







Special Issue Article

The science of humanity and the humanity of science: Perspectives on Ed Zigler’s contributions to developmental psychopathology and the study of all children

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Abstract

We present this article as a testament to Ed Zigler’s commitment to science in the service of humanity and to policy based on conceptually compelling theory and methodologically rigorous science. In doing so, we highlight ways that Ed’s universal and inclusive developmental world view, early training as a behaviorist, exacting scientific standards, concern for others, and appreciation of his own roots and upbringing all transformed the way that many different groups of people of all ages and backgrounds are studied, viewed, and intervened with by researchers, policy makers, and society at large. Ed’s narrative of development rather than defect, universality rather than difference, and holistic rather than reductionist continues to compel us in the quest for a kinder, more inclusive, and enabling society. Conversely, Ed’s behaviorist training as a graduate student also influenced him throughout his career and was essential to his career-long commitment to systemic action in the service of improving the lives of others. We cite the lessons that we, as his descendants, learned from Ed and apply them to our own areas of research with populations that Ed did not study, but had considerable interest in – persons with autism spectrum disorder and Indigenous youth.

Keywords: autism spectrum disorder, developmental approach, Ed Zigler, Indigenous youth, intellectual disability

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Ed Zigler was born in Kansas City to Jewish immigrant parents on March 1, 1930, just a few months after the beginning of the Great Depression. In the Jewish calendar, his birthdate was the first day of the month of Adar, which is considered the most joyous month of the year as it hosts the festive holiday of Purim in which Queen Esther and her cousin and adoptive father Mordecai collaborated at great personal risk to save the Jews of the vast Persian empire from genocide during the 5th century BCE. According to an ancient Jewish saying, “When Adar enters, the world is filled with happiness.” The holiday of Purim is also theologically noteworthy as it is commemorated in the Book of Esther, which is the only book of the Jewish biblical canon in which God’s name does not appear, thereby implying that humans can and need be the agents of God’s compassion.

We can think of no more appropriate day for Ed to have been born – the first day of Adar after the beginning of the terrible era of the Great Depression. He championed the cause of vulnerable children and their families who, until then, had suffered so much

from poverty, marginalization, segregation, and prejudice, and in many ways transformed the lives of millions of individuals throughout the USA and elsewhere. Ed was a scholar, visionary, social activist, policy maker, and doer who brought resources, aid, integrity, understanding, and most importantly, hope to those who often had little. He would often exhort his students by telling them that they were doing “God’s work,” but we all knew that Ed was the modern-day hero, who could not rest as long as there were children and families who needed to be helped.

Ed’s passion and compassion in his quest to help children and families were integrated in his dual commitment to science and policy. He lived almost all of his professional life in the halls of academia, where his publication record and list of honors reflect his remarkable career, yet he was just as “at home” and effective in the bureaucracy of Washington DC and other centers of government or policy, both in the USA and internationally. In merging these often disconnected realms, Ed emphasized that science was meaningful to the extent that it could be used in the service of others and, reciprocally, policy was only worthwhile if it was based on sound science. This integrated vision was at the core of all Ed’s work. As Ed’s intellectual descendants, we use the opportunity of this special issue in the preeminent journal in the field of developmental psychopathology, of which Ed was a pioneer and to which he felt particularly connected, to highlight his commitment to a science of humanity and a humanity of science.

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This article is not meant as a comprehensive review of Ed's work – scientific or policy-oriented – but rather as a testament to the way that his universal and inclusive developmental world view, early training as a behaviorist, exacting scientific standards, concern for others, and appreciation of his own roots and upbringing all transformed the way that many different groups of people of all ages and backgrounds are studied, viewed, and intervened with by researchers, policy makers, and society at large. In doing so, we cite several aspects of Ed's personal upbringing and professional life, both as told to Jake Burack over their 35-year scholarly relationship beginning when Jake was Ed's graduate student, and, more often, as articulated by Ed in an interview with Elena Grigorenko as part of the Society for Research in Child Development (SRCD) Oral History Interview Program (Grigorenko, 2003). We cite liberally from this interview as well as from Ed's publications in order to invoke Ed's own voice in addressing issues of significance to him and to us.

With this backdrop, we note that Ed viewed himself as a “hard-nosed” experimental researcher (Grigorenko, 2003, p. 6). His job and life mission was to provide evidence that could be used to make the world a better place for children and families. Even as a very junior scholar and recent convert to the field of developmental psychology, Ed castigated the field because he felt that:

... relatively little progress has been made towards formal theory construction in this area. What have passed for theories in developmental psychology are little more than grand designs or frames of reference which attempt to explain everything and hence succeed in explaining very little... the relatively slow development of theory construction in developmental psychology is in part due to an over-reliance on natural observation and under-use of the experimental method. (Zigler, 1963, p. 342)

Ed spent much of the scientific aspects of his career addressing this shortcoming by utilizing scientifically rigorous methodology in the service of compelling developmental theory. With this approach, Ed brought considerable clarity to the study of several populations.

Whether regarding his research on any number of marginalized or vulnerable populations or policy work regarding children, Ed felt the stakes were high and deserved the highest levels of methodological diligence. Ed felt a special privilege and obligation to make science accessible – an idea that was less common decades ago when he started out. As he noted in the SRCD interview:

My philosophy was kind of embedded in pragmatism and a sense of duty... when I started policy work was scorned... But I was convinced that knowledge was not its own end... I said it doesn't make any difference if you're trying to raise children or start a social action program or go to the moon... your knowledge base is important. And I just had this sense that our work isn't just to fill up journals and books. It is to impact the world out there and try to help children. (Grigorenko, 2003, pp. 7–8)

With this imperative in mind, we identify a few examples of Ed's contributions to the theoretical foundations of the field of developmental psychopathology, to the wellbeing of children and their families, and how they continue to resonate within our own research, even with populations that Ed did not directly study – in particular, persons with autism spectrum disorder (ASD) and Indigenous youth.

