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## On multiple goals and continuous conflict

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Generally spoken, we know all too well what we should be doing for our health. We should eat less, move more but make sure that we do not get sports injuries, and we should not smoke, drink alcohol or take drugs. However, we should drink one or two glasses of red wine a day but not everyday of the week. In addition, we need to use condoms consistently for at least six months into a new relationship and get ourselves tested for STI regularly. We have to stay out of the sun but make sure that we do get enough of it to produce enough Vitamin D, eat lots of fruits and vegetables, but refrain from eating chocolate or candy or cake, or anything else fattening or salty. We have to avoid “stress”, use bicycle helmets, not drink and drive, brush our teeth twice a day for at least two minutes at a time and floss them, and so on and so forth.

The list could be almost endless, and if we add to it other non-health related activities that we are required to do, it truly becomes never-ending. For example, on a typical day of a working father he may also have to ensure that he is on time for work, that he looks representative, that his work can meet with his own and his boss’ standards, that he is at home on time and does the groceries on his way, that he helps his children with their homework, that he takes the dog out for a walk, and so on. It is the fact that we hold multiple goals at given moment, that may cause us not to pursue a certain health behavioral goal or to not to sustain it over time.

In other words, a health goal:

- ▶ may not be regarded as (most) salient or is not actively represented in the working memory; or
- ▶ may not be (continued to being) pursued over time because it has to continuously compete with other goals for limited resources including time, money and energy.

Consequently, for continued efforts in the attainment of health goals, it is crucial that they are prioritized and shielded from alternative goals during all phases of goal pursuit.



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### Goal prioritization during goal adoption

People are at times disinclined to accept a certain health behavior as a personally held goal. That is, pressured as they may feel by all the different tasks they have to fulfill, they may tend to refuse to adopt yet another new goal that again requires time and effort. For instance, a person may reason in a following manner: “There are so many things that I must do, one cannot do everything that “is good”, and this is just the one thing I will not change! It is me, it is my choice, it is the way I am, and this behavior belongs to me”. This particular person may not want to take up exercise or quit smoking, because: “I am not the sporty type and I am certainly not one of these lunatics who run around all Sunday in their jogging suits. I am the more sensible person who spends the Sunday morning reading the newspaper in peace, which is my preferred choice for stress reduction. And smoking is the only other pleasure I allow myself; I will not have anyone taking that away from me. At least I do not drink or do drugs”. As can be derived from this example, the desired health behavioral goal (such as “taking up exercise”) is embedded in a configuration of related and conflicting goals (such as “relaxing”). What is ▶

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most important, i.e. what is the most “desired” or most “unwanted” end-state, varies enormously between individuals, *and* across situations (Förster, Liberman & Friedman, 2007).

At other times, people may accept the health goal and conceive its attainment as truly desirable, but they may find themselves in situations where they have other pressing issues to attend to. The health goal is merely one of the tasks on the “to-do” list, and whether a goal is being pursued is, therefore, dependent on the relative salience of the health goal. This, in turn, is influenced by the level of potential goal conflict between the health behavioral goal and other valued goals, and – conversely – by the extent to which the goal may facilitate other goals (e.g., Gebhardt, 2007; Riediger & Freund, 2004). When one does not have to attend to a conflict between goals, less effort and attention is required. Similarly, when goals coincide, for example, when joining a health club is accompanied by meeting new people in the place one has moved to, the goal is more protected from being overruled by other valued aims. Thus, the extent to which a health goal is mentally represented as a goal that serves other life aspirations and does not conflict with them is likely to influence goal adoption. Indeed, the rather scarce empirical research in this area applied to health behavior clearly indicates that goal conflict and goal facilitation both influence the initiation of health behavior change (see for a review Gebhardt, 2006; 2007).

**Goal prioritization during goal enactment and continued goal pursuit**

Having a great number of different goals requires control systems that determine continuously which goal is going to be given priority above other goals at any given moment. The outwardly perceived easy choice of selecting and continuing to pursue those goals which produce the most profit in the long run, is frequently compromised by cues in the environment that change the accessibility and the value of these goals. For example, people often indicate that it is not so much that they did not want to perform a certain behavior, but that they “just did not get round to it” (e.g., Abraham & Sheeran, 2003). More recent or more urgent goals may have overridden the prior goal, even if the latter is considered (more) important (e.g., Weinstein, 1988). Thus, attendance to a goal can at times be more a function of what stands out the most in the field of attention than of what is most important per se, and reminder systems (i.e., cues to action) are necessary to

have the original goal returned to our attention. It, thus, appears important that alternative goals are forgotten in the process of goal pursuit and that the goal is shielded from them (Shah, Friedman & Kruglanski, 2002).

When then, will people remain committed to their longer-term goal, which health-goals so often are? Empirical evidence seems to support the notion, that the more people are satisfied with their advancement towards the goal, the more they are inclined to continue their efforts (e.g., Carver, 2004). The nearer you are to your goal, the more you long to actually attain it. If, however, you are disappointed with the outcomes of your endeavours, you are likely to adopt other behavioural strategies to adjust your goals or to disengage from the goal all together (e.g., Wrosch, Scheier, Miller, Schulz & Carver, 2003).

Fishbach and Dhar (2005), however, found support for the exact opposite hypothesis, i.e., that progress towards one goal increases the chance of disengagement and the pursuit of other conflicting goals. For example, female dieters who were made to believe that they had made good progress towards their goal of “losing weight” were more likely to choose a chocolate bar over an apple as a parting gift, than those had been informed that they had hardly progressed. The authors conclude that expected or actual progress towards a goal leads to distancing oneself from it. Similarly, Fishbach and colleagues (2006) observed in another study that those who were informed that they exercised more than others were less willing to maintain a healthy diet and exercise than those who were led to believe that they exercised less than others. However, this pattern was reversed when the goal of “keeping in shape” was primed. Thus, the negative effect of goal progress on subsequent behaviour seems to be fully mediated by the level of commitment to - and accessibility of the higher order (long term health) goal, such as “losing weight” or “increasing fitness levels”. Interestingly, Ramanathan and Menon (2006) conducted a series of studies to investigate the dynamic process over time when people are exposed to tasty food primes (sweets). It appeared through moment-to-moment tracking of desires, that those who are impulsively oriented override their self-control after being primed (with sweets) and continue to do so. This was indicated by an increased desire over time for the temptation (cookies) and eventually by a corresponding increase of the behavioural tendency (i.e., eating more and more of them). In ►

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contrast, those who were more prudent, also showed an increase in desire after being primed and demonstrated impulsive behaviour (ate cookies) initially, but their desire decreased and a compensatory reaction of avoidance occurred shortly thereafter (restraining from eating cookies). Successful self-regulators thus, may have the goal of “willpower” activated in reaction to temptations. Impulsive behaviours, on the other hand, may be primarily a function of the degree to which hedonic goals are chronically accessible. Similarly, in a recent study among dieters by Palfai and Macdonald (2007) it was found that temptation cues (such as the words “cake”, “chocolate”, “cookies” or “ice cream”) reduced the valence of the goal of “controlling weight”. At the same time these primes increased the value attached to words referring to the conflicting goal of “affect enhancement”.

