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## Social engagement and successful aging

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There is a growing recognition that social engagement is important for successful aging. This is the compelling message of Drs. Bath and Deeg's introduction to this new Journal (Bath and Deeg 2005, this issue), and I hope the same message becomes one of the pillars of success for this journal. The idea that an older person's participation in social activity, however defined, is good for his health and well-being has not only strong intuitive appeal, but no doubt also finds resonance in our own experiences and relationships with older adults. In fact, we often might think of decline in social engagement as a harbinger of poor prognosis, the impending collapse of successful aging and life itself. As much as this idea may be part of folk wisdom, we as gerontologists are still bound to furnish its empirical verification. A solid scientific foundation will sustain our understanding of the importance of social engagement for successful aging, and will guide the development of programs or interventions that will make a meaningful difference in the health and well-being of older adults.

The special section in this issue begins with a useful overview of several important studies that have begun to address the relationship between social engagement and successful aging. Together with numerous other published reports, they begin to provide an empirical base in support of this relationship, in spite of the substantial heterogeneity in methods, measures, and health outcomes. A particularly salient and sometimes thorny issue in this regard is the variety in conceptualization, definition, and assessment of social engagement. There is little consistency in the usage and precise meaning of the concepts that are used for different types of social engagement, such as social networks, social support, social activity, social engagement, social integration, social participation, to name some of the most commonly used terms. In this paper, I will use the term social

engagement primarily as an umbrella concept for the various components of an individual's social behavior and social structure, although it would be equally tempting to define it in a narrower sense. Lack of conceptual clarity and absence of well-established standards of measurement is a common feature in new areas of scientific inquiry, as is the case for social engagement and health. Early studies tend to rely on ad hoc measures, summarizing information that happens to be available, rather than on theoretically informed and psychometrically validated measures (Glass et al. 1997). Nonetheless, the heterogeneity in concepts and measurement should not be too readily dismissed as a weakness. Rather, each of the different approaches has revealed a first glimpse of this association, and has led to the establishment of a base of empirical support upon which subsequent work is to be built. The time has arrived to move on, and the papers in this issue clearly do so, each building on the foundation we have built so far, and making its own invaluable contribution to this literature.

The major strength of the paper by Maier and Klump lies in its conceptualization and measurement of social activity (Maier and Klumb 2005, this issue). It is one of the first studies to use a clear theoretical framework to categorize social activity, distinguishing between necessity, purpose, and social context. Actual measures of social activity are derived from this framework, based on a richness of data seldom available in larger-scale survey research. This is precisely the kind of methodology that has been mostly lacking thus far, and that will inform future work in this area. Bennett's paper makes an equally important, although very different contribution (Bennett 2005, this issue). She seriously considers the idea that the association between social engagement and successful aging may be more complex than a unilateral cause-effect relationship, and possibly involves reciprocal and cross-lagged effects. Whereas I have alluded previously to the existence of these more complex interactions (Mendes de Leon et al. 2003), only sparingly have they been modeled as explicitly as in this paper

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(Ormel et al. 2002). The findings reported by Bath and Gardiner essentially draw our attention to the very same issue (Bath and Gardiner 2005, this issue). Social engagement shows robust associations with indicators of health care utilization, but only in the cross-section. Prospectively, these relationships look considerably weaker and more confusing, rendering any causal attribution somewhat suspect. Nevertheless, their focus on the use of health care and social services is an important one that deserved further exploration. Zunzunegui and her colleagues stress another critical point in their paper, i.e., the broader socio-cultural milieu in which social behavior is enacted (Zunzunegui et al. 2005, this issue). This is a very challenging issue, given that health research tends to be focused on processes that affect individuals, whereas the socio-cultural context is clearly a feature that transcends the individual, and barely can be measured at the level of the individual. Yet it is difficult to ignore the powerful influence of the social environment, through shared traditions, conventions and norms, on shaping our social behaviors and the meaning of our social interactions. It seems quite reasonable to hypothesize, as they do in their paper, that this context may well affect the extent and nature of the interrelationships between social engagement and successful aging. The approach of cross-national comparisons is a very useful beginning, and should provide the impetus for more investigation along these lines.

Significant challenges remain in further explorations of the association between social engagement and successful aging. Just as the paper by Maier and Klumb raises our attention to the relative lack of theoretically informed measures of social engagement (Maier and Klumb 2005, this issue), so must we be more concerned about our approach to the definition and ascertainment of the other side of the equation—successful aging. Definitions of successful aging, especially in biomedical models, are typically framed in terms of absence or prevention of chronic diseases and their disabling consequences (Glass 2003). Indeed, each of the four papers of this section follow such a biomedical model of successful aging, given their focus on survival (Maier and Klumb 2005, this issue), chronic disease (Bennett 2005, this issue), disability (Zunzunegui et al. 2005, this issue), and health care utilization (Bath and Gardiner 2005, this issue). It certainly makes good sense to consider successful aging in this perspective, as it tends to guide clinical care and health care policy.

