

**Self in Situ: Locating Self-Concept and Self-Concept Research in Theoretical,
Individual, and Relational Contexts**

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The specific purposes of the present paper are to locate self-concept and self-concept research in the broader contexts of:

- (a) educational and developmental psychological research as a whole;
- (b) a model of the self which takes into account relevant findings from educational and developmental psychological research, and
- (c) a concurrent model of self-in-relation which takes into account the influence of relationships on the development of self-concept.

In fulfilling these specific purposes the paper attempts to provide an overarching theoretical and operational framework within which self-concept research may be located. This may facilitate the interpretation and evaluation of findings relating to self-concept research, especially in relation to other important constructs in educational and developmental psychological research.

A Model of the Self

When focussed on the individual as the unit of analysis, educational and developmental psychology, and related fields of study, have typically focussed on three dimensions of the self - needs, capacities, and beliefs. We briefly review each of these dimensions below, and then show how these dimensions may be integrated to form a model of the self.

Needs

Substantial research in educational, developmental and related fields of psychology has focussed on the needs of the individual in various settings such as family, school, and life in general (Covington, 2002; Deci & Ryan, 1985; Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & MacIver, 1993; Gaede, 1985; Lingard, Martino, Mills, & Bahr, 2002; Sarason, 1993). The needs of the individual include the overall hierarchy of needs identified by Maslow (1970), and others following Maslow's lead (e.g. McInerney & McInerney, 1998). Of more interest in educational psychology, however, are the specific psychological needs of the individual (e.g. Sarason, 1993). The list of these needs is potentially very great, and our psychological needs change over time (Covington, 2002; Irwin, 1996) and according to context (Eccles, et al., 1993; McCarthy, Pretty, & Catano, 1990). However, there appears to be some consensus that our basic psychological needs revolve around issues of competence, autonomy and control, and relatedness (Connell & Wellborn, 1991; see also Deci & Ryan, 1985; Gaede, 1985; Hirsch & DuBois, 1992; Luthar, & Zigler, 1991; Peterson, Maier, & Slegman, 1993; Skinner, Wellborn, & Connell, 1990).

Capacities and Incapacities

In one form or another, the capacities or incapacities of the individual (e.g. Ford & Tisak, 1983; Gardner, 1983; Luthar & Zigler, 1991), particularly their cognitive capacities (Becker & Luthar, 2002; Borkowski, 1985; Jones & Idol, 1990; Piaget, 1967; Scarr, Weinberg, & Levine, 1986; Schunk & Zimmerman, 1994) have formed *a* (perhaps *the*) major focus of

research in educational psychology. An individual's capacities or incapacities may be innate or developed over time. Depending on the theoretical framework utilised, innate capacities may include global and domain specific intelligence (Borkowski, 1985; Sternberg, 1986; Thorndike, Hagan, & Sattler, 1985; Wechsler, 1991), multiple intelligences (Gardner, 1983, 1989), or specific, neurologically related talents and creativity (Feldman & Piirto, 1995; Santrock, 1997). Innate incapacities may include brain damage or dysfunction due to genetic inheritance or trauma (Santrock, 1997). Innate capacities and incapacities are also developmentally related e.g. the capacity to manipulate abstract ideas, or to empathise with others, are potential at birth but not actualised until later in life (Piaget, 1967).

Developed (or learned) capacities in the cognitive domain include the ability to effectively utilise cognitive and metacognitive strategies (Borkowski, Carr, Rellinger, & Pressley, 1990; Paris, & Winograd, 1990; Schunk, & Zimmerman, 1994), to engage in critical thinking (Bransford, Vye, Kizner, & Risko, 1990; White, & Baird, 1991), to process information 'deeply' (Barker, Dowson, & McInerney, 2002; Graham & Golan, 1991), and many other 'mental gymnastics' which are substantially related to academic progress and achievement. Learned incapacities include inflexible or ineffectual strategy use (Cantwell, 1992), learned helplessness (Peterson, et. al., 1993; Stipek, & Kowalski, 1989), self-handicapping strategies (Martin, Marsh, & Debus, 2001; 2003), stress and anxiety reactions (Covington & Omilich, 1987; Sarason, 1984; Tyron, 1980), and a variety of other cognitive-affective 'anti-skills' which prove detrimental for thinking, learning and achievement (Kenny, Gallagher, & Alvarez-Salvat, 2002).