In short, recent research indicates that a goal may lose its salience when one is successfully progressing towards it. For example, if one already has lost six pounds of weight, it may seem less necessary to lose two extra pounds in order to reach the target one has set for oneself. The alternative goals (e.g., the goal of “experiencing pleasure”), particularly if they are chronically accessible, will then increase their influence on behaviour. If however, the superordinate goal (e.g., the goal of “looking attractive” or of “self-control”) remains to be activated during the process, this “rebound-effect” will be far less likely to occur.

**Implications of the multiple goal perspective for health behaviour research**

Thus, people strive for various goals simultaneously at any one time, leading continuously to situations in which conflicts between goals arise. As a result, a certain health goal may not be considered or be deserted, even if it is conceived of as a strongly desired end-state.

One may, therefore, expect that when individuals are encouraged to reorganize their goal system in a way that the health behavior is positively linked to other valued goals, they will be more likely to pursue it and to remain doing so over time (Karoly et al., 2005). It should be noted here that Zhang, Fishbach and Kruglanski (2007) concluded from their study that linking a behavior such as exercising to more than one goal (e.g., “losing weight” and “increasing one’s fitness level”), reduces the chance that people will perceive the behavior as being effective. They argue that a certain behavior will be more likely to be prioritized when only one corresponding goal – as opposed to more – is

activated. Thus, it is not so much that the number of links between a health goal and other goals should be strengthened, but rather that one strong connection between the behavior and one desired outcome should be established.

One possibility for enabling such a connection may be through linking the behavior to (un)desired self-conceptions (e.g. “I wish to be a young attractive looking person”, see Markus & Nurius, 1986). For example, activation of goal salience in terms of how it may facilitate certain desired self-conceptions should increase the openness of the individual to recognize goal-related opportunities. Failing to act in accordance with one’s long-term goals will then be seen as a violation of one’s central values and core self-conceptions. In our recent study among 124 smokers (Gebhardt, van Ek & Dijkstra, in prep.), however, we found no direct support for this notion. Participants who were asked to reduce their smoking during one week, were randomly assigned to a condition in which they generated (1) a main advantage of quitting smoking (benefit condition), (2) a main positive association with being a future (i.e., in 10 years time) non-smoker (ideal-self condition), or (3) a main negative association with being a future smoker (feared-self condition). Subsequently, all participants formed an implementation plan specifying that whenever they would crave for a cigarette in the following week, they would think of the self-generated attribute and would not smoke. Overall the participants reduced the self-reported number of cigarettes smoked during the week substantially, but no main effect of condition on the reduction of number of daily smoked cigarettes was found. Looking at self-reported smoking patterns, it appeared that in the benefit condition 1/5 quit smoking in the week following the intervention versus 1/10 in feared-self and none in ideal-self condition. However, although they did not abstain from smoking, those in the ideal-self condition remained far more stable over time in their smoking reduction, while those in the benefit or feared-self condition were more likely to return to previous smoking levels during the course of the week. Apparently, different goal setting strategies yield different behavioural patterns, indicating that they may direct to other resolutions of goal conflict during the process of goal pursuit.

In line with the work by Ramathan and Menon (2006) mentioned above, another possibility for having the health behavioural goal “shielded” ►





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during goal pursuit may well be through the activation of the overall goals of “exerting will-power” and “persistence”. For instance, Alberts and colleagues (2007) showed that induction through priming of “perseverance” as a goal led to exerted self-control on a subsequent strenuous task, involving the squeezing of a handgrip. All participants in their study completed a difficult cognitive task (e.g., performing calculations while being exposed to distracting auditory cues). It was found that those who had been primed with persistence through a scrambled word task performed much better on the hand-grip squeezing task than those who had not.

Next to increasing goal-salience, and having the intrinsic value of the health goal readily accessible during goal pursuit, the intra-goal conflict—as it occurs—needs to be efficiently managed. Strategies related to coping with distractions in the form of alternative goals, therefore, appear essential. For example, Koestner, Lekes, Powers and Chicoine (2002) asked participants to prepare strategies for handling possible distractions that could occur during the pursuit of their self-generated goal for the weekend. This procedure positively affected subsequent goal progress. Similarly, Sheldon, Kasser, Smith and Share (2002) successfully instructed participants to regard the distress and discomfort during the pursuit of their (mostly academic) semester goals as indicators of the necessity to apply coping strategies rather than as feelings that should be avoided.

### Conclusion

In sum, researchers and professionals in the field of health promotion should take into account the other valued aims of the individual. Health behavioral goals should be considered as part of the conglomerate of personal goals the person is pursuing or striving for, and their exact position within this structure should be known. In other words, personal goals are in continuous interaction with one another, and attempts made to attain one aspired goal are likely to influence the chances of achieving any one other goal. We need to know how the health behavior relates to other goals, including the extent to which it hampers or facilitates their achievement. Investigating the content of the individual's other goals, how they are organized and how they interact is, therefore, essential to optimize our efforts in predicting or influencing health behaviors. Finally, more insight into how difficulties during the process of goal pursuit due to alternative goals may be overcome, is urgently needed ■

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## original article

## Systematizing personal goals: The three R's

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In her article (this issue), Gebhardt reminds us that people's varied health goals neither arise from nor unfold in a vacuum. Context matters. And the idea of "context" includes genetic, physiological, developmental, interpersonal, cultural, perceptual, cognitive, motor, and affective "enabling" and "disabling" conditions that interact dynamically to influence our choices, in the short term, and our very mortality, in the long run. Given the enormous complexity of our inner and outer contexts, it is not at all surprising that even our "best laid plans" and most cherished aspirations frequently falter.

Keeping to Gebhardt's theme of complexity in goal pursuit processes, I will briefly illustrate why I believe that success in attaining any valued goal (health-related or otherwise) requires, in addition to prioritization and shielding, a degree of *relational- and contextual sensitivity* to exploit the power of significant others and significant events, sufficient *regulatory flexibility* to support persistent change and maintenance efforts under complex (changing, challenging, and/or conflicting) conditions, and *depth of goal-centred motivational referencing* to maximize our ability to exploit the coordinated interconnection among diverse motivational elements. Although the *Three R's* that I propose (i.e., relational sensitivity, regulatory flexibility, and referential depth) are undoubtedly insufficient to capture all the mechanisms that drive human goal systems, I contend that they are nonetheless central to the concerns of health psychologists and, therefore, merit our careful attention.

### Relational and Contextual Sensitivity

Health relevant change efforts usually benefit (a) from an awareness of the opportunities and constraints provided by the environment, (b) from an awareness of the roles played by others with whom one is likely to interact over time, and (c) from an awareness of the relationship between one's goals and (a) and (b). Although context sensitivity has not been ignored by goal theorists (see Boekaerts, 2001), neither has it been widely explored.



