

WHAT DOES IT TAKE TO TRANSFORM MENTAL HEALTH KNOWLEDGE INTO WORKPLACE PRACTICE? TOWARDS A THEORY OF ACTION



DISCUSSION PAPER

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ABSTRACT

The purpose of this discussion paper is to consider the question of a knowledge base that might undergird a systematic approach to transforming mental health knowledge into workplace practice. Drawing on a range of systems-change and related research, the paper begins by contrasting the nature of “workplace” as opposed to “mental health knowledge” systems. On the basis of the Luhmann’s concepts, these systems are cast as fundamentally being determined by the types of communication in which they are engaged (business about business matters, and mental health about mental health matters). For information from one to be adopted by the other requires the translation of mental health concepts into language understood by the workplace, by people capable of understanding both.

The paper then examines the importance of determining a vision of desired outcome from such knowledge transfer. What is the desired outcome? A workplace free of mental health problems? The role of both values and existing knowledge in determining these is outlined, along with the importance of engaging the most immediately involved actors in developing the vision.

Because valid and reliable knowledge is central to the task, a framework is set out in which the most immediately relevant research findings might be considered in relation to each other. Three categories of knowledge are proposed: employer-led preventive measures, employee-focused workplace interventions and community-based resources supportive of workplaces. Knowledge drawn from summative analyses of existing research is matched against these three categories to illustrate the potential for guiding both implementation and research decision making.

The final section draws together the key elements of an active approach to promoting and supporting knowledge transformation from mental health research to workplaces.

Introduction

Whereas other discussion papers in this series focus primarily on knowledge (and gaps in it) related to various workplace mental health issues, this paper is primarily about “action knowledge”; that is, *what do we know about how to apply what we know in such a way as to reduce the extent of workplace and mental health problems?* It is reasonable to argue that if this “what it takes” question were well understood, then there should be a reduction in both the high prevalence and cost of mental health problems in the workplace. The fact it hasn’t suggests a need for a theory of action. It also suggests a need for research on transforming knowledge into practice, since knowledge by itself too often does not lead to implementation, despite assumptions to the contrary.

The literature relevant to such a challenge is more extensive than can be reviewed here. It includes research on organizations as learning systems (Argyris and Schon 1978; Senge 1990), intercultural relationships (Dion 1996; De Witte and van Muijen 1998; Harris and Ogbonna 2002), general and social systems theory, conflict resolution and other areas. Also available is documentation of experience in fostering large-scale transformation of human services, including

in the mental health and other related disability fields (National Institute on Mental Retardation 1982; Neufeldt 2003b). In short, what both prior research and experience suggest is that if we are to make a dent in workplace mental health problems, several things are needed: a vision of what is to be accomplished, congruence of values between the various stakeholders, a sound plan of action and adequate resources over a considerable period of time. Other elements might be added to the framework, but these are most basic.

One might stop the paper at this point, except that these apparently simple four requirements are much more complex than they at first appear. To say “the devil is in the detail” would be apt here. The purpose of this paper, then, is to discuss the following questions: What do we know about the context of “mental health” and that of the “workplace” as it relates to the topic at hand? What does it take to shape a sound vision of the desired state? Of the various possibilities, which kind of knowledge is most important to actions that would lead to their adoption in the workplace, and how might such knowledge be organized? And what are the main considerations in developing an action plan?

The Question of Contexts

A useful way to begin is to examine the quite different contexts of two systems. One is that out of which mental health knowledge arises (i.e., by definition, the mental health knowledge system); the other is that to which such knowledge presumably has relevance and should be applied (i.e., the workplace system). We know there are bound to be effects of context both in how knowledge is portrayed and how it is applied (Jacobson et al. 2003; Lavis et al. 2002).

That there are differences in language, culture and practice between these is reasonably well established (Dewa et al. 2000; Peck and Kirbride 2001). The goals of one have been shaped by values of human service, largely conducted within frameworks defined by the state; the other has been shaped by the goods or services market in a context largely defined by the values of the marketplace. Mental health professionals typically are funded for services through public or insurance sources, with reasonable assurance of ongoing funding. Marketplace employers depend on revenues from the sale of products or services, which are vulnerable to competition. The one deals with clients (patients) who may have long-standing and continuing difficulties and a scarcity of other service providers to relieve them should that be desired. The other deals with clients (customers) who purchase one's products and could as easily turn to a competitor if such is available. In other

words, the cultural contexts within which each operates are quite different. It is not surprising, then, that a gulf of knowledge and understanding should exist between them.

That said, it would be wrong to conclude that public and private sector organizations are totally different. Most organization theories, for example, seem remarkably applicable to both.¹ And, while pursuing profitability may be a fundamental motive of all private sector firms, other motives conducive to addressing mental health issues also are evident in many (Argyris 1973; Peters and Austin 1985). These include promoting employee well-being,² pursuing "good corporate citizenship" and so on, motives that are normally thought of as characteristics of non-profit, professional and public sector groups. Finally, despite the reputation of being hard-nosed, the private sector is remarkably vulnerable to claims put forward by "management gurus" and academics that innovations in corporate management they propose are valid, despite little more than case study evidence (Carson et al. 2000).

