Pre-packaged guided imagery for stress reduction: Initial results

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Abstract
A study into the use of pre-packaged compact discs (CDs) which incorporate Guided Imagery (GI) with suggestions and affirmations, indicates that the use of these CDs results in quick reduction of stress-related issues for all participants. Notable improvements were identified in general feelings of well-being (91% of participants), positive thoughts (82%) and ability to cope in stressful situations (73%). Decreases in incidence ratings were greatest for insomnia, anger and negative thoughts. Most commonly the first benefits people noticed were increased relaxation, decreased negative thoughts, and decreased stress. Despite the effectiveness of the CDs, improvements tended to be short-lived due to diminishing use of CDs (and relaxation techniques) over time. There was no long term commitment to the regular practice of the relaxation technique. Rather participants apparently sought speedy issue resolution from the CDs. Consequently not all improvements endured, with some participants needing to revisit the CDs each time symptoms returned.

Keywords:
Guided imagery; relaxation; stress reduction; self-hypnosis; well-being; positive thoughts; compact discs (CDs)
Literature

Many people suffer symptoms of stress manifesting in a range of physical symptoms, of different levels of severity, such as headaches, bodily aches and pains, anxiety, and inability to cope with life generally (Jackson:1993). However, faced with these symptoms, what do we do? Initially, we may attempt to heal ourselves by taking self-prescribed medication (analgesic, tonic, multivitamin), improving our diet, decreasing alcohol intake, etc. and/or we may visit our general practitioner (GP). All these options involve treating the body rather than addressing the root cause, the stress, or, the state of the mind.

There appears no question that stress-related symptoms are real, and can be caused by an emotional imbalance, rather than a physical one (Clarke & Smith:2000), which is not easily treated in an effective manner within a traditional Western medical model based on biomedical science, which is evidence-based as well as being fundamentally analytical and reductive. The wide acceptance of this fact is evidenced by the increase in the availability of alternative therapies, eg relaxation techniques, yoga, Pilates, massage therapy, and self-hypnosis, in many forms and mediums such as therapy sessions, classes, videos, cassettes, CDs, DVDs etc.

The fundamental element in any therapy aimed at reducing stress and stress related symptoms is relaxation, and relaxation has been shown to be beneficial for a range of symptoms and health problems such as shorter hospital stays; decreases in pain along with the promotion of more rapid recovery (Blankfield:1991); quicker wound healing (Kiecolt-Glaser:2001); reduced depression, headaches, fatigue, and improved job satisfaction/performance; better relationships with supervisors/co-workers; and improved quality of sleep (Bellarosa:1997). Benefits also noted include reduction of nervousness; promotion of performance; enhanced selective attention and memory recall; promotion of self-control/self-actualisation and reductions in psychosomatic complaints (Krampen:1996). These techniques have been seen to assist in, (i) alleviation of insomnia and gastrointestinal disorders (McCubbin:1996); (ii) anger reduction (Deffenbacher:1995); (iii) decreases in irrational beliefs and increases of self-efficacy, (iv) reduction in hot and cold spells, along with (v) tension headaches, insomnia, anxiety, stress and excessive fidgeting (Kiselica:1994).

Widespread benefits are noted in holistic terms, and may positively influence (i) improvements in mixed psycho-physiologic disorders (Blanchard:1991); (ii) reduced negative outcomes associated with ageing, (iii) reduced hospitalisation and admission rates; (iv) improved mental health and (v) increases in longevity (Alexander, Langer, Newman Chandler & Davies:1989). In addition to providing assistance for people with cancer and other terminal illness, stress-reduction approaches are known to generally help people cope with illness and chronic pain (Cupal & Brewer:2001).

desirable outcomes (Ackerman & Turkoski:2000). GI induces a relaxed state and facilitates cognitive restructuring when ‘suggestion’ is included as part of the therapy (Syrjala & Abrams:2002). There is debate however that imagery and the associated suggestions are most beneficial when their utilisation is individualised. Evidence for and against individualisation has had mixed outcomes with a key element of success being mastery or competence of imagery technique (Enns:2001; Syrjala & Abrams:2002).