The Development of Ed's Universal, Inclusive, and Holistic Developmental World View

In the first (Luthar, Burack, Cicchetti, & Weisz, 1997) of two edited festschrifts in honor of Ed, Jake (Burack, 1997) recollected that, a decade earlier, Ed and his colleagues had used the same developmental terminology and figures in the publication of two essential books on very different populations – one on persons with intellectual disability (Zigler & Hodapp, 1986) and the other on adults with psychopathology (Zigler & Glick, 1986). This seemed odd and was certainly discordant with traditional psychological and psychiatric approaches, clinical and empirical, in which the essential questions revolved around identifying symptoms or other markers that distinguished specific groups from each other as well as from the general population. To some extent, those questions were as relevant, or even more so, for Ed who – in those same volumes and throughout his career – emphasized the scientific and clinical need for the increasingly precise delineation of specific groups and subgroups for psychiatric classifications. Yet Ed's approach was foundationally distinct in its prioritization of the universality of humanity. As Jake suggested in that chapter, the common depictions of development in Ed's work on these apparently quite distinct groups reflected:

the theoretical and ethical elegance of Ed's work. He worked with one idea: development. It applied to all people, regardless of backgrounds, problems, or stations in life... Ed provided us a common lens with which to see persons who beforehand were only viewed with regard to their differences or atypicalities. (Burack, 1997, p. 161)

Ed's universal developmental approach was largely based in, and initially influenced by, the developmental writings of Heinz Werner, to which Ed was introduced during his clinical internship at Worcester State Hospital in a seminar led by Werner's frequent co-author Bernie Kaplan. Werner's ideas were revelatory for Ed, whose clinical training at the University of Texas, like virtually all clinical training at the time, was behaviorist in orientation. As Ed recounted, he was resistant to a change in thinking, but Kaplan, a long-time colleague and co-author of Werner's, impressed him and eventually won him over.

The internship at Worcester was a transforming experience for me... one of the perks for the interns was a seminar held by Bernie Kaplan. Bernie Kaplan wrote with Heinz Werner... So when I heard this alien language about human development and developmental thought it was totally alien to what I had learned and to what I understood... the seminar turned out to be a one-year-long debate between Bernie Kaplan and myself, with me defending American behaviorism... And I'm pleased to report that I was defeated badly and he convinced me that developmental thought was the truth - stages, all the things that we now understand as developmental thinking. (Grigorenko, 2003, pp. 3–4)

Werner, a Viennese developmental researcher and theorist who emigrated to the USA in 1933 to escape the growing influence of the Nazis in his home country, proposed that “wherever there is life there is growth and development, that is, formation in systematic, orderly sequence...” (Werner, 1957, p. 126). In other words, development proceeds in a specific and meaningful way wherever and whenever it occurs – and it occurs in every living being – an inherently universal message. Werner further delineated the particulars of this hypothesized universal development in what he referred to as the orthogenetic principle, according to which “wherever development occurs it proceeds from a state of relative

globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration" (Werner, 1957, p. 126). This process of ever-increasing complexity and integration is characterized in the universal cognitive progression from action to thought, concrete to abstract, and from outer-directed to inner-directed. Werner's essential notion of a universal process, of course, presaged and influenced to a large degree the eventual emergence of the field of developmental psychopathology with its basic premise of the mutually informative relationship between typical and atypical development (Cicchetti, 1984). These ideas would be fundamental to all of Ed's work – developmental lessons from one group applied to all others and, concordantly, no group could be seen as developmentally disconnected from any other or from the larger population.

Ed's inclusive and universal world view emerged with his early articulation of a developmental approach to the study of persons with intellectual disability (Zigler, 1967, 1969) that he contrasted with, what he referred to as the defect and deficit approaches that prevailed in the educational and psychological literatures during the 1960s and 1970s and have persisted to at least some degree even into the 21st century (for discussions, see Burack, Evans, Klaiman, & Iarocci, 2001; Burack, Dawkins, et al., 2012). In contrast to the defect theorists of the time, who proposed various specific deficits as the source of all intellectual disability (for a collection of such efforts, see Zigler & Balla, 1982), Ed emphasized the commonality between persons with intellectual disability and the rest of the population. For example, along with John Weisz (Weisz, Yeates, & Zigler, 1982; Weisz & Zigler, 1979), he argued that, regardless of etiology, persons with intellectual disability appeared to show typical sequences of Piagetian development. Ed's emphasis on typical development was especially articulated in his work with persons for whom their intellectual disability was seen as familially transmitted as their parents and other family members also had low IQs. In his seminal article in *Science* (Zigler, 1967), often cited as the formal beginning or statement of his developmental approach to the study of persons with intellectual disability (see Burack, Russo, Gordon Green, Landry, & Iarocci, 2016; Burack et al., in press; Hodapp, in press), Ed highlighted that persons with familial intellectual disability simply represented those persons whose IQ scores fell at the lower end of the natural range of scores. According to Ed, this group

was just as normal as the brilliant group at the other end of the normal distribution... this was the lower part of the normal distribution and, to that extent, they're perfectly normal human beings. They just represent this particular portion of the normal distribution. (Grigorenko, 2003, p. 5)

Consistent with Werner's developmental formulations, every aspect of the developmental progression of this group of persons with intellectual disability was expected to be similar to that of persons in the average, and even higher, IQ ranges, albeit at a slower rate and with a lower ultimate level of functioning. In this context, Ed and his colleagues, notably David Balla (Zigler & Balla, 1982) and Bob Hodapp (Hodapp, Burack, & Zigler, 1990b; Zigler & Hodapp, 1986), rejected the defect narrative about this population and recast it with the same lens and methodologies as used for the general population.

This humanizing, inclusive approach to persons with familially transmitted intellectual disability was transformative in thinking about this specific subgroup that had largely been marginalized and even demonized for centuries. They had been thought as and referred to in all sorts of derogatory and deprecating ways,

including as "idiots by deprivation," "backward," "lower class," and "criminals," and were a central focus of the now-reviled eugenics movement (Burack, 1990; Burack et al., in press). As Ed and Bob (Zigler & Hodapp, 1986) noted, this group had been considered such a blight on society that even the generally liberal Supreme Court Justice of the USA, Oliver Wendell Holmes, ruled in favor of their sterilization because "three generation of imbeciles is enough." Within Ed's framework, they were no longer the demonized and defective "other" – a subgroup that needed to be eradicated – but rather were an integral part of the natural variation within humanity. Ed reflected in the SRCD interview that this approach has "given us a kind of different view that retarded people are people" (Grigorenko, 2003, p. 5). Furthermore, the universal developmental approach can also be seen as the scholarly foundation of, and impetus for, the societal revolution regarding the ways that persons with intellectual disability were viewed and treated that was just emerging and that would lead to the widespread desegregation of schools and deinstitutionalization of large residences.

The corollary of Ed's emphasis on the normal, albeit lower, intellectual development among persons with familially transmitted intellectual disability was that the inherent integration and organization of development extended beyond the cognitive domain and needed to include social and emotional development. Initially, in his work with children with intellectual disability and subsequently across all the groups with whom he worked, Ed emphasized the need to study, understand, and work with the "whole child."

