

August 2016

The Rediscovery of Self-Care: A Model for Persons with Incarceration Experience

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Recommended Citation

Shelton, Deborah; Barta, Bill; and Anderson, Elizabeth (2016) "The Rediscovery of Self-Care: A Model for Persons with Incarceration Experience," *Journal for Evidence-based Practice in Correctional Health*: Vol. 1 : Iss. 1 , Article 3.

Available at: <https://opencommons.uconn.edu/jepch/vol1/iss1/3>

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Abstract

This is the third of three papers outlining the development of the Rediscovery of Self-Care Model for Persons with Incarceration Experience (RSC, Shelton, Barta & Anderson, 2010). The preceding papers provided the foundational concepts from which the RSC model developed. These papers conclude that the traumatizing experience of incarceration in combination with the resulting passive behavior encouraged by prisons and jails results in a deskilling of individuals who are recipients of institutional care. In this paper, the strengths-based RSC model is articulated for the reader. The person by environment framework identifies four phases: vulnerability, adaptation, self-direction, and self-care- along with their associated processes by which we propose that incarcerated persons “re-discover” or activate their capacity for self-care. A guide and discussion for clinicians is provided

Introduction

This is the third of three papers outlining the development of the *Rediscovery of Self-Care Model for Persons with Incarceration Experience* (RSC, Shelton, Barta & Anderson, 2010). The preceding papers provided the foundational concepts from which the RSC model developed. These papers conclude that the traumatizing experience of incarceration in combination with the resulting passive behavior encouraged by prisons and jails results in a deskilling of individuals who are recipients of institutional care. In this paper, the strengths-based RSC model is articulated for the reader. The person by environment framework identifies four phases: vulnerability, adaptation, self-direction, and self-care- along with their associated processes by which we propose that incarcerated persons “re-discover” or activate their capacity for self-care. A guide and discussion for clinicians is provided.

This work is based upon the definition of self-care as, “action directed by individuals to themselves or their environments to regulate their own functioning and development in the interest of sustaining life, maintaining or restoring integrated functioning under stable or changing environmental conditions, and maintaining or bringing about a condition of well-being (Orem & Taylor, 1986, p. 52).” The implementation of self-care is conceptualized as personal self-care management (SCM)

and self-care supports (SCS). Simply stated, we hypothesize that the greater the level of SCM skill, the fewer SCS are required. The balance between SCM and SCS shifts as needed to support health and efforts toward wellness.

Concepts critical to RSC are supported in Orem and Taylor's concept of self-care, and include "patient engagement," "patient empowerment" and treatment "self-management" but, as will be discussed, remain a more comprehensive and nuanced conceptualization when applied to persons with criminal justice system involvement.

At the outset, it is useful to consider the concept of self-care in historical context. As nursing scholars in the field of rehabilitation, Orem and Taylor sought to underscore the point that nurses are not merely direct providers of care but play an essential role in preparing clients to take a more active role in their own health care. Their identification of "health" as "well-being" aligns with the *World Health Organization's* definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 2006)." This definition of health *explicitly rejects the medical model*, in which illness is understood to be a deviation from the patient's normative level of physical and psychiatric functioning, and the health care provider's role is confined to correcting the deviation (c.f., Engel, 1977 for a discussion).

Alternative nursing models, such as the RSC are emerging to address poor outcomes in patient engagement and long-term behavioral change. The medical model has had longevity because of a reductionist approach to science that has sought to address ambiguities that arise when defining illness states and demonstrating that medical intervention has been effective; and capitalist managerialism, which in the context of hospital-based care is to “free up beds” for new paying clients (Wong, 2004). Further eroding the soundness of the medical model, Gladwell (2006) introduced readers to the case of “Million Dollar Murray” whose comorbid mental illness and substance use gave rise to repeated visits to emergency departments, substance use treatment facilities, and local jails. A “super-user” of services, it was estimated that, over 10 years, Murray had received roughly a million dollars’ worth of services.

For persons with mental illness and substance use, each chronically relapsing conditions (Ramo, Prince, Roesch & Brown, 2010; Velligan, Weiden, Sajatovic, Scott, Carpenter et al., 2010), one may conjecture that (as in Murray’s case) a more holistic approach to service coordination and treatment would have been advantageous both in terms of controlling costs and in terms of health-related outcomes. Support for this conjecture comes from the results of a Camden, New Jersey program which targeted “super-utilizers” of medical services by providing comprehensive medical treatment and support for patient self-care. The program was able to demonstrate a 34%

reduction in hospital admissions and a savings of \$1.2 million dollars within a single year (Emeche, 2015). While it is not assumed that super-utilizer programs are a panacea, however, the results of programs targeting super-utilizers speak to the point that certain vulnerabilities such as mental illness and substance use create a biopsychosocial context for recurring health crises. As has been pointed out in the previous articles, an approach which addresses each crisis as it arises will likely be less efficacious in the long-run than a more holistic approach which addresses the underlying vulnerabilities.

Central to a holistic approach are the tasks of collaborating with the client, family and/or social supports to maximize personal wellness and motivate the client to develop positive health consumer behaviors, adhere to medical treatment and/or a health-supportive or health-promoting lifestyle. In the case of chronic illness management in particular, self-care likely requires the client's commitment to a long-term adherence to prescribed treatments. This calls for a range of abilities relating to "goal setting and decision-making, planning action and getting started, managing goal conflict and shielding against interference, evaluating change, and habituation of new behaviors (de Wit, 2006; p. 208)." These abilities span emotional and cognitive domains; they are *experience-based*, meaning that they can be learned and improvement requires practice, and *context-sensitive*, meaning that activities such as goal-setting are inherently

premised on the client's current circumstances as a basis for selecting concrete and appropriate steps forward (i.e. patient-centered).

A repertoire of self-care abilities are more readily cultivated in situations where clients are able to establish and settle into personal routines. Among persons with fluctuating levels of psychiatric symptomatology and among persons who are caught in the revolving door between carceral and community settings, the practitioner's tasks of facilitating and observing improvement are more challenging. A theoretical model describing the processes of self-care in this population will by necessity be complex and dynamic.

It bears emphasis that discussions of self-care are inclusive of the client's attitudes and behavior, framed within the person x environment interactions, with attention to the social determinants of health and illness. We proceed on the assumption that social determinants both give rise to illness and impact the individual's capacity for self-care. Evidence in support of this assumption is conspicuous when examining the healthcare needs of persons who are currently incarcerated or have a history of incarceration.

SELF-CARE AND THE CORRECTIONAL POPULATION

Currently, self-care has not been examined in detail among criminal justice involved populations. As has been discussed, many of the persons incarcerated have chronic diseases, including mental illness and addiction. There are significant factors that need be considered regarding this population that would impact SCM and SCS: mental health status, effects of prisonization, post-release adversity, and biopsychosocial stressors.

Mental Health Status. Up to 24% of U.S. inmates exhibit serious mental illness (SMI) and half of all inmates exhibit at least one mental health condition (Baillargeon, Binswanger, Penn, Williams & Murray, 2009). Individuals with serious mental illness (SMI) are 3 times more likely to be incarcerated than to be hospitalized; indeed, 40% of persons with SMI have a history of incarceration (Torrey, Kennard, Eslinger, Lamb & Pavle, 2010). The vast majority of incarcerated persons will at some point return to communities where the prospects for psychiatric rehabilitation are generally poor.

When persons are incarcerated who are known to have SMI, some researchers have observed an initial elevated incidence of psychiatric symptomatology followed by a decline as inmates begin to receive psychiatric care and adjust to their new surroundings. These researchers have concluded that the incarceration does not

exacerbate psychiatric symptoms and may even be a protective factor (Hassan, Birmingham, Harty, Jarrett, Jones et al., 2011). Nonetheless, it has long been recognized that carceral environments tax the coping competence of inmates (c.f., Toch, 1985). Persons with SMI fear for their physical safety throughout their incarceration and are at increased risk of physical and sexual abuse as compared to other inmates (Wolff & Shi, 2009). Noise and physical discomfort are typical features of carceral environments. Because persons with SMI sometimes behave disruptively, they are at elevated risk of being placed in administrative segregation (“solitary confinement”), and professionals recognize that the experience of segregation contributes to poorer mental health status (e.g., O’Keefe & Schnell, 2007; Soderstrom, 2007).

Prisonization. Experts have pointed out that carceral environments are “engineered to disempower prisoners (de Viggiani, 2007; p. 129)” by exerting close surveillance, boot camp style discipline, and humiliation. Persons who are incarcerated – whether they have diagnosed psychiatric conditions or not – experience a deleterious process of “prisonization” manifesting as hypervigilance, social withdrawal, diminished self-worth, dependency, and apathy (Haney, 2001). As will be suggested, these acquired qualities are diametrically opposed to the qualities that support self-care.

Post-Release Adversity. Regardless of the putative benefits of psychiatric treatment received during incarceration, what is clear is that persons with SMI are at very high risk of adverse outcomes immediately following their release back into the community. The incidence of suicide, drug-related death, and other forms of morbidity and mortality among recently released former inmates is substantially elevated in comparison to the general population and persons who have successfully reintegrated into the community (Binswanger, Sterns, Deyo, Heagerty, Cheadle et al. 2007; Lim, Seligson, Parvez, Luther, Mavinkurveet al. 2012).

More commonly, continuity of care is not maintained, and this sets in motion a downward trajectory where untreated mental illness or low adherence to psychiatric medications may contribute to deteriorating post-release outcomes culminating either in adverse health events or recidivism. One study found that, as they are released from correctional facilities, only 47% of persons with SMI are supplied with needed psychiatric medications and only 18% are linked to community-based care providers (Wolff, Plemmons, Veysey, & Brandi, 2002). Osher, Steadman and Barr (2003) observe that the “outcomes of inadequate transition planning include ... an increased incidence of psychiatric symptoms, hospitalization, relapse to substance use, suicide, homelessness, and re-arrest (p. 2).”

Community-based care providers may refuse service to persons with SMI, particularly if they have a history of felonies and a history of substance use (Baillargeon, Penn, Knight, Harzke, Baillargeon et al., 2009). The “dually diagnosed” (i.e., persons with mental illness and substance abuse problems) face particularly difficult transitions from the carceral environment to the community. They are especially likely to have strained ties with family members, lack social support (Mallik-Kane & Visher, 2008), and experience social stigma and internalized self-stigma (Luoma, Twohig, Waltz, Hayes, Roget et al. 2007). As compared to persons with substance use disorders alone, the dually-diagnosed exhibit lower motivation to participate in substance abuse treatment and a relatively high rate of attrition (Horsfall, Cleary, Hunt & Walter, 2009).

A Biopsychosocial Perspective. Shelton et al. (this issue) have presented a biopsychosocial model explicating factors which create acute vulnerability to episodes of psychopathological behavior (“coping breakdowns”) and declining mental health status. Particularly salient in this model is the role of stress, which is generated by events that are uncontrollable, unpredictable, or violent. Although the focus has been on persons with SMI, these vulnerabilities are also found among persons with relatively mild forms of mental illness and persons who have not been diagnosed with mental illness.