The challenge of transforming knowledge about mental health and work into practice might be characterized, then, as less about differences in the nature of organization and motives, and more about figuring out how people using different languages can convey knowledge between two quite different cultures.

It is here that recent advances in systems theory are helpful. While general systems theory tends to consider "mental

¹The writings of arguably Canada's foremost management and organizational theorist, Henry Mintzberg, provide a case in point. His book, *The Structuring of Organizations* (1979; Englewood-Cliffs NJ: Prentice Hall), draws on research from both public and private sector organizations, with common concepts derived from and applied to both. The same has been true of other notable theorists such as Argyris, Galbraith, McGregor, Simon and others.

²Dupont, for example, has a justifiable reputation for concern over the welfare of its employees, one which began long before current organization theories argued the merits of doing so. Its origins as a producer of gun powder contributed to a corporate emphasis on safety, and a culture recognizing that safe workplaces require a satisfied and healthy workforce.

health” or “business” systems in structural or organizational terms, such conceptualization doesn’t really help one think about how to get information from one system to another. More helpful is the way in which the German theorist Niklas Luhmann thought about systems (Andersen 2000; Clam 2000; Hagen 2000a; Hagen 2000b; Osterberg 2000; Stichweh 2000). He defined social systems, not in structural terms, but as fundamentally about communication, with the boundaries of systems determined by the language used and the communication that is engaged in. Business systems are defined by their business communication, mental health systems by mental health knowledge and discourse. Such a definition gets one out of the awkwardness of general systems theory, where it often is difficult to decide whether or not certain groups or practices are part of the system (e.g., is the work of general practitioners part of mental health?). In Luhmann’s approach, the nature of the language specifies the boundaries between what can and cannot be expected. This same language also constrains the system’s search for new connections. So, business systems are constrained by their function as communicators of business matters; mental health systems are constrained by their communication over mental health matters, and so on. Each system maintains itself, and one can’t be another.

This way of thinking about systems frames the challenge in a way one can act on it, with language the key. The language of one system needs to be conveyed to the other in a way that is understood. In this case the language is about the mental health knowledge that has potential relevance to workplace settings. In other words, one needs the message translated

from one language to another. This implies the need for interpreters. In systems terms, these would be “transducers.” More colloquially, people capable of doing this might be thought of as “boundary walkers” – those who cross the boundaries of systems and are understood in both.

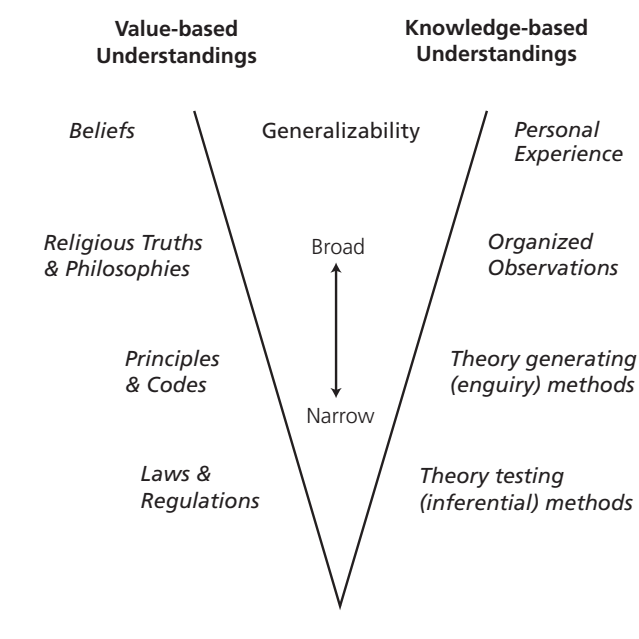
These constructs have relevance for the task at hand and are picked up in a later section on elements of an action plan. They also require much further research since little has been done on this transducing or interpreting role.

Shaping a Sound Vision

A question deserving of an answer is “what vision might one have of the state of mental health in workplaces if available knowledge were applied effectively?” That workplaces should be free of mental health problems? Something else? No one seems to have made a serious attempt at setting out such a vision. Yet, it is in need of doing if evidence on the importance of visions driving change is given any credence.

Visions of desirable futures are drawn from two main sources of evidence: knowledge-based and, perhaps more important, those that are value-based. It is useful to remind oneself that governments and public sector or private sector organizations rarely make decisions based on research-based evidence alone. Constructs such as “employment equity,” “non-discrimination” and “good corporate citizenship,” all of which are widely embraced if not legislated, have a profound effect on how decision makers think about workplace mental health issues. These are not, fundamentally, knowledge-based constructs; rather, they rise out of “values-based” understandings of the world as do notions of cost effectiveness, profit and professional ethics.