I'm a very strong believer in what I call the whole child approach. Cognitive development is not unimportant. It's critically important, but so are social and emotional development. So I see the whole child, I see the systems working synergistically and that's what I've championed. (Grigorenko, 2003, p. 7)

Beginning with his study of persons with intellectual disability (Merighi, Edison, & Zigler, 1990; Zigler, 1967; Zigler & Bennett-Gates, 1999) and extending throughout his career to all populations, Ed's holistic perspective involved considering the personality–motivational styles that impact behaviors and social interactions. This approach led to increasing layers of complexity and nuance in understanding a range of populations, by the conditions, circumstances, or life events that defined a particular deleterious or even positive developmental outcome (such as high grades despite high risk status), as well as by the wide array of contributors to their ways of being that link them to a common universal humanity. For example, as the particulars of the normalization process for persons with intellectual disability continue to evolve with considerable advances, and not infrequent setbacks, we recognize that they and their implications are not specific to this group, but rather resonate across all groups of persons who have historically not fared well by societal standards, are marginalized, and/or commonly identified with regard to their deficiencies. In this manner, Ed's narrative of development rather than defect, universality rather than difference, and holistic rather than reductionist continues to compel us in the quest for a kinder, more inclusive, and enabling society.

Behaviorist Training and the Emphasis on Social Environmental Contributors to Developmental Risk: The Legacy of a Child Born into Poverty

Despite Ed's self-proclaimed defeat by Kaplan in their year-long behaviorism–development debate, his behaviorist graduate

training essentially impacted and even defined much of his work with regard to both research and policy. Throughout his career, Ed was committed to providing a better and more developmentally enabling environment for children – a goal that was fostered by his memories of the devastating consequences of the sequelae of the Great Depression on his own development.

I'm sure my Depression years had a huge impact on me. I can still remember men selling apples on the streets and unable to support their families; it was a very bitter time in this country. As a result of my family's circumstances, I started working when I was about seven or eight down at the city market, and it was a rough, tough existence... I used to work like a dog. I used to get up early in the morning and go down to the city market and work down there unloading freight cars, later graduated to become a salesman and then I would go to school and really, it was pretty tough. (Grigorenko, 2003, p. 1)

Ed's dissertation reflected this behaviorist emphasis with a focus on what he and his academic supervisor Harold Stevenson referred to, in the nomenclature of the time, as the social deprivation of feebleminded children (i.e., children with intellectual disability). In his dissertation manuscript (Zigler, 1958) and in several subsequently published empirical articles, Ed and colleagues (e.g., Green & Zigler, 1962; Zigler, 1961, 1964) developed this concept of social deprivation, initially operationalized somewhat vaguely in terms of the amount and quality of an individual's interactions with adult figures prior to and then during their institutionalization. They highlighted the potency of social deprivation to influence behavior by demonstrating that persons with intellectual disability with histories of greater social deprivation were more likely to persist on mundane tasks – a behavior interpreted as reflecting heightened motivation for positive feedback from an adult in response to the paucity of positive social interactions with adults throughout their lives. Initially intended as a rejoinder to a prevailing theory forwarded by the prominent social–personality theorist Kurt Lewin that the behavior and thinking of persons with intellectual disability were inherently more rigid than that of typically developing persons, the focus on the environment led to Ed's essential emphasis on personality–motivational styles among persons with intellectual disability that arose from their lifetime of experiences of failure (Zigler, 1967, 1969; Zigler & Bennett-Gates, 1999).

Although essential to his portrayal of the behaviors of persons with intellectual disability (Zigler & Hodapp, 1986), Ed did not consider these personality–motivational factors as intrinsic or unique to this population, but rather as a function of environmental influences. In an era in which segregation, marginalization, and institutionalization were common in the lives of persons with intellectual disability, Ed emphasized universal ways in which social deprivation and the life experiences of persons with intellectual disability led to personality–motivational styles that affected behavior, both on experimental tasks and in real-life interactions. He reasoned that:

... if you have a huge intellectual deficit you have to fail a great deal, and failure must have a huge impact on the child. We know that it does. So what does it do? It lowers your expectancy of success. It lowers your aspirations. "I can't succeed." It leads to a construct... outer-directedness. When confronted with a problem, and all life is for most of us a series of problems that the environment keeps resending and we have to solve each and every one as we go along every day, how do you do that? Well, most of us try to call upon our intellectual resources and our experience to figure this thing out and answer what's the right thing to do here.

But what I discovered with retarded children is reluctance to use their own intellectual resources, even when they're adequate for the task at hand. Instead they become outer-directed, imitative. They look for cues not inside themselves as a guide to action, but rather for some direction from outside. (Grigorenko, 2003, p. 5)

True to his universal developmental values, Ed emphasized that these characteristics could be found among other groups as well and, true to his behaviorist background, they were not necessarily inevitable among persons with intellectual disability as they could be ameliorated by different life experiences. As Ed noted:

What must be emphasized is the fact that the behavior pattern developed by the retardate as a result of such a history of failure may not differ in kind or ontogenesis from patterns developed by an individual of normal intellect who, because of some environmental circumstance, also experiences an inordinate amount of failure. By the same token, if the retardate can somehow be guaranteed a history of greater success, we would expect his behavior to be more normal, regardless of his intellectual level. (Zigler, 1967, p. 296)

Within this framework, the narrative was primarily about the circumstances in which this group lived and ultimately less about the specific population – whether persons with intellectual disability or children exposed to any number of developmental risk factors or situations. In the SRCD interview, Ed recalled that, early in his career, he recognized that the same factors of social deprivation that he studied among children with intellectual disability would be relevant to work with any group of children who lived in circumstances that involved some level of loss of social or environmental stimulation and support. These styles emanated from the sequelae of related environmental and life experiences of children with low socioeconomic status, just as they had for the children with intellectual disability. However, he had been sensitized to this point even earlier on from his own life experiences, noting that:

My own education was also not of a very impressive type. I went to a poor elementary school in Kansas City and then went on to a high school that was essentially a vocational school because in those years there was this firm belief that if you were a child of an immigrant the best that you could do would be to learn a trade, master a trade, and make a decent living in this country. (Grigorenko, 2003, p. 2)

Thus, academically trained in behaviorism and a personal witness to the deleterious impact of social deprivation in the broadest sense from his own life experiences, Ed began to generalize the severity and enormity of the sequelae of problematic social environments, especially those of poverty.

