THE IMPACT OF LIFE COACHING ON GOAL ATTAINMENT, METACOGNITION AND MENTAL HEALTH

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Despite its high media profile and growing popularity there have been no empirical investigations of the impact of life coaching on goal attainment, metacognition or mental health. This exploratory study used life coaching as a means of exploring key metacognitive factors involved as individuals move towards goal attainment. In a within-subjects design, twenty adults completed a life coaching program. Participation in the program was associated with enhanced mental health, quality of life and goal attainment. In terms of metacognition, levels of self-reflection decreased and levels of insight increased. Life coaching has promise as an effective approach to personal development and goal attainment, and may prove to be a useful platform for a positive psychology and the investigation of the psychological mechanisms involved in purposeful change in normal, nonclinical populations.

In working with individuals to improve the quality of their lives, psychology has traditionally focused on alleviating dysfunctionality or treating psychopathology in clinical or counseling populations rather than enhancing the life experience of normal adult populations.

However, it is clear that the general public has a thirst for techniques and processes that enhance life experience and facilitate personal development. The market for personal development material has grown rapidly worldwide since the 1950s (Fried, 1994). Although psychologists feature infrequently as producers of this material, psychology has a genuine and important contribution to make in terms of adapting and validating existing therapeutic models for use with normal populations, and evaluating commercialized approaches to person-

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Key words: life coaching, private self-consciousness, metacognition, self-reflection, insight, mental health, personal development, positive psychology, coaching psychology, well-being.

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al development to ensure consumer protection and inform consumer choice (Grant, 2001; Starker, 1990). A recent development in the personal development genre is the emergence of life coaching. Life coaching can be broadly defined as a collaborative solution-focused, result-orientated and systematic process in which the coach facilitates the enhancement of life experience and goal attainment in the personal and/or professional life of normal, nonclinical clients.

**Issues in the Growth of Life Coaching Practice**

The coaching industry, and particularly life coaching, has grown substantially since at least 1998. There have been claims that the number of executive and life coaches number in the tens of thousands in the USA, and coaching has received widespread attention in the popular Western press (Hall, Otazo, & Hollenbeck, 1999).

Despite often over optimistic claims as to its effectiveness there has been little empirical research into the effectiveness of life coaching (Grant, 2000), with anecdotal and marketing claims from the coaching industry itself forming the bulk of the evidence. An overview of the peer-reviewed academic psychology literature on coaching, in normal adult populations, as represented in the database PsycINFO shows that there are only 98 citations, with only 17 of these being empirical evaluations of the effectiveness of coaching interventions. All of these are concerned with evaluating work-related or executive coaching within work or organizational settings.

This is an exploratory study; the first to investigate the effectiveness of life coaching (i.e., coaching in a nonwork or organizational setting), and to investigate the impact of solution-focused, cognitive-behavioral life coaching on key sociocognitive and metacognitive factors.

**A Solution-Focused, Cognitive-Behavioral Model of Coaching**

The life coaching program used in this study is adapted from a self-help book, *Coach Yourself* (Grant & Greene, 2001). This program is based on principles drawn from cognitive-behavioral clinical and counseling psychology (Beck, Rush, Shaw, & Emery, 1979), brief solution-focused therapy (O’Hanlon, 1998), and models of self-regulated learning (Zimmerman, 1989).

Cognitive-behavioral approaches to counseling and coaching psychology recognize the quadratic reciprocity between the four domains of human experience: behavior, thoughts, feelings and the environment. From a cognitive-behavioral perspective, goal attainment is best facilitated by understanding the relationship between these four domains of human experience and structuring them so as to best support goal attainment. However, possibly because its roots are in the treatment of psychopathology within a medical model, the cognitive-behavioral
approach tends to emphasize psychopathology, an approach which is often alienating for nonclinical populations.

Thus, the *Coach Yourself* program incorporates aspects of brief solution-focused therapy. Solution-focused therapy is a constructivist, humanistic approach that concentrates on the strengths that clients bring to therapy, and emphasizes the importance of solution construction rather than problem analysis.

**Self-Regulation, Sociocognition, Metacognition and Coaching**

Goal-directed self-regulation consists of a series of processes in which an individual sets a goal, develops a plan of action, begins action, monitors his or her performance (through self-reflection), evaluates his or her performance by comparison to a standard (gaining insight), and based on this evaluation changes his or her actions to further enhance performance and better reach his or her goals. The coach’s role is to facilitate the coachee’s movement through the self-regulatory cycle towards goal attainment. Hence, coaching is a useful means of furthering our understanding of the sociocognitive and metacognitive factors involved in purposeful behavior change as people move through the self-regulatory cycle. Figure 1 presents a generic model of self-regulation.