Figure 1. Sources of Evidence in Shaping our Futures – The “V” Heuristic



Knowledge and values are intertwined in that values-based constructs shape our understanding of the worth of knowledge-based evidence and our decision whether or not to make use of it. A heuristic to help think about this relationship is provided in Figure 1 (adapted from Novak and Gowin 1984). At their broadest, value-based understandings of worth are drawn from the major religions and philosophies (including philosophies of science). These become more narrowly defined as specific laws and regulations. In the same way, knowledge-based understandings range from broad, loosely organized and defined experiences to narrowly defined, organized observation, such as is undertaken in theory-testing research methodologies. In between there are many degrees of specificity. This Vee heuristic (Figure 1) lends itself to understanding that both knowledge claims and values claims vary in their specificity and

generalizability. The more specific, the more certain one's conclusion about a given phenomenon, but also the less generalizable to other phenomena; and vice versa.

For example, the argument for “evidence-based decision making” articulated in recent years, at its core, is a values-claim. The claim is that evidence from meta-analyses of randomized control-trial experimental studies will lead to better and more cost-effective health, education or social service interventions than alternative sources of knowledge (Cochrane 1972; Cochrane 1979; Mulrow 1987). While most of us probably agree with the intent, it is

useful to note that this is but one of a number of relevant and potentially competing values to consider (Dineen 1996). In the drive for specificity and certainty, one can't help but wonder what less specifiable but broadly important issues may be overlooked.

A theory of action designed to transform mental health knowledge to workplace practice must inevitably consider both dimensions – values and knowledge. The fact that mental health issues are seriously thought about today by both employers and professionals, as contrasted with the situation several decades ago, of itself says something about change in social values. More important, both values-claims and knowledge-claims shape the vision of future possibilities of action to be taken, along with desired end goals and means of achieving them, whether articulated by researchers, professionals, employers or governments.

Framing Existing and New Knowledge

Since knowledge is central to this task, the gathering of the most relevant, valid knowledge into an easily understood framework is essential. Examination of the literature reveals little that could be called an over-arching conceptual framework or theory that might help either to explain how research in the various areas discussed in this conference is relevant to each other or to guide the use of knowledge in practice. There are a variety of micro-theories on specific topics, but a broader theoretical framework seems not to have been developed. In the absence of a good theory, it would at least be helpful to have a conceptual framework. Here, too, we are disappointed. Overview documents such as that by the World Health Organization (WHO) and International Labour Organization (ILO) (Harnois and Gabriel 2000) provide a glimpse of the range, but they aren't meant to give more than that. Perhaps the closest is provided in an overview of some related literature by Glozier (2002). While helpful, it is eclectic rather than systematic in the material covered.

One task is the broad range of research that might be considered – biological and psychological bases of thought and behaviour, treatment issues (biological, psychological, spiritual and other), environmental factors, workplace health issues, public policy issues and many others. A conceptual framework would help determine which of these areas are more central than others to developing a systematic approach to transforming knowledge to practice. It would also provide a sense of how research on these diverse topics relates to each other.

A major challenge is that much exist-

ing knowledge is subject to what might be called an “isolated pockets syndrome.” The different kinds of research described above are published in different types of journal, with cross-referencing infrequent. Epidemiological journals examine the relationship between functioning and psychiatric impairment. Occupational psychology and health literature examines topics such as workplace stressors, health, performance and absenteeism. Literature on rehabilitation and psychiatric fields examines specific treatments for psychiatric conditions, along with the effectiveness of interventions such as short- versus longer-hospital stays, supported employment, case management and others. Of what is published in any one area, only some examines the mediating effects of programs and policies.

In like manner a variety of structural and human factors contribute to difficulties in knowledge transfer, as do differences in culture, history and geography, the effects of which are rarely considered and require more attention (Neufeldt 2003a). It is not uncommon, for example, to observe difficulties in transferring knowledge gained from human service innovations in one province to another, even in a country such as Canada with its highly developed communication infrastructure. One need only examine differences in policy and ways of organizing mental health services across Canada to appreciate the truth of this. In analogous fashion there are gulfs to be bridged in sharing knowledge between the business sector and public sector health, education and social service sectors, each of which has its own culture, norms, assumptions and practices (Dewa et al. 2000).

All of this points to several needs. One is for higher-level analyses of potential

relationships of knowledge gained in one domain with that in another. A second is for a mechanism to convey systematically the essence of extant knowledge to the different audiences that are in a position to build on it, including workplace leaders (employers and unions), leaders of disability advocacy organizations, service providers, policy makers and researchers. A third is for a strategic approach to transforming knowledge into practice. Fourth, perhaps above all, there is a need to develop a sound theory of action. Such a theory would serve as a guide for all when they are pursuing common workplace mental health goals.

A start towards a conceptual framework within which one might organize existing knowledge relevant to this task is to begin with an assumption such as: “the most useful research for transforming mental health knowledge into workplace practice will be that which is most immediately relevant to intervention.” This kind of approach serves the purpose of limiting the amount of knowledge one needs to attend to.

On that basis one can identify three clusters of research that have immediate relevance:

- (1) **Employer-led initiatives** seeking to prevent mental health problems in the workplace
- (2) **Employee-focused** WORKPLACE interventions, initiated or supported by the employer
- (3) **Community-based resources** supportive of enabling workers with mental disorders remain in or return to the workplace.

