A Complex Ecological Framework of Aboriginal Family Resilience

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Introduction

Aboriginal families are often negatively portrayed in the mainstream media: news programs highlight Aboriginal youth crime and academic literature often focuses on the risk factors and health issues that plague the Aboriginal individual, family and community. However, this perspective has done little more than produce inventories of deficits, without illuminating strategies that can assist families and communities who require help to move forward. The purpose of this discussion is threefold: first, to describe the traditional Aboriginal family, precolonization; second, to argue for the saliency of Aboriginal family resilience as a paradigm for research; and finally, to put forward a theoretical framework of Aboriginal family resilience.

Canadian Aboriginal Families - Overview

Traditional Aboriginal Family

The concept of family for early or traditional Aboriginal people in Canada includes a complex combination of biological ties, extended family members, clan membership bonds, adoptions and economic partnerships (i.e. hunting partnerships between communities). "The effect of these diverse, overlapping bonds was to create a dense network of relationships within which sharing and obligations of mutual aid ensured that an effective safety net was in place" (Canada, 1996b, p. 5). The traditional Aboriginal family was the "all encompassing mediator between the individual and the social, economic and political spheres of the larger

society" (Canada, 1996b, p. 11); which included members with biological and/or communal kin relationships.

In traditional Aboriginal societies, all relationships within and without the family were guided by strict rules and defined roles. For example, for the Cree people, these rules were founded in Natural Law (Makokis, 2001), and are referred to as the doctrine of relationships (Cardinal & Hildebrandt, 2000). The rules regarding relationships are embedded in language, which "determine[s] the interdependence among all living beings by calling to mind our relationship to each one" (Makokis, 2001, p. 119). The doctrine of relationships guided how individuals, families and communities interacted with each other, for the purposes of maintaining harmony and ensuring the survival of the people.

In addition, how families formed was an integral part of the whole community, in that "the organization of the camp was based upon family and the family's association with the clan system" (Makokis, 2001, p. 132). Within each family, then, rules existed around spouse selection and adoption to ensure the family would survive and thrive as a contributing part of the community and that children were always taken care of. Further, adults in the community formed mentoring, protective relationships with children; combined with the very strict rules around relationships between family and extended kin member, a very powerful system existed to ensure that children would thrive with a strong sense of self worth and eventually become contributing members of the community. Indeed, the survival of families, communities and nations of Aboriginal people depended upon this important structure.

Finally, Aboriginal families were traditionally part of a land-based society, whereby "families were the units which exercised economic rights to territory and resources. In village, nation and sometimes confederacy, families were represented in councils charged with collective decision

making" (Brant-Castellano, 2003, p. 20). It is logical to presume then, that the healthy, vibrant family, interacting within the larger connected community was the basis for all economic activity of Aboriginal people; indeed families were the "seat of both economic and political activities" (Canada, 1996b, p. 15). Aboriginal families, therefore, were charged with the responsibility of introducing children to their responsibilities, required skills, competence and self discipline as members of the community (Canada, 1996b) to ensure longevity of the family and community.

Historical Adversities

The historical and ongoing campaign of assimilation and genocide by the Canadian government against the Aboriginal people in Canada is now well documented in both the academic and non-fictional literature and other sources of media (i.e. video productions and on the internet). The RCAP Report (Canada, 1996a) indicates that although prior to 1812 the relationship between the Aboriginal Nations and the Government of Canada has been described as "cooperative" (demonstrated in the Treaty making and the Royal Proclamation of 1763), after 1871 the government policies (driven primarily by economic expansion and ideology) shifted in a manner that was invested in domination of Aboriginal peoples. The Canadian government used the Royal Proclamation of 1763, specifically the stated obligation to "protect" Aboriginal people, to begin its campaign of domination (Canada, 1996a); this became a pervasive, systemic control of all aspects of Aboriginal life in Canada and created the basis of significant upheaval that the Aboriginal individual, family and community continues to sustain.