Beliefs

Although not perhaps as extensively researched as their capacities, individual's beliefs, and the effect of these beliefs on their personal and academic progress, has been the focus of much recent attention. Salient beliefs identified in the literature include their beliefs about:

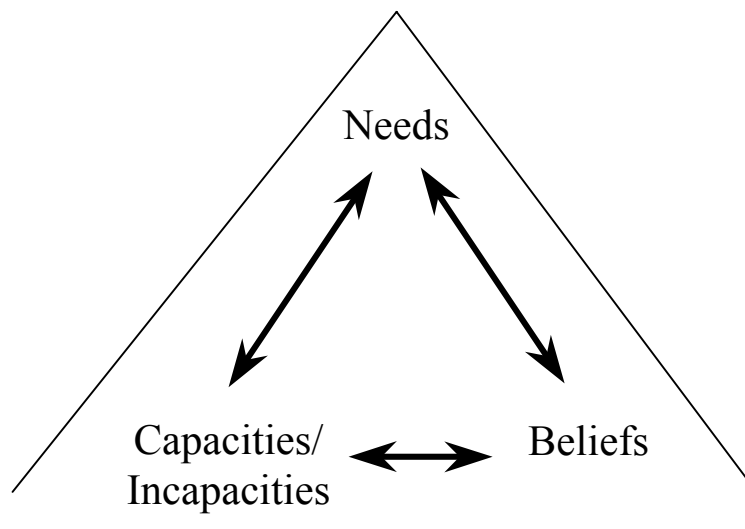
- (a) The nature of intelligence i.e. is intelligence static or malleable (Dweck, 1986);
- (b) Personal competence and ability (Nicholls, Cheung, Lauer, & Patashnick, 1989; Wigfield, Harold, Freedman-Doan, Eccles, Suk Yoon, Arbreton, & Blumenfield, 1997);
- (c) The nature (e.g. Nolen & Haladyna, 1990) and purposes (Pintrich, Marx, & Boyle, 1993; Van Etten, Pressley, Freebern, & Eschevarria, 1998) of learning, and of education as a whole (Nicholls, Patashnick, & Nolen, 1985);
- (d) The nature of success (Wigfield, 1994a), the purposes of success (McInerney, Hinkley, Dowson, & Van Etten, 1998; Weiner, 1994), the sources of success (Groteluschen, Borkowski, & Hales, 1990; Schell, Bruning, & Colvin, 1995; Weiner, 1986), and the chances of success (Eccles, 1983; Eccles, Adler, Futterman, Goff, Kaczala, Meece, & Midgely, 1983; Schell, Murphy, & Bruning, 1989).
- (e) The relative value or utility of institutions and activities (Ainley, 1995; Wigfield, 1994b; Wigfield, & Tonks, 2002)
- (f) Others e.g. are peers, parents, and teachers; helpful or harmful, supportive or non-supportive, cooperative or competitive (e.g Brown, & Kafer, 1994; Creasey, Otlinger, De Vico, Murray, Harvey, & Hesson-McInnis, 1997; Field, Diego, & Sanders, 2002; Harter, Marold, Whitesell, & Cobbs, 1996; Kontos, & Wilcox-Herzog, 1997); and
- (g) Self e.g. am I efficacious or not? (Bandura, 1997; Schunk & Miller, 2002; Zimmerman, Bandura, & Martinez-Ponz, 1992), am I worthy or not? (Covington,

1984), and am I (relatively) good at ‘this’ or not? (Marsh, 1993; Marsh, Walker, & Debus, 1991; Shavelson, & Marsh, 1986).

Each of these sets of beliefs has been shown to have profound effects on learner’s achievement, development, and social-emotional well-being (or otherwise) (e.g. Becker, & Luthar, 2002; Eccles, 1983; Elliot, 1997; Gutman, Sameroff, & Eccles, 2002; Marsh, 1987). Moreover, the extent to which an individual’s beliefs are congruent (or otherwise) with the beliefs of others around them appears to critically influence the operation and effects of these beliefs (Calsyn, & Kenny, 1977; Epstein, 1983; Garcia & Pintrich, 1995; Marsh & Byrne, 1993; Schunk, 1989).

The dimensions of the self reviewed above (which comprise the self-system) may be represented in diagrammatic form as in Figure 1 below.