Not included is fundamental research on the biochemical or psychological bases of behaviour, research on public policy issues, or epidemiological research documenting the prevalence of various kinds of conditions in the workplace. While these all are valuable sources of knowledge of the kinds inferred above, the argument for their exclusion is that they represent domains of enquiry that are not immediately involved with workplace and mental health issues.

As a test of the utility of the proposed framework, one might take a critical look at knowledge claims in these three areas. The purpose is to determine whether the framework is helpful in clustering previously unrelated research in a way that helps one see new possibilities for research, implementation, and so on; and whether it can contribute to the development of a coordinated intervention strategy. Two questions are important: First, is the state of knowledge such that it might be part of a strategy of action? Second, are there apparent links that can be made between the various areas of research in a given category? To test these questions, data gathered for another purpose is set out below (Neufeldt 2003c). These were drawn from a broad range of literature through the main electronic abstracting services, the Campbell and Cochrane libraries as well as other sources, with a variety of search terms, and with particular emphasis on finding summative reviews and critical analyses of prior research. Given that the framework is meant to help us think about research, it should not be surprising that the data overlaps with those presented in other discussion papers.

Employer-Led Prevention Measures

The general starting point for most research of this kind is the question

whether workplace stressors and other factors contribute to mental health problems among employees. This initial questioning has been followed by the introduction of workplace policies and practices that seek to reduce the impact of stressors such as job insecurity, long work hours or weeks, control of work issues and the effect of managerial style. The evidence on five largely unrelated areas of research seems to be as follows:

Reducing job insecurity. Job insecurity has been posited as a precipitating factor in workplace mental health problems, particularly in environments where downsizing or change in employment patterns is a high probability (Sparks et al. 2001). Two types of preventive measures are often advocated: maintaining open communication between higher management and employees, and offering employees the opportunity to learn transferable job skills (Vahtera et al. 1997). While both seem to have some validity, the evidence for these knowledge claims seems to be based primarily on “best practice.” No meta-analyses of RCT studies were found.

Effects of long work days or weeks. Another hypothesis is that stresses from long work days or weeks in certain kinds of job and from family members (often women) holding two or more jobs contribute to increased mental health problems one common preventive measure is the use of flexible work schedules. This area has generated a reasonable amount of research. A summative review of research on the general hypothesis suggests that the relationship between accumulated stressors and indicators of distress are not well understood and that it requires more work (Sparks et al. 1977). As to flexible work

schedules, a review of a number of studies indicates there are some short-term positive effects of flex schedules, but that these wane with time and the effects of particular stressors are likely to reappear (Baltes et al. 1999). Even so, this may still be an approach of choice for families seeking to balance family and income needs.

Enhancing employee control over work. Research on another common hypothesis, that giving employees control of decisions related to their work should reduce distress and other mental health problems, has also had mixed results (Evans and Carrère 1991; Ganster and Fusilier 1989). There appears to be considerable variability from one person to another in the impact of such a strategy (Ganster 1988), and also variability in the effect of different types of control given to employees (de Rijk et al. 1998). Again, there is a need for more research and for a meta-analysis of existing studies.

Managerial style has been thought to have an impact on how employees deal with work stressors. No RCT studies nor meta-analyses of other studies were found. However, a number of studies dating back several decades provide reasonable evidence that leadership styles, such as those that are either “transformational” or “transactional,” are the more effective than others in maintaining a satisfied workforce (Bass 1985; Burns 1978). The need for more research and critical analysis of such findings is again evident.

One exception to the above kinds of research has been to question whether it might be possible to prevent mental health problems by screening out vulnerable job applicants (Poole 1999). While seductive, the idea is faulty on at least two counts. First, hiring criteria of this nature

would clearly constitute a discriminatory practice within the provisions of the *Charter of Rights and Freedoms* and related employment equity legislation and hence would be illegal (this is a “values” matter). Second, it is doubtful the approach would have any utility in that symptoms of illness having little bearing on work success, and that a substantial portion respond well to treatment and recover their occupational functioning (Strakowski et al. 2000). In addition, the variability of symptom presence as noted earlier, particularly among people with the more common mental disorders, would make prediction difficult. Seductive as it may be, the idea should be dismissed.

Employee-Focused Workplace Programs

An alternative to management-led prevention initiatives has been to develop employee-focused workplace programs. In general, these are meant to provide early intervention support or shore up the preventive capacities of groups of employees. The most common and longest-standing have been employee assistance programs (EAPs) and stress management interventions (SMIs). Observations on research related to these are as follows:

Employee Assistance Programs. EAPs have been widely adopted by large employers in Canada and the United States (less so elsewhere) (Teich and Buck 2003). While one would think there would be a substantial body of research supporting EAP use, as some suggest (O’Hara 1995), sadly that seems not the case (Masi and Jacobson 2003; Cohen and Schwartz 2002). Best-practice studies predominate, with very little data of a longitudinal or comparative nature. Despite the absence of strong evidence,

EAPs tend to be regarded favourably by employers and employees alike (they have good “face validity”) (Roman 1999). While EAPs may have merit, their credibility and long-term continuation would benefit from sound empirical work.