I was seeing it in my studies... "Hey, these characteristics that retarded children have, they're not the only children who fail. I think any child with experiences like this will fail, will have this much failure in their lives. Who in our society is surrounded by constant failure, hopelessness? Nothing good is going to happen." That was kind of my life as a child in the Depression. Poor kids. So I was beginning to do studies to show that the characteristics I was finding in retarded children could also be found in poor children. (Grigorenko, 2003, p. 6)

The more general relevance of Ed's work of social deprivation beyond the realm of children with intellectual disability ultimately led to his monumental contributions to the Head Start program (Burack & Luthar, 2020; Zigler & Muenchow, 1992; Zigler & Styfco, 2010). As Ed described on several occasions, Bob Cooke,

who was tasked with forming a committee to develop and implement a preschool program for poor children throughout the USA, heard him speak about his work with children with intellectual disability on a few occasions and realized its significance to children from low socioeconomic backgrounds. As a result, Cooke invited Ed to join Urie Bronfenbrenner as the two psychologists on the planning committee that developed and implemented Head Start. According to Ed, Cooke had wanted to call it “Project Success’, to kind of play on the work I’d done and say how important it is for children to have successful experiences...” (Grigorenko, 2003, p. 7).

In emphasizing the profound impact of different types of experiences on children of different abilities and backgrounds, Ed fused his behaviorist origins with his world view of universal and integrated development. In his formulation, the integrated development of the whole child – including the cognitive, social, emotional, and even physical realms – is profoundly affected by the environment in all its elements. However, in Ed’s world view and work, the harshness that is often associated with strict behaviorism, that of a seeming reduction of behavior to a stimulus–response pattern, was never evident. Rather, he focused on the environment as an agent of change and a key context for explaining particular behaviors that had long been attributed as inherent to one or more specific groups. Ed’s profound insights greatly influenced vast social changes across diverse populations, including the “tearing down of the walls” of the residential institutions that segregated people with intellectual disability and psychiatric conditions from others and the “building up of the walls” and capacities of educational institutions to better include and integrate minority children, those of low socioeconomic status, and other children from communities with histories of diminished educational success. In this way, Ed’s understanding of environmental influences on behavior impels us to systemic action in the service of improving the lives of others.

Developmental Theory and Science in the Service of Child Wellbeing: Perspectives of Ed’s Realistic Positivistic Approach

Ed’s world view reflected a unique integration of realism and positivism. He was keenly aware of the limitations in cognitive, emotional, or social development associated with genetic transmission, physiological conditions, malnourishment, problematic parenting, and otherwise problematic environments. In both the popular media and his academic work, Ed railed against those who promised unrealistic developmental outcomes for children. The chapter “Search for miracle cures” in the book *Understanding mental retardation* (Zigler & Hodapp, 1986) that he co-authored with Bob Hodapp is a powerful example of Ed’s skepticism regarding such claims, of his concern for both the vulnerability of children with disabilities and their family members, and of his scientific integrity in evaluating the evidence of the natural constraints of developmental ranges across circumstances. He clearly understood that developmental risk associated with a range of physical and environmental conditions could jeopardize wellbeing and outcome. Yet Ed’s developmental legacy – maybe inspired by his own experiences – is that of resilience, adaptation, and wellbeing. In reminiscing about his own life story, Ed often highlighted his own attributes that led to success despite the difficult times and setting in which he was raised. Despite the low expectations for those from his neighborhood, Ed said “I knew early on I was, I guess, a gifted child... My grades and

accomplishments I had in my high school years captured a lot of attention because this high school that I went to was so poor in socioeconomic status they very rarely accomplished anything of intellectual merit. But as a sophomore in high school I won the city oratorical championship in Kansas City...” (Grigorenko, 2003, p. 2).

Even in recognizing the extent to which his intelligence and other attributes, such as the ability to debate and his work ethic, impelled his success despite the difficult surroundings in which he was raised, Ed was always cognizant of the essential contributions to his success by other people and factors. “While my parents were both uneducated, my grandfather on my mother’s side was a highly educated, a learned scholar in Europe. I don’t know if it was the Jewish culture or exactly what, but there was a great love in our family for learning and education. Like most immigrant families, my parents worked very hard to see their children advance above their own status in life. My two sisters, who were born in Europe, and I certainly have done that” (Grigorenko, 2003, p. 1).

His personal experiences set the stage for his ideas regarding the power of personal resilience and the promotion of external protective factors in leading to adaptive development and wellbeing in the face of considerable risk. This, of course, was the focus of his policy work, beginning with Head Start, then evolving into his appointment by President Richard Nixon as the first Director of the Office of Child Development, Chief of the US Children’s Bureau, and subsequently to many initiatives, including Operation Babylift and articulation of the “Schools of the 21st Century.” Throughout both his policy and scholarly work, Ed and his students challenged contemporary societal dogma of inevitable deleterious developmental outcomes among diverse groups of youth. In one example from his scholarly work, Suniya Luthar and Ed (Luthar, 1991; Luthar & Zigler, 1991) provided groundbreaking insights about the developmental pathways to educational and other successes among inner-city and minority high school aged youth despite their considerably increased risk for academic failure, even as it also highlighted the complexity of the construct of resilience and the discordance between it and that of wellbeing (for nuanced discussions of this work, see Luthar, 2006; Luthar & Cicchetti, 2000; Luthar, Cicchetti, & Becker, 2000; Luthar, Ebbert, & Kumar, *in press*). In keeping with the emphasis on personality–motivational factors as essential predictors of positive outcomes, Suniya and Ed argued that:

various psychosocial assets may counteract the tendency of intelligent inner-city youngsters to reject academic effort in favor of other activities. Such youngsters may tend to maximize their potential at school if, for example, they believe that events in their lives are determined largely by their own efforts (internal locus of control) or if they have fairly good control over their impulses (high ego development). (Luthar & Zigler, 1992, p. 9)

In another example of the integrative mix of realism and developmental positivism that defied prevailing perspectives, Ed and Joan Kaufman tackled the societal and scientific narratives of the intergenerational transmission of child maltreatment that was common in the 1980s.

The belief that abused children are likely to become abusive parents is widely accepted by professionals and lay people alike. It is noted in introductory psychology textbooks, and advanced on radio and television commercials. (Kaufman & Zigler, 1987, p. 186)

They provided a profound depiction of the social consequences of this widespread belief.