One of the most destructive actions of assimilation taken by the Canadian Government was the forceful removal of up to 5 generations of Aboriginal children from their families and communities and their

placement in church-run boarding schools (Canada, 1996a). In the Assembly of First Nations publication, (1994), it was found that the result of the residential school experience for Aboriginal people was devastating loss, including the loss of family, connection, language, identity, trust, confidence, spirit, morality and control.

The residential school phenomenon also caused the severing of the connection of Aboriginal children with their families, (and subsequently with their cultural and spiritual identities), and damaged the cohesiveness of Aboriginal communities (Corrado & Cohen, 2003). There are also overwhelming reports of physical, psychological, emotional, spiritual and sexual abuse perpetrated by school staff on Aboriginal children at residential schools since their inception (Canada, 1996a; Fournier & Crey, 1997), which has left devastating intergenerational effects on many Aboriginal families, including incest, alcoholism, substance abuse and family violence.

Economically, the Aboriginal family has been in constant transition, moving from a land-based self governed society, to people who have undergone years of assimilative pressures. The family was replaced as the foundation of the economic and political activities; for many communities, families became disempowered structures, which at times could neither prepare its children for the future, nor sustain itself financially nor physically. "Aboriginal families have undergone all the stresses that any hunter-gatherer or agricultural institution undergoes as it is plunged into an urbanized, specialized and industrial or post-industrial world. There are huge demands on its adaptability" (Canada, 1996b, p. 18).

Finally, policies of assimilation affected the spiritual foundation of the Aboriginal family. What began with the 1884 prohibition on potlatch and the Tamanawas dance on the West Coast, led to the banning of the Sundance Ceremony of the plains Indians, as well as other ceremonies of Aboriginal people in Canada (Canada, 1996a). Chief Alfred Scow describes the harmful affects these policies:

This provision of the Indian Act was in place for close to 75 years and what that did was it prevented the passing down of our oral history. It prevented the passing down of our values. It meant an interruption of the respected forms of government that we used to have, and we did have forms of government be they oral and not in writing before any of the Europeans came to this country. We had a system that worked for us. We respected each other. We had ways of dealing with disputes (Canada, 1996a, p. 292).

Contemporary Families and Challenges

Although it is now generally accepted that original Canadian Aboriginal societies employed a holistic interdependent lifestyle, (Clarkson, Morrissette, & Regallet, 1992), as a result of European contact and colonization, the definition and role of the contemporary Aboriginal family has evolved.

Significantly, the ban of traditional ceremonial practices left a large void in the Aboriginal family life, interfered with the socialization of children and cut away the foundation of the Aboriginal way of living. Indian traditional ways have been subverted and some have disappeared completely. While some Aboriginal people have adopted the mainstream notions of religion taught through the residential school system and others lead lives devoid of any spiritual beliefs, those who choose to live according to their Aboriginal spiritual teachings recognize that portions of their traditional ceremonies and ways have been perhaps permanently lost.

Further, as a result of the residential school era in Canada and the disruption of community, the Aboriginal family became disenfranchised and vulnerable to the governmental policies of intervention. Beginning in 1950 (Fournier & Crey, 1997) many Aboriginal children have been apprehended from their families of origin and placed in non-Aboriginal

foster care by government Family Services (Hudson, 1997). Fournier & Crey (1997) noted that: "Only 1% of all children in care were Native in 1959, but by the end of the 1960's 30 to 40% of all legal wards were Aboriginal children, even though they formed less that 4% of the national population" (p. 83).

Aboriginal families were deemed inappropriate due to impoverished living conditions, children being cared for by grandparents who were seen as too old to care for children (Fournier & Crey, 1997), or a perception of neglect of children. The nuclear model of the family was being forced upon Aboriginal families through Family Services actions, even though it did not fit within the paradigm of the Aboriginal extended family (Fournier & Crey, 1997).

