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## Principles of Behavioral Psychology in Wellness Coaching

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*The personal coaching profession has been deficient in the behavioral and technical components necessary for a consistent, replicable, and measurable enterprise, particularly in the health and wellness fields. Integrating principles of behavioral psychology enables standardization and a consistent approach to outcomes measurement, bringing credibility and scalability to coaching.*

*We explore principles from four psychology models, (Transtheoretical Model, Motivational Interviewing, Choice Theory/Reality Therapy, and Solution-oriented Psychotherapy), which are applicable to coaching.*

*Behavioral psychology principles are being successfully employed by two corporate coaching models, and a personal wellness coaching model that incorporates a web-based coaching platform and has potential as a medical intervention.*

*Personal wellness coaching could ultimately become a major force in health promotion/disease prevention, weight management, and fitness programs, emulating the enormous impact that personal training has delivered over the past decade.*

## **Introduction**

Over the past ten years, the personal coaching industry has grown rapidly to become a major new proponent of personal growth and behavior change for improved corporate leadership and management, and more effective personal life-management. More recently, personal coaching has evolved to address health promotion and disease prevention by supporting the development and maintenance of health-promoting behavior changes (Wellcoaches training manual).

In our view, coach training programs have been deficient in acknowledging and integrating evidence-based principles of psychology, and harnessing technology, necessary for a replicable and measurable enterprise. For the health/wellness field, the result is an inadequate foundation upon which to build a broadly based and replicable coaching approach that reliably generates measurable outcomes and behavior change.

The assessments, methodologies, and skills taught by coach training programs vary widely, and frequently don't reference psychology literature. Each coach is often encouraged to develop a unique process and style. After training, coaches practice and pursue continuing education independently, without supervision or standardized approaches – particularly to outcomes definition and measurement. Coaching outcomes research is at a very early stage. Applying principles of established psychology models is a powerful way to strengthen the foundation supporting standardization of coaching skills, processes, outcomes measurement, and research studies. Thankfully, a dialogue and collaboration among psychology researchers and coaching practitioners is now emerging to address these gaps.

Within corporations, in the past thirty years the use of behavior-based applications such as performance feedback and goal setting has increased, setting the stage for a behavioral approach to coaching (Andrasik, 1989; Kim & Hammer, 1976; and Dickinson, 2000). This article briefly describes the principles of four psychology models which support personal growth and behavior change and can be applied in personal coaching, including a health behavior change model, a counseling model, and two therapy models. We then examine the behavioral principles employed by two corporate behavioral coaching models. Finally, we explore a personal wellness coaching model that integrates principles from the four psychology models, and the behavioral principles used by the corporate models.

### **Principles of Psychology Models applicable to Coaching**

Personal growth and development requires both cognitive and behavioral change, and the field of psychology is rich in evidence-based approaches to support both. Two of the most important behavior change models, the Transtheoretical Model of Behavior Change (Prochaska & DiClemente, 1983), and Motivational Interviewing (Miller & Rollnick, 2002), were developed initially for health behaviors and addictions, respectively.

Traditionally, therapy has been oriented mainly to the past, searching for the roots of the present challenges. Some branches of therapy, including Choice Theory (Glasser, 1999) and Reality Therapy (Glasser, 2000), and Solution-oriented Psychotherapy (O'Hanlon & Weiner-Davis, 2003), pursue a future orientation, similar to coaching models, which is unconcerned with how problems arose or even how they are maintained, but instead is concerned with how they will be resolved.

### The Transtheoretical Model of Behavior Change

The Transtheoretical Model of Behavior Change (TTM) developed by James Prochaska is based on twenty-five years of research in measuring behavior change for a wide variety of health behaviors including smoking cessation, exercise adoption, eating a low fat diet, and mammography use (Prochaska, Velicer, DiClemente & Fava, 1988; Marcus, Rossi, Selby, Niaura & Abrams, 1992; and Greene, Rossi, Reed, Willey & Prochaska, 1994). This model is a blueprint for effecting self-change in health behaviors and can be applied in personal coaching.