The post-release period is fraught with potential to generate severe stress, stemming from a risk of homelessness, profound difficulties finding legitimate employment, lack of transportation, lack of money, and challenges associated with restoring *Medicaid* and other needed services (Binswanger Redmond, Steiner & Hicks, 2011). If a coping breakdown manifests as substance use relapse, this will in many instances lead to an even more chaotic lifestyle and add further strain to the individual's social support network (Mullings, Marquart & Diamond, 2001). Substance using persons with SMI are particularly susceptible to being victimized during their community stay; however, regardless of substance use, their chances of victimization are greater than among people who do not have SMI (White, Chafetz, Collins-Bride & Nickens, 2006).

The term "chaotic lifestyle" is frequently applied to unstably housed and homeless persons and persons who experience profound socioeconomic disadvantage. In light of this, it bears mentioning that the capacity to establish daily routines is a taken-for-granted aspect of life in more affluent communities. Routines confer a sense that one's life is predictable and manageable, and provide a buffer against stress (Almeida, Neupert, Banks & Serido, 2005). Others have suggested that having a daily routine confers important therapeutic benefits for persons with bipolar disorder (Frank, Gonzalez, & Fagiolini, 2006).

Lack of insight and impaired decision-making are additional sources of vulnerability that are often observed among people with SMI. Mentally ill individuals exhibit limitations relating to medication adherence, illness management behaviors such as attending clinical appointments, transmission risk behavior (in the case of infectious disease) and treatment disengagement. One may also observe “clouded judgment, deficient insight into illness, dissatisfaction with side effects of medication and perceptions of stigma (Tschopp & Frain, 2009, p. 376).”

Chronic illness (other than SMI) is a source of stress (Stanton, Revenson & Tennen, 2007) and is particularly relevant to this population. Between 58% - 74% of persons with SMI report at least one chronic physical health problem such as hypertension, diabetes, pulmonary disease, tuberculosis, HIV, and hepatitis (Cuddeback, Scheyett, Pettus-Davis & Morrissey, 2010). These risks are exacerbated by behaviors such as sedentary lifestyle and poor diet that are widely observed in the general prison population (Leddy et al., 2009) and low socioeconomic status (SES) communities more generally (Gallo, Bogart, Vranceanu & Matthews, 2005). As the number of comorbid chronic conditions increases, willingness to engage in preventive behaviors such as breast cancer screening tends to decline (Kiefe, Funkhouser, Fouad & May, 1998).

It has already been noted that psychiatric illness can impact insight and decision-making. In addition, chronic physical illness and exposure to chronic stress also adversely impact an individual's ability to concentrate, and in turn his or her decision-making. Chronic physical illness and chronic stress stimulate the production of cytokines. Cytokines are polypeptides mobilized by the body in response to immunological challenges and inflammation. A wide range of health conditions including obesity, chronic heart failure and atherosclerosis stimulate the peripheral release of cytokines (Dantzer & Kelley, 2007); high allostatic load (severe, chronic stress) also stimulates their release (McEwen, 2005). Elevated cytokine levels are thought to produce a set of physical symptoms including, "weakness, malaise, listlessness, and inability to concentrate." Affected individuals "become depressed and lethargic, show little interest in their surroundings, and stop eating and drinking (Dantzer 2001; p. 7)." This set of symptoms is referred to as sickness behavior.

To reiterate, carceral environments elicit certain acquired characteristics of the person such as hypervigilance, distrust, impaired concentration and insight, asociality or maladaptive sociality (e.g., dependency or interpersonal manipulativeness), and apathy. While persons remain incarcerated, their contacts with family members and other members of their social support network are limited. Immediately following release, they are abruptly transitioned back to community environments that are in

many cases chaotic and deficient in terms of basic needs such as housing. The quality and availability of community services are widely cited in the literature as inadequate, as are mechanisms for linking the individual to services. Formerly incarcerated persons' social relationships are often strained and there is a high risk of *relapse*, referring either to a recurrence of psychiatric symptoms or a resumption of substance use. The situation stems from structural and environmental determinants as well as the psychosocial vulnerabilities of persons.

Psychosocial Transitions

Persons who are relatively resilient are, by definition, capable of completing psychosocial transitions without experiencing coping breakdowns. At the same time, it is well understood that transitions tax coping resources. Developmental psychologists speak of transitions over the life course, such as the transition from high school to college, from non-parent to first-time parent, and so on. Given our focus on correctional populations – many of whom will experience new chronic illnesses in addition to preexisting chronic illnesses – we will consider the transition from health to illness. Also, attention will be given to the transition between a prison environment and a community environment. “Changes such as life transitions are particularly sensitive periods as they place new demands on the self, can create a discontinuity between the

self and the external situation, and require the development of new behavioral responses (Amiot, Blanchard & Gaudreau 2008, p. 205).”

The significance of transitions – particularly, abrupt changes of environments and corollary disruptions of social networks – is underscored by findings showing that the transition from the community to prison and the transition from prison to the community are more strongly associated with stress and stress-related illness than the amount of time an individual spends in prison (Day, 2009; Massoglia, 2010; Schnittker & John, 2007).

When inmates face imminent release, particularly if they are end of sentence inmates, the exact date of release is not provided in advance, the inmate may be relocated to another facility, or abruptly released during a courtroom hearing. Travis, Solomon and Waul (2001) report that, “most prisoners are released with little more than a bus ticket and a nominal amount of spending money.” They are returned to the community at odds hours of the night, making it difficult for them to contact family or service providers. They are returned home “without the importance pieces of identification necessary to obtain jobs, get access to substance abuse treatment, or apply for public assistance (p. 19).”

A 2009 Pew Center report on prisoner re-entry finds that the first month post-release is recognized as a “critical period” having long-term implications for the individual’s community length of stay and overall social adjustment. Bonhomme, Stephens and Braithwaite (2006) note that, “heightened stress levels documented at the time of release reflect very real anxieties about successfully managing a return to the outside world and facing problems that did not exist for the inmates while in prison (p. 224).” Arriola, Braithwaite, Holmes and Fortenberry (2007) conclude, based on a study of post-release, that, “the first month post-release is a critical period for ex-offenders who are struggling to gain control of their lives. With strong support systems that help them satisfy basic needs (e.g., housing, employment, and access to medical and mental health services), ex-offenders may feel less pressure to engage in behaviors that are illegal and detrimental to their health (p. 666).”

A less appreciated aspect of transition is that abrupt life changes can elicit a heightened sense of mastery. Verplanken, Walker, Davis and Jurasek (2008) found evidence that transitions trigger “self-activation” if the tasks of managing the transition are viewed as challenging rather than overwhelming. Hence, transition is not merely a critical period in the sense that it can trigger maladaptive responses; it is an opportunity for personal growth. The last point is echoed by Day (2009). He speculates that periods of transition are an opportune time to deliver treatments aimed at promoting emotional

awareness and self-regulation skills. “Given that many re-offences are committed in the first few weeks following release from prison, the provision of post-release support programs addressing issues relating to emotional adjustment would appear to be well justified (p. 126).”

Unpacking the Concept of Self-Care

Orem distinguished between *developmental* self-care requisites and *health deviation* requisites (c.f., Hartweg, 1991). The former refers to any of a range of temporally-defined processes such as adjusting to a new job or navigating the transition from adolescence to young adulthood and implicates psychosocial determinants that might be described under the rubric of “resilience.” The latter refers to specific skills such as the ability to recognize symptoms of illness and the ability to mount appropriate responses such as visiting a physician or taking the appropriate medications.

The following section will focus on the latter – health deviation requisites. Subsequently, attention will turn to developmental self-care requisites, and relevant insights will be drawn from the study of resilience and coping skills.

Health Deviation Requisites

To achieve optimal health outcomes, persons with chronic illness develop what we will refer to as illness-specific knowledge, skills and abilities (KSAs). KSA language has been a mainstay of adult education for many years, with specific reference to building competencies. As it bears on treatment adherence and chronic illness management (“self-care,” as it is often understood), “knowledge” refers to the possession of accurate information with respect to (1) illness dimensions and symptoms, (2) when it is appropriate to seek immediate medical help, (3) prescribed medications, dosing schedules, and treatment practices, (4) social support, as a means of facilitating practices such as receiving reminders to take medication or gaining assistance with transportation to a medical appointment, and (5) the relationship between optimal adherence and tangible improvements in quality of life. “Skills” refers to the effective application of knowledge, and includes (1) the use of self-reminders and other cues to take medications as prescribed, (2) strategies for minimizing side-effects of the medication or treatment, if applicable, (3) enlisting social support, and (4) competent symptom monitoring and proactive use of appropriate steps when symptoms increase.

Lastly, “abilities” refers to the individual’s level of function, as impacted by physical and/or psychiatric limitations, and as impacted by the individual’s successful use of personal strengths to overcome or accommodate these limitations. A person may

possess sufficient skill to navigate public transportation and obtain prescription refills, but if he or she has limited physical mobility, a gap exists between skill and ability.

Self-care knowledge and skills can be mastered through rote learning. In cases where executing skills is hampered by lack of ability, accommodations can be made. Yet, many people fail to achieve sustained optimal adherence. Numerous adherence interventions have focused on “technical skills” or KSAs relating to adherence, and failed to demonstrate substantial improvement in adherence behavior (Van Dulmen, Sluijs, Dijk, Ridder, Heerdink, & Bensing, 2007). To make sense of this, adherence researchers consider moderating factors that affect the association between KSAs and adherence behavior. Frequently cited moderators include attitudes toward adherence and depression (c.f., Ahola & Groop, 2013), and health literacy (Young & Weinert, 2013).

Regarding attitudes, the necessity-concerns framework (Horne, Weinman, & Hankins, 1999) identifies a set of attitudes regarding the necessity of treatment adherence in terms of achieving desired outcomes such as a longer and healthier life, and a separate set of attitudes regarding concerns about the burden of adherence, potentially harmful side-effects, and so on. In a large meta-analytic study examining adherence behavior across a wide range of medical conditions, it was found that for each standard deviation increase in “necessity beliefs”, the odds of adherence increases

by a factor of 1.7. For each standard deviation increase in “concerns”, the odds of adherence decreases by a factor of 2.0 (Horne, Chapman, Parham, Freemantle, Forbes, & Cooper, 2013).

Up to a point, understanding the necessity of treatment is equivalent to possessing factual knowledge. Seen as an attitude construct, one may say that beliefs about the necessity of treatment indicate an individual’s level of certainty and conviction regarding this knowledge, or the extent to which this knowledge is salient or cognitively accessible. Concerns, likewise, encompass factual knowledge about the side effects of a medication, but also include more subjective impressions about the hedonic costs of adherence. From this perspective, it is unsurprising that depression is associated with lower adherence, because persons who are depressed focus on negative information and neglect positive information. From the standpoint of clinical intervention, the aim is to clarify and reinforce in the client certain core health-supportive attitudes toward the necessity of treatment that will remain stable despite fluctuations in mood.

In this paper, attitudes are placed alongside knowledge, skills, and abilities (KSAAAs). Attitudes, in this context, will refer specifically to the individual’s understanding of the necessity of treatment and concerns about treatment.

What will be considered next are factors that influence the association between adherence-related KSAs and adherence behavior. Earlier, attention was given to suboptimal decision-making as a correlate of psychiatric illness, chronic stress, or chronic physical illness. Certain physical and social environments are also conducive to suboptimal decision-making. Persons with incarceration experience face situations where the prosocial and normatively preferable choice of finding legitimate paid work is difficult and uncertain, and the antisocial and socially proscribed choice of generating illicit income is both easier and has a higher chance of success in terms of meeting immediate financial needs.

