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Derek Strijbos, Marc Slors

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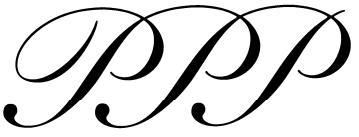

Abstract: In this article, we propose a two-dimensional analysis of self-management in mental health care. The first dimension pertains to the *object* of self-management. Some conditions to be managed directly affect a person's agential capacities and sense of self. Such conditions are "proximal-to-self." Other conditions, by contrast, are more "distal-to-self" in that they do not directly affect a person's sense of self. The second dimension represents the *process* of self-management. Here we will distinguish between management as "control over" versus management as "facilitation of" health promoting conditions or behavior. We argue for a division of labor between management-as-control and management-as-facilitation in the self-management of (mental) illness. The two-dimensional analysis of self-management that we will propose is intended as an antidote against the naïve common-sense view of self-management as "taking conscious control over one's health conditions." This is a one-sided and unrealistic representation of what it means to cope with (mental) illness. The proposed analysis distinguishes four types of self-management intervention, which can be combined in diverse ways. Hence, we argue, it can serve as a tool for determining realistic, person-specific and context-sensitive self-management interventions. Thus, it may also help to reduce (self-) stigmatization and foster a realistic understanding of empowerment.

Keywords: Self-management, conscious control, facilitation, management of the self, mental health

In the last decade or so, we have witnessed an increasing interest in self-management programs in mental health care. With the promise of increasing autonomy and well-being for patients, stimulating shared decision making and making health care more (cost) efficient (Greenhalgh, 2009; Siantz & Aranda, 2014), self-management interventions are currently being investigated in a variety of psychiatric conditions, including bipolar disorder, major depressive disorder, post-traumatic stress disorder, and attention deficit/hyperactivity disorder. In many countries, self-management programs have already been widely implemented in mental health practice. The concept of self-management has slowly but surely gained a central place in the normative

characterization of what high-quality professional mental health should involve. Governmental, professional, scientific and patient organizations stress the role of self-management in state-of-the-art treatment of mental illness.

This growing trend toward self-management within mental health care has not been without criticism, however. Words of caution have been raised against a one-sided understanding of self-management as "medical" or "disease" self-management, focused on symptom reduction and controlling disease parameters. Whereas disease management within the medical model traditionally focuses on symptoms and other clinical parameters, alternative approaches highlight the reality of managing the emotional and social consequences of living with a chronic condition (cf. Lorig & Holman, 2003), stress the importance of recovering a sense of personal identity, empowerment and regaining social roles (cf. Leamy, Bird, Le Boutillier, Williams, & Slade, 2011), and urge to include dimensions of agency and self-experience in self-management programs (cf. Kemp, 2011; Van Geelen & Franssen, 2017). This culminates in a conception of self-management as management *of* the self (van Geelen, 2014) as opposed to management (of a given condition) *by* the self. This line of critique in the self-management literature concerns what we might term the *objects* or *targets* of self-management. That is, they target *what it is* that is supposed to be managed in self-management for people with mental illness.

But what about the "management" part in self-management? What exactly does "management" in self-management consist of? Surprisingly, this question has not received proper attention within the self-management literature. This is unfortunate, because it leaves ample room, for policy makers, clinicians and patients alike, to adopt a naïve view of self-management as "consciously taking control over one's life." Over the past decades, psychological research has shown that the commonsensical idea of conscious intentional action that underlies such a naïve view entails a mistaken depiction of human motivation and human intentional agency. Therefore, we need a more realistic idea of what self-management can actually consist of. In this article, we propose a realistic and detailed analysis of self-management in mental health care.

The analysis we propose is two-dimensional. The first dimension pertains to the *object* of self-management. Some conditions to be managed directly affect a person's agential capacities and sense of self. Such conditions are "proximal-to-self." Other conditions, by contrast, are more "distal-to-self" in that they do not directly affect a person's sense of self and agency. The second dimension represents the *process* of self-management. Here we will distinguish between management as "control over" versus management as "facilitation of" health promoting conditions or behavior. We argue for a division of labor between management-as-control and management-as-facilitation in the self-management of (mental) illness. We will argue—and explain—later on that, as a rule of thumb, *we should help patients to facilitate what they cannot control and control what facilitates them*. By plotting the two dimensions as axes, the proposed analysis distinguishes four types of self-management intervention, which can be combined in diverse ways. We argue, these four types can serve as a tool for determining realistic, person-specific and context-sensitive self-management interventions. It may also help reduce (self-) stigmatization and foster a realistic understanding of empowerment.

The article is set up as follows. In the next section, we will discuss reasons to forgo a naïve view of self-management as requiring conscious will power. This clears the ground for a more realistic and nuanced view of self-management presented in subsequent sections. In the third section, we will discuss the object-axis of the proposed analysis, that is, the distinction between conditions that are proximal-to-self and conditions that are distal-to-self. In the fourth section we will introduce the process-axis and explain how management as control relates to management as facilitation. In the fifth section we will plot the two dimensions of self-management as axes and distinguish four types of self-management intervention.

The Limited Role of Consciousness in Planning and Motivation

Planning one's actions and finding the motivation to act on such planning are important topics in widely implemented self-management programs such as Illness Management and Recovery (IMR) and Wellness Recovery and Action Planning (see the third section). But what does motivation and action planning amount to? What psychological processes are really involved? It is tempting, perhaps, to have recourse to common sense to answer such questions. Acting in a self-management intervention—for example, administering insulin, keeping a healthy diet or going to a peer support group—can easily be though of as requiring some form of conscious will power, a conscious determinate intention that somehow directly causes health promoting behavior.