Stress Management Interventions. In contrast to EAPs, a considerable amount of research has been done on SMIs, though very little of an RCT variety. One meta-analysis of studies comparing different SMI approaches found no differences in effectiveness between any of them (Bunce 1997). It seems that all led to small positive effects. The conclusion of a follow-up study was that SMIs had only limited value in preventing mental health problems and that the effects were quite temporary and faded with time (Bunce 2000). Again, more systematic study of such approaches by means of RTC or quasi-experimental designs is needed.

Disability management programs are relatively new to the mental health field, and have been studied to little to determine effectiveness with any degree of confidence. Outside the mental health field such programs have become quite prevalent for issues of employee absence and disability leave due to other common types of impairment such as lower back pain, repetitive stress syndrome and injury from workplace accidents. Considerably research has been undertaken related to these issues both in North America and Europe, with generally favourable results (Sim 1999). However, it is also clear that effectiveness varies considerably, depending on the kinds of policies in place, the nature of early intervention programs and a variety of other factors (International Social Security Administration 2002; Bloch and Prins 2001).

Finally, managers are in a position (indeed, have a duty under human rights legislation) to develop ways of accommodating people with mental health problems in the workplace when such issues occur. Two types of accommodation that have been tested are (1) assist the employee with the mental health problem by modifying job tasks, work schedules and performance expectations, and (2) create a more supportive work environment by training co-workers and increasing the amount of supervision available (Schott 1999; MacDonald-Wilson et al. 2003). As in previous types of intervention, there have again been relatively few studies. Of these, modifying job tasks provided positive results, but more empirical research is needed, supplemented by qualitative studies of employers' and employees' experiences.

Workplace Support by Community Mental Health Services

For employees with more serious mental disorders, employers depend on the availability of resources from the regular mental health service sector. Research on four kinds of publicly mandated programs was examined – the effect of short-term versus long-term hospitalization policies, the effectiveness of case management (CM) and assertive community treatment programs (ACT), and the supported employment (SE) model.

Length of hospitalization. There has been considerable controversy for many years as to whether intentional short-stay hospitalization is as effective in addressing patient needs as a more open-ended policy. One systematic analysis was found that reviewed five studies (all in the United States) comparing hospital

programs that had short-term stay policies with hospitals, roughly equivalent in terms of patients received and other factors, that had no specific stay policy (Johnstone and Zolse 2003). The intentional short-stay policy was found to be superior, in that it contributed to less readmission (the reverse of what often is argued) and better maintained patients in employment. With only five studies and one systematic review, there is need for additional research; but early evidence suggests that, when hospital admission is required, short-term stay is the best policy.

Case management. CM has become a cornerstone of community mental health services in many jurisdictions. One systematic review of RCT studies was found. It compared CM with standard mental health services (all in the United States) and found that CM contributes to increased hospitalization, rather than decreased as is often argued. There were no differences in other psychiatric or social variables (Marshall et al. 2003). Given its widespread use, the value of CM as a stand-alone service is questionable, though it would be important to undertake additional research.

Assertive community treatment. Again, there was only one systematic review of prior research comparing the effectiveness of ACT with standard mental health services (all US-based) (Marshall and Lockwood 2003). On all dimensions, ACT was found to be superior to standard services. ACT contributes to reduced use of MH services, less time in hospital and greater stay of patients in work.

Supported employment (SE) model. Two systematic reviews were found, each exam-

ining substantially the same data set of US studies (Bond et al. 2003; Latimer 2001). Compared to other employment programs for people with severe mental disorders, both found the SE model a superior strategy for job finding, placement and maintenance. Nevertheless, it was evident that most SE employees worked only part-time.

Conclusions on Relevance of Framework. On the basis of the foregoing summaries, one can draw several conclusions. First, the proposed framework provides a means of organizing information on related but different types of intervention and support that makes some sense for the different actors involved. For example, mental health professionals are most likely to be conversant with the third, whereas employers most conversant with the first and, perhaps, second. Second, information organized in this way should lend itself to revealing potential relationships between the different types of knowledge both within groups and between the three groups. Third, with respect to a substantial number of issues, there exist reasonable hypotheses about strategies that may be appropriate, and a growing amount of evidence even though some of it is “soft.” Fourth, in almost all the areas reviewed there is a need for substantially more research and meta-analysis of previous work to ascertain more clearly what courses of action would be desirable. For those reasons, the framework provides a guide to further research.

Transforming Knowledge into Practice

The foregoing sets the stage for a systematic approach to pursuing the transformation of knowledge into practice. Both prior experience and research-based knowledge have something to contribute.

One summary of major steps involved, based on several systems change experiences, is as follows: (1) frame the issue, (2) clarify values involving all key parties, (3) imagine the future (i.e., create the vision), (4) clarify interests, (5) maximize legitimacy, (6) invent options, (7) build relationships, (8) seek to empower relevant sectors, (9) communicate and listen, and (10) commit carefully (Neufeldt 1986). Even though that list is supported by sound evidence, the problem is that it suggests the process to be linear and relatively easy to implement. The reality of a change process is much more complicated and full of surprises.