TTM first categorizes stage of readiness to engage in a behavior and then measures the use of key variables that have been found to promote behavior change. The four key variables are (1) stage of change, (2) decisional balance, (3) self-efficacy, i.e. examining challenging situations to create a personal relapse prevention plan, and (4) processes of change. The processes of change can be divided into five experiential or cognitive processes (consciousness raising, dramatic relief, environmental reevaluation, self-reevaluation, and social liberation), useful in early stages of change before the behavior has begun, and five behavioral processes (self-liberation, stimulus control, counter-conditioning, reinforcement management, and helping relationship) useful after the behavior change has begun.

### Motivational Interviewing (Miller & Rollnick, 2002)

Motivational Interviewing is a counseling methodology developed over the past 15 years in the addiction treatment field, and is defined as a “client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence.” This methodology considers what is necessary to initiate and support

change - summarized briefly as being ready, willing, and able - and uses a decisional balance sheet to consider the pros and cons of the status quo and the change under consideration. Through a careful balance of inquiry and reflective listening, interviewers elicit and selectively reinforce pro-change talk, and respond to resistance in a way that is intended to diminish it.

Motivational interviewing is readily integrated with application of TTM, and is often combined with values-oriented counseling techniques, which are intended to provide clients with a higher and more inspiring purpose to support change. Motivational interviewing addresses the behavior change variables of readiness, self-reevaluation, decisional balance, and self-efficacy.

Choice Theory / Reality Therapy (Glasser, 1999; and Glasser, 2000)

William Glasser's Choice Theory provides an excellent theoretical framework for coaching models. It is an internal control cognitive theory, which stresses that human beings have four basic psychological needs for fun, freedom, love/belonging, and power built into their genetic structure. When the individual's needs are not being met in the real world, a want is created. Then the individual generates a behavior to bring the want and the real world into balance.

This approach is based on the belief that only the person himself can change his behavior. The client has control of all choices, and no one can control another person's behavior. Coaches can only provide information and help the client to determine the person he wants to be, define his wants, describe his current behavior, and determine a plan of action.

In practice, a Reality Therapist first works to build a close, trusting relationship with a client. The therapist then helps the client describe what is happening and decide whether or not this “reality” is helping to meet his or her needs and wants, and to confront the “reality” in relation to the challenging situation. The client identifies the person s/he wants to be in the situation. Then the therapist helps the client identify the behaviors that the person wants to exhibit in the challenging situation, and helps the client decide to commit to the behaviors, one step at a time. The important behavior change variables used by Glasser in the Choice Theory and Reality Therapy models include doing a needs assessment, self-reevaluation, self-image, goal setting, and specific plan making.

Solution-oriented Psychotherapy (O’Hanlon & Weiner-Davis, 2003)

Solution-oriented therapists help clients elicit their strengths and abilities, rather than focus on the roots of their deficits. The three main strategies of solution-oriented therapy (O’Hanlon & Weiner-Davis, 2003) are:

1. Helping clients change their behaviors in the challenging situations that they wish to address. New behaviors can change a client’s frame of reference, or elicit new or forgotten strengths and abilities.
2. Helping clients change the way that they view a challenging situation by reframing their perspective, and stimulating the use of clients’ resourcefulness.
3. Stimulating clients to identify their own resources, strengths, and solutions, helping them change their behaviors and viewpoints.

The important behavior change principles used in solution-oriented therapy include self reevaluation, self-image, and self-efficacy.

## **Two Corporate Models of Behavioral Coaching**

### Continuous Learning Group Corporate Coaching Model

The Continuous Learning Group (CLG) coaching model (Braksick, 2000) applies the most potent lessons from applied behavioral science (Andrasik, 1989; Kim & Hammer, 1976; and Dickinson, 2000) to business (Braksick, 2000). Five steps are used to facilitate behavior change: 1) Establish the desired results/outcomes; 2) Pinpoint the behaviors that will lead to those outcomes; 3) Understand the influences on that individual's behavior; 4) Develop a plan to start and sustain desired behaviors; and 5) Track and celebrate progress.