Adults who were maltreated have been told so many times that they will abuse their children that for some it has become a self-fulfilling prophecy. Many who have broken the cycle are left feeling like walking time bombs. In addition, persistent acceptance of this belief has impeded progress in understanding the etiology of abuse and led to misguided judicial and social policy interventions. (Kaufman & Zigler, 1987, p. 191)

In contradicting these myths, Joan and Ed pointed to a series of biases and confounds and other methodological flaws that compromised the research that was cited in support of intergenerational transmission. Rather, based on their analysis and interpretation of the literature, they argued that:

the best estimate of the rate of intergenerational transmission appears to be 30% ± 5%. This suggests that approximately one-third of all individuals who were physically abused, sexually abused, or extremely neglected will subject their offspring to one of these forms of maltreatment, while the remaining two-thirds will provide adequate care for their children... Although this suggests that being maltreated as a child is an important risk factor in the etiology of abuse, the majority of maltreated children do not become abusive parents. (Kaufman & Zigler, 1987, p. 190)

Based on this evidence, their lesson for researchers and policy makers alike was similarly compelling with the clear imperative to recast the message of inferred pathology to that of developmental process.

The time has come for the intergenerational myth to be put aside and for researchers to cease asking, “Do abused children become abusive parents?” and ask, instead, “Under what conditions is the transmission of abuse most likely to occur?” (Kaufman & Zigler, 1987, p. 191)

These two lines of research by Ed and his students reflect the relevance of the seminal constructs of equifinality and multifinality to developmental psychopathology. Equifinality refers to the characteristics of an open system whereby a given end state may be achieved by any number of developmental pathways and prior conditions. It has served as an explanatory model for understanding the wide range of experiences, personal histories, and the numerous endogenous and exogenous risk and protective factors that result in a common outcome (Cicchetti, 1984; Cicchetti & Rogosch, 1996). For example, the personality style of looking outward for guidance on how to behave may result from a variety of different experiences that involve perceptions of failure, such as those owing to intellectual disability, poverty, or some other conditions that present challenges that compromise one’s own sense of self-efficacy. Conversely, multifinality refers to the diverse outcomes that can sometimes arise from common origins. As Suniya and Ed highlighted in their work on resilience (Luthar & Zigler, 1991, 1992), different children exposed to similar environmental conditions (again, poverty, as one example) have very different outcomes or end states, whereas Joan and Ed (Kaufman & Zigler, 1987) identified a multiplicity of outcomes for victims of maltreatment. Similarly, children who may share a common genotype such as a microdeletion that sometimes, but not always, leads to intellectual disability (Burack et al., in press). Across these different populations, a variety of risk and protective factors – both endogenous and exogenous – contribute to the developmental outcome. In considering these various developmental pathways, Ed’s mission was to better understand ways to ensure that

the outcome was as positive and as reflective of wellbeing as possible.

Integrity, Perseverance, and Complexity: Some of Ed’s Lessons to his Students

Throughout his career, Ed reveled in his role as a role model and mentor for generations of junior scholars, including the editors of this special issue, most of its contributors, and some who are no longer with us, notably Donald Cohen who worked for Ed in Washington DC, directed the Child Study Center at Yale where he and Ed shared major grants and projects, and along with Dante Cicchetti edited the first two editions of the seminal collections on *Developmental psychopathology* (Cicchetti & Cohen, 1995, 2006). As reflected by the diversity of empirical and policy interests of his many mentees, each of us took away lessons from Ed that were relevant to our own areas of interest and activities. Regardless of whether we were engaged in scholarly or policy work (or both), these lessons were inevitably embedded in Ed’s developmental world view, commitment to methodological rigor, and belief that that our imperative was to make the world a better place. Maybe more importantly, Ed was also a role model with regard to values. He was unfailingly honest and straightforward, never bowing to politicians or political movements of the time for expediency or correctness, always staying the course of what he thought was correct. Ed has been widely cited as saying that “I remember when I was in Washington they kept trying to get me to say whether I was a Republican or a Democrat – I just said, my politics are children. That’s all I know anything about.” That apolitical perspective took its toll both in his academic and policy work as he often came under criticism for his often visionary but unorthodox positions, many of which would become widely accepted years later.

Ed’s willingness to take on the establishment in order to pursue the best interests of children was chronicled in a *New York Times* article in 1989 (Lawson, 1989). The article began:

Before he sends his students at Yale University into the world to fight for better lives for the nation’s children, Dr. Edward F. Zigler says, he outfits them with the verbal armor of an old warrior: “I tell them, if you’re not ready to lose and lose and lose, don’t even start.”

That message was as true for those of us who pursued academic careers in any number of fields related to developmental psychology as it was for those who went to policy-oriented appointments. Trained by Ed, we were all encouraged to both challenge the standing dogma of a field if it didn’t make sense to us or wasn’t consistent with our world views and to embrace the “messiness” that is inevitable in any area of work associated with human development and the diversity of its manifestation. As Ed recounted:

I’ve noticed, people want simple solutions to complex human behavior, and behavior of a young child is extremely complex... There’s an old saying, for every complex problem there’s a simple solution – and it is wrong. (Grigorenko, 2003, p. 7)

Ed both embraced and contributed to the complexity in the areas of study in which he participated through his critical analyses and innovative ideas that inevitably necessitated the further fine-tuning of populations and constructs, developmental considerations, methodologies, and other ideas. After all, increasing

complexity is inherent to Werner's orthogenetic principle with ever-increasing differentiation – the task, of course, for Ed and his students was to find meaning and integration across all the increasingly nuanced and precise information.

Again, the work of Suniya and Ed provides a compelling example as they contributed considerable complexity to the emerging developmental construct of resilience that, at the time, was fairly monolithic (Luthar, 1991, 1993). In contrast, they insisted that resilience was not “an all-or-none phenomenon” and that various domains of functioning needed to be considered, writing:

Although some high-risk children do remarkably well in terms of meeting societal expectations on one or more domains of competence, many of these children exhibit difficulties in other spheres of adjustment. (Luthar, Doernberger, & Zigler, 1993, p. 9)

In order to better understand this burgeoning conceptualization, they advocated that:

A more fine-grained approach needs to be adopted in studying resilience, with specification, for example, of the particular domains (e.g., academics, peer relations, symptomatology) of resilience fostered by particular risk/protective factors. (Luthar et al., 1993, p. 11)

In our own group's work with Ed, we addressed issues of complexity and messiness in the opening chapter (Burack, Russo, Flores, Iarocci, & Zigler, 2012) of Ed's last book (Burack, Hodapp, Iarocci, & Zigler, 2012) about persons with intellectual disability. He and we acknowledged the oddity that Ed's developmental approach had led to such a deconstruction of the accepted knowledge about persons with intellectual disability that the viability of a coherent field of intellectual disability needed to be questioned. In that chapter, titled “The more you know, the less you know: but that's OK,” we invoked the Wernerian concept of regression in the service of progression as we highlighted that, over the years, Ed's conceptual and methodological insights instilled so much messiness by dispelling the monolithic notion of intellectual disability and debunking widely held myths and assumptions that the entire field of the study of intellectual disability needs to be deconstructed into many different smaller disciplines associated with specific etiological groups and other considerations. Consistent with Ed's world view, the message was contextualized as an empowering one that would lead to a more detailed and nuanced understanding of the unique developmental pathways associated with specific etiological groupings and subgroupings, albeit within an overarching framework of development (also see Burack, Russo, Kovshoff, et al., 2016; Burack et al., *in press*).

