Optimism, Hardiness, and Resiliency:
A Review of the Literature

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Michelle Bissonnette
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Introduction

The past two decades have been witness to widespread social, environmental, and economic changes with the result that increasingly greater numbers of children and families are experiencing significant emotional difficulties (Masten & Coatsworth, 1998; Weissberg, Caplan, & Harwood, 1991). Given these current societal conditions, health care providers are faced with critical questions regarding the most realistic and cost-effective ways to meet the psychological, emotional, and social needs of these children (Weissberg et al., 1991) who, as a function of their exposure to socio-economic adversity, are considered to be at a substantial risk for the later development of behavioural and psychological difficulties.

In the majority of contexts, it is well recognized that effecting change or significantly altering the impact of risk variables and/or traumatic events on the lives of children and their families simply cannot be accomplished. Research in the area of resiliency, however, has demonstrated that children who defy expectation by developing into well adapted individuals despite experiencing risk and adversity are, in contrast to their less resilient peers, in possession of various dispositional characteristics and skills, show differences on familial variables, and have greater access to societal or environmental resources.

Early intervention efforts, which focused on ameliorating the environmental adversities experienced by vulnerable children, attempted to provide remediation through reducing economic disadvantage, providing opportunities for mastery via early childhood education programs (Masten & Coatsworth, 1998), or attempted to enhance the nature and quality of the caregiver-child relationship by enhancing positive parental attitudes, increasing parental participation in relevant areas of the child's life, and promoting age appropriate limits, consistent discipline, and clear family structure (Gribble et al., 1993; Masten & Coatsworth, 1998; Wright & Masten, 1997). Despite reported success (Masten & Coatsworth, 1998), these traditional approaches have been plagued with numerous difficulties (Weissberg et al., 1991). Specifically, there continues to be a large discrepancy between the number of health care professionals who provide these services and the children who require assistance which, in turn, is exacerbated by the costly, time consuming, and culture bound nature of mental health services (Cowen & Work, 1988). In addition, there is a tendency for intervention programs to intervene when an individual seeks or is encouraged to seek help as a consequence of already manifested dysfunctional behaviour, to emphasize interventions which focus exclusively on the child to the exclusion of contexts and settings (e.g., families, schools) which frequently contribute to and perpetuate the child's difficulties, to require specialized programs, highly trained providers, as well as significant time commitments, and to experience enormous difficulty in attempting to alter the specific dimensions of the parent-child relationship that are salient to the child's adjustment (Cowen & Work, 1988; Weissberg et al., 1991).

Recognition of these concerns has increased awareness among health care providers of the need for development of alternate programs to assist children and their families in maintaining psychological health. One such alternative, which offers an antidote to mental health's past emphasis on the repair of pathology (Cowen & Work, 1988; Garmezy, 1991; Wolff, 1995), emphasizes the quest to promote children's resiliency and competence to stressful life events from the beginning, rather than offering

assistance once emotional and behavioural difficulties have emerged (Cowen & Work, 1988; Weissberg et al., 1991; Wolff, 1995), and may well be more resistant to amelioration. Importantly, these programs assert that *early intervention* in multiple child contexts is of equal or greater importance than the implementation of treatment strategies later in the child's development (Weissberg et al., 1991).

Major Concepts

Since the promotion of resiliency and competence have become the focus of current health care efforts, concepts which are relevant to understanding how an individual's psychological health might well be enhanced need to be addressed. Competence refers to the effectiveness of one's actions in the world and a personal sense of well being in diverse areas of functioning (Masten & Coatsworth, 1998; Weissberg et al., 1991). Although the domains in which one can achieve competence vary widely (e.g., behavioural, social, academic, developmental), the term typically implies that an individual has demonstrated achievement in one or more areas and will continue to have the capacity to succeed in the future (Masten & Coatsworth, 1998). Resilience has numerous meanings; however, in the current context, it generally refers to the capacity for successful adaptation despite challenging or threatening circumstances and the development of competence under conditions of pervasive and/or severe adversity (Masten, Best, & Garmezy, 1990; Stewart, Reid, & Mangham, 1997; Wolff, 1995). This capacity, which changes over the course of a child's developmental trajectory and is enhanced by protective factors (Stewart et al., 1997), is typically employed to describe three types of phenomena (Masten et al., 1990; Werner, 1997; Wright & Masten, 1997): good developmental outcome despite one's high risk status (e.g., low SES, low maternal education, poverty), sustained competence under threat (e.g., divorce), and recovery from trauma (e.g., maltreatment).

Protective factors, which contribute to the development of resilience and competence (Brooks, 1994), increase the functioning of an individual under conditions of significant adversity (Luthar, 1991). Specifically, they serve to moderate the impact of individual vulnerabilities or threatening environments such that functioning is better than would be expected if these factors were not present (Masten et al., 1990). Garmezy (1985, 1991) and others (Brooks, 1994; Jacelon, 1997; Luthar & Zieglar, 1991; Polk, 1997; Stewart et al., 1997; Werner, 1989; Wolff, 1995) have identified three levels of factors that help to protect the individual against the impact of various biological and psychosocial risk variables. This triplet of protective factors includes: 1) the *dispositional attributes* of the child, such as intellectual ability (Baldwin et al., 1993; Brooks, 1994; Jacelon, 1997; Luthar & Zigler, 1991, 1992; Masten & Coatsworth, 1998; Rutter, 1987; Wolff, 1995; Wright & Masten, 1997), easy temperament (Jacelon, 1997; Kopp & McIntosh, 1997; Luthar & Zigler, 1991; Rende & Plomin, 1993; Werner, 1997; Wright & Masten, 1997; Wyman et al., 1991), autonomy (Jacelon, 1997; Werner, 1997), self-reliance (Polk, 1997), sociability (Brooks, 1994; Luthar & Zigler, 1991), effective coping strategies (Brooks, 1994; Luthar & Zigler, 1991), and communication skills (Kopp & McIntosh, 1997; Werner, 1997); 2) *familial characteristics* which are marked by the presence of warmth, cohesion, structure, emotional support, positive styles of attachment, and a close bond with *at least one* caregiver (Baldwin et al., 1993; Brooks, 1994; Cowen & Work, 1988; Garmezy, 1991; Gribble et al., 1993; Kopp & McIntosh,