The science of human behavior focuses on the two forces affecting behavior: those that precede or trigger the behavior (antecedents) and those that follow and either strengthen or weaken the behavior (consequences). Antecedents control approximately 20% of behavior and 80% is controlled by consequences (Braksick, 2000). The CLG model focuses on both the antecedents and consequences that influence behavior. For the CLG model to work, it is essential to discriminate true behaviors from judgments, labels, perceptions, and aggregate actions. Two basic types of behaviors are examined: results-linked behaviors, those that generate measurable, immediate results; and values-linked behaviors, those that establish the culture of an organization.

Throughout the coaching relationship, coaches gather pinpointed samples of their clients' behaviors and deliver specific feedback to help individuals improve their performance and work toward desired outcomes/results. The goal is to lead the client toward self-sufficiency through successful application of the CLG model thus enabling

the client to use these techniques when faced with future challenges. In summary, the important variables used by CLG are antecedents, pinpointed behaviors, consequences, and using goal setting and feedback as the primary coaching strategies for achieving desired outcomes.

### Goldsmith Leadership Coaching Model

The Goldsmith model of leadership coaching (Goldsmith, 2004) helps executives achieve positive, measurable change in their interpersonal behaviors. Its success stems from its narrow focus and reliance on feedback from co-workers to encourage behavior change. After the executive commits to the coaching process, successful leadership behaviors in the organization are identified and the executive's performance of those behaviors is evaluated by co-workers (selected by the executive) utilizing 360-degree, or multi-user, feedback assessments. The executive then chooses the one or two behaviors for improvement that will deliver the greatest benefit to him/her and the organization, which increases the odds of success. The important behavior change variables used by the Goldsmith behavioral coaching methodology include readiness, concentration on specific behaviors, organizational support, and feedback.

During the next eight to twelve months, a coach works with the executive on the chosen behaviors, keeping the executive moving forward and through setbacks. The executive's progress is rated, at progress intervals and at the end of the defined coaching period, by the selected co-workers, using a feedback/outcomes tool to both measure and encourage change. A coach analyzes the responses and provides a summary report to validate the feedback to the executive. At the end of the engagement the coach has helped the executive change the target behaviors and has provided a re-usable tool.



## **Wellcoaches Personal Wellness Coaching Model**

### Overview

Wellcoaches Corporation was founded in 2000 to develop coaching models that deliver lasting improvements in health and fitness behaviors and prevent or treat disease. In alliance with the American College of Sports Medicine (ACSM), Wellcoaches trains and licenses (business license) degreed and certified health and fitness professionals to become wellness coaches or licensed Wellcoaches. Most licensed Wellcoaches either have ACSM fitness instructor certifications or are registered dietitians.

The wellness coaching methodology closely follows many principles of TTM and Motivational Interviewing, and employs a web-based coaching platform to ensure standardization, scalability, and rapid refinement based on outcomes evaluation. It also integrates some important strategies of the CLG, Glasser, and Solution-oriented Psychotherapy models, in particular the use of self-image, goal setting, feedback, and self-efficacy.

A wellness coach trainee receives a basic education in the human behavior change process. The training stresses the importance of inquiry and reflective listening as described in Motivational Interviewing. Coaches learn to help clients increase self-awareness as in Solution-oriented Psychotherapy, and Choice Theory/Reality Therapy, identify a desired self-image as in Solution-oriented Therapy, Choice Theory/Reality Therapy and the TTM, and provide feedback to clients, as well as help clients develop their own feedback loops, as in the CLG model and Goldsmith models.