Arguments against individualisation for some professionals has popularised mass produced therapies available as tapes, CDs etc., incorporating self-hypnosis techniques, imagery and GI, with the same induction and training being presented to everyone using the CD or tape. This type of easily accessible and relatively inexpensive therapy is becoming more popular and is also being recommended to clients in therapy, to help clients relax (Bourne, 2001; Blanchard:1991).

The author conducted a research project on the effect of non-individualised GI CDs, or ‘pre-packaged guided imagery” (PPGI) on life stress and stress related symptoms. The PPGI used in this instance was a series of CDs with associated written material (Guidebook), developed for a range of personal issues by practicing professionals (a psychotherapist and a peak performance coach). Although the CDs are for a range of issues, they all incorporate the same induction technique of relaxation training using GI followed by imagery incorporating suggestions and affirmations, i.e. 90% of the content of the CD’s was the same except for the focus of the affirmations and suggestions.

Theoretically, the development of such CD’s is in according with Jackson (1993), in that if there is an overall increase of positive thoughts through this technique and with additional positivity from affirmations in this instance, there should be a generalised increase of positive feelings and increase in good health. Thus, it is hypothesised that because of the broadness of the approach, regardless of the underlying issue, there will be an overall improvement across a range of issues.

The aims and objectives of the project were to assess by qualitative and quantitative methods, the following:

- perceived role of non-individualised PPGI (i.e. readily available CDs)
- expected outcomes versus actual outcomes of PPGI CDs
- associated benefits after undertaking GI training, and to
- identify any surprising or unexpected benefits.
Methodology
From previous research already mentioned, a list of potentially stress-related issues and related questions was developed as the basis for a survey of people who had used the PPGI which incorporated specific issue-related suggestions and affirmations. Participants were obtained from a list compiled at the time of acquiring the product, of people willing to participate in a study relating to outcomes. Participants acquired at least one of the CDs from the set of 10 (titled respectively, ‘Absolute Relaxation; Achieving Sensational Grades; Attracting People Magnetically; Busting Away Depression; Creating Abundant Wealth; Discovering Past Lives; Quick & Easy Weight Loss; Sleeping Like a Baby; Stop Smoking Permanently; Meditating Easily’, Briggs & Green:2002). In all, 22 participants completed questionnaires either by phone or self-completion. The questionnaire consisted of open and closed questions. All participants received copies of the questions whilst engaging with the product.

Results
Just over half of the participants were female 59%, and 41% were male. Participants ranged in ages from 19 to 67. Overall a wide range of CDs in the selection were used by the participants. The most commonly used CD was ‘Absolute Relaxation’ (27%), followed by ‘Creating Abundant Wealth’, and ‘Sleeping Like a Baby’ (18% each). Only 4 respondents had used more than one of the CDs individually. At the time of their interview, participants had begun using their CDs from between 2 to 14 months prior, with average usage period of 6.6 months.

From qualitative responses, 45% of participants were classified as being in “Good Health”, describing themselves as “active”, “healthy”, “feeling great” etc., prior to starting the PPGI. The others (55%) were classified (by the author) as in “Poor Health”, reporting a range of health issues such as “depression”, “being overweight”, “lethargic”, “having poor eating habits”, “suffering from headaches”, “experiencing mood swings”, being “anxious”, “weepy”, “uptight”, “out of balance”, “generally unwell”, or suffering from “mental stress”. All but one in this group reported multiple symptoms. Across all ages respondents reported health issues. Female participants reported more health issues than did males (see Table 1).
Table 1. Overall Percentages of Participants Age and Sex by Health Classification

<table>
<thead>
<tr>
<th>Age Ranges</th>
<th>Overall</th>
<th>Good Health*</th>
<th>Poor Health/Multiple issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30 yrs</td>
<td>18</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>30-39 yrs</td>
<td>32</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>40-49 yrs</td>
<td>27</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>50 or more yrs</td>
<td>23</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>41</td>
<td>27</td>
<td>14</td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>18</td>
<td>41</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>100</td>
<td>45</td>
<td>55</td>
</tr>
</tbody>
</table>

* Percentages have been rounded.