1997; Luthar & Zigler, 1991; Masten & Coatsworth, 1998; Rutter, 1987; Stewart et al., 1997; Werner, 1997; Wolff 1995; Wright & Masten, 1997; Wyman et al., 1991, 1992); and 3) *external support factors*, such as positive school experiences (Brooks, 1994; Rutter, 1987; Stewart et al., 1997; Werner, 1997; Wright & Masten, 1997), good peer relations (Cowen & Work, 1988; Jacelon, 1997; Werner, 1997; Wright & Masten, 1997), and positive relationships with other adults (Brooks, 1994; Conrad & Hammen, 1993; Garmezy, 1991; Werner, 1997; Wright & Masten, 1997), all of which act to reward one's competencies and/or foster ties to a larger community (Werner, 1989). With regards to a mechanism of action, it is hypothesized that these factors act to reduce the impact of risk variables by altering the appraisal of or exposure to risk situations, reducing the impact of negative chains of events, and/or serving to develop and maintain self-esteem (Rutter, 1987).

Although the importance of these identified protective factors has been demonstrated through numerous longitudinal investigations (Werner, 1989, 1997), many of these variables are not easily amenable to change. In addition, teaching children to cope in a more problem focused or active manner may not be suitable, depending on the child's environmental context. Despite suggestions that problem-focused coping strategies are adaptive and foster feelings of self-esteem (Williams, Wiebe, & Smith, 1992), these strategies may not be well suited for successful adaptation in, for example, maltreating environments, where active coping behaviours may provoke attention and reactions from others that could result in a greater risk of maltreatment. In their investigation of coping behaviours in maltreated children, Cicchetti, Rogosch, Lynch, and Holt (1993) reported that ego-overcontrol (e.g., able to concentrate, reflective, attentive, responsive to reason, calm, relaxed, dependable), as opposed to ego-undercontrol (e.g., self-assertive, curious, exploring, energetic, straightforward, open), was associated with resiliency among maltreated children. Overcontrollers, who are reserved, rational, and have a controlled way of interacting, may well be more attuned to what is necessary for successful adaptation to adversity in the home which, consequently, prevents them from being the targets of continued maltreatment. Thus, what represents adaptive coping in one situation may not be adaptive in another. For example, while distancing is categorized as an ineffective coping method, it may well be extremely adaptive in a home environment characterized by violence and abuse (Mrazek & Mrazek, 1987; Rutter, 1987).

While given relatively little attention by intervention programs, research within the risk, resiliency, and trauma literatures have documented that an individual's internal resources and their contribution to resiliency is an additional and important area to consider (Brooks, 1994). Two concepts which have recently emerged within the area of psychological resiliency and, which address the relevance of "internal characteristics" in helping one to overcome and deal with negative life experiences, are *hardiness* and *optimism*. Emerging from the medical literature, the concept of hardiness was first identified by Kobasa as a resistance factor in the late 1970's. Initially used to examine the relationship between health and stress (Jennings & Staggers, 1994), Kobasa's (1979a, 1979b) preliminary findings revealed that individuals who experienced high levels of stress, but remained healthy had a different personality structure than individuals who experienced high levels of stress and became ill. The central domain of this personality structure, labeled hardiness, was subsequently defined as, "the use of ego resources

necessary to appraise, interpret, and respond to health stressors" (Pollock, 1989, p. 53). Following this, the term continued to be employed by management theorists in their examination of the links between stress and health (Low, 1996). Although it continues to be employed most frequently in the contexts of medicine and illness (Jennings & Staggers, 1994; Pollock, 1989), researchers are beginning to conceptualize hardiness as a general health promoting factor (Bigbee, 1985), which enables individuals to remain both psychologically and physically healthy despite confrontations with stressful situations or experiences (Kobasa, Maddi, & Kahn, 1982). As will be discussed in further detail, hardiness is currently measured along three dimensions: control, commitment, and challenge (Kobasa, 1979a, 1979b).

In contrast to hardiness, the concept of optimism grew out of the psychological literature and reflects an individual's expectation of a positive outcome in *most* situations (Scheier & Carver, 1985). The concepts of optimism and pessimism are also rooted in Seligman's theory of explanatory style, which proposes that the way in which individuals explain the causes of events influences how they will react to, perceive, or be affected by external events (Abramson, Seligman, & Teasdale, 1978). The explanations offered by individuals have three dimensions: internality (is the cause of the event internal or external to the individual?), stability (is the cause of the event due to stable or transient factors?), and globality (are the factors responsible for the event global or specific?). In contrast to individuals with a pessimistic explanatory style, who perceive bad events as the result of internal, global, and stable factors, the use of an optimistic explanatory style will render the individual more inclined to view negative experiences as a consequence of external, transient, and specific factors (Malinchoc, Offord, & Colligan, 1995).