However, in this section we discuss reasons to reject such a naïve view. In the last few decades a considerable neuroscientific and psychological literature has emerged showing that the role of consciousness in causing our actions is limited and often indirect. If self-management hinges on our ability to exert permanent or frequent conscious command over our actions, the concept would be in dire straights.

The issue of conscious agency has been subject to intense debate in the field of neuroscience, psychology and philosophy the past decades. It is fair to say the debate started with Benjamin Libet's research, showing that conscious intentions do not initiate actions but follow the unconscious onset of actions instead (Libet, Gleason, Wright, & Pearl, 1983). These findings have been replicated in diverse labs with consistent results (Haggard & Eimer 1999; Soon, Brass, Heinze, & Haynes, 2008). Such research is only critical of the presumed initiating role of conscious intentions; it leaves room for consciousness to intervene in actions we are about to execute (Libet, 1985). Moreover, once we are conscious of the fact that we are about to act, such consciousness can be said to be at least part of the cause of our actions, according to this research.

However, in an extensive study, drawing on a rich array of resources, Daniel Wegner has argued forcefully against the remaining causal efficacy of conscious intentions in Libet's picture (Wegner, 2002). According to Wegner, we fall prey to an illusion when we judge that we consciously cause our actions. Such causal judgments arise because we postulate causal relations between a conscious mental event and an action under three conditions: (1) the conscious event must precede the action, (2) the conscious mental event must have some obvious bearing on the action, for instance because it consists of a conscious intention to carry out this action, and (3) there must be no obvious alternative cause for our action, such as someone else who moves our limbs. In previous research, Wegner had already shown that it is possible to create a situation in which a person's actions are not caused by her conscious intentions while (1)-(3) obtain In such cases people are inclined to judge that their actions are caused by their conscious intentions, even though this is demonstrably not the case (Wegner & Wheatly 1999).

Our commonsensical inclination to think that many or even most of our actions are issued by conscious deliberation and conscious intentions is enhanced by the well-documented phenomenon of confabulation. Research on split-brain patients, for instance, has shown that people have a remarkable proclivity for conjuring up plausible stories about their conscious action-intentions, suggesting conscious deliberation, even when these actions can only have been caused unconsciously (Gazzaniga, 1995). Earlier research on consumer choices had shown the same results (Nisbett & Wilson 1977). This ties in with other developments in the social sciences. In psychology, a movement under the heading of "the new unconscious" emphasizes the important and often underestimated role of unconscious processing in action control (Hassin, Uleman, & Bargh, 2008). In economics Tversky and Kahneman have initiated the two-systems approach to action control, suggesting that most of our actions are under the control of "fast and frugal" unconscious mechanisms while only a tiny proportion of our actions are under the control of slow, rational deliberation (Kahneman, 2011).

Given these insights, is it realistic to suppose that the health-promoting actions of patients involved in self-management strategies should all be issued by their conscious intentions? We think that the warning that is issued by the literature referred to above should be taken seriously. We should be careful not to initiate self-management interventions that require near-continuous conscious effort in monitoring the patients' circumstances or initiating appropriate actions. At the same time, we should not throw out the baby with the bathwater. Many self-management programs highlight the importance of forming long-term intentions and detailed action plans (see the third section). This suggests that that long-term intentions do have a causal role to play in health-directed behavior targeted in these programs. Importantly, this is *not* ruled out by the literature mentioned.

In a large meta-study, Baumeister, Masicampo, and Vohs (2011) have summarized scientific studies that highlight the efficacy of conscious intentions and conscious deliberation. Consciousness, they conclude, is remarkably effective in a remarkably large and varied number of instances. This conclusion can be squared with the attack on the efficacy of conscious deliberation and intention discussed above by noting, first of all, that the demonstrated inefficacious conscious intentions in the studies by Libet, Wegner, Haggard, and Haynes are *short*-term intentions. In fact, they are intentions that precede actions by not more than a few seconds at most. As Baumeister and colleagues point out, longer term conscious intentions fare a lot better in scientific research. A prominent example of this is Peter Gollwitzer's research on implementation intentions (Gollwitzer, 1999; Gollwitzer & Sheeran, 2006). In this research, it is shown that the more concrete longer term intentions are, the more likely we are to act on them. The point that is relevant here is that this research demonstrates quite clearly that some longer term conscious intentions and longer term, conscious deliberation is efficacious.

The efficacy of longer term conscious intentions should, of course, be fitted into a larger picture that encompasses the inefficacy of short-term intentions and an important role of unconscious processing in driving our actions. In this context, Baumeister stresses that "conscious causation is often indirect and delayed, and it depends on interplay with unconscious processes" (Baumeister et al., 2011, p. 331; see also Baumeister & Masicampo, 2010, 948). What interplay? If short-term intentions are not the initiators of actions, longer term intentions cannot cause actions by transforming themselves at the appropriate moment into conscious short-term intentions to act (see Pacherie, 2008). Rather, longer term intentions predispose us to be responsive—unconsciously—in the intended way when the right circumstances arise (see Slors, 2015, 2019). Think of a diabetic who feels her blood sugar dropping and automatically—that is, without conscious reflection—measures her blood sugar and administers insulin. Such actions do depend on consciously formed intentions to act. But this is, in Baumeister's terms, indirect and delayed conscious causation. The longer term intention "programs for" a particular kind of situated responsiveness to (pre-reflectively, sometimes unconsciously) deploy certain health promoting actions.

The upshot of these considerations is that any realistic notion of self-management should not hinge, implicitly or explicitly, on continuous conscious monitoring of one's condition and exerting conscious will power to respond to it. It should take into account the fact that most of our actions are initiated and guided by unconscious processes and that the role of conscious reflection is limited and often indirect. Thus, conscious reflection in self-management should mainly be directed at ways in which one can predispose oneself to respond appropriately, but without too much conscious reflection, to specific circumstances, as well as at ways in which one can manipulate one's environment, both physical and social, so that it becomes conductive to acting appropriately.