So, how do we apply this ‘biomedical’ approach to the definition and ascertainment of successful aging? If successful aging is defined on the basis of absence or prevention of disease and disability, then we must begin with a consideration of the nature of the disease processes that affect humans as they age. Adulthood is characterized by an increasing prevalence of chronic diseases, that is, diseases that evolve gradually over time. This is especially true for the disease processes that account for a large proportion of disability and mortality in later stages of life, e.g., cardiovascular disease, cancer,

and neurological conditions. This has two important ramifications. First, if disease processes evolve gradually over time, then, assuming that each individual has his/her own rate of progression, we should see a full spectrum of disease severity across people at a particular point in time, i.e., in cross-section. Crude indicators, and especially dichotomous classifications, although more easy to comprehend, will fail to capture the full spectrum of disease as it occurs in the general population. Such indicators also increase the risk that individuals will be labeled erroneously as being disease-free, only because they fail to meet particular diagnostic criteria. Thus, wherever possible we will need to develop and include measures that ascertain disease states in gradations of severity. Second, descriptors of disease occurrence such as incidence and recovery are only very particular instances of disease progression, clinically certainly very informative and meaningful, but from an etiologic perspective they form only a very incomplete picture of the heterogeneity in the rate of progression that occurs within and between individuals. Thinking about disease as a progressive process underscores the necessity to conduct longitudinal studies, as the outcome of interest becomes the rate of progression of disease, rather than absence or presence, incidence or recovery.

Regrettably, we too often rely on crude, simple, and usually discrete indicators of age-related chronic disease processes. Although these indicators may form a convenient and easily understandable summary of a complex health process, we must realize that they also tend to reveal a very incomplete, and in some instances incorrect, picture of the underlying processes of interest. Mortality may be a good example. Death is a perfectly discrete state, and a convenient summary measure of all the co-morbid diseases that contribute to it. It is also a state that usually can be ascertained with relative ease and high degree of reliability. Yet it also forms the end result of often multiple disease processes that have evolved over years, if not decades, and interact with each other in complex ways. So, if we find measures of social engagement to be predictive of survival, what does this really mean? How did social engagement affect this process? Such questions often remain incompletely addressed, if they are posed at all. The same holds true for other health-related outcomes—why is social engagement associated with less disease or disability? Do we hypothesize it to have a causal effect, that is, it somehow has a direct effect on the pathological processes that underlie a particular disease condition? If so, what do we know about the physiological mechanisms involved?

Adoption of a more severity-graded and dynamic approach should enable us to develop more specific hypotheses about the role of social engagement in successful aging, that is, in the biological disease processes that lead to disease and disability in older age. If we speculate that social engagement is causally involved in these disease processes, then we should see differential rates of progression over time in these processes as a function of social engagement. This line of research can

then be followed by finding the physiological pathways that demonstrate the link between social engagement and these disease processes. For the most part, however, we lack the evidence to formulate causal hypotheses of sufficient biological plausibility, and we could consider alternative models of association, models that go beyond the traditional epidemiological framework of simple cause and effect relationships. To some extent, these ideas are already present in the papers of this special section. For example, Dr. Bennett's paper considers the possibility that social engagement might have differential associations with objective markers of health and subjective consequences or self-evaluations of health (Bennett 2005, this issue). Dr. Zunzunegui and her colleagues recognize the dynamic nature of age-related health processes by focusing on both incident disability and recovery from disability (Zunzunegui et al. 2005, this issue). Two other papers (Bath and Gardiner 2005, this issue; Bennett 2005, this issue) allude to the potentially more complex interactions between social engagement and successful aging. It seems reasonable to pursue the reciprocal nature of such interactions, whereby declining health affects social engagement as much as it is affected by previous levels of social engagement.

A more specific and detailed understanding of the interrelationship between social engagement and successful aging is an obvious requirement for the design and evaluation of interventions. We often point out that social engagement is potentially 'modifiable', and that change in social engagement may hold promise as a method to promote successful aging. It is perhaps not entirely clear yet how modifiable social engagement really is, and what kind of interventions it will take to

meaningfully change it. Whatever interventions will be tried—and the possibilities are legion—they will need to be formulated and tested in a conceptual framework of successful aging that does justice to the dynamic disease processes that govern the changes in health and their functional consequences in older age.

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## References

- Bath PA, Deeg D (2005) Social engagement and health outcomes among older people: introduction to a special section. *Eur J Ageing* 2 DOI 10.1007/s10433-005-0019-4
- Bath PA, Gardiner A (2005) Social engagement and health and social care use and medication use among older people. *Eur J Ageing* 2 DOI 10.1007/s10433-005-0022-9
- Bennett KM (2005) Social engagement as a longitudinal predictor of objective and subjective health. *Eur J Ageing* 2 DOI 10.1007/s10433-005-0016-7
- Glass TA (2003) Assessing the success of successful aging. *Ann Intern Med* 139:382–383
- Glass TA, Mendes de Leon CF, Seeman TE, Berkman LF (1997) Beyond single indicators of social networks: a LISREL analysis of social ties among the elderly. *Soc Sci Med* 44:1503–1517
- Maier H, Klumb PL (2005) Social participation and survival at older ages: is the effect driven by activity content or context? *Eur J Ageing* 2 DOI 10.1007/s10433-005-0018-5
- Mendes de Leon CF, Glass TA, Berkman LF (2003) Social engagement and disability in a community population of older adults: the New Haven EPESE. *Am J Epidemiol* 157:633–642
- Ormel J, Rijdsdijk FV, Sullivan M, van Sonderen E, Kempen GI (2002) Temporal and reciprocal relationship between IADL/ADL disability and depressive symptoms in late life. *J Gerontol B Psychol Sci Soc Sci* 57:338–347
- Zunzunegui MV, Rodriguez-Laso A, Otero A, Pluijm SMF, Nikula S, Blumstein T, Jylhä M, Minicuci N (2005) Disability and social ties: comparative findings of the CLESA study. *Eur J Ageing* 2 DOI 10.1007/s10433-005-0021-x