Evidence now exists revealing the dysfunction of many of the foster homes where Aboriginal children were placed; homes where children faced physical, sexual and emotional abuse or were exploited as labourers (Fournier & Crey, 1997). In addition, the rate of apprehension was so overwhelming in some Aboriginal communities, that almost an entire generation of children was removed (Johnson, 1983); other communities saw their Aboriginal children adopted into American non-Aboriginal families (Fournier & Crey, 1997, p. 88) and lost contact with them completely. Child Welfare services have been slow to examine the "political neglect, paternalism and institutional colonialism" (McKenzie, Seidl, & Bone, 1995, p. 1) that underlies its policies and procedures. While many provincial family services agencies have moved towards a more culturally appropriate model of service provision, the abduction of children from Aboriginal families, continues today.

Perhaps most importantly to the intergeneration Aboriginal family unit, the ability to be good parents and good role models was seriously

challenged for many Aboriginal people in Canada, as they "came out of these schools with no experience of family life to draw upon" (Goforth, 2003, p. 18); children in these families many times have identity confusion and problems learning, which stem from their parents insecurities around their own identity and responsibilities as parents (Canada, 1996b). The cumulative effect of repeated family trauma has had dire effects on the Aboriginal individual, family and community, contributing to the further demise of the family as a mediating unit and the loss of cultural identity of Aboriginal people. For example, in a study recently conducted (Trevethan, Auger, Moore, McDonald & Sinclair, 2002) approximately two thirds of Aboriginal inmates in the federal correctional system had been adopted or placed in foster / group homes at some point in their childhood.

Finally, the RCAP Report (Canada, 1996b) states that the on-going issues of Aboriginal families include:

The need for community healing. Families are losing their young less frequently to distant non-Aboriginal foster homes and adoption, but they still suffer the effects of highly dysfunctional families and community turmoil (p. 34).

Aboriginal Family Resilience

In social sciences, Aboriginal families are most often studied from a very negative perspective, with particular focus on problems, issues and deficits. Combined with an assimilative, colonial history that has traditionally held Aboriginal culture as inferior to the dominant culture, Canadian legislation, family policy and mainstream literature has painted a primarily bleak picture of the Aboriginal family.

During the research process for the RCAP report, however, many Aboriginal people spoke about the importance of the Aboriginal family at the hearings, stating "families are at the core of the process of renewal in which they are engaged" (Canada, 1996b, p. 1). The renewal process of Aboriginal families is a continuation of the resilience demonstrated by the Aboriginal individual, family and community. Resilience is therefore a very salient, tangible concept for Canadian Aboriginal people; the capacity for the Aboriginal family to survive in the face of genocidal assimilative policies and begin to thrive in recent history and contemporary society is evidence of inherent resilience. While important to discuss the adversities that families have overcome (to demonstrate resilience), it is also imperative to acknowledge that there are many Aboriginal families who demonstrate significant success in both traditional and dominant society. The RCAP report illustrates this:

Many presentations in the transcripts of our hearings document the vitality of Aboriginal families and their effectiveness in fostering a strong sense of identity and extraordinary resourcefulness in individuals, particularly those who are now elders (Canada, 1996b, p. 8).

By focusing on the inherent and existing capacities of Aboriginal families, research can assist family practitioners in successfully supporting families to move forwards, even in times of crisis, by building on the strengths that exist, rather than creating inventories of deficits. Research that acknowledges Aboriginal family and community strength and a distinct way of knowing can also inform policies that support Aboriginal families, rather than continuing the legacy of dismantling the Aboriginal family by focusing on issues or misunderstanding based upon Eurocentric interpretations. Finally, Aboriginal family resilience research is a vital part of the movement towards self-determination of Aboriginal communities (Besaw, Kalt, Lee, Sethi, Wilson, & Zelmer 2004); describing families from a positive perspective and in ways that illuminates capacity, creates an environment where the family and community retains the ability to take control their destiny and ensure the longevity of their culture.

Theoretical Framework for Proposed Research

Overview of Western Resilience Theory

The western academic concept of resilience in an individual refers to a "process encompassing positive adaptation within the context of significant adversity" (Luthar, Cicchetti, & Becker, 2000). Luthar et al. (2000), goes on to describe the two important conditions that must be met in resilience: "the exposure to significant threat or severe adversity; and the achievement of positive adaptation despite major assaults on the developmental processes" (p. 543).