![Generic model of self-regulation and goal attainment showing self-reflection and insight.](image-url)
Some of the key metacognitive factors in the self-regulatory cycle are found within the construct of private self-consciousness (Fenigstein, Scheier, & Buss, 1975), specifically, the processes of self-reflection and insight. Both clinical and nonclinical change programs often encourage candidates for change to spend time in self-reflection on the assumption that this will lead to insight, and insight will facilitate goal attainment and behavioral change (Sedikides & Skowronski, 1995). However, it is important to note that self-reflection and insight are logically two separate processes. One may spend time in self-reflection without necessarily developing insight.

METACOGNITION AND COACHING: PAST RESEARCH

SELF-REFLECTION, INSIGHT AND MENTAL HEALTH

Research into private self-consciousness has focused on how self-reflection and internal state awareness (and the associated construct of insight) are related to mental health, rather than to goal attainment through the coaching process. In general self-reflection has been found to be correlated positively with measures of psychopathology with internal state awareness being negatively correlated with measures of psychopathology (Creed & Funder, 1998). Investigations into the relationship between self-reflection and insight using the Private Self-Consciousness Scale (PSCS; Fenigstein et al., 1975) have produced inconsistent findings, and there have been calls for the PSCS to be revised.

A new measure of private self-consciousness, the Self-Reflection and Insight Scale (SRIS; Grant, Franklin, & Langford, 2002), comprises two orthogonal subscales, self-reflection (SRIS-SR) and insight (SRIS-IN), and initial findings suggest that the SRIS is a valid and reliable measure of self-reflection and insight which represents an advance on the PSCS (Grant et al., 2002).

Little is known about how the metacognitive factors of self-reflection and insight change as individuals move purposefully towards goal attainment through a change program. Grant et al. (2002) found that individuals who regularly kept journals in which they wrote about their life experiences had higher levels of self-reflection, but lower levels of insight than did individuals who did not keep journals. Grant et al. suggested that the journal-keepers were in some way stuck in a process of self-reflection, and were primarily engaged in a process of understanding their personal behavioral, cognitive and emotional reactions, rather than moving towards goal attainment. If this is the case then it can be predicted that individuals’ levels of insight should increase as they move through the self-regulatory cycle towards attaining goals that had previously eluded them.

The study also investigated the impact of life coaching on individuals’ ability to reach their goals. It was predicted that participation in the life coaching pro-
gram would be associated with increased goal attainment. Making successful purposeful change and reaching one’s goals can have a positive impact on individuals’ mental health (Sheldon & Kasser, 2001). Thus it was further hypothesized that participation in the program would enhance mental health and increase participants’ quality of life.

**METHOD**

**PARTICIPANTS AND MATERIALS**

Twenty mature-age postgraduate students from the Faculties of Science, Economics and Business in a major Australian university (15 women and 5 men, mean age = 35.6 years) took part in this study.

The *Coach Yourself* (Grant & Greene, 2001) life coaching program is a structured life coaching program. The present study used the *Coach Yourself* program as a basis for group life coaching facilitated by an external coach.

**DESIGN, PROCEDURE AND THE COACHING PROGRAM**

The study utilized a within-subject design. Participants initially completed a life inventory task from the *Coach Yourself* program in which they examined the main areas of their lives (e.g., work, health or relationships) and then developed three specific, tangible and measurable goals which could be attained, or towards which significant progress could be made, within a 13-week time frame. Participants were able to select any goal that they had wanted to achieve in the past, but had been unsuccessful in achieving.

Participants met in a group for ten, 50-minute weekly group coaching sessions, and were coached in the application of cognitive-behavioral coaching techniques, including self-monitoring, cognitive restructuring, behavioral modification and environmental structuring, and solution-focused techniques such as the “Miracle Question” (de Shazer, 1988).

The Miracle Question is a technique which facilitates the generation of options and action plans. The client is asked to respond to a question such as; “if you woke up tomorrow, and a miracle had happened and the solution was somehow present, what would be happening?” Although a relatively new modality, preliminary studies have shown solution-focused approaches to be effective in a range of applications (Gingerich & Eisengart, 2000).

The role of the coach was to facilitate this process, and to help the coachees to systematically work through the self-regulation cycle, monitoring and evaluating their progress towards their goals during the preceding week, and developing action plans for the coming week.
Measures
Participants completed the questionnaires in a group setting before and following completion of the Coach Yourself program.

Goal Attainment Scale. Participants were asked to identify three goals. Participants rated each goal for perceived difficulty on a four point scale (1 = very easy, to 4 = very difficult), and also rated their degree of past success in attaining the goals on a scale from 0% (no attainment) to 100% (total attainment). Goal attainment scores were calculated by multiplying the difficulty rating by the degree of success, and dividing by the number of chosen goals to find a mean score. Participants also rated the length of time they had sought to attain these goals.

The Depression Anxiety and Stress Scale (DASS-21). The DASS-21 (Lovibond & Lovibond, 1995) was utilized as a measure of psychopathology.

