adult males are obese or overweight (Lifestyles statistics team, Health and Social Care Information Centre, 2014)

57.2% of adult females are obese or overweight (Lifestyles statistics team, Health and Social Care Information Centre, 2014)

By 2050, only 10% of individuals will be a healthy weight (Department of Health, 2009)

In 2012, 38 million deaths worldwide (World Health Organisation, 2015)

Non communicable diseases

• Lifestyle modification is the most powerful tool to address obesity-related health issues, but such approaches are usually accompanied by high drop-out rates (Kong et al., 2010)
Setting clear goals (Dubbert & Wilson, 1984)

- Decreased depressive symptoms (Bose et al., 2009)
- Increased problem solving skills (Murawski et al., 2009)

Set manageable & achievable goals

- Greater confidence in ability to lose weight (Kong et al., 2010)

Commitment

Control

Confidence

Challenge

4 C’s model (Clough et al., 2002)

- Control of emotions and anxiety
- Confidence in skills, knowledge and abilities
- Like problem solving & will not fear away from challenge
Method

- Recruit via slimming club members page
- MTQ48
- EITI
- N = 420

0 months

Weekly weight and attendance recorded

3 months

- MTQ48
- EITI
- N = 167

6 months

- MTQ48
- EITI
- N = ???
Changes over 3 months

- Significantly lower mental toughness than population norm
- No significant differences between completers and non completers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Initial</th>
<th>3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>94.42</td>
<td>86.05*</td>
</tr>
<tr>
<td>Mental toughness</td>
<td>3.28</td>
<td>3.36*</td>
</tr>
<tr>
<td>Healthy eating</td>
<td>3.53</td>
<td>3.84*</td>
</tr>
<tr>
<td>Emotional eating</td>
<td>3.85</td>
<td>3.34*</td>
</tr>
</tbody>
</table>

* Significant difference between initial and three month data collection (P < 0.01)

- Mental toughness significantly increased
- Eating style significantly changed
Correlational analysis of variables with initial mental toughness

<table>
<thead>
<tr>
<th>Variable</th>
<th>r value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month weight loss</td>
<td>.150*</td>
<td>.002*</td>
</tr>
<tr>
<td>3 months weight loss</td>
<td>-.003</td>
<td>.947</td>
</tr>
<tr>
<td>Attendance over 1 month</td>
<td>.153*</td>
<td>.002*</td>
</tr>
<tr>
<td>Attendance over 3 months</td>
<td>.007</td>
<td>.887</td>
</tr>
</tbody>
</table>

* Significant difference between one month and three month data collection (P < 0.01)

• Services provided by slimming club may have created a ‘ceiling effect’
Conclusion

Slimming club members

= Mental toughness

= Healthy eating identity

= Emotional eating identity

Slimming club members


References