The two-dimensional analysis of self-management that we will develop in what follows heeds these warnings. It does not hinge on a naïve notion of conscious control. When we will speak of "control," in the fourth section, we are *not* talking about the *conscious initiation* of actions, but rather about a relation of direct causation that a given action is supposed to have with a specific desired outcome. But first, we will turn to the health

conditions that are the objects of self-management. Here too, when we discuss the extent to which certain mental health conditions affect a patient's ability to manage her life, we do not presume that such management consists of exerting conscious will power, which may or may not be affected by the patient's condition.

The Object of Self-Management: Proximal versus Distal-to-Self

The first dimension of our two-dimensional analysis targets the *object* of self-management: the condition of the patient to be managed. The crucial issue here is the following: To what extent is the patient's self-experience and capacity for autonomous agency affected by the condition targeted in self-management? At one end of the spectrum, we find health conditions that affect a patient's agential capacities and sense of self minimally and only indirectly. We shall label these conditions *distal-to-self*. At the other end of the spectrum, we find health conditions that have direct impact on the phenomenology and agential capacities of the patient. These conditions are *proximal-to-self*.

Mild or moderate hypertension is an example of a condition that is relatively *distal-to-self*. It has relatively few symptoms and a pathophysiology that only indirectly connects to factors within the experiential field of the patient (e.g., life style, stress levels). First-person experience of the patient is a distal causal factor in the etiology and pathophysiology of hypertension (and/or vice versa). Furthermore, hypertension can be described with little implications as to what it is like for the patient to have the condition. This means that hypertension can be identified, both causally and conceptually, in relative isolation from considerations regarding the phenomenology and agential capacities of persons diagnosed with the condition.

A severe depressive episode in the context of a major depressive disorder is a good example of a condition that is *proximal-to-self*. Here, changes in both the experiential field and the agential capacities of the patient are directly implied in understanding the nature and causal structure of the condition. Depression is conceived as a mood disorder with symptoms such as low mood, anhedonia, change in self-evaluation (such as excessive feelings of guilt), concentration problems and apathy. These symptoms directly impact on the patient's self.[1]

For example, autonomous agency requires a relatively stable diachronic sense of oneself as a person invested in the world and in others. It requires the ability to set goals based on personal values, to deliberate, evaluate, decide and make action plans, to nourish one's motivation and execute these plans. A severe depressive episode marks a dramatic disruption of these capacities. It is a condition that is relatively *proximal-to-self*, affecting many corners of one's being in the world from the first-person perspective (cf. Ratcliffe, 2014).[2]

The distinction between proximate-to-self aspects and distal-to-self aspects of medical conditions helps to determine the focus of self-management interventions. In the case of an (adult) patient with a medical condition which is distal-to-self, self-management interventions can by default treat the patient as an adequately self-governing agent who is able and willing to learn health promoting skills and share responsibility with the professional in managing her condition. This is a case of (co-)*management of the condition* by the patient herself, who is assumed to have a required minimal degree of mental capacities required for self-governing agency. A patient who suffers from a medical condition which is proximal-to-self and whose mental capacities are significantly affected, in contrast, needs and deserves interventions that specifically target the problems that undermine her disturbed sense of self and her agency. This is a case of management *of* the self, with the support of others, that is, management of (self)experience and agential capacities affected by the condition (cf. Van Geelen, 2014; Van Geelen & Fransen, 2017).

Self-management programs can target several aspects of a condition, some of which are more proximal-to-self while others are more distal-to-self. Type 1 diabetes, for example, can be approached as a malfunctioning of the pancreas causing a deficiency of the amount of insulin pumped into the bloodstream needed to maintain appropriate blood sugar levels. From this

perspective, teaching an adolescent how to self-regulate blood sugar levels can be understood as an intervention that targets a condition that is relatively distal-to-self. The focus is on teaching certain practical skills. Type 1 diabetes can also be approached, however, as a loss of the self-evident healthy functioning, with accompanying feelings of vulnerability, vigilance, and anxiety that affect the way one relates to one's own lived body and one's daily activities and which may undermine one's self-regulating capacities. This approach targets type 1 diabetes as a condition that is relatively proximal-to-self. It suggests self-management interventions that support the patient to recover a sense of basic trust in oneself and the future, that is, interventions that focus on management of the (vulnerable, fragile, etc.) self.

This is certainly the case regarding self-management of mental illness. As a rule of thumb, mental illness is relatively proximal-to-self. A depressive, manic or psychotic episode, for example, marks a dramatic alteration or disruption of one's experience of oneself as being-in-the-world, invested in the world, others and the future. Various mental disorders are defined in terms of criteria that directly impact on the capacity for self-government, such as problems related to emotion regulation, impulse control, executive functioning, coping mechanisms, concentration, self-esteem, desire and core beliefs about self and others.

Conditions distal-to-self solicit explanations in terms of (biological) design and causal mechanisms, whereas conditions proximal-to-self are also open to understanding in terms of intentional states, normative expectations and phenomenal experience. In practice, managing a condition proximal-to-self such as mood disturbances or emotion regulation problems requires a fair degree of empathic understanding and interpretation of the person as an intentional being who experiences the world, self and others in certain ways, who attributes meaning to passing events and to whom certain things matter. In self-management, this requires interpretation of *oneself* in terms of changes in experience, meaning and agential capacities that are involved in having the condition. Many forms of psychotherapy and self-management programs are designed to help people in their self-interpretation efforts so as to open up ways of conceiving their conditions that provide possibilities for further self-directed interventions. By providing theoretical constructs, practical scripts, helpful metaphors and recovery narratives, the social environment facilitates the person's own interpretation of the condition to be managed. We will briefly come back to this in the fifth section.