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Because other people are frequently the context for the attainment or non-attainment of a great many goals, an appreciation of "self-regulatory relationships" in the form of the three-way linkage between self, significant others, and personal goals holds the potential to enhance the success of motivational strivings. Shah's (2006) "triangular model" of self-regulatory relationships and Salmela-Aro and Little's (2007) social-ecological conception of personal project pursuit are highly recommended as sources of insight into the interactional fabric of goal pursuit in general.

Health behaviour change was the specific focus of a recent study (Okun & Karoly, 2007) in which the Social Contextual Model (SCM) of everyday problem solving served as the conceptual grounding. The SCM proposes that, during goal pursuit, individuals can construe themselves as the solitary owner of a goal, as the creator of a goal that impacts others, or as the pursuer of goal that originates in the social unit. In our study, the possibility that health goals might be perceived as externally imposed (partner-set) was assessed and contrasted to perceptions of self-set and jointly set goals in a sample of college students in a current dating ►

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relationship. Among other things, we discovered that, compared to those with self- and jointly-set goals, participants with *partner-set* health goals were the least likely to report making positive changes in health behaviours (such as exercising, eating well, and getting sufficient rest).

#### Regulatory Flexibility

The person, noted by Gebhardt, who will not take up an exercise regimen because she feels that she is “not the sporty type”, might well be labelled as *dispositionally inflexible*, with this characterization verified through the use of any number of available self-report instruments (such as those measuring Action-State Orientation, Need for Certainty, or Tolerance of Ambiguity). Or, if self-report assessment seems too limiting, one could also administer performance tests of higher-order, neurologically mediated “executive functions” (such as task-set switching or inhibitory skill) that have been shown to underlie flexible adaptation. Although I would certainly recommend conducting both kinds of individual differences assessment, I would not stop there. From a dynamic, social-cognitive perspective, rigidity/flexibility is conceived as an *emergent system characteristic* as well as a reflection of stable personal capacities.

Therefore, health psychologists (and others) hoping to “motivate people” to persist in their efforts to dampen self-defeating habits and/or to develop and maintain good ones need to go beyond the admittedly difficult tasks of infusing their at risk clients with knowledge, with better ways of problem solving, or even with more or better health-engendering goals. Practitioners must also find ways to build flexibility into their clients’ day-to-day volitional efforts. If I am correct in assuming that flexibility emerges synergistically when system components are synchronized with one another (what I like to call *motivational resonance*), then it is important that practitioners work to identify the most pivotal and readily trainable regulatory facets suggested by contemporary theory, research, and clinical experience. Although space limitations prevent a long discourse on the matter, I will briefly consider two likely flexibility enhancers.

First, I think that many motivation scholars would agree that flexible self-regulation requires a balance between self-reflective and automatic elements. Neither system component should hold sway over the other for too long or in too many situations. Because, within the

health domains considered by Gebhardt (e.g., safe sex practices, cigarette smoking, weight loss, etc.) problems often arise out of premature or self-defeating automaticity, one critical manifestation of flexibility would be *automaticity override*. Despite the power and ubiquity of non-conscious priming, there is every reason to believe that would-be exercisers, dieters, seat-belt bucklers, condom users, and the like can learn to make use of strategies such as implemental mind-setting, self-instruction, mindfulness, distraction, cue-controlled relaxation, thought stopping, among others to de-automate their response patterns in the service of flexible self-regulation.

It is also important to remember that goals are a form of *feed-forward*, a future anticipating, outcome projecting source of tension or disturbance within a system, whose role is to propel the person toward growth (or reorganization). Consequently, health psychologists should seek to nurture the anticipatory and imaginative faculties of their clients. One important feed-forward skill has been called *mental time travel*, the capacity to reconstruct past events and to forecast future happenings. Thus, Gebhardt’s “non-sporty type” woman might benefit from recalling her pleasurable childhood game playing and/or from picturing herself running or swimming, and then being socially rewarded for her efforts.

#### Depth of Goal-Centred Motivational Referencing

The process of human self-regulation, within which goals play such a significant leadership role, can be thought of as *referential* in the sense that it is organized in reference to a standard or internal guide such that “...interaction with the referent allows determination of the aptness of the current behaviour, which may be used to shape future actions” (Pressing, 1999, p. 714). Because goals lie at the heart of referential control, especially over long time intervals, and because people routinely “juggle” a dozen or more of them, it is imperative that we assess the hierarchical arrangement of current goals (including those that are behaviourally incompatible or “conflicting, and those that lie at the “core” of the system and that implicate or activate others). The occurrence of periodic “switching points” (i.e., when one goal moves to the foreground and a previously dominant one temporarily recedes into the background) also needs to be tracked, along an analysis of the typical strategic elements (means) that people bring to bear in pursuit of their daily ►



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strivings. The use of diary technology (ecological momentary assessment methods) would assist in such efforts.

Moreover, thinking in terms of *goal episodes* would, I believe, assist in the in-depth appraisal of adaptive and maladaptive patterns of goal pursuit. An unfortunate feature of the contemporary motivation literature is that most aspects of self-regulation and goal cognition tend to be studied in piecemeal fashion. Nonetheless, in recent years, scholars have argued that goals are intrinsically or coactively linked to emotions, to action/performance, to thought and memory patterns, and to attention (e.g., Beal, Weiss, Barros, & MacDermid, 2005; Gibbs & VanOrden, 2003). Presumably, then, task-relevant cognitions (plans, evaluations, expectancies), instrumental behaviours (goal pursuit strategies), perceptual processes (attention to relevant environmental cues), and positive and negative affect are *jointly referenced* to personal goals. In addition, people cognitively segment continuous action streams into "episode" (or event) units; and recent models detail how episodic thinking is likewise indexed to goals (see Schneider, 2006; Zacks, Speer, Swallow, Braver, & Reynolds, 2007). Therefore, clinicians are advised to vigorously seek to assess (and to eventually modify) the *health goal episodes* of their clients, because encapsulated within every health goal episode are the focal dimensions (i.e., cognition, affect, and action tendencies) that are of paramount concern to the therapeutic enterprise. The appraisal of goal episodes should enhance the likelihood of "referential depth" by moving the field beyond a focus on goal *content* per se toward a more fully developed and dynamic *process* conception of lifestyle navigation in real time, across varied ecological contexts, and from multiple levels of analysis.

In closing I would also add that when we endeavour to aide our clients in setting, prioritizing, shielding, and juggling their multiple health-related aspirations, we would be well advised to encourage them to adopt an open mind toward the role of chance, instability, variety, and variable solutions in contrast to an adherence to a fixed, "only one right way to do things" mindset (which some therapists may inadvertently instill). Such a complexity oriented way of relating to the world should serve to optimize the functioning of goal systems.