**Perceived role of PPGI**

Almost all participants had high expectations of success, believing that the CD would work. The reasons given for taking up the PPGI could be classified into 3 broad categories:

- a specific/identifiable problem targeted by one of the CDs (e.g., weight loss, insomnia) (50%)
- a general feeling of depression/anxiety manifesting in multiple health concerns (32%)
- self-development (18%)

All participants perceived that their problems were partly psychological or emotional, and for those experiencing symptoms, that these physical symptoms were caused by stress. Less than half (41%) of all participants had attended their GP to discuss their concerns. Those who were prescribed medication discontinued shortly afterwards, saying there were too many side effects or they just didn’t want to take drugs (antidepressants, sleeping pills, etc.). Although all participants were optimistic about expected outcomes, only 9% of them followed the instructions as prescribed, even though many believed they had. A large proportion (73%) said that they followed the instructions of the program, but when qualitative information was analysed more specifically, it was found that only 14% initially practiced twice a day, as recommended. Most commonly, participants initially listened to the CD each day for one to four weeks. Nor did participants read the additional material at least once a week, as recommended. In fact, the written instructions and additional material were hardly ever referred to by 59% of participants.
From analysis of qualitative responses relating to initial interaction with the CDs, participants were grouped into 3 groups for further investigation: Initial Interaction with CD/material High (High II); Initial Interaction with CD/material Moderate (Moderate II); Initial Interaction with CD/materials Low (Low II).

Expected versus Actual Outcomes
The expectations of participants were almost all directly in line with the titles of the CDs, i.e. “lose weight”, “get better grades”, “get a good night’s sleep”; one participant who purchased multiple CDs expected “a new me”. However, there was no evidence from the qualitative information that any participant expected any other improvements in their health or well-being.

When asked how they felt while they were listening to the CD, most often participants mentioned being “more calm” and “relaxed”, others mentioned being “de-stressed”, “switching off”, “feeling detached from the daily grind”, “sleepy”, and “nurturing to myself”. All participants reported an improvement with their concerns, with only one reporting a minimal change for the better. Regardless of the level of Initial Interaction in listening to the CDs, the improvements reported were moderate, with 36% of participants noticing improvements after listening to the CD for the first time, and 59% noticing improvements within 1 to 4 weeks. The remaining respondents were unable to determine how long before noticing an improvement. Improvement timeframe (speed of change) was as expected for 27%, faster for 36% and the remaining 36% had no expectations of speed of change.

Qualitatively, participants individually reported many benefits including:

1. feeling calmer/more relaxed;
2. sleeping better;
3. being more positive/having more positive thoughts;
4. having more energy/energised;
5. losing weight;
6. being more focused;
7. being more in control;
8. having less headaches;
9. stopping smoking;
10. having increased patience;
11. feeling more balanced;
12. having normalised blood pressure;
13. not feeling afraid;
14. being able to turn-off (i.e. no “busy brain”);
15. having reduced negative thoughts;
16. experiencing personality improvements (more understanding of other people);
17. improved listening skills;
18. experiencing diminished mood swings.
Participants were asked if they had noticed improvements in some specific areas. Not surprisingly, “Poor Health” participants were more likely to have noticed benefits for a range of issues (see Table 2).

Table 2. Percentage of Participants with a noticed improvement in specific areas.