### Phase One: Assessment

The engagement begins with the client completing an extensive online questionnaire on demographics, previous physical activity history, eating habits, brief medical history, and areas of present health, fitness, and wellness interests. Clients who fill out the questionnaire are typically in TTM's Contemplation or Preparation stage. People in these two stages are interested in changing, but because of past failure or lack of experience or confidence, want a guide to help them negotiate the process successfully.

### Phase Two: Establishing the Coach/Client Relationship

In Phase Two, using telephone coaching sessions (weekly or as needed), supported by web tools, the coach leads the client to identify 1. what s/he really wants (framed as a wellness vision), 2. specific behavioral goals, and 3. potential obstacles that may interfere with goal attainment. Relationship building, as a basis for the coach's influence, and asking clients to take charge and "choose" a vision and goals, draw from the key elements of Choice Theory/Reality Therapy. The client-centered directive approach of Motivational Interviewing is used to help clients to explore and resolve ambivalence to change. As in the CLG and Goldsmith models, specific behaviors are mutually decided upon. As in the TTM model, specific difficult situations are analyzed to establish a personal relapse prevention plan.

The coach helps the client understand the benefits of a new behavior, corrects misinformation, and discusses self-image issues that arise during the behavior change process, utilizing TTM's cognitive strategies such as consciousness raising and self-reevaluation. The coach also helps the client discover the most powerful motivators or pros behind his or her desires. Working with the pros of doing a behavior is an important

concept for both the TTM and Motivational Interviewing models. Clients then clarify the behaviors they are ready to change, resulting in the formulation of specific three-month behavioral goals.

#### Phase Three: The Coaching “Contract”

The third phase moves the client toward formalizing their goals into a contract or plan. This is the Preparation stage in TTM, and uses the behavioral strategy of self-liberation or committing to concretize the plan. Clients in this stage have the need to accomplish cognitive tasks and to acquire behavioral strategies. At this point, the coach can guide the client into exploring new behaviors to substitute for those which have not been effective in the past in helping the client to achieve his goals.

#### Phase Four: The Self-Change Process

This is the most important and the longest period of interaction between coach and client, lasting three or more months. During each coaching session, the coach and client discuss progress toward the past week’s behavioral goals, explore and resolve new ambivalence and challenges, agree on a new set of behavioral goals for the following week, review progress toward the client’s three-month behavioral goals, and revisit the wellness vision to ensure it remains relevant. If the client is struggling, Motivational Interviewing techniques can help resolve ambivalence.

The successful client progresses from TTM’s Preparation stage, through the Action stage, and to the Maintenance stage. Along the way, the client is asked to come up with solutions to potential challenges, using the self-efficacy construct in the TTM. This same self-efficacy construct is an integral component of Solution-oriented Psychotherapy. The coach will also teach the client common behavioral strategies, such

as using cues to remember to perform the new behavior. Other behavioral strategies include reinforcement management, counter-conditioning, or encouraging the client to develop a social support network, and charting self progress.

#### Phase Five: Measuring Outcomes

In the final phase the coach and client review and quantify progress, and the client completes an evaluation survey. This allows for evaluation of the coach, the satisfaction of the client, and adherence to the program, leading to an ever-improving process. This is very similar to the methodology of the corporate model CLG.

### **The Wellcoaches Experience**

In a pilot project over an 18 month period (2001/2002), Wellcoaches trained 20 wellness coaches who then coached more than 50 clients (employees of a bank and two Blue Cross companies) for three to six months. Approximately 80% of clients completed a minimum three-month program and reached and maintained 70-80% of their three-month goals. Almost all clients had goals to increase physical activity, improve eating habits, manage stress, and lose weight (Moore, 2002). Examples of new behaviors established include four cardiovascular 30-minute workouts per week, healthful snacks five days per week, or three 15-minute relaxation sessions per week. For first priority three month goals, clients reported an average 80% success rate (e.g. consistently doing three 30-minute workouts at three months relative to a goal of four 30-minute workouts per week would be 75% goal success rate).