It has been argued that optimism enables the individual to set goals, make commitments, cope with adversity and pain, and to recover from trauma and/or stress (Fischer & Leitenberg, 1986; Smith, 1983; Tiger, 1979). Numerous studies have examined the role an "optimistic bias" plays in adolescent and adult mental health (Harris & Guten, 1979; Weinstein, 1980) and, consequently, have noted a strong relationship between the possession of an optimistic outlook and current self-reported happiness (Matlin & Gawron, 1979). This "bias", initially believed to be inappropriate since "normal functioning" was presumed to consist of having good contact with reality, has been demonstrated to be associated with overall psychological well-being (Kassinove & Sukhodolsky, 1995). In their review of the literature, Taylor and Brown (1988) concluded that "positive illusions and unrealistic optimism are characteristic of normal human thought...(and)...these illusions appear to promote other criteria of mental health, including the ability to care about others, the ability to be happy or contented, and the ability to engage in productive and creative work" (p. 209). Indeed, the pivotal contribution of an optimistic explanatory style in promoting resiliency among children has been noted by many (Brooks, 1994; Mrazek & Mrazek, 1987; Wyman, Cowen, Work, & Kerley, 1993).

Among factors which have been demonstrated to promote resiliency among children, converging evidence from various research literatures has consistently highlighted the importance of an *internal locus of control and/or attributional style* in protecting individuals from life's stressors (Brooks, 1994; Cowen & Work, 1988; Garmezy, 1985; Luthar, 1991; Luthar & Zigler, 1991; Masten et al., 1990; Mrazek & Mrazek, 1987; Polk, 1997; Werner, 1989, 1997; Wright & Masten, 1997). Specifically,

resilient individuals are more likely to have a greater sense of self-esteem and self-efficacy (Baldwin et al., 1993; Brooks, 1994; Rutter, 1987; Werner, 1997; Wright & Masten, 1997; Wolff, 1995), to have well established feelings of one's worth (Brooks, 1994; Polk, 1997; Wolff, 1995), confidence that they can cope successfully despite adversity (Rutter, 1987), an ability to find meaning in distressing experiences (Polk, 1997), a view that mistakes are consequences of factors that are modifiable (Brooks, 1994), and a conviction that one's contributions are worthwhile and valuable (Polk, 1997). Interestingly, while the hardiness and optimism literatures have developed in relative isolation from one another, the concepts of an internal locus of control and/or attributional style appear central to understanding how both factors operate in the promotion of resiliency. To the extent that these internal cognitive characteristics are modifiable, they may provide health care professionals with avenues by which to promote resiliency and competence in children at risk.

Hardiness, Optimism, and Resiliency

Theoretically, hardiness develops in early childhood and emerges as the result of rich, varied, and rewarding life experiences (Maddi & Kobasa, 1984). According to Kobasa (1979a), the effects of hardiness on mental health are mediated by the individual's cognitive appraisal of a stressful situation and his/her repertoire of coping strategies. Specifically, hardiness alters two appraisal components: it reduces the appraisal of threat and increases one's expectations that coping efforts will be successful (Tartasky, 1993). Hardiness has also been shown to be associated with the individual's use of active, problem-focused coping strategies for dealing with stressful events (Gentry & Kobasa, 1984; Kobasa, 1982). These two mechanisms are, in turn, hypothesized to reduce the amount of psychological distress one experiences and to contribute to the long-term psychological well-being of an individual. To the extent that this constellation of personality characteristics labeled hardiness develops in childhood (Kobasa, Maddi, & Kahn, 1982), early intervention efforts to promote resiliency among children could begin by encouraging the development of those dimensions which comprise this construct.

<u>Control</u>

As indicated previously, hardiness is comprised of three subrelated concepts: control, commitment, and challenge (Maddi & Khoshaba, 1994). Control, which is measured by the absence of powerlessness that an individual feels (Bigbee, 1985), refers to the belief that one can control or influence occurrences in one's life, that personal efforts can modify stressors so as to reduce them into a more manageable state (Bigbee, 1985; Huang, 1995; Maddi & Kobasa, 1984; Pollock, 1989; Tartasky, 1993; Wagnild & Young, 1991), or that a contingency exists between one's actions and external events (Sullivan, 1993). Essentially, this concept taps or represents the level to which individuals perceive themselves as having an internal locus of control which, as noted earlier, has been demonstrated to be a critical component in the promotion of resilience among children (Brooks, 1994; Cowen & Work, 1988; Luthar, 1991; Luthar & Zigler, 1991; O'Grady & Metz, 1987; Stewart et al., 1997; Werner, 1997; Werner & Smith, 1982; Wright & Masten, 1997). Seligman (1995) suggests that a sense of control is developed early in life as infants learn that intentions are correlated with voluntary

movements. Gradually, a general expectancy is engendered in the child that his/her actions have a significant impact on situational outcomes. In contrast, helplessness results from non-contingencies and a sense of uncontrollability. The extent to which one perceives stressors as changeable is influenced by one's attributional style or level of optimism. Kobasa (1982) has noted that hardy individuals have an optimistic explanatory style and Whalen et al. (1994) report that among 10 to 13 year olds, optimism was positively correlated with perceived control. Importantly, with regards to intervention efforts, attributional style and, thus, one's outcome expectancies, have been shown to be potentially modifiable (Seligman, 1995).

In older children (7 to 12 years), teaching optimism consists of four basic skills: 1) recognizing one's automatic thoughts, 2) evaluation of these thoughts, 3) generating more accurate explanations for the occurrence of events, and 4) decatastrophizing (Seligman, 1995). Methods by which children are taught these skills are outlined by Seligman (1995) and include: skits and role plays, cartoons that require children to articulate what characters are thinking and feeling, and opportunities to model the positive explanatory style of adults. Instilling optimism in younger children (i.e., preschoolers), however, differs from the above approach as these children do not yet have the cognitive skills necessary to recognize and dispute their thoughts. Seligman (1995) offers three principles for grounding young children in optimism.