Self-management programs in mental health typically include interventions directed at objects proximal-to-self. IMR, for example, provides a structured program that helps patients to get a clearer focus on their motivation and the goals they want to achieve, learn about their psychological and personal strengths and vulnerabilities and develop skills in problem solving, coping with stress and persistent symptoms, and building social support (cf. Mueser et al., 2002, 2006). With slightly different emphasis, WRAP is designed to foster participant's capacity for achieving and maintaining recovery, by developing personal wellness strategies, advanced planning to proactively respond to self-defined symptom triggers and early warning signs of impending crisis, advanced crisis planning and post-crisis planning (cf. Cook et al., 2012). WRAP has its conceptual foundations in self-determination theory (Ryan & Deci, 2000), according to which lasting behavioral change is mediated by autonomous motivation characterized by a sense of volition, self-initiation and endorsement of their behavior. IMR is inspired by the transtheoretical model (Prochaska & DiClemente 1984), which describes the stages of motivation in relation to behavioral change, and the stress-vulnerability model (Liberman et al., 1986; Zubin & Spring, 1977), which describes course and outcome of schizophrenia in terms of the dynamic interplay between biological vulnerability, stress and coping. In other words: these programs conceive of self-management interventions as for a large part consisting in fostering participants" self-governing agency, that is, influencing factors proximal-to-self.[3]

These self-management programs, and underlying views on behavioral change and recovery, share a plausible assumption. This assumption is that health problems that are relatively proximal-to-self, tend to have a negative impact on the patient's

"managerial" capacities to self-regulate, which therefore deserve proper attention in treatment programs. This urges us to have a closer look at the *process* of self-management.

The Process of Self-Management: Control versus Facilitation

The process of self-management is about the *kind* of management employed in self-management of a health condition. According to the Oxford English Dictionary, "to manage" stems from the fourteenth-century Italian "maneggiare," which means "to be able to use skillfully," more in specific: "to direct or exercise a horse" (derived from classical Latin "manus" – hand). It was later used in a variety of ways, ranging from "cultivating" or "arranging with care," to "manipulating" or "exerting one's influence or authority over."

The etymology of the word already hints at the distinction we want to make between management as *control* versus management as *facilitation* of a process directed at a certain desired outcome. Staying with the equestrian origin of the word, consider the skill of horseback riding. A horseback rider uses various techniques to indirectly steer the behavior of the horse in the desired direction. Or take the activity of driving a herd of cattle. The behavior of a herd is dynamically complex, responsive to several external and internal factors (interaction between individual animals in the herd, environment, vegetation, weather conditions, other animals, etc.), and therefore heavily context-dependent and relatively difficult to predict. The drover is not in the position to directly intervene on the course the herd is taking. Instead, she uses her knowledge of the context-dependency of the herd's behavior to manipulate the herd by manipulating its context. The effect of her interventions will vary depending on the internal state of the herd, and will therefore have a certain degree of unpredictability. The drover depends on her moment-to-moment interpretation of the herd's state and position to decide what interventions (restrain the dog, direct the dog, move her own body, do nothing for some time, etc.) will indirectly steer the herd in the desired direction.

Compare this with the activity of driving a car. Being in the driver's seat of a properly functioning car, one has fairly direct and predictable influence over the car's trajectory. The behavior of a customized car is far less dynamically complex; its design and mechanics usually ensure that the driver's interventions (pulling the wheel, stepping on the gas pedal, hitting the brakes, etc.) have a direct, relatively[4] context-independent and predictable effect on its trajectory. Even when driving on "automatic pilot,"[5] one can directly change the course of the car in this way when the need arises.

Self-management as control is like driving a car in the sense that one can exert relatively direct and predictable causal influence over the target object by means of one's actions. Consider, as an example, a patient with insulin dependent diabetes who monitors her blood sugar levels and self-injects insulin when blood sugar levels are too high. The self-management behavior of self-injecting insulin has relatively direct and predictable impact on the target outcome (the blood sugar level).

Self-management as facilitation, in contrast, is more analogous to the activity of horseback riding or driving a herd of animals. Our bodily processes, moods, thoughts and emotions often behave more like a difficult horse than a customized car, so to say, especially in the context of health problems. Many health problems do not allow for self-management by means of control.

Consider, as an example, the same patient with diabetes having problems keeping a healthy diet. To reach a desired outcome (stable blood sugar levels within a certain range), she needs to change her eating habits. Changing such basic dispositions is typically not under one's direct control. One reason for this is that such dispositions are shaped by many interdependent factors (biological, psychological, and social) and are heavily context dependent, such that influencing one such factor will not automatically lead to the desired outcome. In our example, refraining from buying sweets in the grocery store usually will not be enough to control food intake, for instance. There are many other factors to take into account, like overeating as a means of coping with emotional distress, eating habits of family members, food intake when eating outdoors, and so on. Another reason why

basic dispositions are not under our direct control is that changing them, takes place on a larger time scale and requires stable long-term intentions and a fair amount of motivation through time (see the second section). Such factors are themselves difficult to maintain and under the influence of a myriad of other biopsychosocial factors. Nurturing one's long-term intentions and motivation to eat healthier foods is itself a proper target of self-management. And these psychological targets are typically not within the span of our direct control either.

The distinction between management-as-control and management-as-facilitation hinges on 1) the degree of unpredictability of the behavior of the system or "object" one is trying to manage and 2) the context-dependency of one's behavior and hence the (in)directness of the causal impact of one's interventions on the target outcome. Control implies that one's interventions have a highly predictable, context-independent and direct effect on the target outcome. Usually this is because the underlying causal processes of the target system are stable across contexts and well-structured, with few degrees of freedom. The intervention is a direct cause that produces the effect without depending on further causal and mediating factors.