With regards to resilience in families, (Patterson, 2002a) states that it "is similar to family regenerative power, particularly when good outcomes follow significant risk situations confronting a family" (p. 237). Family resilience is also referred to as a dynamic, emergent, fluctuating process, whereby over time, families demonstrate more or less resilience depending upon the situation, rather than a static or constant trait (Patterson, 2002a; Conger & Conger, 2002; Luthar et al., 2000). In this way, resilience is a process that is differentiated from resiliency, which is a personality trait (Luthar et al., 2000; Masten, 1994).

In order for a family to demonstrate resilience, there needs to be exposure to adversity. Patterson (2002a), differentiates between normative demands ("typical life cycle and societal changes affecting everyone" (p. 238)) and non-normative family demands, which are those severe, unexpected traumatic events that are over and above the expected stressors, and include situations such as natural disasters and death. However, even normative stressors may be difficult to manage for a family who has many other stressors upon it. For example, having a baby is a normative stressor for most families; however, for a family of five living in poverty, the added demands of another baby may have a

cumulative effect, and leads to a "pile-up of family demands" (McCubbin & Patterson, 1983).

In the face of adversities, families employ protective factors in the resilience process. Johnson (1995) refers to these protective factors as the family's "inherent strengths to challenge and triumph over adversity and, in doing so, emerges stronger and more confident" (p. 3). Johnson goes further to describe the changing nature of these protective factors, by stating that:

resiliency mechanisms evolve and are anchored in the family's development over time as a supportive and functioning system, they exist as contributions from each members unique resiliency traits and they are tempered (and perhaps modified) each time the family system encounters adversity (p. 3).

Finally, the outcome of the adversarial experience in the process of family resilience is an adaptation of the family. Adaptation, as defined by Patterson, (2002b) can be viewed as "a process of restoring balance between capabilities and demands" (p. 352); it infers that the family changes in some way to accommodate the stress it is encountering, yet preserves the family unit.

Towards Theoretical Synthesis

Considering that the experiences and realities of Aboriginal families are substantially different from those of European-Canadian, it is logical that the framework for resilience employed to examine these families be unique as well. For Aboriginal families a resilience framework must consider and reflect their worldview, including the need for balance, fluidity, and the interconnectedness of family members, the community and the cosmos. In this section, a synthesis between assumptions of Indigenous science, resilience theory, human ecology theory and

complexity theory will be discussed. The result of this synthesis will form the theoretical framework that will guide the research process.

Interconnectedness

The Indigenous episteme, or way of knowing, is informed by the philosophical belief in the interconnectedness of all aspects of nature (Cajete, 2000, Colorado, 1998; Cardinal & Hildebrandt, 2000; Ermine, 1999; Bastien, 2004); knowledge is therefore "the expression of the vibrant relationships between the people, their ecosystems, and the other living beings and spirits that share their lands" (Battiste & Henderson, 2000, p. 42). In this way, Indigenous science ascribes to the ontological principle of holism, which holds that "reality may be best understood by the interrelationships among its constituent parts" (Klein & Jurich, 1993, p. 51); this ontology is also expressed as connections between inner and outer worlds: "This inner space is that universe of being within each person that is synonymous with the soul, the spirit, the self or the being...Aboriginal people found a wholeness that permeated inwardness and that also extended into the outer space" (Ermine, 1995, p. 103). Indigenous ontological holism is also demonstrated through the principles of maintaining harmony and balance, which is achieved by having good relationships with all people (Cardinal & Hildebrandt, 2000) and with all aspects of nature, including the metaphysical.

The theoretical assumption of interconnectedness is central to human ecological theory, demonstrating a philosophical fit with Indigenous science. Visvader, (1986) suggests that human ecology speaks to the global interconnectedness of people and our many environments. Human ecology is therefore ontologically committed to holism as a function of the principle of integration, whereby phenomena is viewed "holistically as a complex system of interdependent parts bounded"

through coordinated interaction and functional relationships" (Sontag & Bubolz, 1988, p. 119).