Mastery Experiences

Non-contingency between one's actions and external events, or uncontrollability, as been demonstrated to lead to depression and passivity (Seligman, 1995). Feelings of mastery, in contrast, are the result of a contingency between action and outcome and have been shown to be associated with increased resiliency among children (Brooks, 1994; Stewart et al., 1997; Werner, 1997). Structured environments (predictability), in addition to strategies such as grading (using small achievable steps to grade challenges) and choice (maximizing the amount of choice given to a child) allow children to develop a sense of control over their world (Seligman, 1995). It is this perception of control over the environment which leads to feelings of mastery and optimism on the part of the child (Brooks, 1994). As part of this strategy, parents, teachers, and other adults in the child's life must identify and reinforce areas of competence (Brooks, 1994), provide opportunities for mastery (Masten et al., 1990), and enable the child to model effective action (Masten et al., 1990). Verbally reinforcing the child's own effectiveness may motivate children to venture out and confront tasks that are challenging (Brooks, 1994). In addition, enhancing decision making skills and allowing children to understand the purpose of rules by allowing them to contribute to their formation, along with consequences if not adhered to, also contributes to the belief that one has some control over what is occurring in one's life (Brooks, 1994).

Task accomplishment and experiences of mastery have also been found to contribute to higher levels of self-esteem and self-efficacy in children (Masten et al., 1990; Rutter, 1987) which, in turn, has been associated with increased resiliency (Baldwin et al., 1993; Brooks, 1994; Neighbors, Forehand, & McVicar, 1993; Rutter, 1987; Werner, 1997; Wolff, 1995; Wright & Masten, 1997). For example, feelings of self-esteem and self-efficacy may help children to resist the negative messages they receive about themselves as a result of maltreatment experiences (Cicchetti et al., 1993)

and enable them to feel prepared when they enter a novel situation by virtue of their perceived competence and confidence (Masten et al., 1990). The role of mastery in promoting feelings of self-esteem and self-efficacy is crucial. Seligman (1995) notes that the failure of the self-esteem movement occurred because the emphasis was on "feeling good as opposed to doing good". Indeed, there is no effective way of teaching an individual how to feel good which does not teach doing well first. Thus, self-esteem develops as a side effect of mastery, a byproduct of doing well. Finally, experiences of mastery demonstrate to children that they have the skills needed to succeed (Rutter, 1987) which, consequently, may increase motivation and activity level, two factors which have been shown to be characteristic of resilient children (Weissberg et al., 1991; Wolff, 1995).

Feelings of Positivity

In addition to providing explicit opportunities for mastery, a warm parental relationship indirectly enhances mastery via increased exploration (Masten et al., 1990; Seligman, 1995). It is well documented in the literature that secure early attachments lead to increased levels of self-esteem and self-efficacy (Brooks, 1994; Gribble et al., 1993; Rutter, 1987; Wyman et al., 1992). Caring and loving caregiver relationships lead the child to view herself as lovable and worthwhile. This positive self-perception, which the child receives in part from others, provides a secure base for exploration of the world (Wright & Masten, 1997), thus, increasing the likelihood that he/she will experience a sense of mastery and autonomy (Masten et al., 1990). Longitudinal research investigating the role of familial factors in protecting children from adversity have consistently shown that the presence of a warm, positive, and caring relationship with *at least one parent*, who demonstrates concern for the child's well-being and is attuned to the child's needs (Garmezy, 1991; Werner, 1989, 1997; Wyman et al., 1992) contributes to the development of a resilient profile. Similarly, expressed appreciation for and encouragement of children by parents and other family members contributes to a sense of one's worth and positive feelings toward the self (Brooks, 1994; Gribble et al., 1993; Wyman et al., 1992). Socializing agents, such as parents or a responsive adult, also serve to reinforce positive behavioural performances (Seligman, 1995). Seligman (1995) notes, however, that it is essential to praise children contingent on success only. He argues that like children who suffer from learned helplessness, or the belief that bad events are uncontrollable and thus, inescapable, children who experience praise and reinforcement in the absence of a behaviour begin to realize that their actions, good or bad, have no predictable outcome in the environment. In addition to reinforcement contingent upon success, it is also critical to provide clear warnings and safety signals to children when bad events loom.

"Bedtime nuggets" (Seligman, 1995) is an exercise which promotes feelings of positivity within children. In the evening, parents or caretakers invite children to review the good and bad events which happened during that particular day in an attempt to shape a positive state of mind which children can eventually internalize. Mrazek and Mrazek (1987) similarly note that encouraging children to identify positive events, in general, helps to foster resiliency in maltreated children.

Parental Explanatory Style

As noted previously, teaching preschool children to identify and utilize various cognitive skills is a difficult task since their cognitive processes are not sufficiently developed to engage in this type of activity. By the age of two years, however, causal attributions can be verbalized (Seligman, 1995). This ability is, in part, developed by absorbing and modeling the explanatory style of others, most notably parents. Hesse and Cicchetti (1982) argue that young children are capable of assimilating the emotional repertoire, language, and coping styles of their parents. Similarly, Fischer and Leitenberg (1986) suggest that the tendency for parents to express an optimistic or pessimistic explanatory style might well be associated with their children's level of optimism. The implication of these findings for resiliency promotion efforts centers on the idea that parents and adults, who have a significant impact on the child, must attempt to communicate their own optimism and hopefulness (Brooks, 1994).

Commitment

Conceptually similar to Antonovsky's (1979) notion of meaningfulness (i.e., Salutogenic model; Sullivan, 1993), the second dimension, commitment, is reflected in the ability to feel actively involved with others and a belief in the truth, value, and importance of one's self and one's experience (Huang, 1995; Tartasky, 1993; Wagnild & Young, 1991). Adverse situations are ultimately seen as meaningful and interesting (Maddi & Kobasa, 1984). Individuals high on this dimension are committed to various aspects of their life including interpersonal relationships, family, and the self (Low, 1996). Measured or indicated by the absence of alienation (Bigbee, 1985), commitment is reflected in one's capacity to become involved, rather than feeling estranged. From an existential point of view, this dimension represents a fundamental sense of one's worth, purpose, and accountability, which protects against weakness while under adversity (Bigbee, 1985; Pollock, 1989; Sullivan, 1993).