In the case of facilitation, in contrast, the behavior of the object is typically dynamically complex and heavily dependent on the internal state and factors in the external environment of the system. Its underlying causal processes often show less structural stability, with many degrees of freedom. Moreover, an intervention by means of facilitation is typically an indirect cause of the target object, only affecting the outcome in conjunction with, and depending on, other causal and mediating factors, factors which themselves might have more predictable and/or direct effects on the outcome.[6]

Thus, in the prototypical case of control, one's self-management behavior has *relatively direct and highly predictable causal impact* on the selected outcome (e.g., self-injecting insulin to control one's blood sugar level). In the case of self-management as facilitation, the relevant self-management behavior has *relatively indirect* causal impact on the selected outcome, that is furthermore less predictable due to the interplay with other factors and the dynamic nature of the target's behavior. Facilitation aims to influence the proper arrangement of these other factors, which together and in specific constellations do have a more direct and more predictable causal impact on the target outcome (e.g., going to a peer support group to nurture one's motivation to remain abstinent from alcohol).

The behavior of human beings typically does not unfold in linear, mechanical fashion, which makes the idea of control by means of precise and direct "surgical" interventions inapt as a model for self-management in mental health care. Rather, health problems often behave as complex dynamical systems, in which a multitude of causal and mediating factors show non-linear interdependency relations among themselves and with various environmental cues, resulting in unpredictable emergent patterns of (mal)adaptive self-organization of symptoms and behavior in relation to the environment. Such understanding of health problems and mental illness as complex dynamical systems is not new (Engel, 1977; Sturmberg, Martin, & Katerndahl, 2014), but has recently attracted new interest in the wake of network models of mental disorders (e.g., Borsboom & Cramer, 2013; Borsboom, Cramer, & Kalis, 2019; Wichers, Wigman, & Myin-Germeys, 2015).

An important feature of complex systems is that they can be entirely deterministic in their behavior over time, yet unpredictable. Small and/or slow changes to input variables may lead to disproportionately large outcomes and rapid phase shifts. With multiple variables interacting with one another in non-linear ways, it is often practically impossible to predict with precision what the effect will be of manipulating one or more control variables upon the overall behavior of the system. Interaction with the environment significantly adds to this feature of complex systems. Environmental factors (social, economic, ecological, etc.) will have non-linear effects on the behavior of the system, which in turn will lead to changes in the environment, and so on.

Within such systems, interventions by means of facilitation and control imply a difference in *scope* regarding the causal process leading to the target outcome. Consider the graph in Figure 1, where variables V_1 through V_5 are responsible for the dynamics of the behavior of system S.

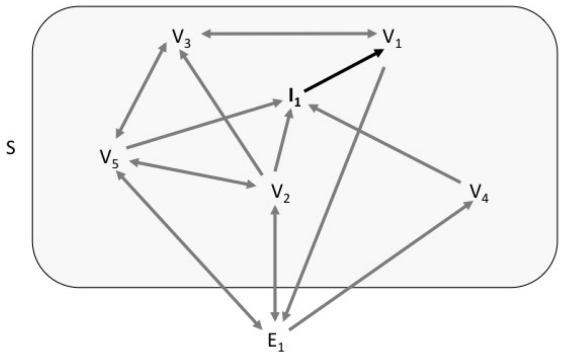

Figure 1. An intervention in a complex system.

Intervention I_1 may be a means of directly and predictably influencing the value of variable V_1, and in that sense represents management-as-control *with respect to that variable*. However, relative to *the whole system*, intervention I_1 only indirectly (and less predictably) causes behavioral changes in S. Thus, I_1 may be a means of *facilitating*, rather than controlling the desired behavior of S. For example, self-administering adequate doses of insulin on a regular basis (I_1) relatively directly and predictably influences—and therefore controls—the diabetic's blood glucose level through time (V_1), which enables him to visit peer group sessions (E_1), which in turn helps him to keep motivated (V_2) to, for example, keep a healthy diet (V_3) and nourish the disposition to adequately self-inject insulin (I_1). At the same time, peer support ($E_{1)}$ might help improve his skills in self-injecting (V_4) and teach him a few things about healthy life style (V_5), which in turn facilitates maintaining a healthy diet, and the overall stability of S, and so on. In complex dynamical systems, controlling one variable is a means of facilitating specific behavior of the system as a whole, which in turn might facilitate the process of controlling that variable.

A shift in focus of the target object can thus result in a change in the kind of management that is suitable to reach the desired outcome. Self-administering insulin on a daily basis requires the development and maintenance of a new habit. Self-management behavior directed at nurturing this new habit requires other self-management activities, arguably ones that are more on the facilitating end of the spectrum (assuming that developing habits is a dynamically complex process that is not under one's direct control). Thus, to *control* one's blood sugar level by self-injecting insulin, one needs to *facilitate* the development of a new health-related habit. Facilitating such habit might be promoted by *controlling* something else (e.g., setting a timer on one's smartphone).

Self-management often involves such *facilitation-control loops*, where each intervention is directed at certain specific object parameters in the management process (Figure 2). These facilitation-control loops typically reveal a means-ends structure relative to certain target outcomes: setting a timer on one's phone [control] *in order to* develop a new health-related habit of self-administrating insulin [facilitation] *in order to* regulate one's blood glucose level with insulin [control], and so on.

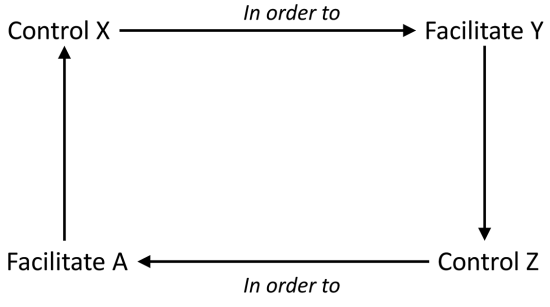

Figure 2. A facilitation-control loop.