Figure 1: The self-system with composite dimensions



The arrows linking the various dimensions of the self-system represent the hypothesis that the various dimensions of the self are inter-linked. So, for example, it is assumed to be easier to form a high self-concept if one’s capacities are high (Burns, 1979) and one’s needs are being met (Bachman & O’Malley, 1986; Brockner, Derr, and Laing, 1987; Gutman, et al., 2002). Moreover, if an individual’s self-concept is high, their capacities may be fully actualised (not least because learned incapacities such as self-handicapping will presumably be reduced under conditions of high self-concept) (compare Martin, 2002). As a result, the individual’s needs are more likely to be met (assuming they direct their capacities towards the fulfilment of their needs).

In addition the arrows allow for the self-system to be both negatively and positively self-reinforcing. For example, low self-concept may lead to low capacity may lead to low need attainment may lead to even lower self-concept, etc. Such reinforcement ‘loops’ may also be bi-directional e.g. high capacity may lead to high self-concept may lead to higher capacity, etc.

Finally, each of the dimensions of self may act in reinforcing or non-reinforcing ways within each dimension of the self in given circumstances. For example, within the belief dimension, the belief that the purpose of learning is to master a skill (a mastery goal in terms of Goal Theory) may act to positively support an individual's self-concept (especially if a given skill is actually mastered!) (e.g. Craven, Marsh, & Debus, 1991; Nicholls & Utesch, 1998; Skaalvik, Valas, & Sletta, 1994). Conversely, the belief that the purpose of learning is to beat others (a performance goal in terms of Goal Theory) may act to undermines self-concept, especially in the face of failure (e.g. Nicholls, 1984; Pajares, Britner, & Valiante, 2000; Skaalvik, et al., 1994).

Similarly, different capacities and incapacities may be reinforcing or not. For example, an inability to read will obviously negatively affect one's ability to develop effective cognitive strategies. Also, different needs may act in compensatory or contradictory ways. For example, the need to sleep may conflict with the need to achieve (by, say, writing an academic paper!).

Self-in-Relationship

The description of the self-system above has not yet incorporated the effects of other-selves on the self. Specifically, research from various traditions suggests that other-selves critically influence both the development of the self, and how the self is able to operate in given contexts. This development and operation is explored below.

The Initial Development of the Self-System

At its most basic, biological level the self is created in relationship between other selves. So every person is a direct product of a relationship between other selves (even if this relationship is mediated by a test-tube!). The individual's originating relationship endows the self with at least some of its basic capacities and incapacities, as well as the potential to develop these and other capacities. So, for example, the capacity to see, hear, smell, grow to a certain height, etc. is given to the self to a greater or lesser extent as a product of the self's originating relationship. More controversially, the capacity for intelligence, talent, or creativity may also be given at birth, although the extent to which this is the case, if at all, is hotly debated in the literature (McInerney & McInerney, 1998; Santrock, 1997)

In a certain sense, the basic needs of the self are also given through the self's originating relationship. It is, of course, true that there is not much choice about some of the more basic human needs. All human infants require warmth, food, and human contact, for example. However, some psychological needs do appear to be endowed to a greater or lesser extent by a person's parents. For example, some infants appear to be born with the need more attention than others (Berk, 1992). Also, a person's initial capacities and incapacities influence their needs. So, some infants need special assistance to breathe or eat because of basic incapacities at birth (Berk, 1992).

Infants may not be born with basic beliefs about the world, although there is some conjecture as to the effect of pre-natal experiences in this regard (Berk, 1992; Turner & Helms, 1991). However, there is growing evidence that basic beliefs about the world develop very early in the life span (Harter, 1999; Santrock, 1997; Scarr, Weinberg, & Levine, 1986). In particular, the quality of care that an infant receives appears to have a profound effect on its beliefs concerning the trustworthiness of the world (Lyons-Ruth, 1996), and about its own adequacy or inadequacy as an object of love and attention (Elkind, 1974; Elkind & Hetzel, 1977). Thus, while beliefs may not be endowed at birth, it is reasonable to hypothesise that some key

beliefs, for example those related to competence and self-concept are strongly influenced by the extent to which the infant's needs are met in the context of the infant's relationships with its care-givers (compare Brody & Flor, 1998; Culp, Hubbs-Tait, Culp, Starost, 2000; Majoribanks, 1996). Hence, at a very basic level, the satisfaction, or otherwise, of needs may be the initial catalyst for the development of beliefs about self and the world (Erikson, 1963).