The Quality of Life Inventory (QOLI). The QOLI (Frisch, 1994) is a 32-item self-report questionnaire that assesses individuals’ perceptions of their quality of life in 16 life domains: health, self-esteem, goals and values, money, work, play, learning, creativity, helping others, love, friends, children, relatives, home, neighborhood, and community.

The Self-Reflection and Insight Scale (SRIS). The SIRS (Grant et al., 2002) is a 20-item self-report scale which comprises two subscales: a self-reflection scale (SRIS-SR) and an insight scale (SRIS-IN). The SRIS assesses individuals’ propensity to reflect on, and their level of insight into, their thoughts, feelings and behavior.

Self-reflection items include; “It is important to me to try to understand what my feelings mean”, and “I frequently take time to reflect on my thoughts”. Insight items include; “I usually know why I feel the way I do”, and “My behavior often puzzles me” (reverse scored).

RESULTS

To assist interpretation effect sizes are reported and t tests were used to assess statistical significance. Alpha was set at 0.05. Results of the intervention are presented in Table 1.

Participation in the life coaching program was associated with increased goal attainment, with a large observed effect size (d = 2.85; Cohen, 1992). The average length of time that the participants had been trying to reach their goals was 23.5 months.

Participants’ reported levels of depression, anxiety and stress were significantly reduced, with statistically significant effect sizes of d = 0.82, 0.48 and 0.69 respectively. Participants reported a significantly enhanced quality of life with an observed large effect size of d = 1.62. As predicted, participants’ levels of insight
significantly increased following the life coaching program with a medium effect size being observed ($d = 0.59$), and participants’ levels of self-reflection significantly decreased ($d = 0.76$).

### TABLE 1
**MEAN PRE- AND POST-COACHING PROGRAM SCORES**

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>$t$ (1, 19)</th>
<th>$p$</th>
<th>$d$</th>
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<tr>
<td>GAS</td>
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<td>35.24</td>
<td>204.05</td>
<td>65.79</td>
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<td>Goal Difficulty</td>
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<td>.46</td>
<td>2.97</td>
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<td>.88</td>
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<tr>
<td>DEP</td>
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<td>4.77</td>
<td>1.20</td>
<td>2.28</td>
<td>3.65</td>
</tr>
<tr>
<td>ANX</td>
<td>2.90</td>
<td>4.18</td>
<td>1.10</td>
<td>1.77</td>
<td>2.16</td>
</tr>
<tr>
<td>STRESS</td>
<td>12.60</td>
<td>9.38</td>
<td>7.80</td>
<td>5.98</td>
<td>3.11</td>
</tr>
<tr>
<td>QOLI</td>
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<td>44.45</td>
<td>18.23</td>
<td>7.24</td>
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<tr>
<td>SRIS-SR</td>
<td>56.05</td>
<td>5.65</td>
<td>49.05</td>
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<td>3.40</td>
</tr>
<tr>
<td>SRIS-IN</td>
<td>35.65</td>
<td>6.71</td>
<td>38.60</td>
<td>5.55</td>
<td>2.64</td>
</tr>
</tbody>
</table>

Note: GAS = Goal Attainment Scale; QOLI = Quality of Life Inventory; DEP = DASS-21 depression scale; ANX = DASS-21 anxiety scale; STRESS = DASS-21 stress scale; SRIS-SR = Self-Reflection scale SRIS-IN = Insight scale

There was no significant positive correlation between the self-reflection scale of the SRIS and the insight subscale either before ($r = .10$) or following the life coaching program ($r = -.22$). A significant negative correlation between post-program SR-SRIS scores and goal attainment was found ($r = -.35$, $p = .03$), and the positive correlation between postprogram IN-SRIS and goal attainment was significant with a one-tailed test ($r = .28$, $p = .04$; one-tailed).

### DISCUSSION

**THE IMPACT ON GOAL ATTAINMENT AND WELL-BEING**

This exploratory study provides preliminary empirical evidence that a life coaching program can facilitate goal attainment, improve mental health and enhance quality of life. This study also sheds light on the metacognitive processes of self-reflection and insight, and how these change following a program of purposeful directed change.

It appears that the life coaching program was indeed successful in terms of goal attainment. The participants chose to work towards attaining a wide range of goals. These included; establishing a new business; extending social life; balancing work/life and attending to neglected financial affairs. On average these individuals had been trying to reach their goals for 23.5 months. The goal attain-
ment scale effect size was large ($d = 2.85$) and this compares favorably with meta-analytic reports of the efficacy of bibliotherapy where the mean estimated effect size was $d = 0.56$ (Marrs, 1995).