Adaptation, Emergence and Self-Organization

Indigenous philosophy holds that reality is dynamic and constantly changing, as opposed to fairly stable and consistent (Klein & Jurich, 1993). This is characterized by a world that is in a "dynamic, circular flux in which human beings participate directly. Life is to be lived...as an interactive relationship in a particular time and place" (Battiste & Henderson, 2000, p. 27). Indigenous philosophy therefore holds the expectation that all things will eventually change, "in both predictable and unpredictable ways, thus requiring human vigilance and adaptation" (Battiste & Henderson, 2000, p. 46). From this perspective, Indigenous science is not in search of a definitive truth within finite categories, but rather is an attempt to better understand the essence of things, as a function of their relationship to the knower (Cajete, 2000).

For human ecology, adaptation has been identified as a key process of both humans and their environment as a function of the relationships between them. "Adaptation is behaviour of living systems that changes the state or structure of the system, the environment or both. Humans do not simply adapt to the environment but also modify the environment to reach desired outcomes" (Bubolz & Sontag, 1993, p. 433). In family ecological studies, the family can be viewed as the "core adaptive mechanism" (White & Klein, 2002, p. 214), which facilitated both individual and group adaptation processes.

Complexity science has focussed on adaptation as a function of non-linear dynamics in systems. Families can be understood as complex systems having the following properties: First, based upon the assumption of interconnectedness, the family affects and is affected by interactions environments. Second, families are self organizing systems; they make adaptations as a result of their connections with environments, creating the "new structures and behaviours needed to meet the demands of these relationships" (Anderson, Crabtree, Steele & McDaniel, 2005, p. 673). Third, as families relate, adapt and self organize, system properties begin to emerge that are distinct from the properties of the individual family members (Anderson et al., 2005). In this way, the whole is greater than the sum of its parts (Holland, 1998). Finally, the family and the environments exert influence on each other, causing both to co-evolve (Agar, 2001) as a result of the constant interaction. "Because of co-evolution, the system's current and future behaviour is intricately linked to its history" (McDaniel & Driebe, 2001; cited in Anderson, et al., 2005, p. 673).

Complexity science enhances our understanding of families, through two key assumptions. First, adaptation is facilitated by positive and negative feedback loops, whereby the environments provide positive feedback that reverberated through out the system.

Such iteration can produce growth spurts [non-linear change], causing disorganization (chaos) and rapid change. Resource limitations in turn serve as negative feedback that may iterate through the system as well. Systems and environments perturb each other and are therefore both constantly changing (Warren, Franklin & Streeter, 1998, p. 361).

Families, when viewed as complex systems are in a constant flux of adaptation and subject to non-linear processes, which makes family behaviour difficult to predict with cause and effect models. For example, even if it was possible to understand all of the initial conditions of a family and its environments pre-stressor, it is impossible to know what effect the stressor will have on the family, due to the multiple ways in which the feedback (both positive and negative) can iterate through the system. Potentially devastating events can cause catastrophe for one family,

while for another family, is causes little change in the overall functioning of the system. As opposed to the principle of equifinality (which holds that systems that start out differently will ultimately end up in the same state), "path of dependence is a result of the sensitivity that nonlinear systems show to initial conditions. It implies that systems that start in a nearly identical state can develop in completely opposite directions as the systems amplifies initially minor differences" (Warren, et. al, 1998, p. 365). This principle of path dependence holds that a family system always moves forward, as the system is too complex (with too many agents exerting influence) to go back to a previous state.

Finally, in complex family systems, although change is constant and non-linear, emergent phenomena (Holland, 1998) can be detected. These emergent phenomena are persistent patterns of behaviour that can be delineated in the system, amid the constant flux of adaptation; "...the persistent patterns are the only ones that lend themselves to observable ontogeny" (Holland, 1998, p. 226). These patterns become the order that result from self-organization of the system and are context-specific, in that the function of the pattern is determined by the context it emerges in (Holland, 1998). For families, emergent order may be observed when families develop competencies (patterns of bonaptation) as well as in families who are constantly in a state of disorganized crisis (patterns of maladaptation).