Ed's Influence on our Group's Work in Developmental Psychopathology: Examples from Research with Persons with ASD and Indigenous Youth

The co-authors of this paper are all connected to Ed in different ways but all of us – individually and as a group – have been and continue to be influenced by his thinking, research, and humanity. Two of us worked with Ed at Yale, Jake as a graduate student and David Evans as a research assistant, and continue to work in areas related to developmental psychopathology. Four were or are graduate students in Jake's McGill Youth Study Team (MYST) and so are among Ed's many “intellectual grandchildren.” Natalie and Grace have established their own academic careers

and, in the process, had the opportunity to collaborate with Ed on one or more publications. Jenilee and Vanessa are emerging scholars who never had the opportunity to collaborate with Ed, but continue in his legacy in the study of resilience among diverse populations of youth from often-marginalized communities. In keeping with Ed's particular commitment to marginalized groups, the membership of MYST over the years has included a particularly diverse group of students, many of who are from communities underrepresented in academia, including those from Afro-Canadian, Caribbean-Canadian, Indigenous, Hasidic, rural, and low-income backgrounds.

Our group's work is guided by two commitments that emanate from Ed's lessons to us all. One is based in developmental theory with the guiding principle of promoting a scientifically rigorous approach to advancing a humanistic and universal understanding of the development of the “whole” person within the context of family, community, and society, regardless of abilities and backgrounds. The second is depicted in the MYST motto – “A commitment to excellence in the study and education of all children.” The challenge we have taken from Ed's legacy is to make sense of complex developmental patterns, histories, and experiences as we emphasize individual uniqueness within a universal framework. With this background, we briefly highlight disparate foci of our scientific and conceptual writing about two populations that Ed did not directly study but about which he expressed considerable interest. One involves the study of cognitive and social development among persons with ASD, a group to which Ed was somewhat connected through his collaborations with Donald Cohen and others at the Yale Child Study Center. The second involves the longitudinal impact of identification with ancestral culture in promoting academic success, social adaptation, and overall wellbeing among Indigenous youth in Canada, a group about which Ed often inquired when he spoke with Jake and with which he was linked through the establishment of Indigenous Head Start programs. In both these areas of research, we follow from Ed's emphatic rejection of prevailing narratives of deficits or pathology and argue both for a new discourse about identity that is based in alternative values and ways of being, and for changes in policy in order to champion individual strengths and needs within safe and enabling contexts.

All four of us who had the opportunity to collaborate with Ed co-authored manuscripts with him that related to his developmental approach to the study of persons with intellectual disability, and together as a group we have extended this area of work in several ways (for reviews, see Burack, Russo, Gordon Green, et al., 2016; Burack et al., *in press*; also see Russo, Kaplan, Wilson, Criss, & Burack, *in press*). In keeping both with Ed's theoretical and questioning approaches, we have challenged basic assumptions in the field, including the notion of a pervasive attention deficit among persons with intellectual disability that was perpetuated for close to half a century despite clearly flawed studies and data (see Burack, Dawkins, et al., 2012; Burack et al., 2001). We have called into question the lack of consideration of basic developmental methodologies such as comparison by mental, rather than chronological, age by highly funded researchers using state-of-the-art neurological technology (Burack, Russo, Gordon Green, et al., 2016). With regard to the latter, we invoked Ed's concerns from half a century ago as we lamented that:

The current advancement of technology and the related increased access and funding available to researchers using neuroscience tools to study persons with intellectual disability are certainly welcome contributions to this

field, but have given rise to a new generation of defect theorists who, in their frantic pursuit to identify key neurological problems, lay waste to many of the tenets of developmental theory and methodology. Thus, decades after its apparent demise, the defect approach appears to be rearing its head again. (Burack, Russo, Gordon Green, *et al.*, 2016, p. 54)

In another example of our extension of Ed's work with persons with intellectual disability, David and his colleagues demonstrated that – consistent with Ed's emphasis on the power of genetic and environmental familial factors – family background continues to confer risk and protective factors that mediate outcomes for persons with known genomic deletions and duplications associated with intellectual disability, even whole chromosomal aneuploidies like Down syndrome (Evans & Burack under review; Evans & Uljarević, 2018; Moreno-De-Luca *et al.*, 2015).

As the study of persons with ASD has been an essential focus for all of us, we have also extended many of Ed's lessons to the study of persons with ASD. Early in his career, along with Ed's colleagues at the Yale Child Study Center (Fred Volkmar and Donald Cohen), Jake co-authored some of the earliest manuscripts on a developmental approach to the study of persons with ASD (Burack & Volkmar, 1992; Volkmar, Burack, & Cohen, 1990). Subsequently, our group provided both an early commentary to the “benefits and pitfalls” in integrating the developmental approach to the study of persons with ASD that appeared in this journal (Burack, Iarocci, Bowler, & Mottron, 2002) and developmental lessons for appropriate matching techniques in comparing the performance of persons with and without ASD (Burack, Iarocci, Flanagan, & Bowler, 2004). In one application of these developmental considerations, we challenged common statements of executive function deficits among persons with ASD by deconstructing the construct of executive functions into its component parts and considering how mental age matching strategies impacted developmental patterns, thereby providing more empirically nuanced and clinically relevant understanding of performance levels across the various components of executive function at different points in development (Russo *et al.*, 2007).

Somewhat parallel to our work in debunking the claims of an essential attention deficit across the population of persons with intellectual disability, we have challenged widely held assumptions of deficient visual attending among persons with ASD. We recast this narrative by arguing that the attention of such persons might actually be more efficient in many situations. For example, contrary to the common notion that persons with ASD cannot or do not follow eyes, Ristic *et al.* (2005) found that eye gaze following may be more effective among persons with ASD as it appears to be contingency based rather than automatic, as is the case with typically developing persons. Similarly, Brodeur, Stewart, Dawkins, and Burack (2018) cited findings that they interpreted as indicating a particularly utilitarian approach to attending: their participants with ASD seemed to be particularly able to utilize certain dynamic objects in the environment as beneficial cues, whereas the other participants found them distracting and an impediment to performance (for a comprehensive discussion, see Burack & Brodeur, 2020). In a related example of apparently more efficient processing of information, Russo, Mottron, Burack, and Jemel (2012) found that individuals with ASD processed incongruence between an animal sound and a picture of a different animal particularly quickly, as indicated by a positive event related potential (ERP) of around 100 ms as compared with a negative ERP of 400 ms observed among the IQ- and age-matched typically developing comparison participants, although

the groups performed similarly in terms of the speed and accuracy of behavioral responding. These and other examples by our group of particularly efficient or unique ways of attending (Iarocci, Burack, Shore, Mottron, & Enns, 2006; Landry, Mitchell, & Burack, 2009) are recapped in a position paper in which we recast the narrative of the study of attention among persons with ASD – “How I attend – not how well do I attend” (Burack, Russo, Kovshoff, *et al.*, 2016) – within a context of styles, biases, and motivation that better reflect alternative, and often effective, approaches to understanding and functioning in the real world.