In part, complications arise from the fact that a number of different “actors” are involved, each with its own assumptions, culture, language and so on (Lavis et al. 2003; Lomas. 2000). Already identified are the two systems – mental health and workplace – and issues of language and culture. Both can be subdivided. In mental health, for instance, service providers aren’t necessarily the same as “knowledge brokers.” At a minimum, one also needs to include representation from the people who have had personal experience with mental health and work problems, and the state (i.e., government). Each of these social institutions contributes to the total well-being of society, and all are central to the question of employment of people with mental health problems. The state is the initiator of policies that both create an economic framework and safety nets of various kinds (economic, health, social). Households participate in the market, and they are significant sources of social support, motivation and other factors. The market provides opportunities for work and creates its own policies and programs directed towards its employees and the

well-being of the public. The sources of action and intervention by the various public and private service providers – EAPs, community mental health, non-governmental organizations and so on – cross into all of these in various ways.

A second challenge is to decide where to focus one's energies and resources. While from a mental health perspective the question tends to be one of how to put the available knowledge into practice, even employers interested in being involved are bound to view this as a process that necessitates some changes to their operating systems; from the mental health perspective the question in turn, will be cause for caution. Research on information diffusion and adoption of innovations helps one think about this challenge. Rogers, for example, demonstrated some time ago that adoption of new ideas seems to proceed in stages (Rogers 1962). At the beginning, only small numbers are likely to be interested in an innovation, which is what a systematic approach to adopting mental health knowledge would be. With the success of the innovation by these "early adopters" and persistent effort in promoting and supporting the innovation, others gradually become involved. If the process continues to have some reasonable success, it is likely there will come a time that a "tipping point" will be reached where a large portion of employers are likely to adopt the innovation (though some will continue to resist) (Kuhn 1970). These and other concepts have been elaborated upon by later theorists (Mintzberg 1983; Pettigrew et al. 1992; Tushman and O'Reilly 1997).

A third challenge is that of time. The time involved can be considerable. Human service innovations that the

author has been involved with have typically taken a generation, though the "tipping point" where the ideas started to be self-sustaining averaged about 10 years. The amount of time depends to a large extent on the persistence in promoting the change, the complexity of organizations involved and their readiness for change (Schon 1971; Emery and Trist 1965; Howard-Dixon 2001).

There are several features of successful social change initiatives that seem to contribute to overcoming the practical implementation barriers. One has been that the vision was clearly articulated and was supported by an organized approach both to ensuring shared values and clarity of understanding of relevant knowledge. Second, use typically has been made of a "experimental and demonstration" or "pilot project," where various incentives are used and visibility is given to successful outcomes. Third, there is usually a support mechanism comprising personnel fully conversant with the innovation, and with the "boundary walking" capacity referred to earlier. The support measures include training, providing resource materials, organizing publicity and so on. Fourth, a systematic plan typically is developed for promoting the innovation and its merits to the various "actors" involved. Fifth, these activities are maintained until after the tipping point is reached. That, in turn, requires continuous financing.

Conclusion

Given the challenges to knowledge transfer that have been described, it should not be of particular surprise that the available knowledge has not been put into widespread use in private sector workplaces. First, little work has been done so far to bring together the disparate areas of

knowledge that are relevant to the task within a framework that is easily understood by all parties. Second, inadequate attention has been given to determining with any assurance which of the many knowledge claims we can have confidence in. It has been suggested that both require some homework before we proceed further. Third, research on innovation transfer and systems change suggests that the knowledge base exists on which a more systematic approach could be used to transfer existing knowledge on addressing mental health issues into the workplace. Pursuing such a goal requires the concerted and coordinated effort of major stakeholders.

