

The Presentation of a Flow Model for Strategic Decision-Making and Golf Performance

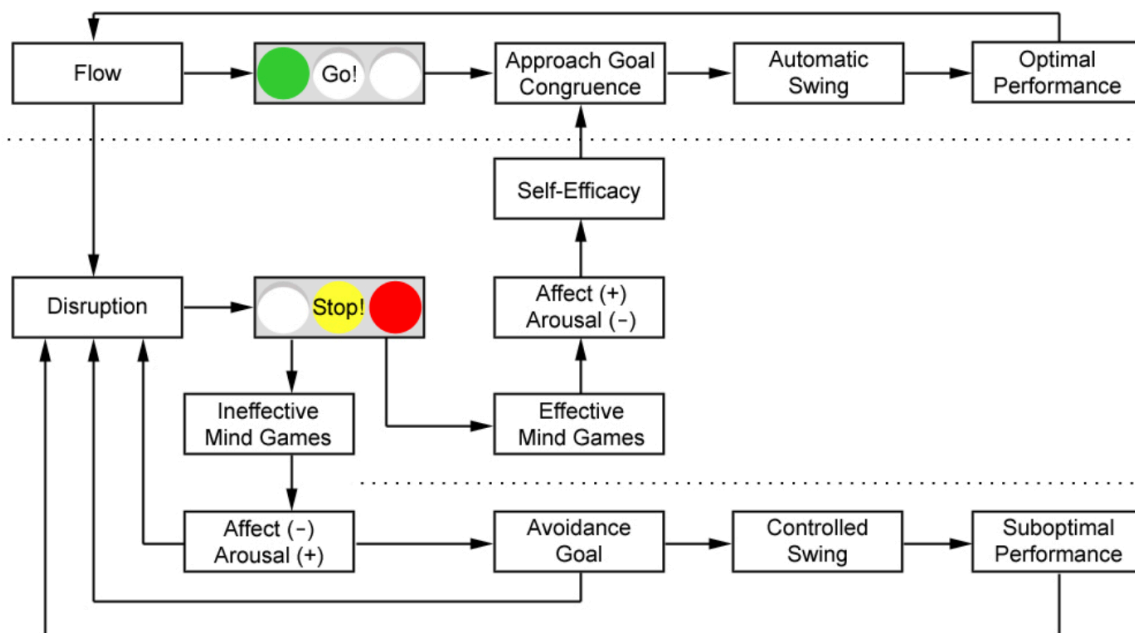
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Purpose:

Strategic decision-making has received relatively little attention in the study of sports performance and less in elite golf. One reason is that strategic decision-making in golf is a complex dynamic process that does not fit well with traditional decision making models. Early decision-making research was rooted in expected utility (von Neumann & Morgenstern, 1944) and utilized decision problems for which the actor's choice had no influence on the outcome. For example, a decision-maker is asked to choose a gamble. Beyond the initial choice, the actor has no influence on the outcome of the gamble. In contrast, golf – like most sports - is dependent upon both the decision and the execution of that decision. Thus, the actor, the decision, and the outcome of the choice are inextricably linked - creating a more dynamic decision-making experience. In addition, the result of a golf-swing often influences decisions on subsequent shots. Thus, unlike Expected Utility Theory, the odds for achieving an outcome are fluid rather than static. Odds change depending upon the interaction amongst the golfer, his recent performance, mental and physiological state, and the physical and contextual environment where the shot must take place. As a result, although golfers may evaluate decisions with an awareness of probabilities for success, their experience of the odds is more of a fluid feeling than an objective percentage. In addition, it is now well publicized that decision makers often deviate from rational decision models (Kahneman, 2011). Moreover, researchers propose that the human brain does not deal well with probability thinking when making choices (Meder & Gigerenzer, 2014). Given this and the results from Gnagy & Bartholomew (2012), a flow model of decision-making has been created to teach golfers how to think about strategical decision-making.

Flow Model of Strategic Decision-Making in Golf



Methods:

The model was designed based on the phenomenological analysis of interview data compiled in Gnagy & Bartholomew (2012).

Discussion:

The results from Gnagy & Bartholomew (2012) can be thought of as describing two distinct phenomenological experiences. The first, a negentropic experience characterized by positive affective states such as; confidence, clear thinking, reduced cognitive effort, and certainty. The second, an entropic experience that was associated with negative affective states like, uncertainty, disrupted focus, polyphasic thinking, and cognitive dissonance. Theoretically these two experiences are consistent with descriptions of flow and anti or disrupted flow (Nakamura & Csikszentmihalyi, 2005) and the premise that individuals rely on two distinct processing systems when making decisions (Kahneman, 2011). Integrating the two theories, flow states would be associated with the reliance on system-one (i.e., intuitive and heuristic processes), while disruptions to flow would activate system-two leading to more elaborate information processing.

The intention of the proposed model is not to predict a golfer's strategic decisions, nor is the model designed to assert which decisions a golfer should make beyond that of beginning with approach goals and then matching the challenge of the task with their self-efficacy. The top of the model represents strategic decision making in golf when a golfer is experiencing flow like states. Again, when a golfer is in flow they should continue doing what they are doing without evaluation. The bottom section describes how a golfer should respond to disrupted flow. This is the primary function of the model; to train golfers to optimize their decisions through an interactive and iterative process of coping with disruptions and aligning strategic options with current self-efficacy judgments. This iterative process is a fundamental component of the transactional model (Lazarus & Folkman, 1984) and of self-efficacy theory (Bandura, 1997), which both posit the existence of a reciprocal relationship between the individual and their environment. Therefore the decision-making process includes both coping with internal and external factors while formulating one's strategy, with the end goal being to pick a strategy that matches challenge and skill so that the golfer can execute their swing with automaticity.

Practical Application:

This model can be used to train golfers to recognize how their emotional responses to the challenges faced during competitive golf affect their decision-making process and the subsequent performance of their golf swing.

Outline of Decision Model

1. Teaching golfers principles of flow (challenge/skill principle).
2. Teaching them how to recognize disruptions to flow (traffic light analogy).
3. Teach them principles of MBCT and effective coping strategies such as breathing, positive reframing, acceptance, re-focusing, and pre-shot routines.
4. Teach principles of positive approach goals and to begin the decision-making process by identifying opportunities rather than threats.
5. Teach performance attribution strategies to alter or maintain self-efficacy.
6. Teach golfers to have an external focus while executing the golf swing.