As we already mentioned, the causal structure of the processes leading to illness and health involve non-linear, dynamical processes with multiple feed-forward and feedback loops. Targeted, "surgical" interventions on specific causal factors, which leave the impact of other causal factors unaltered, are practically impossible. Thus, in our example, joining a peer support group might help to maintain motivation, improve self-confidence, provide meaningful activities and directly provide practice in preparing low-sugar foods, each of which might influence the other factors that directly or indirectly impact on one of the target outcomes (one's blood glucose levels).

There is an interesting parallel here with what is known in the literature as extended cognition and cognitive scaffolding (Clark, 1998, 2008; Menary, 2010; Sterelny, 2010). The idea in this literature is that human cognitive capacities are enhanced, aided, and to some extent even constituted by various artefacts: pen, article, abacuses, smartphones, and so on, to mention just the most obvious examples. In a similar fashion, people's mnemonic, volitional or affective capacities can be scaffolded or extended by external means. Electronic calendars with alarm functions can help to remind patients of required actions. Securing the presence or direct accessibility of family and friends might help addicts dealing with periods of craving. The same goes for prearranged sets of distractive activities. Carefully thought out day-planning or sports programs can be of help to keep one's mood stable. In such cases a patient's social and/or physical environment functions as scaffolding the affective and/or volitional abilities of people coping with mental illness.

Self-Management: A Two-Dimensional Approach

The two dimensions of self-management can be plotted orthogonally, as visualized in Figure 3. The horizontal axis represents the object dimension of self-management, ranging from proximate-to-self to distal-to-self. The vertical axis represents the process dimension of self-management, ranging from control to facilitation. On this model, there are four quadrants in which self-management interventions can be located.

i. Proximate-to-self/facilitation: interventions that indirectly influence factors or conditions that have high impact on self-experience and agency.

ii. Distal-to-self/facilitation: interventions that indirectly influence factors or conditions with relatively low impact on self-experience and agency.

iii. Distal-to-self/control: interventions that have a relatively direct influence on factors or conditions with relatively low impact on self-experience and agency

iv. Proximate-to-self/control: interventions that directly influence factors or conditions with high impact on self-experience and agency.

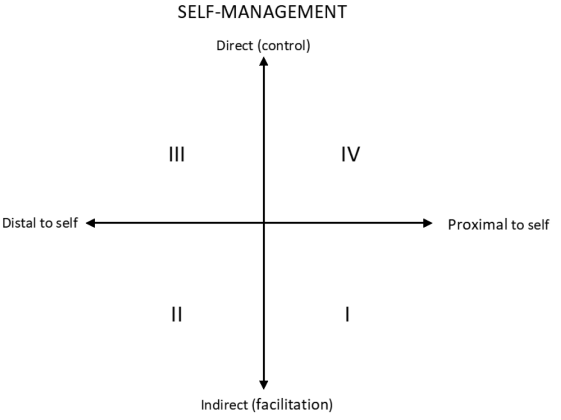

Figure 3. Plotting the two dimensions of self-management.

From a conceptual point of view, all four quadrants seem to represent possible interventions. That is: there does not seem to be any inconsistency in de idea of self-management interventions in any of the four quadrants. Empirically, however, our estimate is that facilitation in quadrants (i) and (ii) are most significant in clinical practice. Patients can control certain parameters related to their health conditions, but only within an extensively facilitating context. For example, the diabetic can reliably control her blood sugar levels by self-injecting insulin, but only by facilitating this behavior (e.g., setting timers) and nurturing many other behavioral dispositions that impact on the course of diabetes (e.g., diet, exercise).

Moreover, we think that interventions in quadrant (iv) (proximate-to-self/control) carry the least weight in effective self-management. As we have seen in the second section, scientific findings strongly suggest that we do not *consciously control* our actions. Rather, we facilitate our actions with our conscious intentions by shaping our behavioral dispositions. In similar vein, we think that the interventions that patients can adopt to influence their affective, volitional, cognitive and other (self-) states will generally not manifest direct control over such states. Rather, like driving a herd, patients can learn to anticipate and adopt strategies to influence their (social) environment such that their mental states and behavioral dispositions are steered in the preferred direction. This type of self-regulation is dubbed "self-nudging" in consumer studies (Torma, Aschemann-Witzel, & Thøgersen, 2018)—a term that we think is perfectly apt in the domain of self-management in mental health care too.

Of course, people can and do use type (iv) interventions to influence their mental states. The most dramatic example is taking drugs to control one's moods and emotions. Ironically, however, such "quick fix" interventions tend to be highly addictive and for some individuals can be disastrous for their (mental) health and general functioning in the long run. Less dramatic, and clinically much more beneficial, are certain psychological interventions such as mindfulness exercises, which can have relatively direct impact on one's current mental states.[7]

However, rather than categorically pleading for or against certain types of self-management interventions in clinical practice, we want to stress the relevance of each type *within the facilitation-control loops* that characterize the dynamics of self-management (Figure 2). The diabetic joins a self-management course to learn how to *program* herself (facilitation) to make and maintain the necessary changes in her environment and her life style, to adequately self-administer insulin (control) under the right circumstances, which enables her to be more active and to do regular physical exercises, *nurturing* her motivation to keep a healthy diet with (indirect) positive impact on her blood sugar levels (facilitation). A psychotherapy program *facilitates* the borderline patient to develop a new disposition to adequately seek help, which triggers a timed conscious intervention in times of suicidal crisis (e.g., calling my therapist now) as a means of *controlling* his immediate context (talking to my therapist) that helps to *facilitate* in steering his thoughts and emotions away from suicidal ideation.