Seligman (1995) asserts that the difficulty with current Western society lies in its inability to find meaning in life. Despite philosophical arguments regarding what is "meaning", the true essence of the term becomes clear when we, as individuals, are able to attach ourselves to a larger entity (e.g., community, church); life has more "meaning". To the extent that individuals, including children, are consuming, isolated, believe only in their success, invest solely in their goals, and feel that they are all that truly matters, the more devastating it is when one fails or is weakened.

The dimension of commitment may also underlie the "required helpfulness" phenomena; the observation that resilient children are often called on to assist their families or communities, quite competently, in times of need (Brooks, 1994; Mrazek & Mrazek, 1987; Stewart et al., 1997; Werner, 1997; Wright & Masten, 1997). In addition, having to care for a younger sibling or a pet appears to be related to the individual's survival (Zimrin, 1986). Children who are able to carry out this task seem to have the capacity to look beyond themselves and feel a responsibility to assist others (Rutter, 1987; Werner, 1997), which in turn, contributes to one's sense of purpose and worth. Protective factors which appear repeatedly in the literature, especially among persons surviving serious maltreatment include: the conviction that one's contributions are worthwhile and valuable, the opportunity to be helpful to others, the ability to feel a curiosity for and express interest in life, and the belief that one has purpose and worth

(Brooks, 1994; Polk, 1997; Radke-Yarrow & Sherman, 1990; Werner, 1993; Wright & Masten, 1997).

To engender a sense of ownership and pride within a child, adults must provide children not only with opportunities to assume responsibility, but opportunities which encourage them to feel as though they are making a contribution to school, family, or the community (Brooks, 1994). Fostering commitment also involves asking oneself, "What does this experience really mean for me?" For young children, exploration of this sort would involve the assistance of a warm and supportive adult who could assist the child in examining the meaning of an experience. Polk (1997), in her review of protective factors, notes that having the ability to find meaning in one's experiences or having close contacts who can assist one in making sense of an experience is associated with resiliency.

Commitment encompasses the need to be involved with and contribute to familial and school endeavors and reflects a capacity to feel a responsibility to assist others (Weissberg et al., 1991). To the extent that children who have witnessed adversity may present as aggressive or withdrawn (Cicchetti et al., 1993; Schneider & Leitenberg, 1989), social skills training (e.g., emotional expression, sensitivity, and control) via modeling, would be a critical intervention component.

Challenge

The third dimension, challenge, reflects the belief that change is not a threat to personal security, but an opportunity for personal development and growth (Bigbee, 1985; Huang, 1995; Maddi & Kobasa, 1984; Pollock, 1989; Tartasky, 1993; Wagnild & Young, 1991). Indicated by the absence of a need for security, it represents the individual's positive attitude toward change and the belief that one can profit from failure as well as success (Brooks, 1994). Fears surrounding potential mistakes and the feelings of embarrassment which are frequently a consequence of making them, present an obstacle to overcoming challenges and, thus, personal growth (Brooks, 1994). These fears frequently lead to avoidance behaviour which perpetuates the fear and prevents the individual from confronting and overcoming the challenge. Parents and adults must create an environment that reinforces within the child the belief that not only are mistakes and failure are to be expected, they are acceptable and provide an opportunity for learning and growth (Brooks, 1994).

Fostering challenge can also be accomplished by asking oneself, "What can I learn from this experience?" For preschoolers, who may have conceptual difficulty with this question, the presence of a warm and supportive adult would be needed to assist children in exploring the answer to this question. Alternatively, employing the "bedtime nuggets" exercise could be used to review the difficult events of the day and to explore what each means with respect to personal growth.

Mediators

Although the specific mechanism(s) by which hardiness and optimism contribute to long term psychological well-being remain speculative (Tartasky, 1993), Kobasa (1979b) hypothesized the existence of two mediational pathways (see Figure 1). First, hardiness (and optimism) alter the individual's cognitive appraisal process, such that

individuals are able to reframe or reinterpret adverse experiences (Florian, Mikulincer, & Yaubman, 1995; Funk, 1982; Pollock, 1989; Tartasky, 1993; Williams et al., 1992). Consequently, the level of psychological distress experienced is reduced. Secondly, hardy individuals have the ability to cope in a way that is adaptive once stress and/or adversity is perceived (Tartasky, 1993; Williams et al., 1992). This is to say that hardy persons prefer to rely on active, transformational coping strategies which act to cognitively transform a potentially negative event into a growth producing experience (Bigbee, 1985, Florian et al., 1995; Funk, 1992). Previous research findings have provided support for this hypothesis and indicate that, in comparison to less hardy individuals who are more likely to engage in distancing, avoidance, and emotionally-focused coping, individuals who score high on hardiness measures are more likely to engage in problem-focused, active, and support-seeking coping strategies (Pollock, 1989; Williams et al., 1992) . These latter coping strategies, in comparison to emotionally-focused coping (e.g., distancing) have typically been regarded as adaptive, since individuals engaging in problem-focused coping generally demonstrate fewer indications of distress and maladjustment (Breslin et al., 1995; Cooper et al., 1988, 1992; Evans & Dunn, 1995). As noted previously, for children living in a violent familial environment, these more "adaptive" coping mechanisms may provoke negative reactions from caregivers (Cicchetti et al., 1993). In contrast, distancing, while considered a regressive strategy (Florian et al., 1995), may prove to be an extremely adaptive mechanism.