The Ongoing Development of the Self-System

Needs and capacities

Of perhaps more interest to the present paper than the initial development of the self-system, is the way in which the self-system develops over time in relationship with others. First, capacities are developed in relationship with others (Kontos Wilcox-Herzog, 1997; Majoribanks, 1996; Moss & St-Laurent, 2001). This particularly occurs when 'expert' others (parents, teachers, skilled peers) provide instruction sufficient to develop latent capacities in the individual (Pianta, Nimetz, & Bennett, 1997; Rickards & Fisher, 1999). In one sense, the essence of instructional science may be conceptualised as the determination of what it is that relatively expert others do in order to develop (hopefully to their fullest) the capacities of the individual (e.g. Jones & Idol, 1990; Lingard, et al., 2002; She & Fisher, 2002). Moreover, while it is possible (and desirable) for individuals to self-develop capacities of their own, it is highly unlikely that (at least early in the life-span) this will occur in any systematic fashion unless others are available so support self-instruction both before, during, and after the fact (Brody & Flor, 1998; Schickedanz, 1995; Sparks, Sparks, Chambers-Otero & Otero, 2001).

Interestingly, much recent research has also focussed on how others may assist the development of incapacities in the individual. In particular, recent research has focussed on incapacities (such as learned helplessness, self-handicapping propensities, and deficient cognition) that may be built in students when parent and/or teachers emphasise competitive approaches to learning (Ames, 1992; Martin, 2002), or when insufficient emotional and cognitive support is given to student at critical stages (Dowson & Cuneen, 1997; Dowson & McInerney, 1998).

What has also been made as clear in the literature, although not always emphasised by *educational* (as opposed to counselling and organisational) psychologists; are the reasons why competitive structures or insufficiently supportive environments may lead to the development of incapacities in the individual. The extended self-system model described later in this paper (following Maslow, 1976, Covington, 1984; Robinson, 1995; and others), implies that human beings have a deep needs for psychological security and value. Moreover, the model implies that these needs are met in relationship i.e. when people are connected to other individuals and to supportive groups (Gaede, 1985; Hirsch & DuBois, 1992; Gutman, et al., 2002; McCarthy, et al., 1990). Thus, any structure or process that leads to disconnectedness amongst individuals (or equivalently to the fragmentation of groups and partnerships) such as may occur in competitive or unsupportive environments sets up the potential for psychological insecurity and related behaviours (Hirsch & DuBois, 1992; Simons, Paternite, & Shore, 2001).

Individuals respond to relational fragmentation and subsequent psychological insecurity in many ways. These include the development of various affective pathologies (e.g. fear, anger and depression), behavioural pathologies (e.g. aggression, withdrawal, and inappropriate help-seeking), and cognitive pathologies (such as the development of work-avoidance goals, learned helplessness and self-handicapping strategies) (see references above as well as Bellah,

Madson, Sullivan, Swidler, & Tipton, 1985; and Coleman, & Hendy, 1999). Each of these pathologies may be seen, in the terms of the present model, as an incapacity developed in the individual in response to their basic need for relatedness not being met. Conversely, when the basic need for relatedness is met, individuals are much more likely to develop their capacities in healthy ways (Moss St-Laurent, 2001; Pianta, et al., 1997; Sparks et al., 2001).

Beliefs

Of perhaps more interest for the present, however, is that the extent to which others may influence the development of beliefs in the individual. Specifically, it is hypothesised that there is a causal link between the feedback of others (or otherwise) and the development of beliefs about the self (Bachman & O'Malley, 1986; Bandura, 1997; Brockner, et al., 1987; Schunk, 1982, 1983). Thus, for example, supported and encouraged children develop higher self-concepts, more positive self-esteem, a greater sense of personal efficacy, and vice versa. Such support and encouragement may have direct effects on the development of self-beliefs or, as noted above and implied by our self-system model, may have indirect effect on beliefs through the development of capacities. In this way, needs and capacities may interact to help form beliefs. Whatever the mechanism, however, relationships with others are clearly central to the development of beliefs.

Another, related mechanism by which relationships may influence the development of beliefs, including self-concept, may be termed *perceptual congruence*. Specifically, researchers in various areas of belief have proposed that whether (or not) the beliefs, perceptions, and expectancies of an individual are congruent with those of their significant others is likely to have an important impact on the formation of the individual's beliefs, and subsequently on a variety of other important outcomes such as behavioural adjustment and academic performance (Calsyn & Kenny, 1977; Jerusalem, 1984; Marsh & Byrne, 1993). This emphasis on perceptual congruence between an individual's beliefs and expectancies and those of their significant others is consistent with person-environment fit theory (Kristof, 1996; Ostroff & Rothausen, 1997; Ryan & Schmit, 1996; Pervin, 1968). From the perspective of this theory, congruence between an individual's perceptions (the 'person' component) and the perceptions of their significant others (the 'environment' – or 'relational' - component) generates psychological forces that facilitate desirable outcomes. These desirable outcomes may include positive *self*-perceptions such as positive self-concept and positive self-esteem.