Consistent with Ed's emphasis on the whole child and the role of social agency, Grace and her colleagues developed a measure of social competency in children and adults with and without autism (Trevisan, Tafreshi, Slaney, Yager, & Iarocci, 2018; Yager & Iarocci, 2013) that takes into account the developmental complexity of social competence. Their Multidimensional Social Competence Scale involves seven dimensions that occur in dynamic interactions among individuals and that change over the course of development. In addition to measuring the social competency of individuals, this scale can be used to assess the transactional and relational aspects of social competence in real-world tasks that involve interactions with other children and adults (Trevisan, Enns, Birmingham, & Iarocci, 2020) as well as with parents (Gurm & Iarocci, 2019). Following from Ed's emphasis on social competence and personality, Grace and her colleagues have begun examining the role of camouflaging – a social strategy similar to Ed's notion of outer-directedness – that individuals with and without ASD employ in social situations to compensate for their social difficulties (Scheerer, Aime, Boucher, & Iarocci, 2020). Like outer-directedness, this social strategy may be useful in the short term, but it may also have costs in terms of mental health and the development of self-identity over time.

Ed's universal developmental world view also greatly impacted David's emphasis that repetitive and ritualistic behaviors, which are essential features of ASD as well as other developmental conditions, may also be adaptive among typically developing preschool children (Evans, 2000; Evans & Gray, 2000; Evans, Kleinpeter, & Boomer, 2014; Evans *et al.*, 1997, 2017). Repetitive behaviors are often a means to self-regulate emotional states in the face of uncertainty and can accompany a host of magical, superstitious actions and beliefs. In this manner, they can serve as a self-organizing mechanism during periods of uncertainty, such as transitional periods, and in the context of the normal fears and anxieties that accompany daily life (Evans, 2000). However, when viewed in the context of disorders such as ASD, repetitive behaviors are too often seen as merely symptoms, rather than as tools for adaptation. Thus, when rigid habits or routines are exhibited by a child with ASD or intellectual disability, they are generally assumed to be maladaptive – and they often are – but without considering the developmental context, we fail to recognize their normative and possible adaptive functions among persons with ASD just as seen among typically developing children.

A second general area of our group's research that was largely influenced by Ed's developmental world view, scientific rigor, and commitment to helping others is our quarter-century long program of research on the impact of identification with ancestral culture in promoting academic success, social adaptation, and overall wellbeing among First Nations adolescents from northern communities. In rejecting prevailing pathologizing narratives about Indigenous peoples, we have highlighted the remarkable

resilience of communities in the face of hundreds of years of colonization, persecution, and oppression that continues today (Burack, Blidner, Flores, & Fitch, 2007; Burack et al., 2017; Iarocci, Root, & Burack, 2009). Every aspect of culture, family life, and education of the Indigenous peoples in North America was fundamentally altered by the assimilationist practices of European colonizers that were premised on the well-documented mission “to kill the Indian, save the man” (Fryberg, Covarrubias, & Burack, 2018). The many sequelae of these reprehensible beliefs of moral and religious superiority included the imposition of austere and abusive Western-style schools and educational practices in order to eliminate the languages, religions, and other cultural aspects of Indigenous peoples. Although many Indigenous communities have persevered and maintained their own unique identities and cultural practices, the legacy of colonialism has significantly disrupted the education and transmission of collective Indigenous knowledges and practices (Burack, Bombay, Flores, Stewart, & Ponizovsky, 2014; Fryberg et al., 2018).

Like Ed’s work with other groups of children and adolescents, our endeavors are focused in schools with an emphasis on long-term academic outcomes. However, in keeping with his imperative to consider the “whole child,” we consider the many different relationships experienced by the child or adolescent including those with parents, peers, teachers other relatives, and community members. As Ed taught, we are sensitive to the academic disadvantages experienced by youth. In particular, the cultural mismatches between Indigenous youths’ own cultures and the majority Western one in which the schools and curricula are based and the diminished identity safety in these environments predispose students to academic underperformance and the resultant consequences for adaptation as an adult. School contexts characterized by this type of cultural mismatch provide cues that one’s cultural identity is unwelcome or threatened, whereas schools that endeavor toward cultural match provide identity safety and therefore promote academic success and feelings of belongingness (Fryberg, Covarrubias, & Burack, 2013).

In keeping with Ed’s conceptualizations of the complexity of development, we have noted that the impact of culturally mismatched schools can be nuanced. While we, like others, have found that identification with one’s own ancestral culture of heritage contributes to the various aspects of wellbeing among North American Indigenous youth (Blacklock et al., 2020; Flanagan et al., 2011; for a review, see Burack et al., 2014), its beneficial influences might be attenuated by their incompatibility, or mismatch, with the majority culture – especially in institutions such as schools (Fryberg, Troop-Gordon, et al., 2013). Accordingly, as Ed advocated so passionately, schools need to be designed to enhance students’ success; in this case, we and our colleagues argue that the identification and modification of cultural mismatches in the school context are first steps in promoting positive school experiences that lead to educational success and retention among Indigenous students, regardless of their level of identification with the ancestral or majority culture.

In reviewing our research program with Indigenous youth, we also note that the way we have conducted this work has been greatly influenced by Ed’s lessons to us all. In keeping with Ed’s critical rigor and disdain for artificially monolithic constructs, we have been careful to recognize that the Indigenous peoples of North America are so diverse with regard to culture, languages, beliefs, histories, geographic locales, sources of food and livelihood, and exposure to Western invaders that they have little in common other than some shared experiences of historic

colonization and the ongoing experiences of marginalization and oppression by the majority culture – as well as of shared advocacy and activism on their own part (e.g., Fryberg et al., 2018).