In email feedback surveys, coaches reported that wellness coaching is significantly more effective than personal training or dietitian consultations in delivering

sustainable behavior change, and that they enjoy allowing clients to find their own answers, and being able to address the behavioral and mindset issues. A quote from Mark Nutting of Maine:

*“With a degree in physical education/exercise science, 10 certifications in health, fitness and sports performance, 22 years of personal training and 20 years of educating personal trainers, I was amazed to find myself rethinking my whole approach to client goal-setting, motivation, and adherence. I truly believe that the future for the health/fitness/wellness professional is the integrating of wellness coaching skills with his/her expertise.”*

In online questionnaires, clients reported that the focus, support, accountability, and expertise of their coaches, combined with the privacy and convenience of telephone coaching sessions, allowed them to set and reach goals that they had failed to accomplish in the past.

Since late 2002, Wellcoaches has trained an additional 275 wellness coaches and to date client results are consistent with the pilot results. In response to the U.S. Preventive Services Task Force 2003 recommendation (<http://www.ahrq.gov/clinic/3rduspstf/obesity/obesrr.htm>) that physicians prescribe intensive counseling and behavior therapy, Wellcoaches is starting a research study to treat and prevent obesity in the fall of 2004.

## **Conclusions**

Personal coaching models founded on principles of behavioral psychology are scalable, replicable, and have the potential to reliably deliver measurable changes in

target behaviors, and are particularly relevant to the evidence-based health field. A wellness coaching methodology using behavioral psychology principles to help define and measure success, and web technology to ensure consistency and scalability, could have a significant impact on health, disease prevention, and wellness. Personal wellness coaching could ultimately become a major force in health and fitness programs, emulating the enormous impact that personal training has delivered over the past decade.

## **References**

- Andrasik, F. (1989). Organizational behavior modification in business settings: A methodological and content review. Journal of Organizational Behavior Management (10(1), 59-77.)
- Braksick, L.W., (2000). Unlock Behavior, Unleash Profits, pp 25-27, 64. McGraw Hill
- Dickinson, A. (2000). The Organizational Behavior Management Culture: Its Origin and Future Directions. Journal of Organizational Behavior Management, 20 (3/4), 9–58.
- Glasser, W (1999). Choice Theory: A New Psychology of Personal Freedom. New York: Harper Perennial.
- Glasser, W (2000). Reality Therapy in Action. New York: US Harper Collins
- Greene GW, Rossi SR, Reed GR, Willey C, Prochaska JO. "Stages of change for reducing dietary fat to 30% of energy or less." Journal of the American Dietetic Association 1994; 10:1105-1110
- Goldsmith (2004). Retrieved August 20, 2004.  
<http://www.marshallgoldsmith.com/approach/index.asp>
- Kim, J.S., & Hammer, W.C. (1976). Effect of performance feedback and goal setting on productivity and satisfaction in an organizational setting. Journal of Applied Psychology, 61, 48-57.
- Miller, W.R., Rollnick, S. (2002). Motivational Interviewing – preparing people for change. New York: Guilford Press
- Moore, M. (2002). American College of Sports Medicine Summit 2002 presentation, Reno, NV, April 2002
- O’Hanlon, W., Weiner-Davis, M. (2003). In Search of Solutions – a new direction in psychotherapy. New York: W. W. Norton & Company

Prochaska J, DiClemente C. Stages and process of self-change of smoking: Toward an integrative model of change. J Consulting and Clinical Psychology. 1983; 51(3): 390-5.

Prochaska J, Velicer, W., DiClemente C, Fava, J. Measuring processes of change: Applications to the cessation of smoking. J Consulting and Clinical Psychology. 1988;56:520-8.

U.S. Preventive Services Task Force. Screening for Obesity in Adults: Recommendation and Rationale. November 2003. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved August 20, 2004.  
<http://www.ahrq.gov/clinic/3rduspstf/obesity/obesrr.htm>

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