The consistency with which KSAs guide behavior will depend in large part on an individual's overall quality of decision-making as it affects his or her health, access to social support and other resources, and criminal recidivism. Persons who make consistently bad decisions exhibit what may be characterized as a self-defeating lifestyle. A person who chooses to resume drug use rather than seek treatment has made a decision that will directly and indirectly undermine his or her ability to apply treatment-related KSAs. A person who has a highly unstructured daily routine may find that there are relatively few constants in his or her schedule and relatively frequent distractions, making it that much more difficult to implement specific skills such as choosing a particular recurring daily activity as a cue to take medications. However,

these perceptions imply a deficit-oriented view of behavior. The term “lifestyle” described is freighted with an unintended connotation of blame. A more strengths-based perspective adapted for the RSC model proceeds from the concept of resilience, as will be discussed.

Resilience: Competence and Confidence

Earlier, a connection was made between Orem’s idea of developmental self-care requisites and resilience. The term “resilience” has been defined in numerous ways over the years. As it bears on the RSC Model, our understanding of the term draws on Rutter’s (2013) perspective.

According to Rutter, qualities that give rise to resilience include: (1) a “planning tendency,” (2) a degree of self-reflection and self-regulation that permits an adaptive assessment of goal-attainment strategies that have succeeded or failed in the past, and (3) a sense of agency and self-confidence. Resilience, according to Rutter, is distinct from coping skills: a planning tendency, for example, refers to “a propensity to plan at all in relation to key life decisions, rather than skill in such planning” (p. 478). Rutter’s account, like most accounts of resilience, emphasizes personal attributes.

Observations of symptomatic persons with serious mental illness help illuminate what it means to lack resilience. They fail to consistently exercise self-care or optimal

illness management, exhibit difficulties with social interaction, and are compromised in terms of basic problem-solving skills (Revheim & Marcopulos, 2006). It is said that these individuals “lack comprehension of consequences,” have trouble initiating tasks, are disturbed by changes to their routines, have poor decision-making skills and poor planning skills, do not monitor their own mistakes to understand what could be done differently, are disorganized, and appear to be lazy and concrete and rigid in their thinking” (p. 39).

Defined by the RSC Model, resilience consists of four mutually influential factors. These are termed self-mastery, planfulness, perceived ability, and motivation. Each of these is described below.

Self-Mastery.

The ability to keep one’s attention focused on the task at hand and the ability to inhibit impulsive, inappropriate responses fulfill important adaptive functions. Also important are working memory and overall cognitive flexibility. These functions are compromised by intense negative affective states, stress, depression, and anxiety (Thayer, Hansen, Saus-Rose, & Johnsen, 2009). Thus, we posit that one aspect of resilience is the ability to regulate one’s emotional states effectively, and that as an

individual acquires increasing emotional regulation skills, he or she will show corresponding improvements in cognitive flexibility and concentration.

Consistent with this position, Iacoviello and Charney (2004) state that nonacceptance of fear and maladaptive efforts to avoid fear, anxiety, or uncertainty are transdiagnostic symptoms of psychopathology and help maintain a state of low resilience. In contrast, stress inoculation, or cognitive and behavioral engagement with stressful situations in the service of desensitization and building problem-solving skills, promotes a sense of control and mastery. In this paper, the term *distress tolerance*, or “the capacity to experience and withstand negative psychological states (Simons & Gaher, 2005; p. 83)” will be used to refer to this concept.

Kashdan and Rottenberg (2010) develop the position that distress tolerance contributes to *psychological flexibility*, which is in turn a cornerstone of psychological adjustment. They assert that flexibility is reflected in how an individual adapts to fluctuating situational demands, reconfigures mental resources, shifts perspective, and balances competing desires, needs, and life domains (p. 866). Individuals who lack cognitive and emotional flexibility, Kashdan and Rottenburg suggest, exhibit a range of risk factors for poor psychological health. These risk factors “span cognitive rigidities such as rumination and worry, patterns of [maladaptive] behavioral perseveration, as

well as a relative inability to rebound following stressful events, and difficulties planning and working for distant goals (p. 866).”

Planfulness.

Recall that Rutter’s definition of resilience includes a “planning tendency” as one component. One may imagine that a person who experiences increased perceptions of personal control may nonetheless have difficulty making realistic plans for the future or is simply not in the habit of making such plans. This is again an area in which an affluent and educated layperson may fail to fully appreciate the extent to which some severely disadvantaged individuals focus almost exclusively on the task of making it through one day to the next, and do not structure their time and priorities in a way that would be useful in terms of selecting steps to proactively head off problems before they arise or ensuring that – despite competing demands on their time – they cultivate social relationships or allow themselves constructive, socially-engaged leisure activities. Such individuals might not even be accustomed to simple steps such as leaving a pill bottle out the night before so it will be noticed the following morning.

Planfulness – or the lack of it – is implicit in some criminologists’ accounts of persons with a history of incarceration. They speak of “cognitive indolence” (Walters, 2007) or “preference for simple tasks” (Arneklev, Cochran, & Gainey, 1998). However,

one may view these qualities from a different perspective. Banerjee and Mullainathan (2008) argue that impoverished persons face more numerous and urgent demands on their time than other individuals – this is driven by a lack of stable, reliable income or lack of stable housing and often parental responsibilities when money for child-care is lacking. One may add to this list of competing concerns the requirements of managing a chronic illness. Banerjee and Mullainathan suggest that, in this context, some people will seek out less stressful and less cognitively demanding occupations. Yet, simple and often menial occupations are less likely to confer vocational skills that will enable them to advance to higher-paying positions.

A relatively novel assumption grounding the RSC Model is that planfulness is not only associated with increased resilience but is a factor in identity development. To understand the relationship between planfulness and identity, consider the example of persons with borderline personality disorder (BPD). And it bears mention that BPD is germane to the study of persons with a history of incarceration experiences. As compared to the general population, where prevalence is estimated at 1-2%, a substantial portion of incarcerated persons exhibit features of BPD. Over 29% in one sample met clinical criteria for the disorder and over 93% had at least one trait associated with BPD (Black, Gunter, Allen, Blum, Arndt et al., 2007).

As Black and colleagues note, BPD is linked to comorbid psychiatric disorder, psychosocial impairment, disrupted interpersonal relationships, and excessive health care use. Chabrol and Leichsenring (2006) also emphasize the relevance of BPD to correctional populations. They cite its association with established correlates of criminal behavior including antisocial personality disorder, impulsivity, and psychopathy. BPD is distinguished by identify diffusion (a poorly integrated concept of self and significant others; see below), low anxiety tolerance, and limited capacity for reality-testing (Trull & Durrett, 2005). As it bears on the earlier discussion of distress tolerance – and as will bear on subsequent discussion -- persons with BPD are unwilling to engage in goal-directed behavior if doing so occasions distress (Gratz, Rosenthal, Tull, Lejeuz, & Gunderson, 2009). Hence, a direction connection exists to what we have been referring to as “planfulness.”

Personal identity implies “a continuity of self-consciousness over time” and a “volitional and agentic *I* that thinks, wills, tests reality, and self-regulates (Berzonsky, 2004; p. 303).” The decision to desist from crime is often framed in terms of choosing a new identity. Long-term desisters describe their former criminal identities as “age inappropriate” or as cases of “arrested development.” They also describe criminal behavior as a manifestation of a “party boy” attitude toward life. The new identity is implicitly future-oriented and prosocial, for example, an identity as a “family man”

(Laub & Sampson, 2003; p. 146). Along with these new identities, Laub and Sampson found, comes a new level of involvement in purposeful human agency and structured routine activities.

Berzonsky proposes that some individuals possess a *diffuse-avoidant* identity style marked by a tendency toward procrastination and defensive avoidance as well as “a reluctance to confront and face up to decisional situations, personal problems, and identity conflicts (p. 306).” Diffuse-avoidant individuals are contrasted with persons sharing an *information-oriented* identity style, who conceptualize their personal identities in terms of valued goals and desired experiences; they are also contrasted with persons sharing a *normative style*, who conceptualize their personal identities in terms of social connections such as family or religion.

There is a long-standing distinction in the literature between “impulsive” and “reflective” decision-making styles (c.f., Metcalfe & Mischel, 1999). However, it may be fruitful to frame this distinction in terms of *future self-continuity*. Low future self-continuity, in particular, manifesting as an absence of positive anticipation about the future, is a feature of BPD and has been linked to suicidality (van Beek, Kerkhof, & Beekman, 2009). Closely related to future self-continuity is *mental time travel*, or the ability to adopt a first-person perspective to recall “past episodes and to simulate

possible future scenarios in which one is personally engaged (Levy, 2014, p. 360).” Levy reviews studies showing that persons who score high on measured psychopathy are impaired with respect to mental time travel, and indeed, lack of realistic goals (or in many cases, the presence of strikingly unrealistic goals) is a defining characteristic of psychopaths (Hare, Harpur, Hakstian, Forth, Hart & Newman, 1990). Mental time travel is a key facet of the ability to make and follow plans, and “a person’s capacity for pursuing plans and projects is the capacity for autonomous action (Levy, p. 362).”

Future self-continuity also provides a foundation on which persons build *moral capital* – that is, a reputation and self-image as an honest, responsible and caring person (Dal Bó & Terviö, 2013). Moral capital, in turn, is a determinant of prosocial behavior. Levy asserts that the capacity for empathy requires that an individual be able to vividly imagine the future and the effects of one’s actions on other people. An increasing capacity for empathy may reduce the risk of future criminal offending and increase the individual’s capacity to form close and lasting interpersonal relationships. In terms of self-care behavior, one may speculate that the quality of “being responsible” may translate to a more diligent attitude toward treatment adherence and that honesty may mean that when an individual informs loved ones of an intention to adhere to treatment, he or she will follow through with this commitment.

Perceived Ability.

Bandura (1997) describes self-efficacy as belief in one's ability to perform a task; this belief is contingent on the individual's prior success or failure experiences while attempting the task, and on level of familiarity with the task. Self-efficacy is one of the most frequently targeted and frequently credited psychosocial correlates of theory-based behavior change interventions (Whitlock et al., 2002). Interventions that are designed to increase self-care behavior by emphasizing self-efficacy and success experiences are generally found to be efficacious (Peyrot & Rubin, 2007).

In the RSC Model, self-efficacy is understood to be task specific, and perceived ability as an emergent outcome of the person's experience of increasing self-efficacy across multiple task domains. Perceived ability and perceived control are non-redundant, mutually reinforcing qualities. As perceived ability increases, so will the individual's confidence.

Motivation.

Motivation, according to Locke and Latham (2004), "refers to internal factors that impel action and to external factors that can act as inducements to action. The three aspects of action that motivation can affect are direction (choice), intensity (effort), and duration (persistence)." They add that, "Motivation can affect not only the acquisition

of people's skills and abilities but also how and to what extent they utilize their skills and abilities" (p. 388).

As it relates to the RSC Model, we are referring to the motivation to become more resilient, supported by growth in the separate domains of self-mastery, planfulness, and perceived ability. When individuals are most vulnerable to stress-related coping breakdowns, the aspiration to become a more resilient person will likely be eclipsed by the immediate demands of survival and adaptation. When this is the case, social motivation may play a more important role than internally-generated motivation. Social motivation refers to responsiveness to positive reinforcement of a particular behavior by other people – such as praise for making certain lifestyle or behavioral changes. As Ryan and Deci (2000) have argued, social motivation may lead in time to internal motivation, when the wishes of others continue to influence behavior even when they are not present to praise or reinforce motivated behavior. Subsequently, this will evolve into intrinsic motivation; that is, the motivational goal of increased resilience has been incorporated within the individual's self-concept.