These examples reveal an important point. Self-management interventions should be *person-specific* and *context-sensitive*. The distinction between the four types of intervention helps to make explicit how this can be done. Here are a few examples that illustrate our point:

- The relative importance of type (i) and type (iv) interventions (proximal to self) in self-managing a condition will i.a. depend on the patient's psychological make-up (personality traits, past experience, dominant coping mechanisms, self-efficacy, emotional stability, etc.). Which type of intervention deserves emphasis also depends on the current situation one is in. In times of personal stress or demoralization, interventions directed factors proximal-to-self become relatively important.

- There is an important asymmetry among the four types of intervention represented in Figure 3. As mentioned in the third section, effective self-management interventions presuppose a certain degree of autonomous agency, which in turn requires a relatively stable sense of oneself as a person invested in the future, the ability to set goals based on personal values, to deliberate, decide, make action plans, execute and evaluate action, and so on. Whenever a condition compromises a patient's agential capacities, both clinical and ethical considerations give priority to type (i) interventions, directed at facilitating the patient's self-experience and capacities for autonomous agency.

- This also suggests that whenever self-management programs aimed at training interventions of type (ii), (iii), and/or (iv) are not effective, attention should be paid to the possibility of proximal factors that undermine agency and require facilitating interventions of type (i). In psychiatry, these considerations carry even more weight than in medicine in general. As we have argued, mental disorders are (by definition) proximal-to-self with high potential

impact on one's "managerial" capacities. Importantly, these proximal factors are *not* within patients" span of control. This suggests that type (i) self-management interventions (proximal-to-self / facilitating) deserve special attention in psychiatric self-management strategies. This is in line with the general outline of widely implemented self-management programs such as IMR and WRAP, which, as we saw, put emphasis on teaching skills that *facilitate* setting personal goals, maintaining mental stability and implementing healthy routines.

- Because mental illness as a rule implies problems proximal-to-self, personal experiences and values, personality characteristics and cognitive capacities will play a relatively large and decisive role in shaping self-management strategies compared to health problems that are more distal-to-self. And as mental health problems behave like complex dynamical systems, monitoring their trajectory through time and across different contexts becomes especially important. Relatively small changes in context may result in rapid phase shifts, especially in times of impending crisis. The relative emphasis on one or more of the four quadrants in Figure 3 should therefore be informed by the current state of the system, relative to context. Consider two different phases of alcohol addiction: (a) being in sustained full remission for a considerable time, and (b) trying to quit drinking after relapse. In situation (a), the person experiences generally high levels of personal well-being and little craving for alcohol. He sleeps well, his mood is stable and generally positive, he experiences little stress, he has meaningful social relations and a job that he likes. After years of alcohol abuse, his life is finally working out for him. He has learned to regard a minimal degree of "self-maintenance" and to keep a watchful eye on certain pitfalls. Thus, he lives by certain rules which keep him out of trouble ("no alcohol in the house," "always get up early in the morning," "no long working hours," etc.). Under these circumstances, his alcohol addiction has become relatively distal-to-self: it no longer significantly affects the way he feels, thinks, wants and acts. Self-management interventions to keep on this path likewise focus more on type (ii) and type (iii). In situation (b), by contrast, the cycles of alcohol intoxication and withdrawal, all-consuming craving, feelings of insufficiency, shame and guilt, depressive moods, and so on, have high impact on self-experience and severely undermine his agential competence. In this situation, self-management interventions of type (i) are also required for facilitation of self, with the help of others (e.g., making use of one's crisis intervention plan, calling one's therapist, accept the help of important others to clear the house of alcohol and temporarily hand over control over one's finances, taking medication to suppress withdrawal symptoms, etc.).

We would argue—on the basis of the insights discussed in the second section as well as on the basis of the observation that psychiatric conditions tend to be proximal to self, more often than not—that self-management programs in psychiatry should by default start from quadrant (i) and explore for each patient, given the current state of the self, what facilitating interventions are required to enhance or restore a coherent sense of self and agency and to assess when, how and to what extent self-management interventions in the other quadrants come within reach and can be put into practice. When a patient's managerial capacities are at stake, *self*-management by means of facilitation is typically *socially extended* and may involve *other* people providing helpful interpretative tools and arranging the appropriate context with or for you for you to recover your senses. In extreme cases, self-management might even involve others doing things *to* you, as in the case of advanced directives in psychiatric crisis. As indicated in the third section, targeting conditions proximal-to-self in practice requires particular epistemic approaches, such as empathic understanding and interpretation in terms of intentional states, moods, feelings, norms and personal narratives. By giving meaning to mental illness in these ways, possibilities for self-management intervention open up. These sense-making activities are facilitated not only by the actual interaction with others (family, therapist, peers, etc.), but also by the meaningful structures provided by the sociocultural context (the metaphors, images, scripts, narratives and the dominant values therein) that form the "hermeneutical interface" in our day-to-day social interactions.

In sum, the relative importance of the four types of self-management interventions varies from person to person, time to time, situation to

situation, and (sub)culture to (sub)culture. There is no one-size-fits-all self-management program that can be implemented as a package deal for all people suffering from a particular condition.

Conclusion

In this article, we proposed a two-dimensional analysis of the concept of self-management in (mental) health care. Regarding the *object* of self-management, the relevant question is to what extent the target of intervention directly affects or implicates self-experience and self-governing agency of the service user (proximal vs distal-to-self). As to the *process* of self-management, we proposed a distinction between management-as-control vs. management-as-facilitation, which hinges on the issue of the relative (in)directness of the causal effect of the intervention on the target outcome.