Among adults, studies conducted by Florian et al. (1995) and Williams et al. (1992) have provided support for the hypothesis that the dimensions of commitment and control positively contributed to mental health by way of cognitive appraisal and active coping resources. Clearly, what needs to be acknowledged is that investigations which support the association between hardiness and active, problem-focused coping strategies have utilized adult populations. Interestingly, Sullivan (1993) notes that Kobasa's concept of challenge describes an individual who has developed *flexible* coping styles. Cicchetti et al. (1993) found that ego-resiliency, or the ability to modify one's level of ego-control as a function of environmental demands (i.e., flexibility; Polk, 1997), served as a protective factor in maltreated children. It may well be that hardiness and optimism in *children* lead to the development of a range of coping strategies; which strategy is chosen to cope with a particular experience would depend on the nature and severity of the situation.

Additional Effects

The mediational model outlined above emphasizes the hierarchical structure of protective factors in promoting resiliency. It has been asserted that cognitive processes may represent precursors to the later acquisition of coping skills and the development of other protective characteristics (Hall, 1993). Weissberg et al. (1991) describe two additional means by which preschool programs may produce long term effects. First, the skills and resources developed within the program may promote greater school readiness and provide a smoother transition into kindergarten. This, in turn, would elicit positive responses from the teacher (Werner, 1997) which may lead to improved attitudes toward school, better academic performance, and higher levels of self-esteem and motivation (Wolff, 1995). Secondly, these programs may begin to enhance parental competence and

involvement, such that parental efforts to socialize their children are more successful and expectations for their children (especially as they enter the educational system) are more realistic.

Regardless of its specific effects it is hypothesized that, in general, interventions focused on the internal resources of the child will have a significant impact upon that child's emerging view of the world, his/her ability to find meaning in events, and the belief that they, in addition to others, are worthwhile individuals who are capable of contributing something of value. Ultimately, it is anticipated that these interventions will serve to promote the child's socio-emotional development, use of adaptive coping strategies, and the acquisition of developmentally appropriate skills and abilities.

Importance of Context

Focusing exclusively on the child and the promotion of his/her resiliency is important, however, ignoring or relying too heavily on any one context can be detrimental (Masten et al., 1990). As these children are being taught to tap internal resources which they can then employ to counteract the negative effects of adverse environments, it must be recognized that other contexts the child finds him/herself in may not be, or know how to be, supportive and encouraging. Evidence suggests that prevention programs directed towards children, socializing agents, and their respective environments appear to produce longer lasting effects (Stewart et al., 1997; Weissberg et al., 1991) than those treatment plans which are designed specifically for children to the exclusion of contextual factors. In addition, where possible, it would be important to promote among parents and caregivers, a nurturing and attentive interactional style, as well as personal development and well being, in an attempt to empower parents to help themselves and their children (Weissberg et al., 1991).

Methodological Issues

Understanding how children are able to manifest competence in the face of adversity is important as researchers attempt to delineate those factors which promote resiliency in vulnerable individuals. Despite the proliferation of studies on resiliency, no consensus regarding its definition has emerged (Kinard, 1998). Although the task of operationalizing resilience is crucial to the integrity of the research being conducted, efforts to develop an operational definition of this key concept is hampered by numerous methodological difficulties. Specifically, six key issues need to be addressed by investigators in the development of an operational definition of resilience (Kinard, 1998). First, factors defining resilience and factors promoting or reducing resilience need to be differentiated and distinguished. Second, measures of resilience in different settings and situations must be obtained in order to establish a comprehensive picture of the child's functioning. Third, multiple sources of data are required to yield the greatest understanding of resilience in children. Thus, the use of more than one observer or measure is preferable and allows researchers to determine if resiliency profiles are differentially related to the source of the data. Fourth, scoring criteria for measures chosen to define resilience should be clear and the use of cutoff scores should be accompanied by a clear rationale. In addition, consistency regarding definitional criteria

for resiliency should be implemented for reasons of comparability between studies. Fifth, issues have emerged over when resilience is typically measured. Most studies of children measure resilience following exposure to the adverse event(s) and are not privy to the child's level of competence prior to the period in question. This has implications, for example, among children who are originally of low cognitive ability since if higher cognitive capability is used to define resilience, how can these individuals ever be seen as resilient? Finally, longitudinal studies are needed to determine the continuity of resilience over time since the ability to manifest resilience is likely to change as a function of the child's emotional, cognitive, and behavioural development.

Implementation of Interventions

Studies of competence and resiliency have documented the importance of implementing interventions early in development (Masten & Coatsworth, 1998). Children who enter the school system with difficulties in emotional regulation and who are distrustful of adults are at a disadvantage for meeting the developmental tasks of middle childhood. Thus, children who possess adequate internal and external resources benefit from a good start in school, connections with peers, and positive self-perceptions. Children who begin the educational process with few resources have greater cognitive, self-regulatory, academic, and interpersonal difficulties and are at risk for disengagement from contexts which may help to promote the development of more adaptive and appropriate resources. Similarly, Wolff (1995) maintains that there is evidence for the beneficial and long term cost savings effects of targeting preschool education. The extent to which school based training can contribute to fostering resilience through the promotion of resources, such as an inner locus of control, she argues, has yet to be established.

Consistent with the argument that interventions at the internal resource level be implemented prior to the start of the formal educational process (i.e., preschool), the ages from three to five years are recognized as a critical period in the child's development. The skills and abilities learned in these early years serve to build the foundation for later competence (Masten & Coatsworth, 1998). Specifically, this phase of childhood is a time of motor skills development, language acquisition, play, and emerging problem solving abilities which, ultimately, will underlie competence in later years. Play, at this stage in development, is characterized by the mastery of physical skills and increased interest in social play, both of which are critical to the development of self-confidence and competence (Hughes, Noppe, & Noppe, 1988). White (1959) argued for a "mastery motivation" inherent in all humans which, however, is *readily* observable in young children as they interact with their environment in an effort to experience pleasure from feelings of self-efficacy.