Finally, clinicians might also wish to acknowledge the possibility that the time- and resource pressured lives that most of us lead can place restrictive boundaries on the efficiency with which our most

valued goals can be managed, even with the help of our clocks, Post-it notes, and to-do lists. To aid in the self-regulation of multiple, sometimes conflicting, sometimes weakly articulated health goals, the use of electronic technology (the Internet, cell phones, PDAs, and the like) would seem a reasonable option. I believe that *computer-assisted goal management* has the potential to become a highly cost-effective, convenient, and compelling means of offsetting the limits of working memory and attention, as well as for accurately tracking goal progress and sources of interference, and for obtaining timely supportive feedback, particularly among the substantial subset of individuals who are also burdened by illness fears, growing work and family commitments, interpersonal hindrances, limited self knowledge, and a constricted sense of time and future possibilities. ■

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## original article

**Personal projects analysis: Opportunities and implications for multiple goal assessment, theoretical integration, and behaviour change****Justin Presseau<sup>\*1</sup>, Falko F. Sniehotta<sup>1</sup>, Jill J. Francis<sup>1</sup>, and Brian R. Little<sup>2,3</sup>**<sup>1</sup> University of Aberdeen, Scotland<sup>2</sup> Carleton University, Canada<sup>3</sup> McGill University, Canada

Much of our behaviour acts in service of pursuing our goals (Carver & Scheier, 1998). However, research into goal pursuit has mostly focused upon the study of single isolated health goals and behaviours. As Gebhardt (this issue) discusses, life is more complex; people pursue multiple goals via numerous behaviours (health related and not), which all potentially compete for limited resources. Further investigation is needed using multiple goal approaches that account for this complexity. This thought piece describes a comprehensive unit of analysis and an associated methodological framework for conducting research on multiple goals, and provides suggestions for its potential application in health psychology.

**Goal systems – Health behaviour as a means to an end**

The health behaviours we promote (e.g. ‘physical activity’) do not occur in isolation. They are but one of many behaviours we engage in, most (if not all) of which act in service of goals that we pursue. In considering not only additional health behaviours but behaviours from other life domains (e.g. empty the rubbish bin, commute to work, email friends) we can quickly appreciate the complexity and idiosyncrasies of an individual’s goal system. While considered in greater detail elsewhere (e.g. Carver & Scheier, 1998; Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002), for illustrative purposes let us briefly explore the hierarchical nature of a goal system using an example behaviour, ‘engaging in physical activity on at least 5 days a week for at least 30 mins’. This behaviour can be conceived as a means of pursuing a goal of ‘being regularly physically active’. In turn, this goal might be associated with a higher goal of ‘being fit’, and another of ‘losing weight’. These in turn might be associated with a higher-level goal of ‘preventing disease’ and/or a goal of ‘attracting a significant other’, which finally may lead to a highest level goal of ‘being happy’. A single behaviour can therefore be conceptualised as embedded within a vertical hierarchical chain with potential horizontal branches at each level, with all other goal-directed behaviours engaged in (health-related or not) having an associated

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hierarchical structure. This structural interconnectedness of the goal system highlights the competitive nature of goal pursuit, where limited resources (cognitive, Kruglanski et al, 2002; time, energy, money, Riediger & Freund, 2004) foster varying levels of between-goal conflict and facilitation. With respect to physical activity, evidence suggests that differences in exercise frequency can be attributed to goal conflict (Gebhardt & Maes, 1998) and that goal facilitation is predictive of exercise frequency (Riediger & Freund, 2004).

If the other goals pursued in a goal system have an impact on individual behaviours, what are the implications for evidence from research focusing on the behaviour level of the goal hierarchy? For instance, research testing social cognition models suggests a reliable relationship between motivation and behaviour. However, increased recognition that motivation may be necessary but not always sufficient (e.g. ‘inclined abstainers’; Orbell & Sheeran, 1998) in determining and changing behaviour has led to research on post-intentional volition-based strategies aimed at increasing the likelihood that intentions be translated into behaviour (e.g. action and coping plans; Sniehotta, Scholz, & Schwarzer, 2006). What impact does goal conflict and facilitation have on health behaviour in either ►

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the motivational or volitional phases of behaviour change? A methodological framework that can cope with the complexity of integrating goal-directed behaviour and multiple goal pursuit would aid in addressing this sort of question.

### A construct and a method for multiple behaviour assessment and change

Little (1983) conceived a goal-directed action unit – the *personal project* – and developed, tested and refined an open-ended methodology for eliciting, rating, and comparing these units: *personal projects analysis* (PPA). A personal project can represent either a means to an end or an end in itself, where both are representations of what characterises an individual's salient pursuits; they are extended in time, inherently volitional, and contextually embedded within the person's life. Personal projects have been formally defined as "extended sets of personally salient action in context" (Little, 2007, p.25). They are our "real life goals" (Károly, 1993, p.275); the idiosyncratic pursuits that define our everyday lives and are meant to represent the full range – both horizontal and vertical – of the goal hierarchy/system.

PPA is a flexible, open-ended series of assessment modules used to elicit, rate and compare personal projects. Typically (though inherently not necessarily), PPA consists of an initial elicitation stage where

participants are asked to list the personal projects that represent what they are currently pursuing in as many life contexts as the individual deems to be characteristic (e.g. school, work, family, interpersonal, intrapersonal). Participants then narrow their list to (usually, though not necessarily) 10 projects and rate each on a number of dimensions that are of interest to the researcher, e.g. importance, difficulty, stress, support, effort. PPA provides a list of predefined dimensions which robustly load onto 5 factors: project meaning, structure, community, efficacy, and stress (Little & Gee, 2007), but the open-ended nature of PPA explicitly encourages researchers to add or remove dimensions according to their research interests (see Figure 1). The resulting ratings on each dimension can be aggregated to form goal system-level constructs which can be compared between participants and used in predictive analyses. For example, ratings of importance can be averaged across all elicited projects to form an overall importance score, or alternatively importance of a focal project of interest (e.g. health-related) can be compared relative to all other projects. In short, it provides both normative and idiographic levels of analysis.

The assessment of each project's impact on each other (i.e. their cross-impact) is another PPA rating module that is particularly relevant to this multiple ►

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# What do you think about your Personal Projects?

Please rate each project below on a **scale of 0 to 10** on the series of dimensions listed above them.

**\*\* When you're finished rating your projects, please click the next tab entitled "Project Conflict" \*\***

Place your mouse over each dimension for

→

Personal Projects

	Importance	Enjoyment	Difficulty	Visibility	Control	Initiation	Stress	Time Adequacy	Likelihood of Success	Self Identity	Other's View	Value Consistency	Progress	Effort	Absorption	Support	Other's Approval	Intention	Autonomy	Helps Physical Activity	Helps Studying
1	Participate in regular physical activity	6	6	4	9	8	9	2	5	7	3	9	7	5	7	9	7	10	7	9	2
2	Regularly study before / after class for my uni courses	8	5	6	3	8	10	5	1	6	7	10	7	2	6	8	9	9	8	7	0
3	Save up for vacation	7	3	8	1	6	7	5	4	8	2	6	7	4	7	3	6	8	9	8	0
4	See friends	9	10	2	10	4	8	1	2	10	9	9	10	9	6	10	8	8	10	10	7
5	Support my football team	8	9	2	8	8	7	10	5	9	10	9	10	9	4	10	9	8	9	10	4
6	Plan and complete essays	6	4	6	7	7	9	7	2	8	6	7	8	5	5	10	3	9	8	7	3
7	Keep my room tidy	2	0	6	9	10	9	3	8	3	1	7	2	1	3	3	1	7	7	9	4
8	Play 18 holes of golf	4	7	5	7	7	5	0	8	4	7	2	5	4	3	10	8	6	8	10	10
9	Try to meet new people	6	7	5	5	5	9	10	2	1	1	9	5	3	5	7	5	8	9	10	8
10	Practice for my driving test	3	3	3	5	6	7	7	4	9	2	9	2	6	8	8	7	10	9	6	3