Overview of Theoretical Framework

It is through this synthesis of philosophical assumptions that the principles of holism, connectedness, adaptation and self-regulation of non-linear systems arise to form the resilience framework that can guide the research process. Indigenous family resilience will be investigated as a process whereby families adapt positively to overcome significant

adversity (both historical and contemporary). This resiliency will be considered within the context of interconnectedness – from an Indigenous relational world view; which is:

...intuitive, non-temporal and fluid. The balance and harmony in relationships among multiple variables, including metaphysical forces, make up the core of the thought system. Every event is in relation to all other events regardless of time, space and physical existence (Cross, 1998, p. 147).

Further, resilience will be viewed as a characteristic of genuinely complex systems, which operate in a space that is "on the edge or order and chaos, where they can take advantage of the possibility of sudden change inherent in nonlinear dynamics while maintaining the order necessary for continuity (Waldrop, 1992)" (Warren, et. al., 1998, p. 365).

From this vantage point, family resilience will be considered a process of non-linear adaptation; the result of the unpredictable capacity of the Aboriginal family unit to withstand centuries of colonization, and oppression, and in many cases, to even thrive and continue to achieve high levels of organization.

REFERENCES:

- Agar, M. H. (2001). Another complex step: A model of heroin experimentation. *Field Methods*, *13*(4), 353-369.
- Anderson, R., Crabtree, B., Steele, D., & McDaniel, R. (2005). Case study research: The view from complexity science. *Qualitative Health Research*, 15(5), 669-685.
- Assembly of First Nations. (1994). Breaking the silence: An interpretive study of residential school impact and healing as illustrated by the stories of First Nations individuals.
- Bastien, B. (2004). *Blackfoot ways of knowing the world view of the Siksikaitsitapi*. Calgary, AB: University of Calgary Press.

- Battiste, M., & Henderson, J. S. Y. (2000). *Protecting Indigenous knowledge and heritage: a global challenge*. Saskatoon, SK: Purich Publishing.
- Besaw, A., Kalt, J. P., Lee, A., Sethi, J., Wilson, J. B., & Zelmer, M. (2004). *The context and meaning of family strengthening in Indian America*. Cambridge, MA: Harvard University.
- Brant-Castellano, M. (2003). Aboriginal family trends. *Healing Words, 4,* 20-24.
- Bubolz, M. M., & Sontag, M. S. (1993). Human ecology theory. In P. G. Boss & W. J. Doherty & R. LaRossa & W. R. Schumm & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A contextual approach* (pp. 419-448). New York: Plenum Press.
- Cajete, G. (2000). Native science. Santa Fe, New Mexico: Clear Light Publishers.
- Canada. (1996a). Report of the Royal Commission on Aboriginal Peoples: Volume 1.Ottawa: Royal Commission on Aboriginal Peoples.
- Canada (1996b). *Report of the Royal Commission on Aboriginal Peoples:* Volume 3.Ottawa: Royal Commission on Aboriginal Peoples.
- Cardinal, H., & Hildebrandt, W. (2000). *Treaty Elders of Saskatchewan: our dream is that our peoples will one day be clearly recognized as nations*. Calgary: University of Calgary Press.
- Clarkson, L., Morrissette, V., & Regallet, G. (1992). Our Responsibility to the seventh generation: Indigenous people and sustainable development. Winnipeg, Manitoba: International Institute of Sustainable Development.
- Colorado, P. (1988). Bridging Native and Western science. *Convergence*, *21*(2/3), 49-68.
- Conger, R. D., & Conger, K. J. (2002). Resilience in midwestern families: Selected findings from the first decade of a prospective, longitudinal study. *Journal of Marriage & Family, Vol. 64*(Issue 2), p361, 313p, 364 diagrams.
- Corrado, R. R., & Cohen, I. M. (2003). *Mental health profiles for a sample of British Columbia's Aboriginal survivors of the Canadian residential school system.* Ottawa, Ontario: Aboriginal Healing Foundation.
- Cross, T. L. (1998). Understanding family resilience from a relational world view. In H. I. McCubbin & E. A. Thompson & A. I. Thompson & J. E.