At this point, the discussion is not about the benefits of social support, although the benefits are undeniable. We suggest that social motivation is less likely to arise if the individual possesses negative attitudes toward help-seeking. Persons who believe

that their personal struggles (for example, in managing symptoms of mental illness or securing basic resources) are signs of personal weakness are less willing to seek social support. Individuals who experience internalized self-stigma or social stigma are also less willing to seek social support (Wrigley, Jackson, Judd, & Komiti, 2006). Hence, a clinician is advised to identify and target negative attitudes toward help-seeking and model the benefits of social support as part of a strategy to mobilize client social motivation.

Adherence Behavior

It has been suggested that qualities of planfulness, future orientation and self-continuity are integral to resilience. One basis for this conclusion comes from the study of treatment adherence, and in particular, the observed difficulty that many individuals have maintaining treatment adherence behavior over an extended period of time. Treatment adherence is only one aspect of wellness and well-being, but it is an important aspect, and will be given further attention in this section.

The challenge of treatment adherence in chronic illness revolves around the difficulties of committing oneself to a lifelong treatment regimen. Persons who manage to achieve this exhibit (1) control over maladaptive responses to emotions (i.e., giving up, shrinking from hassles) (2) structured lifestyles, and (3) a strong sense of personal

agency (i.e., unaffected by impulses to assert agency by rebelling against the rigors of adherence).

The problem of intra-individual variation in adherence behavior is familiar to the clinical practitioner. In the case of a newly-diagnosed patient who is attentive to treatment advice, capable of understanding and following the advice, and at least initially motivated to carry out the recommended treatment regimen- they may sporadically miss doses of medication or fail to follow treatment guidelines. It is not unusual for individuals to experience occasional setbacks with respect to carrying out instrumental activities of adherence, such as maintaining a current prescription. Once they are no longer in regular contact with a caring professional, these lapses can increase in frequency (Bellg, 2003).

The typical trajectory of adherence behavior is marked by a gradual decline in level of adherence; also, an individual's initial level of adherence will predict higher levels of adherence months later. If a client starts at 80 – 100% adherence at the start of treatment, level of adherence a year later will remain at around 60%; if a client starts at 60% adherence or less, the level of compliance a year later is likely to be less than 20% (Vrijens, Vincze, Kristanto, Urquhart & Burnier, 2010).

According to Bellg (2003), “the salience and effectiveness of reinforcement changes over time. Terrified cardiac patients who give up smoking after a heart attack and resume 3 months later when their fear has subsided are ubiquitous in cardiology practices (p. 104).” As memories of the adverse health event fade, other ideas come into sharper focus. In the case of chronic illness, the patient becomes increasingly aware of the fact that the lifestyle changes demanded by a treatment regimen will exist for the rest of his or her life. Sometimes, the fear of a return of life-threatening symptoms is the primary motivation for adherence. If so, each dose of medication that is taken may become an anxiety-provoking reminder of one’s precarious health status, and contributes to *adherence stress* (Haslbeck & Schaeffer, 2009). Resilience may be expected to buffer the effects of adherence stress insofar as resilience implies emotional awareness and emotional self-regulation.

The most frequently suggested strategy for maintaining adherence is the use of self-reminders and routines (van Dulmen, Sluijs, van Dijk, de Ridder, Heerdink et al., 2007). Yet, participant reports indicate that this strategy is more effective if one’s life is structured and predictable, and less effective when this is not the case (Ryan & Wagner, 2003). As already pointed out, persons with a history of incarceration experience undergo repeated transitions between carceral environments and community environments, and when living in the community often experience chaotic lifestyles.

When considering the time-course of adherence, the frequency of occasions that disrupt routines will inevitably increase as a function of time. Indeed, “had a change in daily routine” and “was away from home” are two of the three most frequently offered reasons people give for episodes of non-adherence (Barfod, Sorensen, Rodkjaer, & Obel, 2006). As will be discussed, as these episodes of non-adherence increase in frequency, perceived self-efficacy and control beliefs may deteriorate, and the individual may defensively devalue the importance of adherence.

Reactance. Reactance is a particular source of “negative motivation” to engage in treatment. If a patient perceives his or her treatment to be under the control of external forces such as the need to satisfy a healthcare provider’s expectations or satisfy the persistent demands of a spouse or parole office, treatment adherence will become associated with the loss of perceived autonomy and competence. Hence, “the patient may actively argue with caregivers and resent their intrusion on his or her life or may passively agree to recommendations but ignore them once away from the clinic (Bellg, 2003; p. 114).” Psychological reactance has well-demonstrated associations with the frequency of missed medical appointments, earlier treatment termination, failure to fill or refill prescriptions, and low satisfaction with care (Baker, Sullivan & Marszalek, 2003; Fogarty, 2007).

The issue of reactance and personal freedom is “particularly salient for individuals involved in the justice system, in which behavioral control takes precedence over individual choice. Offenders may resist any form of treatment, perceiving it as being part of a larger, coercive system, particularly when treatment is offered in ways that emphasize compliance over autonomy (MacKain & Meuser, 2009, p. 34).” Among ex-offenders, reactance contributes to non-adherence to psychiatric medication and follow-up with appointments, and in turn, increased risk of recidivism. As mentioned earlier, reactance reflects a desire to assert personal control. Resilient individuals, owing to increased self-mastery, are able to maintain a sense of personal control using more adaptive strategies.

The Need for a Dynamic Model.

Corbin's (2001) trajectory model of chronic illness self-management identifies multiple trajectories in which personal circumstances might interfere with or support self-management practices. Among these is the “unstable” trajectory in which a reactivation of acute symptoms of illness coincides with what he terms a “biographical disruption” or psychosocial transition period. Not only is self-management compromised, but the individual may have difficulty carrying out everyday life activities. Corbin’s model is noteworthy in that it emphasizes the life histories of

individuals as they relate to chronic illness self-management behavior. To explicitly represent individual life histories while identifying measureable determinants of treatment adherence behavior over time, a dynamic process model is required.

Insights from Relapse Prevention Theory. Of the relatively few intra-individual process models existing today, *Relapse Prevention Theory* (c.f., Marlatt & Gordon, 1985) is one of the more influential. The theory arose in the context of clinical research on addictions, and indeed, the phenomenon of addiction vividly illustrates the context-sensitivity of behavior. Someone who is attempting to abstain from drinking may firmly intend to abstain. Yet, he or she will nonetheless drink when experiencing emotional distress, when exposed to instigating cues that excite momentary craving for alcohol, or when the experience of positive affect eclipses other conscious concerns. Isolated instances of counter-intentional behavior are referred to as “lapses.” Prolonged discouragement and discontinuation of abstinence behavior is referred to as “relapse.”

The relevance of Relapse Prevention Theory to adherence behavior is not widely recognized. As will be discussed, however, Blume and Marlatt (2006) make a strong case for its applicability. In the following summary of their ideas, the terms “lapse” and “relapse” extend to non-adherence. This discussion is meant to address an important

gap in the existing literature on health behavior change, namely, the limited ability to predict behavior from behavioral intentions (e.g., Sheeran, 2002).

Vulnerability to Relapse. Blume and Marlatt identify *lifestyle imbalance* as a diathesis for relapse. When an individual lacks the ability or the opportunity to create positive emotional experiences, this creates an internal division: on one hand, there is a feeling of enslavement. When day-to-day behavior is no longer motivated by anticipated positive experiences, the remaining sources of motivation are a sense of necessity to carry out socially-imposed demands, meeting one's basic needs, or avoiding immediate threats. On the other hand, there is an acute *desire for indulgence* in which sensory gratification is used to substitute for the lack of positive emotional experiences. Data suggest that a bias toward immediate gratification both contributes to and results from devaluing long-term rewards (Berns, Laibson & Loewenstein, 2007). Berzonsky argues that persons with a diffuse-avoidant identity style do not enjoy the emotional satisfactions that are available to persons with an identity that is grounded in self-affirming accomplishments, and instead derive satisfaction from "pleasurable experiences, consumer goods, approval from others, and the like (p. 306)."

The notion of lifestyle imbalance is – we suggest – highly germane to treatment adherence. Hope or optimism concerning one's long-term prognosis will increase

willingness to accept a treatment regimen. Maintenance of behavior change depends on an ongoing, effortful process of generating self-rewards and other positive reinforcements (Rothman et al., 2004). Limitations in the ability to generate positive affective states and favorable self-appraisals will compromise this process. Individuals who lack proficiency in sharing successes with others and eliciting the praise and support of others will miss the benefits of the important ongoing supply of positive reinforcement (c.f., Fredrickson, 2001). On the other hand, if an individual's intentions are acknowledged by members of his or her social support network and the individual is oriented toward making favorable impressions on others, this acknowledgment may actually lessen the association between intention and behavior (Gollwitzer, Sheeran, Michalski, & Seifert, 2009).

High-Risk Situations. Intense emotion – whether positive or negative – can be behaviorally deregulating and lead to lapses. This phenomenon extends beyond substance use abstinence or treatment adherence to overeating among dieters, shopping binges among compulsive buyers, procrastination (Pham, 2007), and impulsive criminal acts among individuals with a history of criminal activity (Hayward, 2007). Episodes of deregulated behavior are generally purposive even if they are experienced as losses of self control; the aim is to address a perceived urgent need to experience pleasurable, distracting, or highly stimulating sensations (Baumeister, 1990; Tice, 2001).

Relapse Prevention Theory posits that intense emotional states are one form of high-risk situation with respect to lapses. Interpersonal conflict is a second high-risk situation for relapse, particularly when friends or family members directly or indirectly add to the difficulty of resisting lapses. Evidence suggests that interpersonal conflict is an important factor in predicting non-adherence. A meta-analysis of 122 studies revealed that, on average, adherence is 1.74 times higher among patients who report a cohesive family environment; adherence is 1.53 times *lower* among patients who report a conflict-ridden family environment (DiMatteo, 2004).

Marlatt and his colleagues regard stressful environments as a third type of high-risk situation. Although stress and negative affect are likely to be confounded in day-to-day experience, stress is distinct from intense affective states in that stress often triggers the appraisal of the stressor as uncontrollable (Pearlin, 2010).

Rediscovery of Self-Care (RSC) Model: Basic Concepts

The Rediscovery of Self-Care (RSC) Model, derived from a review of the literature, theory, empirical investigation and the clinical experience of the authors, identifies theorized determinants of increased resilience. Increased resilience, we believe, will increase the client's access to his or her latent ability to enact illness- and wellness-specific self-care KSAs. We call the model "rediscovery of self-care" is

because of our belief that the effects of prisonization is the unique factor that erodes strengths in this population, and that coping and adaptation, i.e. resilience need to be “re-discovered”.