Supporting this theory in the positive, and from a self-concept perspective, it is recognised that students' self-concepts and self-esteem tend to be high if they perceive themselves as competent in areas that they believe are important to others (Byrne, 1996; Harter & Pike, 1984). In the negative, there is substantial evidence that discrepancies between one's self-perceptions and perceptions derived from other sources (such as from significant others) may lead to affective state disorders (e.g., Brown & Kafer, 1994; Dietsche, 1990; Epstein, 1983; Harrison, 1985), and behavioural maladjustment (Schlenker & Leary, 1985).

A Relational Perspective on Models of Self-Concept Development: Competition Versus Cooperation

In addition to the support (or care) of others, and the extent of congruence of beliefs between the self and others, individual's comparisons of themselves with others play a key role in the development of self-beliefs. Two of the most well-known models for describing and explaining the influence of comparisons-with-others on the development and operation of self-concept, for example, are the Internal/External (I/E) Frame of Reference Model, and a derivative of it, the Big-Fish-Little-Pond-Effect (BFLPE).

The I/E model (Marsh, 1986, 1994) was initially designed to explain why verbal and math self-concepts were found to be distinct in many research studies. According to the I/E model, Verbal and Math self-concepts are formed in relation to both external comparisons (comparisons with others) and internal (comparisons with self). These two types of comparisons represent two distinct frames-of-reference for the development of self-concept. Moreover, the interplay of these two frames-of-reference substantially accounts for distinctions and discrepancies between student's Verbal and Maths self-concepts (Marsh, 1986, 1994).

The important point for the present analysis, however, is that comparisons with others (e.g. other students) are critical to the way in which individuals come to judge themselves. With respect to these comparisons, Marsh (1987; Marsh, Chessor, Craven, & Roche, 1995) proposed a frame-of-reference model called the Big-Fish-Little-Pond-Effect (BFLPE). This model hypothesises that students compare their academic abilities with the academic abilities of their peers. They then use information from this comparison to formulate (at least in part) their academic self-concept. Specifically, the BFLPE suggests that if a student's perceived ability is higher than that perceived of their peers they will generate higher self-concepts of ability, and vice versa. For example, if *average* ability students attend a *high*-ability school this should lead (according to the BFLPE) to academic self-concepts that are below average. Conversely, if *average* ability students attended a *low* ability school, they should demonstrate academic self-concepts that are above average. Thus, in general, the BFLPE suggests that academic self-concept should be negatively related to school-average achievement i.e. the higher the average school-achievement the lower the average self-concept.

Together the I/E and BFLPE models suggest that the *referent groups* within which individuals are located, and the individual's comparative perception of themselves with respect to these groups, has a substantial impact on their self-concept. (These referent groups, by the way, do not have to be school only but may also be traditional classes or other relevant groupings such as sporting groups/teams or special programs classes (e.g. Marsh, et al., 1995). Put another way, individuals' self-concepts are not independent of the referent groups within which they are located. This again highlights the strong social/relational dimension of self-concept.

An Extended Model of Self-in-Relationship

The sections above, care, congruence, and comparison have been suggested as three key mechanisms by which self-concept develops. It is possible, however, to conceptualise these three mechanisms (the three 'C's) as being critical in the development of all dimensions of the self - needs, capacities, and beliefs (including self-concept). Thus, as indicated earlier, care is obviously critical to the fulfilment of needs and the development of capacities, and a lack of care leads to unfulfilled needs and incapacity. Perhaps less obviously, congruence also affects needs and capacities. Thus, it is much more likely that my needs will be fulfilled if my needs are congruent with the needs of others. Similarly, if my developing capacities are congruent with the capacities of others around me, it is more likely that my capacities will be developed further.

We also develop capacities and needs, as well as beliefs, in comparison with others. So, for example, social learning theory (Bandura, 1997) posits that individuals learn behaviours (and attitudes) by modelling their behaviours on those of others. This modelling implies comparisons between the self and others over time so that my behaviours eventually converge

with those of my models. In this way I develop my abilities and, hence, increase my capacities for action.