Although mastery motivation is exhibited by infants (Masten & Coatsworth, 1998), by the age of two years, a child's behaviour is affected by cognitive appraisals of success or failure (i.e., optimism; White, 1959). Along a similar vein, Murphy (1987, p. 104) articulates that the, "roots of optimism lie in infancy - in repeated experiences of gratification of needs, of being able to count on life feeling good." The optimism and hope acquired through these early life experiences are reinforced in later years as, "separations are followed by reunions, pain is followed by comfort ... the child develops

confidence that he and the environment will be able to manage any problem." Thus, the ages between three and five years are critical to the child's developing a sense of self-efficacy and mastery (Anthony, 1987) which, as noted, are important in the construction of an internal locus of control and/or optimistic explanatory style. Evidence also suggests that young children (i.e., four to five years of age), in comparison to their older peers, have a tendency to be less accurate in the assessment of their abilities, frequently overestimate what they can do, and can remain optimistic and confident even in the face of negative feedback (Eisenberg, Fabes, & Guthrie, 1997). Murphy (1987, p. 94) sees the four to five year old, with his/her "zest for growth and pride in mastery as a propitious stage for resilience." Anthony (1987, p. 37) also notes that "this enhancement of resilience and this acquisition of new resources often occur in the third year of life, when the basic coping capacities are integrated and when self-management is established. There is always a combination of internal and external resources working together that furnishes the invulnerable child with necessary resilience to overcome life's stresses." With this developmental phase as a critical time for the emergence and use of skills and resources which have been shown to be important for the promotion of resiliency and competence, it is necessary that interventions be implemented during this period, before the child begins school.

As children develop these resources out of their interactions with the world, and not through a didactic learning process, a preschool setting which provides children with opportunities to learn communication, social, and problem solving skills, to develop respect for themselves and others, as well as to encourage the exploration and mastery of the physical world, via social-interaction modeling, would constitute the ideal environment in which to introduce these interventions. In addition, because of socio-economic and demographic shifts within North American society, in conjunction with the increasing numbers of working mothers, preschool child care settings are fast becoming important instruments of socialization for young children. Thus, to the extent that these environments promote the acquisition of skills and resources through modeling and constitute the primary means by which young children become socialized, preschool settings represent the most realistic and cost effective way to provide interventions which will help to meet the psychological, emotional, and social needs of these children.

Finally, unlike previous programs which have directed their efforts towards enhancing the quality and nature of the child-parent relationship (Masten & Coatsworth, 1998) or alleviating environmental deficits (Masten & Coatsworth, 1998), promoting resiliency via interventions aimed at developing and/or enhancing one's internal resources can be accomplished without specialized programs, highly trained providers, or other costly resources. Child care providers need only be made aware of how specific actions (i.e., modeling, reinforcement) promote the development of various cognitive and internal resources which, consequently, may increase resiliency and competence in children. Indeed, "children are capable of overcoming great odds...if their life conditions help them to develop expectations of a responsive environment and views of themselves as competent" (Wyman et al., 1993, p. 65).

Appendix A

Measurement Instruments

Hardiness

1979 -- Alienation from Self (Maddi, Kobasa, & Hoover, 1979) Commitment
Alienation from Work
Powerlessness Scale (Maddi, Kobasa, & Hoover, 1979) Control
External Locus of Control Scale (Rotter, 1966) Security Scale (Hahn, 1966)
Challenge
71 item Unabridged Hardiness Scale

1982 --1) 20 item abridged Hardiness Scale 2) 36 revised Hardiness Scale (Kobasa et al., 1984)

3rd generation scales --

1) Personal Views Survey (Hardiness Institute, 1985).
2) Dispositional Resilience Scale (Bartone, Ursano et al., 1989).
3) Health Related Hardiness Scale (HRHS; Pollock, 1986).
4) Family Hardiness Inventory -- to measure hardiness as stress resistance and adaptation resources in families (McCubbin et al., 1987).

Optimism - With regards to optimism and its assessment in children, very little has emerged in the literature. Seligman (1995) employs Kaslow's Children's Attributional Style Questionnaire or the CASQ as a measure of optimism/pessimism. Recommended for children 8 to 13 years of age.
-General Expectancy for Success Scale (Fibel & Hale, 1978)
9-13 year olds
30 items

Resilience-
-Child Depression Inventory (Kovacs, 1981)
-Revised Children's Manifest Anxiety Scale (Reynolds & Richmond, 1985)
-Self-Esteem Inventory (Coopersmith, 1981)
-Perceived Competence Scale for Children (Harter, 1982) Grades 3 to 9
-Peabody Picture Vocabulary Test (General Intelligence; Dunn & Dunn, 1981)
-Pupil Evaluation Inventory (Pekarik et al., 1976)
-Teacher's Report Form (Achenbach, 1991)
-The Teacher-Child Rating Scale (Hightower et al., 1986)
-Child Behaviour Checklist (Achenbach, 1991)
-California Child Q-Set (Block & Block, 1969)