Figure 1: Standard and ad-hoc dimensions rated for elicited personal projects (adapted with permission from Little, 1983)



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goals discussion. Using a matrix composed of participants' personal projects, participants rate the extent that, for instance Project 1 (e.g. participate in physical activity) impacts in a facilitative or conflicting way with each other project, and so on for all projects. The resulting matrix of inter-goal relations can be used to identify a) particular constellations of conflict, facilitation, and independence, b) the overall conflicting and facilitating impact of the other projects upon a particular project, or c) a general indicator of overall system conflict and facilitation. Riediger (2007) highlighted the distinctive nature of goal conflict and goal facilitation as two independent constructs, and further conceptualises the ways in which goals may conflict with or facilitate each other. A closely related module, the joint cross-impact matrix, explores how an individuals' projects impact on those of other individuals. Given the importance of emotional support in project pursuit, this module may be of particular interest. Electively, additional modules can be added (see Little & Gee, 2007).

With these modules, idiosyncratic goal systems can be elicited and assessed on a series of relevant dimensions, and the helpful and/or hindering impact that pursuit of each goal has on the pursuit of each other goal, and those of others, can be determined.

**PPA as a means for theoretical integration**

Personal Projects Analysis provides a common and comprehensive assessment tool for testing and integrating theories that are usually applied to single behaviours and goals. While a standard set of 17 dimensions is typically used to assess the elicited personal projects, the methodology is entirely open-ended and can include any additional (or remove any non-essential) dimensions to fit the research question. For instance, PPA can be used to test a multiple behaviours version of the Theory of Planned Behaviour (TPB) by including the dimensions of attitude, subjective norm, perceived behavioural control and intention, which could be assessed for each elicited personal project. Theoretical integration efforts can be tested within a multiple goals approach by for example integrating volitional constructs with the motivational constructs in the TPB via assessment of 'where', 'with whom', and 'how' each project is pursued. Personal projects are the linchpin of a social ecological model of human development, in which biological, cultural and emergent choice behaviour are integrated, which make their use in theoretical integration efforts particularly relevant.

**Behaviour change interventions based on Personal Projects Analysis**

While much of our behaviour is goal directed, the ebb and flow of daily life is such that the probability that we are consciously aware of the pursuit of all our goals at all times is likely to be low (Gebhardt, this issue). A static graphical representation of the hierarchical goal structure does not convey the inherently dynamic nature of the self-regulation of multiple goal pursuit. The relations between our goals, be they conflicting or facilitating, may therefore not always be obvious or accessible (aside from *in situ* circumstances when critical choices of pursuit of one goal over another are made). The process of listing one's personal projects, rating them on a series of dimensions, and assessing the extent that each conflicts with and/or facilitates the others provides the opportunity of considering the various pursuits of one's life all at once. This in itself may provide a basis for a behaviour change intervention, but has yet to be tested formally.

PPA may also be used for reducing goal conflict and enhancing goal facilitation. Returning to contemporary efforts in health psychology for promoting the enactment of high intentions into behaviour, planning strategies have been shown to be particularly successful in promoting the enactment of motivation (Gollwitzer & Sheeran, 2006). Eliciting personal projects and rating the extent to which they impact on each other necessarily increases the salience of the goal system for the individual, which may assist in increasing the potential for formation of relevant and effective plans. For example, coping plans are post-intentional planning cognitions that involve a) identifying potential barriers to the pursuit of a focal goal and b) *a priori* planning of behavioural or cognitive self-regulatory responses to prioritise the focal goal if/when the identified barriers present themselves (Sniehotta et al., 2006). While much attention has been paid to b), comparatively less attention has focused on the means of identifying and anticipating potential barriers to focal goal pursuit. Rather, it is often assumed that the individual can readily identify and anticipate these barriers. However (and particularly in brief interventions with more passive modes of delivery – e.g. web-based), this assumption may not be tenable. Methodologies such as PPA, which ask participants to list out their own personally salient personal projects, rate them along a number of dimensions, and assess the conflicting and facilitating impact that pursuit of ►



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each has on the pursuit of each other, may render the identification of potential barriers more salient. In particular, assessment of the impact that other salient goals have on a particular goal provides an indication of whether any of the other goals being pursued may either interfere with pursuit of the focal goal (see Figure 2). Upon identification of particularly conflicting goal combinations, a specific self-regulatory response may be prospectively planned to cope with instances when such conflict may prevent the enactment of the focal goal. Among these, goal facilitation planning (Darker, French, Eves, & Sniehotta, submitted) may complement the identification of conflicting goals. If a particular goal combination is deemed to be conflicting, the identification of goals which facilitate the pursuit of the focal goal may provide an additional self-regulatory means of minimising goal conflict. This would account for the wider goal system and valorise the pursuit of not only the focal goal but also additional goals in the goal system. The prospective planning of facilitative goal pursuit may therefore provide an additional means of coping with identified barriers. It should be noted that all goals are not valued equally, and therefore even a

minimum amount of conflict or facilitation with a vital, core project is likely to have important implications for enactment of a focal goal (Little, 2007).

### A flexible method for addressing focused research questions

PPA typically encompasses the pursuit of all relevant personal projects spanning the range of an individual's experience. It has been applied to not only promotion-based health behaviours (e.g. exercise) but also to explore how illness (e.g. cancer) impacts on project systems (Peterman & Lecci, 2007). However, when the interest is in identifying whether the pursuit of other goals impacts on a focal goal, constraining the setting to only contexts in which the focal goal is pursued may prove useful.