However, it should be borne in mind that the goal attainment scale used in this study was self-report. Although it was not possible for the investigator to objectively determine the veracity of reported goal attainment, nevertheless, it appeared from the discussions in the weekly group coaching sessions that the participants were making genuine progress towards their goals. For example, several of the participants’ goals were to establish new businesses and have paying clients by the completion of the life coaching program, and they spoke enthusiastically about the development of their new businesses.

The life coaching program appeared to enhance quality of life and mental health, even though the enhancement of mental health and life quality were not specifically targeted in the life coaching program. The observed effect sizes for mental health were $d = 0.82$ for depression, $d = 0.48$ for anxiety and $d = 0.69$ for stress. The magnitude of this study’s impact on mental health is noteworthy given that Ergene (2000) found a mean effect size of $d = 0.65$ for cognitive-behavioral psychological treatment for anxiety programs, and effect sizes for psychological treatments for depression range from $d = 0.28$ to $d = 1.03$ (e.g., Febbraro & Clum, 1998; Reinecke, Ryan, & DuBois, 1998).

The program also appeared to enhance general life satisfaction. The QOLI (Frisch, 1994) assesses 16 different life domains and there was an observed large effect size ($d = 1.62$). This finding suggests that although the life coaching program was directed at the attainment of specific goals, the benefits generalized to participants’ broader life experience, and this provides preliminary evidence of the general value of life coaching in enhancing well-being, in addition to its more specific impact on goal attainment.

**THE IMPACT ON SELF-REFLECTION AND INSIGHT**

The life coaching study also impacted on the participants’ levels of self-reflection and insight. Following the program participants’ levels of self-reflection decreased while their levels of insight increased.

These findings lend support to the notion that high levels of self-reflection may be more akin to a self-focused rumination, rather than a reflective processes associated with goal attainment. Indeed, Lyubomirsky, Tucker, Caldwell, and Berg (1999) found that dysphoric self-reflection led participants to rate their own problems as severe and unsolvable, and to report a reduced likelihood of actually implementing their solutions.

These findings also suggest that as individuals move through the self-regulatory cycle towards goal attainment they become less engaged in self-reflection and experience greater insight. This suggests that the constructs measured by the
SRIS may be malleable as a result of coaching, and this notion is somewhat at odds with previous research which has identified private self-consciousness as a trait facet (e.g., Trapnell & Campbell, 1999). The items on the SRIS are presently expressed in a global, trait-like fashion. Exploration of the malleability of self-reflection and insight may be further facilitated by the inclusion of process-related or goal-specific items in the SRIS.

**Limitations**

There are a number of limitations to the present study which should be taken into account when interpreting these findings. This exploratory study used a within-subjects design. The lack of a control group means that the effects could have occurred naturalistically, rather than being caused by the intervention. In addition, the participants were self-selected mature-age university students, who may not be representative of the general population, and who may have been especially motivated to achieve their goals. Further, the design may have induced a demand effect; that is, the participants may have felt that they had to report making progress and enhanced well-being in order to please the experimenter. Nevertheless, this study has begun the process of evaluating the effectiveness of life coaching and has further advanced our knowledge of a psychology of life coaching.

**Implications for Life Coaching Practice**

This study has indicated that solution-focused, cognitive-behavioral life coaching can facilitate goal attainment, improve mental health and enhance general life experience.

This study also found that over the course of participation in the life coaching program levels of self-reflection decreased and levels of insight increased. This has been interpreted as an indication that as individuals move through the self-regulatory cycle towards goal attainment they are less engaged in self-reflection. The implications of this finding for life coaching practitioners emphasize the fact that an excessive focus on self-reflection may be counterproductive in terms of goal attainment. Use of the solution-focused approach may be useful in counteracting tendencies to engage in prolonged self-reflection, and may serve to remind coaches to ensure that life coaching is conducted as a solution-focused, goal-directed process.

**Directions for Future Research**

Future research should employ random assignment to treatment and control. The construction of process-specific or goal-specific items to complement the existing global items on the self-reflection and insight subscales of the SRIS would be a valuable step in developing an understanding of the role of metacog-
nition in purposeful change, and would further explorations of the relationship between insight and goal attainment. Given the apparent positive impact on participants’ mental health, future research should investigate also the utility of life coaching as a means of enhancing well-being.

**SUMMARY**

This study has shone some light on the roles of self-reflection and insight in the self-regulatory cycle. It appears that overengagement in self-reflection may not facilitate goal attainment. This finding serves to remind coaches that life coaching should be a results-orientated solution-focused process, rather than an introspective, overly-philosophical endeavor.

This study has shown that solution-focused, cognitive-behavioural life coaching can indeed be an effective approach to creating positive change, enhancing mental health and life experience and facilitating goal attainment. In addition to these therapeutic aspects, life coaching and coaching psychology provide a useful framework from which to further develop our knowledge of the psychological processes involved in purposeful change in normal, nonclinical populations.

**REFERENCES**


Momentum Press.