References

- Andersen, N.A. 2000. "Public Market-Political Firms." *Acta Sociologica* 43(1): 43-61.
- Argyris, C. 1973. "Organization Man: Rational and Self-Actualizing." *Public Administration Review* 354-57.
- Argyris, C. and D. Schon. 1978. *Organizational Learning: A Theory of Action Perspective*. Don Mills ON: Addison-Wesley.
- Baltes, B.B., T.E. Briggs, J.W. Huff, J.A. Wright and G.A. Neumann. 1999. "Flexible and Compressed Work Week Schedules: A Meta-analysis of Their Effects on Work-related Criteria." *Journal of Applied Psychology* 84: 496-513.
- Bass, B.M. 1985. *Leadership and Performance beyond Expectations*. New York: Free Press.
- Bloch, F.S. and R. Prins. 2001. *Who Returns to Work and Why? A Six-country Study on Work Incapacity and Reintegration*. International Social Security Series, Vol. 5. London: Transaction.
- Bond, G.R., D.R. Becker, R.E. Drake, C.A. Rapp, N. Meisler, A.F. Lehman, M.D. Bell and C.R. Byler. 2003. "Implementing Supported Employment as an Evidence-based Practice." *Psychiatric Services* 52: 313-22.
- Bunce, D. 1997. "What Factors Are Associated with the Outcome of Individual-focused Worksite Stress Management Interventions?" *Journal of Occupational and Organizational Psychology* 70: 1-17.
- Bunce, D. 2000. "Statistical Considerations in the Interpretation of Research on Occupational Stress Management Interventions." *Work and Stress* 14: 197-212.
- Burns, J.M. 1978. *Leadership*. New York: Harper and Row.
- Carson, P.P., P.A. Lanier, K.D. Carson and B.N. Guidry. 2000. "Clearing a Path through the Management Fashion Jungle: Some Preliminary Trailblazing." *Academy of Management Journal* 43(6): 1143-58.
- Clam, J. 2000. "System's Sole Constituent, the Operation: Clarifying a Central Concept of Lumannian Theory." *Acta Sociologica*. 43(1): 63-79.
- Cochrane, A.L. 1972. *Effectiveness and Efficiency: Random Reflections on Health Services*. London: Nuffield Provincial Hospitals Trust.
- Cochrane, A.L. 1979. "1931-1971: A Critical Review, with Particular Reference to the Medical Profession." In *Medicines for the Year 2000* (pp. 1-11). London: Office of Health Economics.
- Cohen, A. and H. Schwartz. 2002. "An Empirical Examination among Canadian Teachers of Determinants of the Need for Employees' Assistance Program." *Psychological Reports* 90: 1221-38.
- de Rijk, A.E., P.M. LeBlanc, W.B. Schaufeli and J. de Jonge. 1998. "Active Coping and Need for Control as Moderators of the Job Demand-Control Model: Effects of Burnout." *Journal of Occupational and Organizational Psychology* 71: 1-18.
- De Witte, K. and J.J. van Muijen. 1998. "Organizational Culture." *European Journal of Work and Organizational Psychology* 8(4): 497-502.
- Dewa, C.S., P. Goering and E. Lin. 2000. "Bridging Academia and Business: Exploring the Workplace Burden of Mental Illness." *Economics of Neuroscience* 2(6): 47-49.
- Dineen, T. 1996. *Manufacturing Victims*. Toronto: Robert Davies.
- Dion, M. 1996. "Organizational Culture as Matrix of Corporate Ethics." *International Journal of Organizational Analysis* 4(4): 329-51.
- Emery, F. and E. Trist. 1965. "The Causal Texture of Organizational Environments." *Human Relations* 18: 21-32.
- Evans, G.W. and S. Carrère. 1991. "Traffic Congestion, Perceived Control and Psychophysiological Stress among Urban Bus Drivers." *Journal of Applied Psychology* 76: 658-63.
- Ganster, D.C. 1988. "Improving Measures of

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- Work Control in Occupational Stress Research.” In J.J. Hurrell, L.R. Murphy, S.L. Sauter and C.L. Cooper, eds., *Occupational Stress: Issues and Developments in Research*. New York: Taylor and Francis.
- Ganster, D.C. and M.R. Fusilier. 1989. “Control in the Workplace.” *International Review of Industrial and Organizational Psychology*. Chichester, UK: Wiley.
- Glozier, N. 2002. “Mental Ill Health and Fitness for Work.” *Occupational and Environmental Medicine* 59: 714-20.
- Hagen, R. 2000a. “Introduction: Observing Luhmann.” *Acta Sociologica* 43(1): 3-4.
- Hagen, R. 2000b. “Rational Solidarity and Functional Differentiation.” *Acta Sociologica* 43(1): 27-42.
- Harnois, G. and P. Gabriel. 2000. *Mental Health and Work: Impact, Issues and Good Practices*. Geneva: WHO/ILO.
- Harris, L.C. and E. Ogbonna. 2002. “The Unintended Consequences of Culture Interventions: A Study of Unexpected Outcomes.” *British Journal of Management* 13(1): 31-49.
- Howard-Dixon, T. 2001. *The Ingenuity Gap*. Toronto: Random House.
- International Social Security Administration. 2002. *Who Returns to Work and Why: Evidence and Policy Implications from a New Disability and Work Reintegration Study*. Geneva: International Social Security Administration.
- Jacobson, N., D. Butterill and P. Goering. 2003. “Understanding User Context: A Framework for the Knowledge Translation Process.” *J. Health Services Research and Policy* 8(2): 94-99
- Johnstone, P. and G. Zolese. 2003. “Length of Hospitalisation for People with Severe Mental Illness (Cochrane Review).” *The Cochrane Library*, Issue 3.
- Kuhn, T.S. 1970. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Latimer, E.A. 2001. “Economic Impacts of Supported Employment for Persons with Severe Mental Illness.” *Canadian Journal of Psychiatry* 46(6): 496-505.
- Lavis, J., D. Robertso, C.B. McLeod and J. Abelson. 2003. “How Can Research Organizations More Effectively Transfer Research Knowledge to Decision-makers?” *Milbank Quarterly* 81(2): 221-48.
- Lavis, J.N., S.E. Ross, J.E. Hurley et al. 2002. “Examining the Role of Health Services Research in Public Policy Making.” *Milbank Quarterly* 80(1): 125-54.
- Lomas, J. 2000. “Using ‘Linkage and Exchange’ to Move Research into Policy at a Canadian Foundation.” *Health Affairs* 19: 236-40.
- MacDonald-Wilson, K.L., E.S. Rogers and J. Massaro. 2003. “Identifying Relationships Between Functional Limitations, Job Accommodations, and Demographic Characteristics of Persons with Psychiatric Disabilities.” *Journal of Vocational Rehabilitation* 18: 15-24.
- Marshall, M., A. Gray, A. Lockwood and R. Green. 2003. “Case Management for People with Severe Mental Disorders.” *The Cochrane Library*, Issue 3.
- Marshall, M. and A. Lockwood. 2003. “Assertive Community Treatment for People with Severe Mental Disorders.” *The Cochrane Library*, Issue 3.
- Masi, D.A. and J.M. Jacobson. 2003. “Outcome Measurements of an Integrated Employee Assistance and Work-life Program.” *Research on Social Work Practice* 13: 451-67.
- Mintzberg, H. 1979. *The Structuring of Organizations*. Englewood-Cliffs, NJ: Prentice Hall.
- Mintzberg, H. 1983. *Power in and Around Organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Mulrow, C.D. 1987. “State of Science.” *Annals of Internal Medicine* 106: 485-88.
- National Institute on Mental Retardation. 1982. *Experimenting with Social Change – An Interpretive History of the Southern Alberta ComServ Project*. Toronto: National Institute on Mental Retardation.
- Neufeldt. 1986. “Managing Change in Rehabilitation Services.” *Management and Administration of Rehabilitation Programs*. London: Croom Helm.
- Neufeldt. 2003a. “Disability in Canada: An Historical Perspective.” In *In Pursuit of Equal Participation: Canada and Disability at Home and Abroad* (pp. 22-83). Toronto: Captus Press.
- Neufeldt, A.H. 2003b. “Canada’s Approach to Disability: An Historical Perspective.” In Henry Enns and Aldred H. Neufeldt, eds., *In Pursuit of Equal Participation: Canada and Disability at Home and Abroad* (pp. 22-80). Toronto: Captus Press.
- Neufeldt, A.H. 2003c. “How Much Knowledge on