Personal Projects Analysis provides a flexible methodological foundation for incorporating the impact that the goal system has on enactment of particular health behaviours by using an integrative unit of analysis (the personal project) and taking into consideration the pursuit of multiple goals. As ►


 <b>How do your personal projects conflict with <u>each other</u>?</b>										
We are interested in understanding how each of your personal projects conflict with one another. Note that participating in project A may highly conflict with participating in project B, but the reverse may not necessarily be true. Using a <b>scale of 0 to 10</b> , please rate the extent to which you feel that your projects conflict with each other. <b>0 = Does not Conflict at all</b> <b>10 = Conflicts a lot</b> <b>** When you're finished rating your projects, click the next tab at the bottom of the screen entitled "Categorize Projects" **</b>										
To what extent does actively engaging in each of these projects → conflict with actively engaging in each of these projects? ←		Participate in regular physical activity	Regularly study before / after class for my uni courses	Save up for vacation	See friends	Support my football team	Plan and complete essays	Keep my room tidy	Play 18 holes of golf	Try to meet new people
1	Participate in regular physical activity		10	7	1	6	9	1	0	4
2	Regularly study before / after class for my uni courses	4		9	5	10	3	9	1	6
3	Save up for vacation	8	9		3	5	8	4	1	2
4	See friends	2	7	5		0	4	2	1	0
5	Support my football team	6	8	7	3		4	0	1	2
6	Plan and complete essays	9	3	6	4	2		1	1	1
7	Keep my room tidy	3	7	5	3	5	4		1	2
8	Play 18 holes of golf	0	8	2	1	2	6	2		1
9	Try to meet new people	10	6	3	1	2	3	3	1	
10	Practice for my driving test	6	7	6	5	2	6	4	1	2

Figure 2: Matrix assessing goal conflict (adapted with permission from Little, 1983)



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### Personal projects analysis (cont'd)

effective, replicable, and generalisable health behaviour change remains a priority for the field, we recommend mobilising research efforts beyond the theoretical and methodological consideration of single isolated behaviour. Tools such as PPA can foster new and exciting avenues of theory testing and integration which may have implications for explaining and predicting behaviour, and ultimately for the design and delivery of behaviour change interventions. ■

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**Motivational systems and the pursuit of goals: Lessons learned from older adults****Michaela Riediger\***<sup>1</sup><sup>1</sup> Max Planck Institute for Human Development, Berlin

Every once in a while, we all encounter situations in which we think about what we want to attain, maintain, or avoid in the future. No matter which goals we set ourselves in such situations—to spend more time with friends, learn Spanish, find a better-paid job, lose weight, exercise more regularly, or attend preventive medical checkups—the step to their realization is often a large one. We work on some of our goals, but fail to do so with respect to others. Health-behavior changes bear a considerable risk of falling into the latter category. The identification of motivational factors that contribute to the initiation and longer-term maintenance of goal-directed behaviors thus has important implications for understanding successful implementations of health-behavior change. In this paper, I will take a developmental perspective and review research showing that we can learn from older adults when it comes to the persistent pursuit of goals. This research has yielded insights into two characteristics of the motivational system that have implications for the longer-term maintenance of goal-directed action. I will first elaborate the role that the nature of interrelations among a person's multiple goals, and particularly the extent of *mutual facilitation among goals*, plays in this respect. Following that, I will introduce *motivational selectivity* as a multifaceted phenomenon and discuss research suggesting that there are aspects of motivational selectivity that have implications for involvement in goal-directed action. I will conclude by arguing that the insights from this research can be applied fruitfully to health-psychological contexts.

**Motivational Facilitation and Health-Behaviour Change**

Making plans or setting oneself goals is a central aspect in health-behavior change. Goals can be defined as states a person wants to attain, maintain, or avoid in the future. People usually hold several goals at once, often pertaining to different domains of life. A health-behavior goal, such as starting regular physical exercise, is thus typically accompanied by other goals, such as being professionally successful or losing weight. Such multiple goals are not always independent of each other. Potential *conflict* among goals has long been acknowledged in psychology. Pursuing a career

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goal, for instance, may take time that is then not available for the pursuit of other goals, such as starting regular physical exercise. More recent research shows that another, equally important characteristic of motivational systems is the degree of *positive* interrelations, or mutual facilitation, among goals. Regular physical exercise, for instance, may be quite beneficial for other goals, such as losing weight.

Most of the currently available research on the role of intergoal relations for health-behavior change was guided by an interest in potential consequences of *conflict* between a health-behavior goal and the person's other goals (e.g., Maes & Gebhardt, 2000). One of my aims in this paper is to demonstrate the additional need to pay attention to the notion of *facilitative* intergoal relations. Empirical support for this proposition stems from a series of studies that employed the Intergoal Relations Questionnaire (IRQ, Riediger & Freund, 2004) for the assessment of interrelations among multiple goals. This instrument requests participants to pair each of their most important personal goals with each of the other ones. For each of these goal combinations, participants are then asked to respond to several items assessing conflict among goals in terms of resource limitations and incompatible ►

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attainment strategies on the one hand, and assessing facilitation among goals in terms of instrumental goal relations and overlapping goal attainment strategies on the other. The IRQ has demonstrated good psychometric properties and a stable structure of two unrelated factors (interference and facilitation) in several independent samples (Riediger, 2007; Riediger & Freund, 2004; Riediger, Freund, & Baltes, 2005).

A well-replicated finding in this line of research is that the more facilitative a person's goals are, the more this person tends to work on the realization of these goals. Evidence on this converges across a variety of methodologies for the assessment of goal-directed activities, such as retrospective self-reports, comprehensive activity diaries and objective behavioral information in the context of realizing the health-behavior goal of starting regular physical exercise. Exercise-specific intergoal facilitation, but not interference, for example, contributed significantly to the prediction of longer-term exercise frequency in a sample of younger and older exercise beginners. Participants were more persistent in maintaining their exercise regimen throughout a longer period of time the more facilitative the interrelations between their exercise goal and the other goals they had initially reported were (Riediger & Freund, 2004, 2007). This pattern of findings has been replicated with respect to goals in life domains other than starting to exercise. A possible interpretation is that mutual facilitation among goals enhances goal-directed activities by allowing an efficient utilization of one's (limited) resources in the interest of one's goals. Facilitative goals can be pursued simultaneously with little or no additional effort. This may be particularly important for the long-term maintenance of goal-pursuit behaviors, such as health-behavior change, even in the context of new demands or interests.

But why does conflict among goals play a less important role? One possibility is related to the fact that the reviewed studies investigated interrelations between people's *most important* goals. It is possible that people mobilize effort and other resources to compensate for interference among their most important goals. For example, they may sleep less in order to have more time to engage in the accomplishments of their goals. Conflict among important goals may thus not be reflected in fewer goal-pursuit activities (but could well have long-term health implications). In situations of severe resource limitation or when people perceive a goal as not being "worth" the effort, such compensatory strategies could be less likely. This may explain why some studies observed a negative association between

intergoal interference and particular health behaviors (i.e., exercising and smoking cessation, Gebhardt & Maes, 1998; McKeeman & Karoly, 1991). These health-behavior goals could have been comparatively less important to the participants and could therefore have been more prone to disengagement in the interest of pursuing the other goals.

Another well-replicated finding in the developmental research mentioned above is that of *age-related differences* in the intensity with which people work on realizing their goals. Older exercise beginners, for example, were more persistent in maintaining their exercise regimen throughout a longer period of time than younger exercise beginners; an effect that was not attributable to age differences in exercise motives. The same pattern was also evident in people's daily lives. According to information from comprehensive activity diaries, older adults invested a higher day-to-day goal involvement than younger adults. Interestingly, this effect was not due to the fact that younger adults were more involved in work or study, and that older adults had more freely disposable time (Riediger et al., 2005).