<table>
<thead>
<tr>
<th>Specific Area</th>
<th>Percentage of participants with a noticed improvement.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
</tr>
<tr>
<td>General feeling of well-being</td>
<td>91</td>
</tr>
<tr>
<td>Positive thoughts about the future</td>
<td>82</td>
</tr>
<tr>
<td>Ability to cope in stressful situations</td>
<td>73</td>
</tr>
<tr>
<td>Feeling of optimism about the future</td>
<td>64</td>
</tr>
<tr>
<td>Confidence</td>
<td>64</td>
</tr>
<tr>
<td>Sleep</td>
<td>55</td>
</tr>
<tr>
<td>Concentration</td>
<td>55</td>
</tr>
<tr>
<td>Memory/recall of information</td>
<td>50</td>
</tr>
<tr>
<td>Reaction to situations where you would normally get angry</td>
<td>45</td>
</tr>
<tr>
<td>General health</td>
<td>41</td>
</tr>
<tr>
<td>Luck</td>
<td>36</td>
</tr>
<tr>
<td>Tendency to procrastinate</td>
<td>32</td>
</tr>
<tr>
<td>Weight (loss or gain)</td>
<td>23</td>
</tr>
<tr>
<td>Feelings of attractiveness</td>
<td>23</td>
</tr>
<tr>
<td>Finances</td>
<td>23</td>
</tr>
</tbody>
</table>

Improvement in “general feeling of well-being” and “positive thoughts” appears least likely for those in the following groups: ‘Low II’ and ‘Used the CDs for less than 6 months’.

Participants were also asked to rate the incidence of certain common medical issues prior to listening to the CD and after listening to the CD, on the following broad 4-point scale: Often (4), Regularly (3), Sometimes (2), Never (1). All of the issues yielded an overall positive
difference in mean scores for before and after experiencing the PPGI, as reported in Table 3, i.e. all conditions improved. The highest differences, (i.e. greatest improvements), were noted for Insomnia, Anger and Negative Thinking. Even higher score differences were recorded for those in the “Poor Health” group. Interestingly, some of the biggest differences were noted for participants who were grouped into the “Moderate II” group.

### Table 3: Means Score differences of incidence rating of common medical issues, before and after using PPGI.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Mean Score Difference before and after PPGI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
</tr>
<tr>
<td>Insomnia</td>
<td>0.89</td>
</tr>
<tr>
<td>Anger</td>
<td>0.79</td>
</tr>
<tr>
<td>Negative thinking</td>
<td>0.79</td>
</tr>
<tr>
<td>Fatigue/tiredness</td>
<td>0.69</td>
</tr>
<tr>
<td>Headaches</td>
<td>0.67</td>
</tr>
<tr>
<td>Irrational beliefs</td>
<td>0.66</td>
</tr>
<tr>
<td>Depression</td>
<td>0.64</td>
</tr>
<tr>
<td>Digestion</td>
<td>0.44</td>
</tr>
<tr>
<td>Viral infection</td>
<td>0.32</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>0.28</td>
</tr>
<tr>
<td>Obesity</td>
<td>0.28</td>
</tr>
<tr>
<td>Aches/pains</td>
<td>0.22</td>
</tr>
<tr>
<td>Hair loss</td>
<td>0.22</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>0.21</td>
</tr>
<tr>
<td>Hot/cold spells</td>
<td>0.17</td>
</tr>
<tr>
<td>Gastrointestinal problems</td>
<td>0.16</td>
</tr>
<tr>
<td>Decreased heart rate</td>
<td>0.05</td>
</tr>
</tbody>
</table>
A large proportion of the participants would like to continue using the CD (96%), and were still using the CD (83%). 46% of participants were still using the CD on a regular basis, 23% using the CD “as needed”, 14% “not often enough”, and the others (18%), “not at all”. However, in continuing to use the CD, 41% expect that this will only be “as needed”, 18% will continue “once a week”, 23% continuing “a few days a week” or “5 times a week”, with the other participants (18%) unable to specifically say how often they will use the CD.

Unexpected benefits
When asked to identify any unexpected benefits, the following were each mentioned by one or more participants: motivation; stronger memory; needing less sleep; benefits applicable to other areas of life (work/family); stress relief; normalisation of blood pressure; decreased back and neck pain; no more fear; positive thoughts; improved communication skills; ability to control anger; ability to laugh again.