To our knowledge, this work is the first systematic treatment of the concept of self-management in (mental) health care that includes not only the notion of "self," but also provides a thorough analysis of the notion of "management" in self-management. We believe that the resulting two-dimensional framework (Figure 3) can serve as a tool to assess and improve current self-management programs so as to make them more personalized, tailored to the specific needs and characteristics of the individual service user. It urges health care professionals and service users to think about (a) the right targets for self-management and (b) the right means to intervene on these targets, and (c) in which order of priority these targets and interventions should be carried out, given the service user's specific situation and phase of his illness/recovery. We believe the framework can function as a practical heuristic for health care professionals in devising self-management programs and adjusting treatment plans to the individual needs and characteristics of their patients.

The framework can also be of great value for psycho-education for service users and their families. The distinction between proximal- and distal-to-self helps to get a clearer idea on which aspects of one's health problem have impact on one's sense of self and one's ability for self-government, which is crucial to understand and lay out a path toward functional, social, and personal recovery. Perhaps even more importantly, the distinction between control and facilitation as a means of self-management will help service users and their families, to better understand what they *can* control and what they *cannot*, and therefore should not expect themselves to be able to, control. In this way, this framework can serve as an antidote against (self-)stigmatization.

On the naïve common-sense view, the notion of self-management is still portrayed as a means of "taking control" over one's health conditions. Our (Western) folk psychology still promotes the idea that regulating one's thoughts, emotions and actions directly depends on acts of consciously deciding, intending and willing our states and dispositions to change (Baumeister et al., 2011; Wegner, 2002). Indeed, it seems that the more proximal-to-self the condition one wants or needs to change, the more we are inclined to look at forms of conscious control as a last resort. Folk psychology grapples with psychopathological phenomena such as unwanted but effective desires, compulsive actions, severe emotion and impulse regulation problems and radical changes in experience of self and others in interpersonal dynamics. The advice or imperative "to control yourself" does not help in such cases and often has adverse, (self-)stigmatizing consequences.

Human beings have little direct control over their moods, emotions, desires, motivations, and the like. But this does not mean that service users have no control over their condition. The point is that the concept of management-as-control should be restricted to those instances where they *can* directly influence certain factors that (indirectly) contribute to their well-being.

As a rule of thumb, our advice would thus rather be *to facilitate your ability to control and to control what facilitates you*. This is already implied by the notion of facilitation-control loops (Figure 2). It is crucial for a sense of self-efficacy and empowerment to know what aspects of your condition you *can* control and how to do so (e.g., blood sugar level by means of insulin injection, taking antipsychotic medication to tone down auditory hallucinations). It is equally important, however, to know how to nurture your control-

ling self-management behavior so as to transform it into steady dispositions that you can rely on. And this, as we explained, requires a great deal of facilitation. However, a certain degree of insight into and control over these facilitating factors will prove vital for making this work. A person with diabetes knows how to facilitate his disposition to self-inject insulin at the right intervals by setting his alarm, and he has control over his alarm settings, which allows him to change the settings when the doctor advices to change the intervals. A person with bipolar disorder co-produces a crisis management plan with health care professionals and his family, which specifies how others can help him to stay in balance and under which conditions he allows them to take over in times of crisis. By co-determining the content of this plan, this person has a fair degree of control over the way he is facilitated to manage his condition.

As an antidote against (self-)stigmatization, we thus propose a division, and recursive integration, of labor between management-as-facilitation and management-as-control in the process of self-management in (mental) health care. We believe this strikes the right balance between individual empowerment and social/technological dependency in helping people to cope and live with chronic conditions.

Notes

1. We have not defined "the self" more elaborately than as "subject of experience and initiator of actions." In philosophy, many different definitions and theories of "the self" have been proposed. Not all theories depict the self as something that is susceptible to impact by, for example, symptoms of depression. If the self is conceived of abstractly as the instance that has experiences or initiates actions but is as such distinct from these (cf. Popper & Eccles, 1977; Swinburne, 2013) psychiatric symptoms will be unable to affect it. In this paper we will use a richer notion of "self" that includes embodiment and narrative self-understanding (cf. Gallagher, 2013) and is connected with living a specific kind of life as an individual in a given sociocultural setting (cf. Schechtman, 2014). The self in this richer and more commonsensical sense definitely is susceptible to impact by psychiatric symptoms.

2. Note that we define the proximity-to-self of a given health condition in terms of the extent to which it affects the phenomenology and agential abilities of a patient. Given the fact that patients might differ in the extent to which they are affected by specific conditions, this means that the same condition may be more proximal to self in one patient than in another. For example, hearing that one has hypertension might affect a hypochondriac's self more severely that it affects the self of a more laid-back person.

3. This is more explicitly recognized in Leamy et al.'s (e.g., 2011) characterization of recovery-oriented mental health care in terms of CHIME: helping patients to achieve Connectedness, Hope and optimism about the future, Identity, Meaning in life and Empowerment. These aspects are argued to be crucial in the process of recovering a meaningful sense of self and regaining the ability to lead a meaningful life in dealing with chronic mental illness.

4. Of course, the driver's interventions cannot be fully context-independent; the road she drives on might be dry or slippery and the weather may be windy or not. This does not affect the conceptual distinction between control and facilitation we intend to highlight.

5. We do not mean "cruise control," but performing the actions required to control the car and respond to the traffic situation without being reflectively conscious of the processes that lead up to the decisions one takes.

6. The idea of a spectrum ranging from direct to indirect causation does not hinge on a specific theory of causation. It is compatible with nomological theories (Nagel, 1961), conserved quantity approaches (Salmon, 1984), counterfactual theories (Lewis, 1973) and interventionist approaches (Woodward, 2003) to causality.

7. Interestingly, mindfulness is explicitly not about trying to control one's mind (Bishop et al. 2004; Segal, Teasdale, & Williams, 2002). Zooming in on the psychological processes involved, mindfulness exercises arguably facilitate certain functions (e.g., attention). Yet within our conceptual framework, it should be located more on the control side of the spectrum when compared to e.g., having regular sleeping hours and avoiding long working hours when trying to manage one's mood disorder.

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