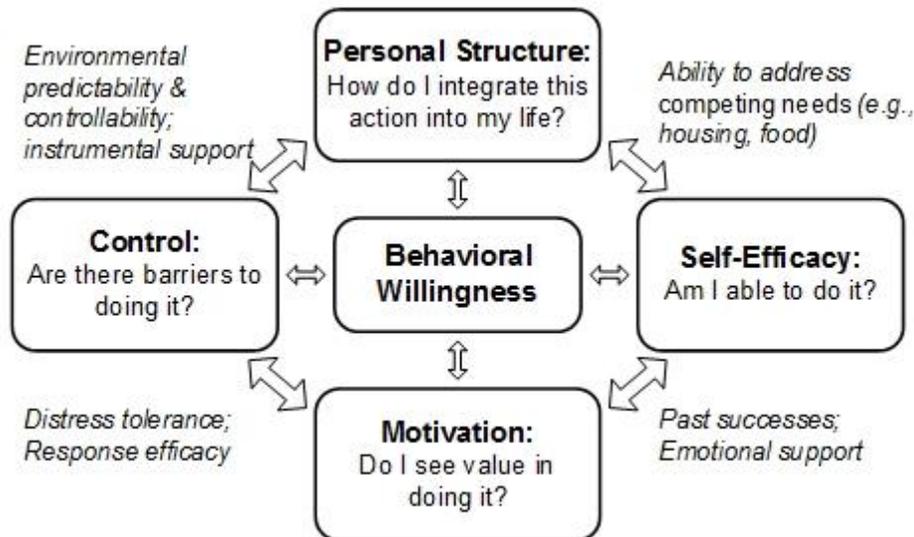
KSAAAs of Resilience

The RSC Model features an important innovation in comparison to other models of the determinants of behavior change. The RSC Model is not a simple enumeration of correlates of health behavior change, as is the case with the *Health Belief Model*. Nor does the RSC Model propose simple mediation – an example of which is Ajzen’s (1991) *Theory of Planned Behavior*, which posits that behavioral intention mediates the relationship between certain predictor variables (e.g., beliefs about the behavior and social norms) and enacted behavior.

Instead, the RSC model stipulates that the effect of any one determinant is conditioned by the influence of other determinants. This may be termed a configural approach. To illustrate the concept, a daily diary study of persons initiating methadone maintenance therapy for opioid addiction asked participants to report daily opioid cravings and opioid abstinence self-efficacy and found that the combination of high craving and low self-efficacy, over and above the effects of these variables in isolation, predicted episodes of opioid use (Barta, Kurth, Stein, Tennen & Kiene, 2009). Craving

and self-efficacy are non-redundant and, as documented over the course of repeated observations, covary within persons. This is analogous to a statistical interaction effect, but statistical interaction is usually observed in the aggregate without reference to temporal dynamics, and here, the focus is on intra-personal processes. The more appropriate statistical reference, then, is to the concept of *mediation*, defined as a generative function by which the independent variable (e.g., self-efficacy) influences the dependent variable (opioid use); and specifically, we are referring to the reconceptualization by Collins and her colleagues of mediation as a temporal process unfolding within persons (Collins, Graham, & Flaherty, 1998).

As this relates to the determinants of resilience, attention will be given to mutually reinforcing relationships among variables. We posit that perceived ability (Bandura, 1997), perceived control (Ajzen, 1991), motivation (Rollnick & Miller, 2002), and the capacity to create and follow action plans (Friborg, Hjemdal, Rosenvinge & Martinussen, 2003; Leventhal, Brissette & Leventhal, 2003) are mutually reinforcing determinants of increased resilience (refer to **Figure 1**).

Figure 1: Mutually reinforcing relationships between the basic constructs

Levels of Self-Mastery

The lowest level of resilience will occur among vulnerable persons who have recently completed a transition in to a high stress environment. We expect that these individuals will perceive that they lack personal control over valued outcomes. The following conceptualization of levels of self-mastery rests on the premise that chronic emotional pain, arising from traumatic life experience, is directly related to a perceived lack of control. In support of this, research has linked emotional pain to feelings of anxiety, helplessness, meaninglessness, and powerlessness (Holm & Severinsson, 2008). Likewise, resilient individuals understand that, even in the most demoralizing situations, people have choices, and that “it is better to try to understand and solve the

problems than it is to avoid them or bear them as the inevitable burden of life” (Ross & Mirowsky, 2013, p. 399).

Level 1: Personal Control. Personal control refers to a belief in mastery (one’s ability to achieve goals) and a belief that constraints (external barriers to goal attainment) are minimal or can be overcome (c.f., Neupert, Almeida, & Charles, 2007). To illustrate, researchers have posited that some incarcerated persons achieve a sense of personal control by adhering closely and unquestioningly to prison rules and regulations; if one follows the rules, day-to-day life becomes more predictable. Among some incarcerated persons, however, this passive and accommodating stance may result in learned helplessness. This is particularly likely if they continue to have aversive experiences despite their acquiescence. Other incarcerated persons defy prison regulations to achieve a sense of personal control, even if it means accumulating disciplinary tickets and reducing the likelihood of an early parole (Goodstein, MacKenzie, & Shotland, 1984).

Persons who struggle with stress and accompanying cognitive and affective disturbances might adopt a “mindless” orientation. “Mindlessness,” in this context, refers to a passive acceptance of information and routines that allow an individual to fulfill minimal performance goals in a manner that requires the least cognitive effort.

Mindless learning of a routine achieves short-term efficiency at the expense of adaptability. A potential consequence is overlearning -- a “condition in which individuals lose the ability to critically evaluate” and explain their own behavior, and have difficulty adapting their behavior to changing conditions (Butler & Gray, 2006; p. 215). The loss of adaptability is a key point, particularly during transitions between environments.

Level 2: Mindfulness. An individual who has made gains in emotional processing may make further progress toward emotional regulation by developing *situation awareness* and *self-monitoring* skills. Situation awareness can be learned through practice and is closely related conceptually to mindfulness, that is, an accurate perception of elements and unfolding events within the immediate environment, comprehension of their meaning, and predictions of the direction that events are taking (Sharma & Ivancevic, 2010). Situation awareness also depends on the individual’s ability to shift attention away from self-focused rumination and off-task contextual cues. In that ruminative affective states and hypervigilance to threats reduce working cognitive capacity and limits situation awareness, an effective means of remediation is to focus one’s attention on the immediate situation. Mindfulness training, when applied to depressive individuals, has been shown to reduce negative affect and increase problem solving performance (Sanders & Lam, 2010).

The term “self-monitoring” has several meanings and uses in the literature. Here, we are referring to self-monitoring as it appears in the literature on self-regulated learning, where it refers to a process by which the learner of a skilled task observes his or her own ongoing performance to evaluate (1) whether or not a strategy he or she is employing is facilitating progress toward a goal, and in what ways the strategy is effective or ineffective, and (2) the amount of time and effort the strategy requires (Pressley & Ghatala, 1990).

Level 3: Emotional Processing. Rachman (1980) defined *emotional processing* as “a process whereby emotional disturbances are absorbed and decline to the extent that other experiences and behaviour can proceed without disruption (p.51).” Evidence that emotional processing has been engaged, according to Rachman, includes (1) presence of emotional disturbance, (2) indications that the disturbance has declined, and (3) indications of a return to normal (undisrupted) behavior.

Working memory capacity and emotional processing are reciprocally influential factors affecting the quality of health-related decision-making. If individuals experience difficulty decoding their own affective states, attempts to do so will require greater effort and will be more likely to deplete cognitive resources (Mikolajczak, Roy, Verstrynge & Luminet, 2009).

Impaired emotional processing is sometimes conceptualized as *alexithymia*. It is prevalent in correctional populations (Christopher & McMullen, 2009), particularly those described as dual diagnosis (e.g., Carton, Bayard, Paget, Jouanne, Varescon et al., 2010). Alexithymia consists of four elements: difficulty identifying and describing feelings, difficulty differentiating feelings from the physiological sensations associated with states of arousal, low capacity to generate positive fantasies or daydreams concerning themselves or their future, and a concrete, utilitarian cognitive style (Taylor, Bagby, & Parker, 1997).

Experiential avoidance carries psychological costs; avoidance of awareness of emotions contributes, paradoxically, to more extreme emotional states. By avoiding careful scrutiny of their own affective states, individuals deny themselves the opportunity to learn fine distinctions among these states and recognize the complexity of their own emotional lives. This lack of complexity or differentiation renders an individual more susceptible to being consumed by negative affect following exposure to an upsetting or stressful event, and losing contact with positive experiences that may have occurred on the same day (Feldman Barrett et al., 2001). Susceptibility to processing negative experiences globally is also evident among pain sufferers. Individuals who make careful distinctions among their affective states, as compared to those who do not, are less likely to report large increases in negative affectivity on days

in which self-reported pain intensity is relatively high (Zautra, Smith, Affleck & Tennen, 2001).

Level 4: Capability. Each step in the progression toward increased self-mastery is supported by contemporaneous graduated improvements in the domains of planfulness, motivation, and perceived ability. At Level 4, individuals are able to mindfully attend to changes in their environment and suppress destabilizing or self-defeating manifestations of negative emotionality.

Levels of Motivation

Miller and Rollnick's (2002) counseling philosophy, known as *motivational interviewing* (MI), provides an evidence-based, clinically-validated theoretical account of motivation. According to MI, clients at the outset of treatment struggle with ambivalence regarding behavior change. The client's relationship with his or her own emotions is often the origin of the client's ambivalence. Persons who are predisposed to "experience heightened levels of negative affect and to perceive such experiences as threatening (i.e., neuroticism)" will strive to "control, suppress, and avoid emotions." This tactic produces a short-term reduction in negative arousal and is hence maintained both by negative reinforcement and foregone opportunities for corrective learning. For example, "it is extremely difficult to disconfirm a strongly held expectation that one will

be socially rejected if one avoids all interpersonal contact (Boswell, Bentley, & Barlow, 2015, p. 37).”

Level 1: Demotivation. A generalized pattern of avoidant behavior is observed in depressed or anxious individuals (Dickson & MacLeod, 2006), correctional populations (Taxman, Rhodes & Dumenci, 2011), and alcohol or other substance users (Cleveland & Harris, 2010). Taxman notes that *problem avoidance* is a cardinal feature of criminal thinking. Avoidant individuals “distance themselves cognitively or behaviorally from the source of distress (p. 343).” This may manifest as any of a range of behaviors including: *mental disengagement*, defined as denial or motivated inattention to the stressor, *behavioral disengagement*, or leaving a stressful situation, and *consumptive coping*, or the use of food, substances, or other physical gratifications to counteract awareness of the stressor (Carver, Scheier & Weintraub, 1989; Sarin & Nolen-Hoeksema, 2010).

This recalls the earlier discussion of reactance and the closely related concept of *resistance*, a “general reluctance to discuss, remember, or think about events that are particularly troubling or threatening (Phares, 1992, p. 304).” Also relevant to this discussion is the literature on avoidance goals. “Avoidance goals inherently focus on negative possibilities and this use of negative possibilities as the hub of self-regulation produces worry, threat, distraction, pressure, rumination, preoccupation with the self,

and reduced cognitive flexibility (Elliot, Thrash & Murayama, 2011; p. 646).”

Accordingly, persons guided predominantly by avoidance goals will likely exhibit impaired problem-solving and planning skills.

Level 2: Social Motivation. If one imagines the process of acquiring motivation to become more resilient as it unfolds within an individual, with demotivation as a starting point, four logical phases suggest themselves. The demotivated client lacks the capacity for self-reflection regarding qualities that he or she might cultivate that would lead to increased resilience.