- Mental Health and Work Related Policies and Programs Is Evidence-based?" Paper presented at Hemispheric Conference on Work and Mental Health, Pan American Health Organization, Mexico City, Mexico, October 7-8.
- Novak, J. and D.B. Gowin. 1984. *Learning How to Learn*. Cambridge, UK: Cambridge University Press.
- O'Hara, P.L. 1995. "Employee Assistance Plans in Canada." *Employee Benefits Journal* 20(3): 23-26.
- Osterberg, D. 2000. "Luhmann's General Sociology." *Acta Sociologica* 43(1): 15-25.
- Peck, B. and L.T. Kirbride. 2001. "Why Businesses Don't Employ People with Disabilities." *Journal of Vocational Rehabilitation* 16: 71-75.
- Peters, T. and N. Austin. 1985. *A Passion for Excellence: the Leadership Difference*. New York: Random House.
- Pettigrew, A., E. Ferlie and L. McKee. 1992. *Shaping Strategic Change*. London: Sage.
- Poole, C.J.M. 1999. "Can Sickness Absence Be Predicted at the Pre-placement Health Assessment?" *Occupational Medicine* 49: 337-39.
- Rogers, E.M. 1962. *Diffusion of Innovations*. New York: Free Press of Glencoe.
- Roman, P.M. 1999. "Workplace Managed Care Research: Successful EAP Models." Unpublished presentation (available from author at Center for Research on Deviance and Behavioral Health, University of Georgia).
- Schon, D. 1971. *Beyond the Stable State*. London: Temple Smith.
- Schott, R.L. 1999. "Managers and Mental Health: Mental Illness and the Workplace." *Public Personnel Management* 28: 161-84.
- Senge, P. 1990. *The Fifth Discipline: The Age and Practice of Learning*. London: Century Press.
- Sim, J. 1999. "Improving Return-to-work Strategies in the United States Disability Programs, with Analysis of Program Practices in Germany and Sweden." *Social Security Bulletin* 62(3): 41-50.
- Sparks, K., C. Cooper, Y. Fried and A. Shirom. 1977. "The Effects of Hours of Work on Health: A Meta-analytic Review." *Journal of Occupational and Organizational Psychology* 70: 391-408.
- Sparks, K., B. Faragher and C.L. Cooper. 2001. "Well-being and Occupational Health in the 21st Century Workplace." *Journal of Occupational and Organizational Psychology* 74(4): 489-509.
- Stichweh, R. 2000. "Systems Theory as an Alternative to Action Theory? The Rise of 'Communication' as a Theoretical Option." *Acta Sociologica* 43(1): 5-13.
- Strakowski, S.M., J.R. Williams, D.E. Fleck, M.P. Delbello. 2000. "Eight Month Functional Outcome from Mania Following a First Psychiatric Hospitalization." *Journal of Psychiatric Research* 34: 193-200.
- Teich, J.L. and J.A. Buck. 2003. "Datapoints: Mental Health Services in Employee Assistance Programs in 2001." *Psychiatric Services* 54: 611.
- Tushman, M.L. and C.A. O'Reilly. 1997. *Winning through Innovation*. Boston: Harvard Business School Press.
- Vahtera, J., M. Kivimaki and J. Pentti. 1997. "The Effect of Organizational Downsizing on Health of Employees." *Lancet* 350: 1124-28.