Like Ed, we have worked with communities for as long as they have deemed it helpful, including a quarter-century long research collaboration with the Naskapi Nation of Kawawachikamach and the local Jimmy Sandy Memorial School (JSMS). Aware of our own limitations in grasping both the successes experienced and the challenges faced by the youth in these communities, our work has been guided by Indigenous educators and scholars. The many Indigenous educators and scholars who influenced this work include our co-authors Sandy Robinson, who initiated this program of research when he was principal of JSMS, and his successor Curtis Tootoosis, who facilitated and guided the ongoing collaboration as well as our understanding of the key academic and social issues impacting the lives of the Naskapi youth for more than two decades. Jake’s work in this area was largely influenced by his long friendship with George Blacksmith, a prominent Indigenous educator and scholar whose book *Forgotten footprints: Colonialism from a Cree perspective* (Blacksmith, 2016) is essential reading for those interested in the legacy of governmental policies on the Indigenous communities in Quebec and elsewhere. Our work essentially evolved over the years due to seminal contributions by our collaborators and co-authors: Stephanie Fryberg, a social psychologist whose pioneering work is essential to understanding the self-identity and ways of being of Native American and First Nations youth in relation both to educational values and practices and to societal attitudes toward Indigenous peoples, and Amy Bombay, a psychologist/neuroscientist who studies the intergenerational transmission of trauma associated with residential schools and the effects on self-identity and wellbeing among Indigenous peoples throughout Canada. Both of these scholars have impacted policy regarding Indigenous persons from individual communities to the highest levels of government in the USA and Canada.

Ed as Scientist in the Service of Humanity

Ultimately, Ed was so resolute in his own work and in those with whom he worked because he was committed to helping and improving the lives of real people. He understood that the efforts to realize this lofty goal must be multifaceted, and even unconventional, and required the contributions of a broad swath of society. Ed was thus always ready to take on any task, even if generally deemed unworthy of academics, and always made sure to acknowledge the contributions of others. As Ed noted in the SRCD interview:

If you actually went to Washington, if you testified, if you wrote a piece about what you were doing in a popular outlet like *Parents Magazine* – that was disapproved. You know, if we write a piece that appears in *Child Development*, 300 people are going to read it and that’s a notch in your belt. If you write a piece for *Parents Magazine* and six million people read it and you impact lots of lives, in those days that was called prostituting yourself. And I can still remember distinctly in those years one of the great leaders of our field took me aside and told me that I would be a first-rate child psychologist if I would just give up this policy nonsense. (Grigorenko, 2003, p. 8)

Luckily for so many, Ed ignored that advice.

Ed worked in the highest echelons of government and, as he liked to say, with every President from Lyndon Johnson to

Barack Obama, but his motivation was the ability to help and work with real people, across the spectra of age and position, with real-life issues. In one example, as he and Sally Styfco were preparing what was to be Ed's last book about the Head Start program, *The hidden history of Head Start* (Zigler & Styfco, 2010), Ed rejected the publisher's proposed book cover based around a stock photo of children in a classroom because he wanted to recognize the real children and contributors to the program. Instead, he chose a photo of an actual early Head Start classroom with a racially diverse mix of students being read to by the First Lady of the USA, Ladybird Johnson, who had strongly advocated for and contributed to the development of the program. That authenticity and gratitude in the choice of cover reflected Ed's integrity, way of being, and respect of others.

Although his contributions to social policy at the level of government and large programs affected tens of millions, Ed's generosity of spirit and time also extended to more modest endeavors. In one example, he was asked by Berneen Bratt, a mother of a child with cerebral palsy, to write the preface to her book *No time for jello*, in which she recounted her family's negative experiences with the costly and time-consuming Doman–Delacato intervention program that Ed had long criticized as being ineffective and an emotional, financial, and energy drain on families (for a review, see Zigler & Hodapp, 1986). Ed, of course, complied with the invitation. In doing so, he addressed the failure of the intervention program to produce results but, even more, he emphasized the types of fatigue and stress suffered by the Bratt family and so many other families desperate to do what is best for their children. He wrote:

Berneen Bratt's book is a quest: a quest for the best for her child with cerebral palsy, and a quest for knowledge... This is a cautionary tale showing how and why a middle-class educated family could fall victim to a therapy that doesn't work. (Bratt, 1989, p. ii)

In his typically gracious way, Ed highlighted the unique contribution of the book's author and the role of each individual in enabling change. Although leading health organizations, such as the American Academy of Pediatrics, had refuted the Doman–Delacato technique, Ed noted that:

... such scientific critiques, while important, are unable to show the human side of the issue. It is this human side that comes through so clearly in the book before you... We can only thank and commend her for a courageous act as she has provided a clear, simple, yet powerful work that joins science and humanity. (Bratt, 1989, p. ii)

In this compelling preface, Ed highlighted the power of an individual – in this case a mother – to enable change and improve humanity.

Concluding Thoughts about Ed and his Legacy

As noted in various obituaries written by Ed's students following his death, Ed was fond of saying that his most important contribution was his students – and he meant it! Despite all his contributions to science and to policy, to ideas and people, in the USA and internationally, Ed knew that much work is left to do and so he trained, inspired, and exhorted generations of scholars, educators, policy makers, and others to continue his quest for both a better world for children and a better humanity. In doing so, Ed certainly fulfilled and exceeded the ancient Rabbinic

imperative “It's not your duty to finish the work, but neither are you at liberty to neglect it” (*Ethics of the Fathers*, 2, 16). We, like the other contributors to this special issue, are thankful and honored to play a small role in perpetuating this magnificent legacy of repairing the world.

In concluding, we leave the last word to Trevor Dube, who began working as a companion to Ed and Ed's wife Bernice in August 2013, and continued to do so through Bernice's passing in 2017, until Ed's passing. When asked to provide his thoughts about Ed, with whom he spent so much time during Ed's last 5 years of life, Trevor relayed the following thoughts.

Because of his experiences growing up so poor, Ed wanted to change other young people's lives and families. His father used a horse and wagon to sell milk and fruit, they were a poor family. He wanted other kids with the same early experiences as him to have better opportunities and choices when they grew up. He focused on poor kids and the kids who had not been given fair chances to be successful in life. He wanted to change the opportunities those kids had.

He wanted to focus on children in the early stages and to help the families who came from poor backgrounds. Ed used to sell papers and flowers and then gave the money to his mother, who sometimes gave him some back to buy some licorice, which he loved.

One of the things that connected me to him was that he was invited to South Africa, my home country, years ago but he refused to go because he was invited by the apartheid government. They would only let him meet with the White people and he wanted to go to meet with and help the Black people in South Africa. He always fought for poor people during his life. He wanted to give them a better chance in life.

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