At the second phase of motivation, the desire to become more resilient is driven by the influence of an intervention provider, peers, friends and/or family members. Relating this to Berzonsky’s (2004) theory of identity status, persons with a diffuse-avoidant identity are said to be particularly reliant on seeking validation from others.

Level 3: Internal Motivation. One may observe naturalistic life transitions which promote increased maturity, such as marriage or finding steady work (Laub & Sampson, 2001, 2003). Speculatively, these transitions may inflect a shift in identity style in a (prosocial) normative or information-oriented direction. If the client experiences deficits in terms of the capacity to formulate plans, he or she may benefit from conversations with friends or family members who can provide assistance with

this activity. Opportunities to enact adaptive behavior successfully will contribute to increased perceptions of self-efficacy and perceived control, and the positive reinforcement provided by these success experiences will foster internal motivation.

Level 4: Intrinsic Motivation. At the highest level of integration, growth in other domains of resilience will have occurred. In the context of increasing environmental support for lifestyle change, a more planful orientation, and other factors to be discussed, intrinsic motivation will manifest as a positive desire to enact new, more adaptive lifestyle behaviors.

Levels of Planfulness

Future-oriented cognition is conspicuous when it is absent: Barratt (1985), for example, wrote about *non-planning impulsivity*, which he characterized as “a lack of futuring” or forethought. Others refer to *temporal orientation*; future-oriented individuals prefer to make schedules for themselves and believe that sustained effort will eventually reap rewards, whereas present-oriented individuals do not (Epel, Bandura, & Zimbardo, 1999). Epel and colleagues found that, in a sample of homeless persons, those with greater future orientation were able to progress to transitional housing more quickly.

Level 1: Reactive Stance. When a vulnerable person is newly introduced to a high-stress environment, we posit that he or she will exhibit a “reactive stance” in which future-oriented thinking and cognitive reappraisal of stressors are absent, and behavior is determined by the immediate situation. High stress will reduce working memory capacity and in turn cognitive processing (Arnsten, 2009; Derakshan & Eysenck, 2009). Also, the individual may exhibit “myopic” perception; that is, a narrow attentional focus on only the most salient environmental cues (Pham, 2007).

Level 2: Short Term Thinking. In correctional populations, future-oriented cognition is often severely limited. The threat of incarceration does not deter criminal offending, nor do potential consequences deter risk-taking behavior. Members of correctional populations exhibit limited generative capacity, deficits in *means-ends thinking* (e.g., the ability to conceptualize step-by-step procedures to achieve a desired goal), concrete rather than abstract thinking, and poor *consequential thinking* (e.g., forecasting the outcomes of a course of action; Ward & Nee, 2009).

Persons with SMI, regardless of their specific psychiatric diagnosis, will exhibit varying levels of *psychiatric disability* (Salvador-Carulla & Gasca, 2010). Persons with psychiatric disability are impaired with respect to their ability to “attain typical, age-appropriate goals for extended periods of time.” They struggle to find purpose or

meaning in their lives, experience difficulty functioning in valued roles, and exhibit “significant role impairments affecting social relationships, work, leisure and self-care” (Tschopp & Frain, 2009, p. 375). The absence of meaning and purpose, as suggested earlier, may be a manifestation of low self-continuity. The individual has difficulty imagining him- or herself in the future, and may therefore fail to make investments in the future by cultivating relationships, creating structured leisure activities, or developing occupational skills.

Level 3: Concern for the Future. Soon-to-be-released inmates also face externally imposed barriers to planning. They are often denied basic information needed to make plans. Inmates often do not know the date or location of their release from incarceration. An inmate may plan to seek housing or employment, but there is often very little an inmate can do to ensure that this plan will come to fruition. However, inmates who are assisted in developing realistic and detailed plans for re-entry are less likely than other inmates to re-offend once they enter the community (Willis & Grace, 2009).

Level 4: Goal Orientation. Goal orientation denotes a trait-like tendency to organize one’s life according to short-term and long-term goals. This is unlikely to manifest until after a formerly incarcerated individual has withstood the immediate

crisis of transition into the community environment. Goal orientation will emerge in the context of increasing self-continuity and increasing ability to envision a realistic, hopeful future.

Levels of Perceived Ability

The experience of successfully performing a skilled task will give rise to increased self-efficacy (Level 1). The experience of successfully performing a range of tasks, according to Bandura (1997), contributes to the subjective experience of possessing *personal agency* (Level 2).

Perceived personal agency and problem-solving are integrally related. For example, a person may remain trapped in an abusive relationship if he or she lacks personal agency; but if a person does possess personal agency, he or she may consider various problem-solving strategies to facilitate leaving the relationship (c.f. Thoits, 2006).

Problem-solving requires the ability to forecast possible future outcomes. Therefore, we believe that improvement in planfulness will accelerate the attainment of problem-solving ability (Level 3). Also, problem-solving requires motivation and a degree of self-mastery to avoid maladaptive emotional responses to situations in which

a problem-solving strategy fails or leads to further frustration. At Level 4, the individual displays competent performance and confidence in his or her performance.

Rediscovery of Self-Care (RSC) Model: Person x Environment Scenarios

Environmental Press

As part of the RSC Model, four scenarios are considered in which environmental determinants impact the psychosocial determinants of self-care. The scenarios fall into a two-by-two scheme in which the first dimension consists of high or low environmental *adversity* and the second dimension- *time*- consists of brief or prolonged exposure. As it relates to the correctional population, adversity exists in two distinct forms: in a carceral environment, adversity manifests as profound challenges to the individual's capacity to exercise autonomy and his or her ability to mount competent coping strategies. In a community environment, adversity manifests as a lack of social structure, difficulties securing stable sources of food, income, housing, and requisites of employment (e.g., access to clean clothes or a shower). In either environment, the risk of becoming the victim of violence is pronounced (refer to paper 2, Shelton et al. this issue).

The second dimension, *time*, brief vs. prolonged exposure to an environment, is included in acknowledgment of findings, reviewed earlier, which show that transitions between environments (brief exposures) are perceived to be highly stressful. Also, persons will in many cases become desensitized to a stressful environment over a period of increasing exposure to the environment and will, over time, acquire resources to aid them in coping. This assumption does not discount the fact that some persons remain sensitized to certain stressors even after prolonged exposure – as is the case, for example, among persons with trauma- or anxiety-related disorders. To accommodate this, and as will be discussed, the RSC Model explicitly recognizes an interaction between characteristics of the person and characteristics of the environment.

To be clear, the RSC Model posits that environmental variables are time-varying determinants of change in resilience. Different environments will differentially impact perceived stress, perceived control over personally valued outcomes, contact with one's social support network, motivation, and so on. Cognitive skills are partly context-dependent: this is conveyed by the term *situated cognition*; situated cognition encompasses a variety of cognitive schemas or mental representations relating to, (1) *persons*: how others behave and think, (2) *roles*: how formal roles influence others' thoughts and behavior, (3) *events*: how actions relate to specific outcomes, and (4) *rules*: perceived relationships among persons, roles, and events (Fiske & Taylor, 1991). The

often-cited characterization of criminal offenses as lacking empathy may be re-framed in terms of under-development of these cognitive skills.

Mapping onto the four levels of environmental press described above, we posit that there are four empirically and theoretically distinguishable ensembles of psychosocial determinants of self-care behavior, shaped by characteristics of the person and environment. Sustained self-care behavior is, we theorize, least likely in the first scenario and increasingly likely in subsequent scenarios. Brief exposure to a high adversity environment is labeled *vulnerability*; prolonged exposure to a high adversity environment is labeled *adaptation*; brief exposure to a reduced adversity environment is labeled *self-direction*, and prolonged exposure to a reduced adversity environment is labeled *self-care*.

Vulnerability

A person who is transitioning into a high adversity environment, such as a recently incarcerated person, is likely to exhibit low self-efficacy, low perceived control and low motivation, and lack planfulness. In terms of competing needs, we posit that learning to adjust to a new environment will consume considerable emotional and attentional resources. This has implications in terms of the practitioner's treatment planning activities. Setting ambitious behavior change goals will almost certainly be

met either by reactance or at minimum, a lack of comprehension on the part of the client. The client's attention will be focused on avoiding immediate sources of distress (strategies for adjusting to a new environment) and enjoying immediate gratifications (e.g., relief of unpleasant symptoms).

Fluctuations in self-efficacy are affected by contextual factors as well as by characteristics of the individual (Bandura, 1997). When individuals are experiencing acute distress, they are both more likely to selectively attend to their past failures (Teasdale & Spencer, 1984) and to regard these past failures as evidence of their inability. Once self-efficacy increases and reaches a certain threshold, isolated failure experiences are unlikely to be invalidating (Bandura, 1997). Notably, although self-efficacy to enact a health behavior is a predictor of adopting a new behavior, it does not ensure that the newly adopted behavior will be maintained over time (McCaul, Glasgow & O'Neill, 1992).

A generalized sense of inefficacy is characteristic of individuals who exhibit *learned helplessness*, or the belief that one is incapable of effectively pursuing desired future outcomes. Learned helplessness is distinct from *learned hopelessness*. The latter refers to persistent belief that desired future outcomes will not happen (Abramson, Alloy, Hankin, Haefel, MacCoon et al., 2002; Au, Watkins, Hattie & Alexander, 2009);

this literature supports the relevance of future self-continuity to the present conceptualization of determinants of self-care.

During periods of increased stress one may anticipate increased, (1) cognitive disorganization and inefficiency, (2) avoidant, often self-defeating responses consisting of disengagement, acute loss of emotional clarity and self-awareness, or consumptive coping, and (3) feedback processes in which declining performance triggers off-task worrying and self-evaluative concerns (Gallo et al., 2005; Taylor & Seeman, 1999). Thus, increased stress may be said to impact perceived locus of causality (the belief that critical personal outcomes are controllable or uncontrollable), personal structure, and motivation.

Pearlin (2010) discusses the concept of *stress proliferation*, or the potential of a stressor to generate new, secondary stressors. For example, "it has been observed ... that economic strain and family conflict often follow involuntary job loss or that being involved in a caregiving role can lead to problems in one's occupational role. Stress proliferation can result in people's lives becoming mired in clusters of stressors, some of which may persist and contribute to cumulative adversity (p. 209)."

Folkman and Lazarus (1985) stated that "the essence of stress, coping and adaptation is change ... Therefore, unless we focus on change, we cannot learn how

people come to manage stressful events and conditions (p. 150).” Benight and Bandura (2004) observe:

Threat is not solely an inherent property of ... events. Nor does appraisal of the likelihood of injurious happenings rely entirely on reading the nature of external signs of danger or safety. Rather, threat is a relational property concerning the match between perceived coping capabilities and potentially detrimental aspects of the environment. The same potential threats are frightful to people beset with doubts they can control them, but relatively benign to those who feel assured they can override them. Self-appraisal of coping capabilities ... determines, in large part, the subjective perilousness of environments (p. 1131).