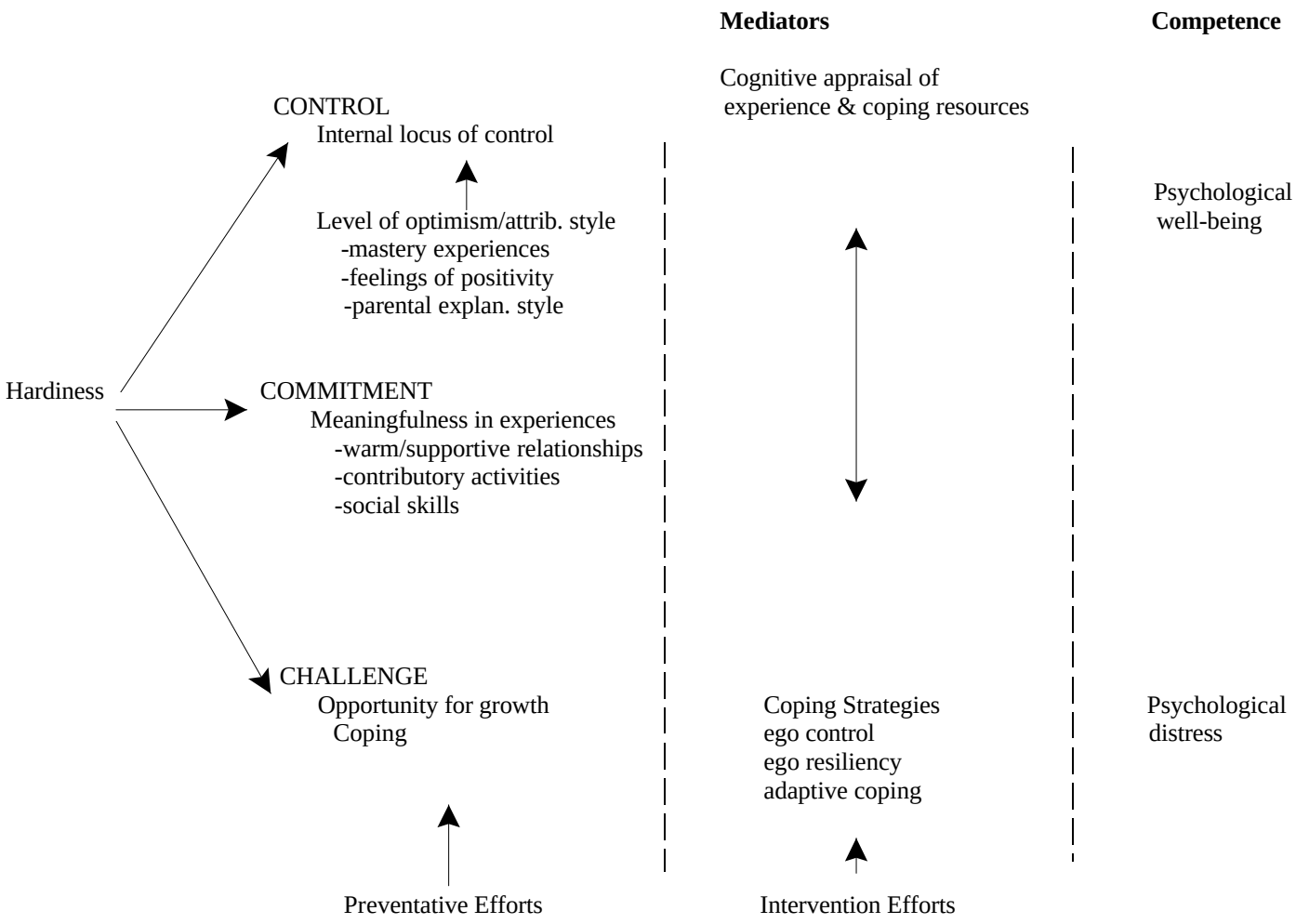
-School measures
-Grade
-Peer reports of child's behaviour -- leader, aggressive, withdrawn, shy

-Pupil Evaluation Inventory (Pekarik et al., 1976)
-Revised Class Play (Masten, Morison, & Pellegrini, 1985)

Locus of Control-
-Stanford Preschool Internal-External Scale (SPIES)
-Causal Attribution Questionnaire (Fielstein et al., 1985)
-The Nowicki-Strickland Locus of Control Scale (Nowicki & Strickland, 1973)

Figure. 1

Resilience



Appendix B

Issues

1) The causal sequence of hardiness and stress is unclear. Is the ability to withstand stress an indication of hardiness or is a hardy personality an indicator of the ability to handle stress? (Low, 1996)

2) Where does hardiness come from? -socialized trait, ascribed trait, or benefit derived from strong social network? (Low, 1996)

3) Whether the hardiness construct has one or more dimensions is ultimately an empirical question (Tartasky, 1993; Williams et al., 1992). Some question as to whether dimensions should be studied separately (Florian et al., 1995; Funk, 1992; Jennings & Staggers, 1994).

4) Some question the validity of scales used to identify/measure hardiness (Jennings & Staggers, 1994). It is somewhat unclear as to what scales are measuring (Low, 1996). E.g., response options to the question "Do you feel in control of the events in your life?" include a yes or no. No room to elaborate/explain. There is also a proliferation of scales and questions relate to which is the most reliable and valid (Funk, 1992; Jennings & Staggers, 1994; Tartasky, 1993). The majority of scales have been developed for use with adults and/or adolescents. Some suggestion that original hardiness scales measure neuroticism (Funk, 1992; Jennings & Staggers, 1994; Tartasky, 1993).

5) Suggestion that hardiness may function differently in men and women (Funk, 1992; Jennings & Staggers, 1994; Williams et al., 1992). Hardiness, possibly, is a false construct built upon particular personality traits of male executives who were originally studied by Kobasa.

6)Wheeler and Frank (1988) point out that since the components of hardiness are a) control and b) commitment and challenge, both of which have been found to be related to social support, the construct of hardiness may simply be an indicator of a complex relationship between the variables of locus of control and social support.

7)Finally, hardiness has not been extensively studied in children.

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