A particularly interesting question examined which role the nature of intergoal relations played. In fact, evidence again converges across the various samples that older adults are not only more involved in goal-related activities but also report a higher degree of mutual facilitation among their goals. Older exercise beginners, for example, perceived their exercise goal as being more facilitative for their other goals (and vice versa) than did younger exercise beginners. Furthermore, mediation analyses consistently showed that significant proportions of the age-difference in goal involvement were accounted for by including facilitation among goals as a mediator. For example, the higher degree of exercise-specific intergoal facilitation in the older as compared to the younger exercise beginners partly mediated the older adults' higher longer-term exercise adherence. Again, these findings were robust to controlling for age-group differences in exercise-specific rival predictors, such as participants' reasons for exercise, the exercise context, their exercise biography and so forth, and replicated with respect to alternative operationalizations of goal-directed actions, such as diary methods (Riediger & Freund, 2007; Riediger et al., 2005).

In other words, there is evidence showing that older adults are more persistent than younger adults in realizing their goals, and that this is related ►

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to older adults' perception of their goals as more mutually facilitative. With regard to potential implications for health psychology, this gives rise to the following question: Why do older adults perceive more mutual facilitation among their goals than younger adults? I will conclude this paper by summarizing first evidence suggesting that motivational selectivity plays an important role in this respect.

**Implications of Motivational Selectivity for Health-Behavior Change**

Selectivity as evident in people's goals is a multifaceted phenomenon. It can involve both *restricting* the *number* and *focusing* the *content* of selected goals. Restricting is characterized by the selection of few (versus many) goals. Focusing, in contrast, is characterized by selecting subjectively central (versus marginal), and similar (versus diverse) goals. *Central* goals address life domains that persons regard as highly important for their life satisfaction. *Similar* goals are comparable in the life domains they address; they focus on the same, rather than on divergent, areas of life.

A recent investigation showed that the transition from middle to older adulthood is characterized by a pronounced increase in motivational selectivity (both in terms of restricting and focusing) that mirrors the age-related increase in mutual facilitation among goals (Riediger & Freund, 2006). As compared to younger and middle-aged adults, older adults select fewer and more similar goals that address subjectively central life domains to a greater extent. Interestingly, this research has also suggested that motivational selectivity in the sense of focusing the content of one's goals on central and similar goals (but not in the sense of restricting oneself to few goals) is among the mechanisms that underlie high levels of intergoal facilitation in older adulthood. Hence, it is motivational selectivity *sensu* focusing (but not restricting) that is associated with an enhanced involvement in goal-pursuit activities. That is, the more similar a person's goals are, and the more they pertain to life domains the person regards as highly important for his or her life satisfaction, the more this person will engage in behaviors directed at the realization of the selected goals. This association holds independent by the person's age and is mediated through a high extent of mutual facilitation among the person's goals (Riediger & Freund, 2006).

**Conclusions: What We Can Learn from Older Adults**

Understanding motivational factors that contribute to the initiation and longer-term maintenance of goal-directed behaviors is very relevant to health

psychology. This understanding can be deepened if we learn from those who are good at converting goals into actions. Evidence from developmental studies shows that many older adults belong to this group of people. The research summarized in this paper suggests that one thing to be learned from older adults is that motivational selectivity in terms of focusing on subjectively central and similar goals results in the tendency for these goals to be mutually facilitative, which, in turn, helps people to stay highly involved in the pursuit of their selected goals.

I want to conclude by suggesting that health-psychological approaches would benefit from investigating ways to use these lessons from older adults in order to help people realize a desired health behavior. Strengthening facilitative relations between a target health behavior and other important goals, for example, may represent a pathway to support the longer-term maintenance of health behaviors, at least after the decision to engage in such behaviors has been taken. A promising field for further investigation would then be to find intervention methods influencing determinants of mutual facilitation between a health behavior and other goals important to the individual concerned. Increasing people's motivational selectivity in terms of focusing on central and similar goals could be a highly relevant candidate domain. ■

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## 10 years of Collaborative Research and Training in the EHPS (CREATE), 10 years of up-to-date education, networking and excellence

**Benjamin Schüz\*, on behalf of the CREATE team**

Apart from a quite historical location, the 1999 EHPS congress in Florence saw an innovation- the first CREATE workshop, which was facilitated by Marie Johnston and Charles Carver and organised by David Hevey, David French, Mike Echteld and Efi Panagopolou. CREATE had just recently been founded as a subdivision of the (also at that time quite young) EHPS and intended to be an opportunity for early career health psychologists to share experiences, provide mutual support in an international network and to provide up-to-date education in yearly workshops. These ambitious goals have been more than met and have developed into a success story. The recent and actual CREATE team and participants originate from all European and many overseas countries, and several contacts being started during CREATE have developed into international cooperation projects such as successful major EU grant proposals. The annual workshops were mostly overbooked, so that one of the major topics in the organisers' discussion was formulating fair acceptance criteria for the workshop applicants. In fact, many former CREATE participants considered the concentrated workshops before the annual EHPS conferences so productive that after their CREATE career they founded SYNERGY, which organises yearly workshops for more advanced scientists.

In this article, we want to give a short overview of the past 10 CREATE years, point out how CREATE workshops have reflected current debates in health psychology, and formulate some desiderata for the future. More information on CREATE, past and future workshops and the possibility for international networking can be found on the CREATE website [www.ehps.net/create](http://www.ehps.net/create)

Most CREATE workshops so far have been structured in two main parts: One part being an explicitly prepared programme delivered by the facilitators and a second part intended to respond to participants' issues such as writing articles, grant proposals or translating health psychology theory into practice.

But let's start with 1999 - The first workshop (facilitated by Marie Johnston and Charles Carver) had two main topics, "Solving general research problems" and "Writing and publishing scientific health psychology research articles". These topics can be considered prototypical for the CREATE workshop concept: Addressing issues relevant for early-career health psychologists while aiming at involving the most eminent protagonists of the discipline in training the next generation of researchers (Hevey, Di Blasi, Hall, & Absetz, 2000). The discussion of publication strategies is one of the most important topics throughout all CREATE workshops, therefore one aim of the organisers has been and still is to ask current or past editors of health psychology journals to facilitate the workshops.



*CREATE Logo – 1999 to 2005*

The 2000 CREATE workshop in Leiden, facilitated by Marie Johnston and John Weinman, focused on theory-based research in health psychology: "Nothing is more practical than a good theory: Exploring, testing and applying theories in health psychology". This workshop explicitly related to the theme of the 2000 EHPS conference, "Models of Health and Illness Behaviour" (Hevey, 2001). With the focus on theory-based research, this workshop also reflects the ongoing discussion on advancing and refining health behaviour theories. The task for testing, refining and again testing theories in order to improve them remains one of the core tasks for our discipline. ►

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## CREATE 10 years (cont'd)

In 2001, the CREATE workshop “Health behaviour change: Intervention and Evaluation” was facilitated by Brian Oldenburg, Paul Kennedy and Paul Gardner. It focused on theories of individual and group/population behaviour change. Here again, a correspondence between the conference theme “Changing behaviour: Health and Healthcare” was maintained. This workshop also saw a special focus on statistical methods to analyse change data.