- Fromer (Eds.), Resiliency in Native American and Immigrant Families (pp. 454). Thousand Oaks, California: Sage.
- Ermine, W. (1995). Aboriginal epistemology. In M. Battiste & J. Barman (Eds.), *First Nations education in Canada: the circle unfolds* (pp. 101-112). Vancouver: University of British Columbia.
- Fournier, S., & Crey, E. (1997). Stolen from our embrace: The abduction of First Nations children and the restoration of Aboriginal communities. Vancouver, British Columbia: Douglas and McIntyre, Inc.
- Goforth, S. (2003). Traditional parenting skills in contemporary life. *Healing Words*, 4, 17 19.
- Holland, J. (1998). *Emergence: From chaos to order*. New York: Basic Books.
- Hudson, P. (1997). First Nations child & family services: breaking the silence. *Canadian Ethnic Studies, 29*(1), 161-172.
- Johnson, A. C. (1995). Resiliency mechanisms in culturally diverse families. *Family Journal, Vol. 3*(Issue 4), p316, 319p, 311bw.
- Johnson, P. (1983). *Native children and the child welfare system*. Toronto, Ontario: Canadian Council on Social Development.
- Klein, D. M., & Jurich, J. A. (1993). Metatheory and family studies. In P. G.
 Boss & W. J. Doherty & R. LaRossa & W. R. Schumm & S. K. Steinmetz (Eds.), Sourcebook of Family Theories and Methods: A Contextual Approach (pp. 3 30). New York: Plenum Press.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- Makokis, L. (2001). *Teachings from Cree Elders: A grounded theory study of Indigenous leadership.* Unpublished Dissertation, University of San Diego, San Diego.
- Masten, A. (1994). Resilience in individual development: successful adaptation despite risk and adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational Resilience in Inner-City America:*Challenges and Prospects (pp. 3-25). Hillsdale: New Jersey: Erlbaum.

- McCubbin, H., & Patterson, J. (1983). The Family stress process: The double ABCX model of family adjustment and adaptation. *Marriage and Family Review*, 6(1-2), 7-37.
- McDaniel, R., & Driebe, D. (2001). Complexity science and health care management. In J. D. Blair & M. D. Fottler & G. T. Savage (Eds.), *Advance in health care management* (Vol. 2, pp. 11-36). Stamford: JAI.
- McKenzie, B., Seidl, E., & Bone, N. (1995). Child and family services standards in First Nations: an action research project. *Child Welfare*, 74(3), 633 653.
- Patterson, J. M. (2002a). Understanding family resilience. *Journal of Clinical Psychology, Vol. 58*(Issue 3), p233, 214p, 231 chart, 231 diagram.
- Patterson, J. M. (2002b). Integrating family resilience and family stress theory. *Journal of Marriage & Family, Vol. 64*(Issue 2), p349, 312p, 341 diagram.
- Sontag, M. S., & Bubolz, M. M. (1988). A human ecological perspective for integration in home economics. In R. J. Borden & J. Jacobs (Eds.), *Human ecology research and applications* (pp. 129-137). College Park, Maryland: Society for Human Ecology.
- Trevethan, S., Auger S., Moore, J., MacDonald, M. & Sinclair, J. (2002). The effect pf family disruption on Aboriginal and non-Aboriginal inmates. Ottawa: Correctional Services Canada
- Visvader, J. (1986). *Philosophy and human ecology.* Paper presented at the Human Ecology: A Gathering of Perspectives, College Park, Maryland.
- Waldrop, M. M. (1992). *Complexity: The emerging science at the edge of chaos*. New York: Simon & Schuster.
- Warren, K., Franklin, C., & Streeter, C. L. (1998). New directions in systems theory: Chaos and complexity. *Social Work, 43*(4), 357-372.
- White, J. M., & Klein, D. M. (2002). *Family Theories* (2 ed.). Thousand Oaks, CA: Sage Publications Inc.