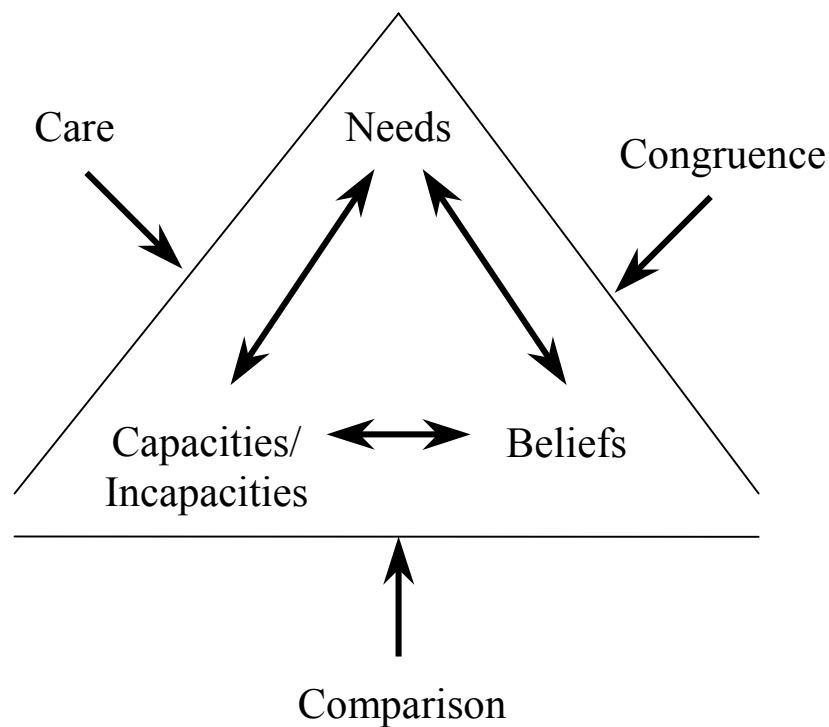
The individual's basic biological and other needs are not determined in comparison with others. However, the individual does learn to fulfil their needs through comparison with others i.e. the individual learns strategies for need fulfilment by comparing themselves with others. Moreover, the strength with which needs are experienced may also be determined in comparison with others. Historical and recent evidence from various branches of psychology (e.g. Cohen, 1999; Kenny, 2002; Mead, 1967), for example, suggests that individuals are more likely to experience the need for something if they see others in their referent group(s) having that need fulfilled while their same need remains unfulfilled. Conversely, if the individual and most or all others in their referent group(s) are similarly deprived of the fulfilment of a particular need, the acuteness with which that need is experienced by the individual may be lessened.

Given the above discussion, it is possible to augment the model of the self presented in Figure 1 to incorporate the relational mechanisms of care, congruence, and comparison discussed above. This augmentation is presented in Figure 2, below. The double ended arrows in Figure 2 between these relational mechanisms and the self-system represents the fact that individual's needs, capacities and beliefs develop:

- (a) while caring for others as well as being cared for by others;
- (b) while others determine their congruence with the individual, as well while the individual determines their congruence with others; and
- (c) while others compare themselves to the individual, as well as while the individual compares themselves with others.

In other words, relational effects on the self-system are (as might be expected) bi-rather than uni-directional (e.g. Cronick, 2002; Dalton, Elias, & Wandersman, 2001; Pretty, Conroy, Dugay, Fowler, & Williams, 1996).

Figure 2: The self-system in relationship.



Conclusion

This paper has argued that the broad sweep of educational and developmental psychology:

- (a) Posits the self-system as a composite of interacting needs, capacities and incapacities, and beliefs, and
- (b) Suggests that relationships with others, through the mechanisms of care, congruence, and comparison, profoundly influences both the initial state and the ongoing development of the self-system and its composite elements.

Moreover, in constructing models to describe (a) and (b) above, the paper has located self-concept as an important belief within the overall belief dimension of the self. In doing so, the paper has (albeit briefly) demonstrated how self-concept may be related to other beliefs, capacities and needs within the self-system. In this way the paper attempts to provide both a theoretical and an operational context for the construct of self-concept and research related to it. It is hoped that this contextualisation may make it easier to interpret and evaluate self-concept and self-concept research within the broader scope of educational and developmental psychology as a whole.

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