Associated Benefits
Coincidentally, use of analgesics was reported to have decreased slightly over time from the 12 months prior to using the PPGI, and since using the PPGI (Mean Scores of 2.21 and 1.79 respectively, using the previously described 4 point relative frequency scale). Participants also reported that they visit the doctor less often, post PPGI, with an overall number of visits annually of 4.18, prior to PPGI, and after PPGI of 2.88 visits annually. However, these results should be interpreted with caution given that the average time since acquiring the CDs is only 6.6 months. Over half (59%) reported that others (friends/family/colleagues) had recognised improvements in performance and or their behaviour.

Discussion
It seems that for these participants, many aspects of their lives improved because of the use of PPGI at least in the short term. More research is needed to investigate what, if any, benefits may exist in the long term from the use of PPGI. The key finding of this research is that listening to CDs incorporating the techniques of GI, suggestion, together with affirmations tend to assist people in feeling better by increasing their general feeling of well-being, increasing positive thoughts, and improving their ability to cope in stressful situations; in decreasing the incidence of insomnia, and in feelings of anger and negative thinking. These benefits may occur regardless of the reason for acquiring the CD in the first place. However, further investigation of the causal factors is yet to be seen, as it is difficult if not unlikely to facilitate a controlled sample without mitigating circumstances influencing the results of analysis.

This being said, regardless of the suggestion component (i.e. CD used) it appeared that the most common benefits people noticed were increased relaxation, decreased negative thoughts, and decreased stress; with a couple of exceptions, i.e., the first benefit for those using the “Sleeping Like a Baby” CD, was better sleep. Those people, who had only a moderate commitment initially, reported considerable improvements across a range of symptoms.
For current participants however, there was no long term commitment to developing a lifestyle that incorporates the techniques into their daily lives. The book associated with the CD was perceived to be of little importance to the treatment. For a lasting benefit there appears to be a need to be more committed and persistent in engaging with the CD, with a need to understand that relaxation therapy needs to become a way of life to bring about lasting changes. However, this is yet to be seen and requires further study. Also, participants did not appear to be looking for lasting benefits, but rather sought a ‘quick fix’ or speedy improvement of a problem. They saw the CD as the means to an end, with many of them expecting quick results and consequently getting them, but they didn’t last. The influence of prior personal beliefs associated with the treatment modality poses interesting challenges in understanding therapy outcomes. These beliefs were challenged as participants often indicated that they had to keep revisiting the CDs when the problem arose again. The fact that the written material was hardly referred to by any participant indicates that when people choose treatment in the form of PPGI as a CD, they expect just to listen, and are not interested in reading. These factors may also suggest participant capacity and/or will to retain information, ideas, and beliefs associated with the path of recovery across various symptoms.

Also clear from the qualitative information is that participants have very little time to engage in such a therapy. Thus, it can be said that this type of program should be short and sharp. Participants in this study had trouble listening to a CD for 30 minutes once a day, let alone twice a day as was recommended for maximum benefit. Many respondents (96%) indicated that they would be continuing to practice the techniques, however, there is still an inclination to perceive PPGI within the medical model, and to treat it like a pill, i.e. listen to the CDs or to practice the technique as a ‘quick fix’ when things start to go wrong, and our mind needs a ‘top up’. The idea or notion of keeping the mind permanently in good health by practicing regular relaxation is not yet instilled in the collective consciousness, even for those who have recognised the connection of mind/body. This type of therapy may require some sort of self-checking or monitoring component which would enable individuals to gauge their level of relaxation and progress. These mitigating factors including cultural dispositions to holistic health require greater sensitivity in future research design, particularly in a field like counselling, and psychotherapy, where the whole person tends to be the object of analysis.

Results related to frequency of visits to the doctor and use of analgesics were inconclusive given the timeframe between participants having acquired the CDs and the conducting of the research and the fact that most of the respondents were generally relatively healthy. Some participants reported positive comments from family and friends. This is interesting as the social aspect of increasing positive outlook in people’s lives is often overlooked in similar research, which tends to focus on the individual exclusively. However, this is an area where further investigation could contribute constructively in developing group or family therapy approaches that incorporate some aspect of PPGI. Comprehensive long-term follow-up with people who have used this type of CD or therapy (both successfully and unsuccessfully) would be beneficial in understanding how they can be used for the greatest benefit.

References