Adaptation

We posit that the individual’s acquisition of social support is a necessary component of adaptation to a stressful environment. Social support has been shown to have a positive impact on subjective appraisals of stress (Pearlin, 2010). There are several mechanisms by which constructive social support contributes to positive health outcomes. Among these are (1) *normative social influence*: members of the social network who demonstrate norms supporting self-care behavior, for example, by abstaining from

substance use or regularly adhering to treatment regimens; (2) *social control*: active attempts by network members to promote treatment adherence and health behavior in the client, (3) *mattering*: to the extent that social relationships are valued, this supplies a motivation for health behavior, (4) *positive experience*: insofar as a social support network provides opportunities to experience positive affect, the individual will experience the salutary effects of positive affect on mood and, in turn, motivation, and (5) *social competence*: to the extent that the client derives a positive sense of self by fulfilling role obligations as a parent, romantic partner, son or daughter, the client will experience increased perceptions of competence, and perceived competence may transfer to the domain of self-care behavior (c.f., Thoits, 2011).

Self-Direction

Our definition of “self-direction” corresponds to Manz’s (1991) notion of self-leadership as, “a self-influence process and set of strategies that address *what* is to be done (e.g., standards and objectives) and *why* (e.g., strategic analysis) as well as *how* it is to be done ... [it] incorporates intrinsic motivation and ... [focuses] on cognitive processes (p. 17; emphasis in original).” This concept conveys a new level of integration – that is, the ability to form and execute simple plans, to reflect upon the ultimate goal and consider various alternative strategies for achieving it, and acceptance that the goal

is autonomously chosen and is not externally imposed (e.g., by the social or small group environment).

“A goal can be described as how things will be at some specified time in the future and that it is a desired state that requires both action and effort (Playford, Siegert, Levack & Freeman, 2009; p. 338).” Authors have offered different frameworks for defining goals and different intervention strategies for developing goal-setting skills, and in some writings one may find conceptual overlap between goal-setting and problem-solving. In the context of the RSC Model, the primary focus is to enhance the motivational properties of goals and to promote future-oriented cognition among individuals who will, in many cases, exhibit impulsivity and a corresponding inattention to long-term outcomes.

In evaluating a goal, both in terms of the capacity to measure goal attainment and in terms of the client’s capacity to benefit from the goal, S.M.A.R.T. criteria are recommended by several authors. The acronym stands for specific, measurable, achievable, realistic / relevant, and time-related (Playford et al., 2009; c.f., Doran, 1981; Pearson, 2012). Pearson (2012) emphasizes that goals set in the distant future are less likely to motivate performance and more likely to be lost to procrastination as compared to more temporally proximate goals.

Clinicians have observed that persons undergoing psychiatric rehabilitation may exhibit deficits with respect to problem solving and critical thinking skills. To address deficits in these areas, clinicians are advised to (1) provide structure, routines and steps that are well-organized and easy to follow, (2) offer praise when the client initiates behavior and follows through, (3) offer guiding questions in support of independent decision-making, (4) demonstrate sequences and steps, and (5) promote the use of self-talk (Revheim & Marcopulos, 2006; p. 42). Note that Revheim and Marcopulos identify structure as a determinant of problem-solving effectiveness; the RSC Model likewise posits that progress in developing personal structure (planfulness) during the adaptation stage will facilitate the acquisition of problem solving skills at this stage.

Problem-solving ability has been described in terms of two broad components. The first, *problem-solving orientation*, “includes the person’s awareness of problems, personal assessment of his or her ability to solve the problems, and expectations about the effectiveness of problem-solving attempts.” The second, *rational problem-solving*, refers to “a person’s ability to logically identify problems, define them, generate solutions, execute those solutions, and monitor solution effectiveness (Becker-Weidman et al., 2010 p. 11).” As noted above, problem-solving is seen as a facet of resilience. Also, problem-solving is impaired among persons who are oriented by avoidance goals. Hence, we theorize that readiness to develop problem-solving skills will be greater

among persons who have benefited from advice to set positive (approach-oriented) goals and who have made progress in regulating the aversive affective states that trigger avoidance.

Internal motivation refers to knowledge of the importance of developing personal resilience. Internal motivation is integrally linked to identity status. Persons “who have a firm sense of identity and are strongly oriented toward fulfilling their personal standards display a high level of self-directedness. Those who are not much committed to personal standards adopt a pragmatic orientation, tailoring their behavior to fit whatever the situation seems to call for. They become adept at reading social cues, remembering those that have predictive value and varying their self-presentation accordingly (Bandura, 1991; p. 253).”

Self-Care

We believe that individuals who successfully achieve adaptation and self-direction will experience greater clarity with respect to their personal identities. Self-accessibility refers to the level of certainty and salience (wellness) an individual possesses regarding self-attributes (e.g., self-care competence and capability). Persons who possess self-accessibility, as compared to others, exhibit a relatively strong and

stable association between attitudes and behavior and a relatively strong and stable association between intentions and behavior (DeMarree, Petty & Briñol, 2007).

Skills learned and practiced in self-care are applied across aspects of one's life to include use of leisure time, management of loneliness and isolation. In studies of the lifestyles of persons who subsequently developed a psychiatric disorder, it has been found that these individuals lacked close friends, had few leisure or recreational activities, and were underemployed or unemployed. One may infer that social isolation, absence of structure, and limited opportunities to experience a sense of accomplishment (particularly to the extent that personal accomplishment is a social phenomenon) are risk factors emotional stress as well as relapse among persons who have recovered from prior episodes of psychiatric illness (Corrigan, Mueser, Bond, Drake & Solomon, 2008). Similarly, for persons who experience incarceration, constructive use of leisure time contributes to outcomes not specified by this model but, as noted earlier, has been shown by research that positive affective experiences are a protective factor against affective disorder (Steptoe et al., 2009).

Occupation -- in the simplest terms, activities relating to personal activities and time use -- provides opportunities to experience mastery, confidence, control, and a sense of increased adaptation to one's environment. It provides a context in which

persons may take risks and learn how to cope with perceived failure and mistakes. It provides a means to connect with oneself, others, and the world in a self-determined way. Hence, it is integrally related to the process of developing a positive self-identity (Mee, Sumsion & Craik, 2004). Barriers to occupation, a challenge for incarcerated persons, has been found to result in what many inmates reported “sleeping a lot” (Whiteford, 1997). With few constructive outlets some incarcerated persons reported that excessive sleep had become habitual, in that they'd lost interest in other activities.

It seems short-sighted then that budget constraints have led to a reduction in the number of occupational therapy and vocational programs offered to incarcerated persons and others (Eggers, Muñoz, Sciulli & Hickerson Crist, 2006), particularly given the effectiveness in terms of reducing risk of recidivism. Vocational skills that aid former offenders in obtaining competitive employment also provide both structure and resources to organize leisure time and activities. The balance between vocation and leisure activities can provide for and support health and wellness among persons who experience incarceration.

The RSC Model: Summary and Application

A repertoire of specific psychosocial abilities contribute to increase self-care behavior. We have suggested that these abilities are *experience-based*, meaning that

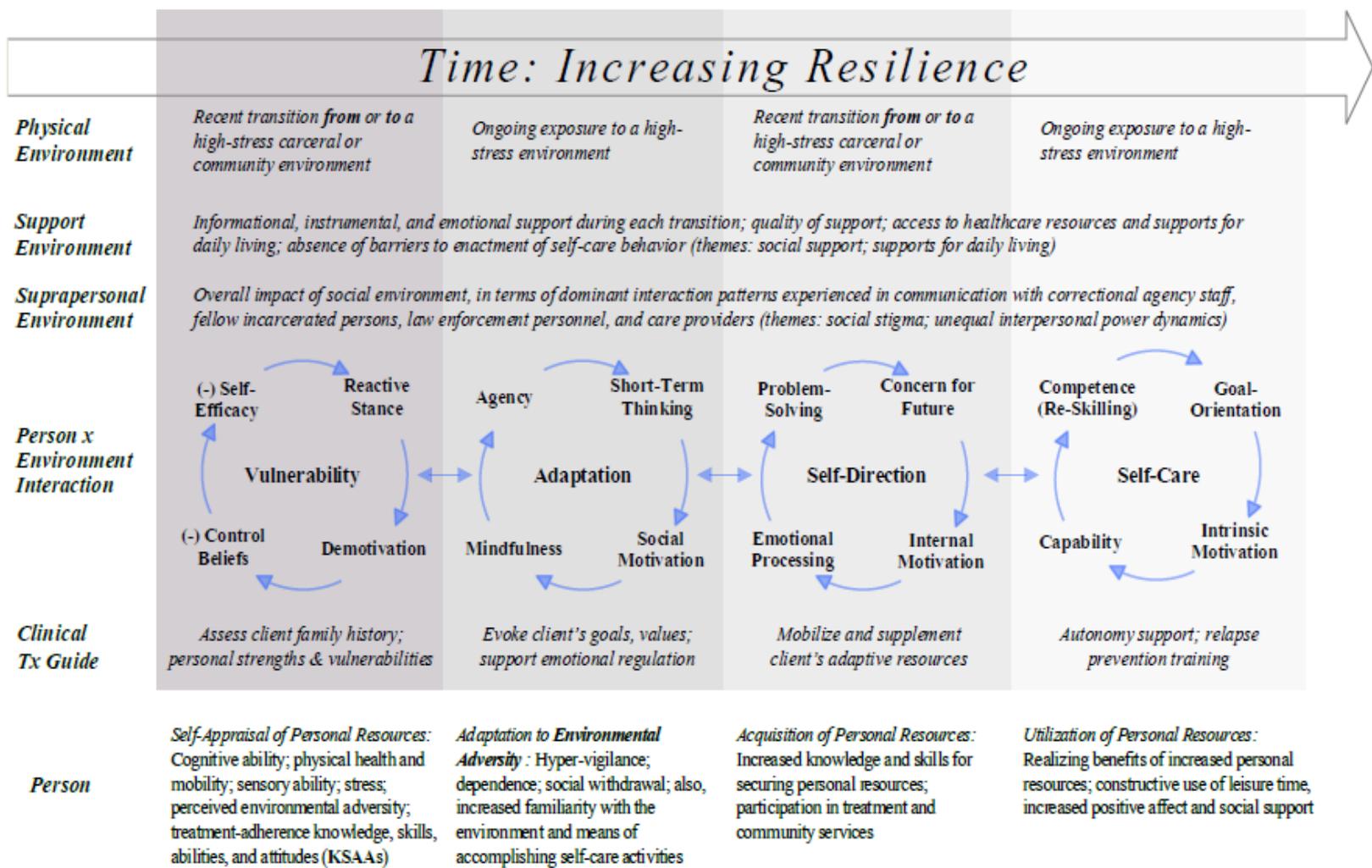
improvement requires practice, and *context-sensitive*, meaning that environmental factors influence the acquisition of these abilities and will either hinder or augment the effectiveness of these abilities in achieving self-care outcomes. We will add that these abilities are, in our view, *graded* in terms of difficulty. Self-efficacy relates to the perception of success at a specific task and is an important determinant of self-care, but it is a more elementary skill than problem-solving. One of the defining limitations of “one size fits all” psychosocial interventions is their insensitivity to the heterogeneity of the client population. The RSC Model focuses on heterogeneity with respect to level of attainment of certain key determinants of self-care. That is, progress is measured by reference to the individual’s initial level of attainment of the determinants of self-care and tailored to areas in which additional progress is needed.