The 2002 workshop “Research methods in Health Psychology” was facilitated by John Weinman, Kavita Vedhara and Rona Moss-Morris. This workshop also reserved a slot for sharing work in progress with the rest of the participants. Although the workshop topic



*CREATE Logo – 2005 to 2006*

reflects a general resource for Health Psychology, the methodological focus was developed before the backdrop of illness perceptions, psychoneuroimmunology and interventions in chronic illnesses. The focus on illness perception also reflects one of the key publications in 2002, the Revised Illness Perceptions Questionnaire-Revised (IPQ-R; Moss-Morris et al., 2002).

In 2003, the workshop “Understanding qualitative research in Health Psychology”, facilitated by Kerry Chamberlain, took an explicit perspective on qualitative research in Health Psychology. Kerry Chamberlain’s main aim was to make participants bilingual in terms of being able to equally understand and interpret quantitative and qualitative research. This workshop tapped into a very important field of research, as qualitative methods in health psychological research are increasingly being used and published.

The 2004 workshop “Predicting and changing health behaviour: Conducting and publishing theory-based research” was facilitated by Paul Norman and Peter Harris. While the first part of the workshop took into account recent discussions on theory-based research and focused on a critical evaluation of the prevalent health behaviour theories, the second part of the workshop profited from both facilitators’ outstanding expertise in publishing and presenting research. Paul Norman presented criteria and guidelines for peer-reviewed publications, while Peter Harris explained and introduced tactics and strategies for disseminating and publishing research findings.

Susan Michie (at that time EHPS president), Charles Abraham and Susan Ayers facilitated the 2005 CREATE workshop “Designing and evaluating theory-based interventions”. This workshop took up the current discussion on theory- and evidence-based interventions in health psychology. Special emphasis was given to protocols for intervention development, such as the MRC framework for intervention development. Designing theory-based interventions is one of the core topics in health psychology, and the discussion around designing interventions in the workshop resulted in the development and publication of a checklist for theory-based interventions (Darker, 2006; Davies & Panzer, 2006).

The 2006 workshop of CREATE in Warsaw “Stress, coping and social support” was facilitated by Ralf Schwarzer and Krys Kaniasty. Within this workshop, new concepts of social support in support in coping with illnesses and coping with disasters were introduced, along with new developments in mediation and moderation analyses were introduced. Additionally, the facilitators as recent and current editors of *Anxiety, Stress and Coping* reviewed the peer-review process.

In 2007, the CREATE workshop was facilitated by Gerjo Kok, Herman Schaalma and Rob Ruiter. It focused entirely on Intervention Mapping, a framework for designing evidence- and theory-based interventions in health promotion. This workshop provided many answers for applied problems in health promotion, but additionally stimulated discussion on the role of health behaviour theory in theory-based research. ►



## CREATE 10 years (cont'd)

The 2008 CREATE workshop on risk perceptions and risk communication will be facilitated by Britta Renner (current president of the EHPS) and Stephanie Kurzenhäuser.

This short review of the past CREATE workshops demonstrates that the application of theory, especially health behaviour theory in research and health promotion practice remains one of the core topics of interest. Although it may seem that workshops rotate around a limited set of repeating topics, the continuing discussion of theoretical innovations and their role in the applied research projects of early-career health psychologists (and advanced career health psychologists as well) promotes Health Psychology as a science. This is because continuing discussion of these topics leads to refined research questions and methodologies, which in turn allow for refining of theories.



CREATE Logo – current

In these terms, the CREATE workshops reflect current discussions of the Health Psychology community and provide an excellent and important means for early-career health psychologists to network and acquire a common knowledge and discussion basis.

Future CREATE workshops are planned around the core topic of designing and evaluating interventions in Health Psychology, but might take advanced research methodology into account as well.

We would like to pose a big “Thank you” to all previous organisers, to all participants and especially to all facilitators of the CREATE workshops who helped to make these ten years a great success.

As current organising team of CREATE, we are happy to announce that CREATE is alive and kicking, and we hope to see many happy returns of both the workshop and anniversary pieces in the European Health Psychologist! ■

**The current CREATE organising team:** Stephan Dombrowski, Nelli Hankonen, Natalie Mallach, Karen Morgan, Jana Richert, Benjamin Schütz, Amelie Wiedemann

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## ehp announcements

## Call for applications



The European Health Psychologist is now actively recruiting new co-editors to join the editorial board. As a co-editor, you would be responsible for inviting and managing contributions for upcoming issues of the European Health Psychologist. If you are interested in being a part of the EHP editorial team, please forward your curriculum vitae to Vera Araujo-Soares (v.l.b.araujo-soares@rgu.ac.uk), with the subject line 'ehp co-editor'.

## Call for contributions

The European Health Psychologist (EHP), the official bulletin of the European Health Psychology Society, would like to issue a general call for contributions to members of the EHPS. The quarterly online publication of the bulletin reaches all members of the EHPS and as such is a vehicle for transmitting timely and thought-provoking ideas and research. Past issues have featured wide ranging scientific topics written by contributors based both within and outside of Europe and the EHP aims to continue this trend into the future. Over the past year, you may have noticed a movement towards publication of empirical results, with an eye on filling a niche which does not fall within the remit of *Psychology & Health* or *Health Psychology Review*. Nevertheless, a diversity of contributions may include, but are not restricted to:

- **Position papers (think pieces)**
- **Overview papers**
- **Research letters**
- **Interviews**
- **Controversy**
- **Reports about conferences and workshops**
- **Country/research group profiles of EHPS conference host countries**
- **Other important information relevant to EHPS members**

Manuscripts must not currently be under review, accepted for publication, or published elsewhere unless express consent is given by the original publisher, and must be written in English. Though all manuscripts are considered, we urge potential contributors to contact the editorial team in advance to discuss ideas or potential submissions. An informal peer-review process consisting of one of the Editors, an Editorial Assistant, and a co-editor will read all submissions and provide timely feedback on submissions. Further details regarding publication guidelines can be found on the EHP website ([http://www.ehps.net/ehp/author\\_instructions.html](http://www.ehps.net/ehp/author_instructions.html)), and any questions can be directed to the editors.

We look forward to discussing your ideas for potential pieces in upcoming issues of the EHP.

Cordially yours,  
Falko F. Sniechotta & Vera Araujo-Soares, Editors  
On behalf of the European Health Psychologist Editorial Team





## conference announcements

conference title	date	location
29th Stress and Anxiety Research Society Conference	16 – 18 July 2008	London, UK
XXIXth International Congress of Psychology	20 – 25 July 2008	Berlin, Germany
12th World Congress on Pain	17 – 22 August 2008	Glasgow, Scotland
2008 European Health Psychology Society / Division of Health Psychology Conference	9 – 12 September 2008	Bath, England
8th conference of the European Academy of Occupational Health Psychology	12 – 14 November 2008	Valencia, Spain
UK Society for Behavioural Medicine 4th Annual Scientific Meeting	6 – 7 January 2009	Exeter, England

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