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Motivational systems and the pursuit of goals: Lessons learned from older adults**Michaela Riediger***¹¹ 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. ■

References

- Gebhardt, W. A., & Maes, S. (1998). Competing personal goals and exercise behaviour. *Perceptual and Motor Skills*, 86, 755-759.
- Maes, S., & Gebhardt, W. (2000). Self-regulation and health behavior: The health behavior goal model. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 343-368). San Diego, CA: Academic Press.
- McKeeman, D., & Karoly, P. (1991). Interpersonal and intrapsychic goal-related conflict reported by cigarette smokers, unaided quitters, and relapsers. *Addictive Behaviors*, 16, 543-548.
- Riediger, M. (2007). Interference and facilitation among personal goals: Age-group differences and associations with well-being and behavior. In B. R. Little, K. Salmela-Aro, J.-E. Nurmi, & S. D. Philipps (Eds.), *Personal project pursuit: Goals, action, and human flourishing* (pp. 119-143). Mahwah, NJ: Erlbaum.
- Riediger, M., & Freund, A. M. (2004). Interference and facilitation among personal goals: Differential associations with subjective well-being and persistent goal pursuit. *Personality and Social Psychology Bulletin*, 30, 1511-1523.
- Riediger, M., & Freund, A. M. (2006). Focusing and restricting: Two aspects of motivational selectivity in adulthood. *Psychology and Aging*, 21, 173-185.
- Riediger, M., & Freund, A. M. (2007). Intergoal relations in the context of starting to exercise: A case of positive development from younger to older adulthood. *International Society for the Study of Behavioural Development Newsletter*, 2, 8-11.
- Riediger, M., Freund, A. M., & Baltes, P. B. (2005). Managing life through personal goals: Intergoal facilitation and intensity of goal pursuit in younger and older adulthood. *Journals of Gerontology: Psychological Sciences*, 60B, P84-P91.