The RSC model (noted in Figure 2) sets out to describe a dynamic interplay among determinants of self-care at varying levels of environmental press. There is a vertical dimension representing *person x environment* interactions at a given point in time. There is a second horizontal dimension representing the effects of mastery of certain psychosocial abilities on the individual’s ability to master new abilities. We make no specific predictions regarding the rate of acquisition of specific abilities, as this will vary from person to person and as a result of the intensity of intervention. Nor do we make specific predictions regarding threshold levels of ability. That is, there are no

fixed “cut-points” in measured levels of a psychosocial construct that define transitions between the stages.

Figure 2: Rediscovery of Self Care Model

Rediscovery of Self-Care: A Care Intervention Model for Persons with Incarceration Experience



Vulnerability and Adaptation Stages

We theorize that, at the vulnerability and adaptation stages of the RSC, that important treatment foci include providing behaviorally-relevant knowledge of self-care for a specific chronic illness state, bolstering client readiness by addressing, to the extent possible, his or her competing needs (i.e., urgent priorities that are not directly related to self-care), and reducing negative problem orientation. “A negative problem orientation renders an individual vulnerable to recurrent and prolonged experiences of negative affect that can inhibit or disrupt complex problem solving, as the individual harbors pessimistic appraisals of the self and expectancies. An individual with a high negative orientation often lacks motivation for complex problem solving (Shewchuk, Johnson & Elliot, 2000; p. 728).”

Clinical recommendations: There are many opportunities to build confidence and competence in self-care while incarcerated and following incarceration as well. Using alternate strategies may reduce the deskilling effects of the prison experience without causing conflict with the safety and security regulations that structure the environment. It calls upon a shift in clinical thinking. We recommend that the practitioner (1) provide behaviorally relevant self-care knowledge, (2) provide clients with opportunities to build self-care self-efficacy through enactive mastery experiences, (3) enhance social

motivation by encouraging the client to identify valued others who will support his or her self-care behavior, (4) instruct clients to become more mindful of their own emotional states as occasioned by the experience of chronic illness, the client's experience with treatment, and his or her reactions to stigma, and (5) collaborate with the client in identifying daily routines that will support increased personal structure and increased environmental predictability. The practitioner's focus should be on relating each of these skill-sets to overcoming specific and immediate challenges to self-care and positively reinforcing successful performance. To the extent that acquisition of these skills give rise to increased perceptions of competence and control, we theorize that attitudes toward self-care will become increasingly favorable without the need to explicitly target attitudes as part of the intervention. Beginning conceptualizations of clinical guides across adaptation stages are shared in Table 1 and will be an area for future development and testing.

Table 1. Rediscovery of Self-Care: Clinical Guide

Domains	Vulnerability	Adaptation	Self-Direction	Self-Care
Self-efficacy vs Inefficacy	Prison undermines autonomy-related strivings (deskilling)	Poorly managed stress is predictive of cognitive impairment and low self-esteem	An adaptive coping response to distress is a pre-condition for restored self-efficacy	The stable perception of oneself as skilled and capable (reskilling)
Social & Personal Motivation	Low self-worth is linked to low commitment to self-care	Social isolation/ disruption of social relationships linked to reduced self-care, motivation and low self-esteem	Increased self-worth resulting from supportive environment & self-care	Emotional engagement in self-care and reintegration
Planning vs Reacting	Externally imposed structure of prison undermines self-generated plans for care	Sudden demands for adaptation may trigger reactive or impulsive behavior	Individual goal setting; increased future-oriented cognition, reduced impulsivity	Individual plans self-care routines and adheres to them
Level of Perceived Control	Often achieved indirectly through dependence or manipulation	Perceived lack of ability to secure basic survival needs	Situational awareness: cognizant of changeable aspects of environment	The individual has a realistic appraisal of social system resources
Degree of Adversity	Anticipated post-release conditions as a stressor; mental/physical health status	Health status; ability to meet basic needs measured concurrently with other predictors	Health status; ability to meet basic needs measured concurrently with other predictors	Health status; ability to meet basic needs measured concurrently with other predictors

Self-Direction and Self-Care Stages

We theorize that, at the more advanced stages of self-care, the client will possess behaviorally relevant knowledge of how to manage his or her chronic illness and will

need little if any further instruction. The practitioner may therefore begin to shift focus away from the basic provision of support for self-care and instead consider preparing the client for practicing self-care even under challenging and/or unforeseen circumstances and providing the client with the requisites for long-term maintenance of self-care behavior.

Regarding clients with mental illness, the practitioner may consider requisites for recovery. Recovery has been defined as “the establishment of a fulfilling, meaningful life and a positive sense of identity founded on hopefulness and self-determination (Andresen, Oades, & Caputi, 2011, p. 40).” Acquiring or re-acquiring a positive sense of identity will in some cases be necessitated if the chronic illness has only recently emerged and the client has not incorporated it into his or her sense of personal identity; positive identity may also need support against the countervailing influences of social stigma and self-stigma and social rejection. In addition, as has been discussed in this paper, clients who struggle with unstable affect and impulsivity may exhibit a diffuse-avoidant identity status which militates against self-care behavior.

Andresen and colleagues also believe that responsibility is a key component of recovery from psychiatric illness, by which they mean self-management of wellness and medication, autonomy with respect to life choices, accountability for one's actions, and

willingness to take risks and experience failures in order to grow as a person. This is consistent with the RSC Model, which has incorporated Rollnick and Miller's position that autonomy support is an essential organizing principle for practitioners seeking to foster increased behavior change motivation, behavior change, and behavior change maintenance.

For members of the correctional population to successfully engage in treatment, Day (2009) believes, they "have to experience and accurately label their emotional states" and "many offenders struggle to do this (p. 125)." At this point, if the client has successfully navigated the initial transition from a carceral environment to the community and is being coached and supported by a care provider, he or she will have learned to appraise stressors more realistically, resist the impulse to turn his or her attention away from difficult problems, and apply consequential reasoning.

Concepts relevant to emotional processing are identified in Gratz and Roemer's (2004) *Difficulties in Emotion Regulation Scale*. This assesses self-reported self-regulatory difficulties, as defined by six subscales: (1) lack of emotional clarity; (2) lack of emotional awareness; (3) non-acceptance of emotional responses; (4) impulse control difficulties; (5) difficulties engaging in goal-directed behavior; and (6) limited access to emotion regulation strategies. To highlight a central point that has been developed in

this paper, Gratz and Roemer's framework explicitly links impaired emotional processing to problems of impulse control and goal-directed behavior.

A program called Emotional Processing and Metacognitive Awareness is one example of a brief intervention targeting emotional processing. The program consists of asking participants to recount distressing experiences in an experiential manner (i.e., simple description). This facilitates metacognitive awareness that the expressed thoughts and feelings are not necessarily factual and not necessarily harmful or threatening. The developers emphasize that their intervention is not designed to tackle more complex, deeply rooted and difficult-to-resolve affective problems such as attributional style or theory of mind abilities. They found the intervention to be effective at reducing distress among persons with persecutory delusions (Hepworth, Startup & Freeman, 2011).

Moderating Variables

Interventions may need to be tailored in terms of their content and duration to specific subgroups of the treatment population. One may predict, for example, that the rate of acquisition of self-efficacy or motivation will differ as we compare individuals who differ in terms of their level of disadvantage (e.g., education, English language proficiency, family support, or physical disability) or degree of psychiatric disability.

Here, we briefly consider some broadly generalizable factors that may distinguish between subgroups in terms of treatment retention and in terms of the speed and magnitude of treatment-related change.

Prisonization. Barton (1966) identified “institutional neurosis” as a syndrome consisting of “apathy, lack of initiative, loss of interest more marked in things and events that are not immediately personal or present, submissiveness ... lack of interest in the future and an apparent inability to make practical plans for it ... a loss of individuality, and a resigned acceptance that things will go on as they are -- unchangingly, inevitably, and indefinitely (1966, p. 14).” Contributing factors are enforced idleness and loss of responsibility, dictatorial treatment by staff, and diminished prospects outside the institution. Thirty-five years later, Haney (2001) used the term *prisonization* (c.f., Clemmer, 1940) to describe the phenomenon of “prisoner apathy and loss of ... capacity to initiate behavior on one's own (p. 9).” To the extent that an incarcerated person succumbs to the effects of prisonization, we may anticipate that the cultivation of self-care determinants and self-care behavior will be retarded.

Personality Traits. Neuroticism and impulsivity have been presented as two important determinants of self-care deficits. Individuals who score high in measures of neuroticism exhibit relatively frequent and intense negative affective states; neuroticism

is associated with depression (Lahey, 2009) and reduced self-care behavior (Byrne, 2008). Similarly, individuals who score high on measures of impulsivity are less likely than other individuals to adhere to an asthma self-care regimen (Axxelson, Emilsson, Brink, Lundgren, Tóren, & Lötval, 2009) and less likely to adhere to prescribed medications (Liraud & Verdoux, 2001).

In clinical populations, impulsivity is a symptom shared by a range of mental health diagnoses including bipolar disorder, substance use/dependence disorders, anxiety, and depression. In each case, impulsivity is a severity marker of the illness state (Watkins, 2011). Nonetheless, there is empirical evidence suggesting that the frequency of impulsive behavior will decline over time among individuals who are also provided with psychosocial treatments targeting social skills, self-efficacy, depression, and avoidant behaviors (McKellar, Ilgen, Moos & Moos, 2008).

Social Networks. Ungar's (2008) definition of resilience emphasizes the value of social networks. He writes, "In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their wellbeing, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways" (Ungar, 2008, p. 225). This understanding

of resilience implies that there are persons in the community who are able to provide needed resources, and explicitly points toward collective action as a potential avenue by which a coordinated group may build resilience among its members.

State agencies will likely remain fragmented and under-resourced for the foreseeable future. This places the burden on persons with a history of incarceration to develop social networks to better articulate their needs and provide mutual support.

“For many prisoners and former prisoners in the 1970s, mutual-help was viewed as an important component of ‘going straight’ ...”; a self-help orientation helps prisonized individuals recognize that their situation is one which requires self-advocacy and personal change (LeBel, 2007, p. 3). Several promising programs were developed in the 1960s and 1970s in which community members jointed with former inmates in creating mutual-help groups, in some cases placing former inmates in paid positions as mentors to assist newly-released former inmates adjust to community living and obtain needed services. Despite their promise and demonstrable positive results, these efforts have either languished or receded from the public eye in subsequent decades. Nonetheless, LeBel argues, placing persons with a history of incarceration in mentoring roles will powerfully impact their self-perceptions as “wounded healers” and agents of positive change. LeBel likens grassroots mutual-help groups to programs such as

Alcoholics Anonymous, where recognition of one's status of being at need promotes a constructive problem-solving orientation both with respect to personal growth and encouraging others undertake the process of change.

Discussion

This paper introduces the *Rediscovery of Self Care Model (RSC) for Persons with an Incarceration Experience*, which identifies determinants of the adoption and maintenance of self-care behavior among persons with a history of incarceration and psychiatric illness. In light of the profound impact of carceral environments and transitions between carceral and community environments on psychiatric symptoms, the RSC Model is predicated on a *person x environment* interactionist framework. In recognition of the fact that determinants of self-care are experience-based (requiring practice) and graded (varying in terms of complexity or performance demands), we have identified successive stages in the acquisition of determinants of self-care. It is hoped that this model will *reframe* the discussion and spur further empirical investigation aimed at identifying heterogeneity in terms of the extent to which individuals possess determinants of self-care as a step toward developing interventions tailored to individual needs.

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