

10

URIE BRONFENBRENNER

THE ECOLOGY OF HUMAN DEVELOPMENT

LEARNING OUTCOMES

Having read this chapter you should be able to:

- understand Bronfenbrenner's theory related to the ecology of human development
- recognise how that theory might be applied to the workplace
- understand how human development can be influenced by environmental factors.

KEY WORDS

ecological systems theory; bioecological; microsystem; mesosystem; exosystem; macrosystem; chronosystem; proximal processes; person characteristics

INTRODUCTION

Urie Bronfenbrenner can be credited with breaking some of the barriers which prevailed in the social sciences, encouraging practitioners involved in the study of child development to view children and their families in an increasingly holistic manner, through his **ecological systems theory**. Prior to the development of Bronfenbrenner's model, human development was viewed in a predominantly fragmented manner, with each fragment having its own agenda and level of analysis. In essence: the child psychologist studied the child, sociologists studied the family, anthropologists examined society, economists studied the economic framework and political scientists looked at the structure of society. What then prevailed was a somewhat disjointed view of human development from which no clear picture emerged. Bronfenbrenner argued for a mode of study which encompassed all of these lenses, with family to economic and political structures all viewed as part of a life study, embracing childhood through to adulthood, thus his concept of *the ecology of human development* was born.

In Bronfenbrenner's theory the environment was viewed as an essential component in human development. He identified layers within the environment, each interconnecting and playing its own role in the growth of the child into adulthood. He did not understand the rationale behind investigating human development under laboratory conditions and stated that:

Much of contemporary developmental psychology is the science of the strange behaviour of children in strange situations with strange adults for the briefest possible periods of time. (Bronfenbrenner, 1977: 513)

Bronfenbrenner firmly believed that the developing child should be studied within their own natural environment, undertaking tasks which were familiar to them among people they were comfortable with, suggesting that it is through these interactions that the true nature of the child can be revealed.

Through his work with children and their families Bronfenbrenner influenced how the child was viewed in society and highlighted the importance of working together in the best interests of the child. His work led to the introduction of the Head Start programme in the United States, a readiness-for-school scheme which saw practitioners increasing support for socially disadvantaged families. This was the forerunner to similar policies in the UK, such as Sure Start, which were arguably influenced by Head Start.

Up until his death in 2005, Urie Bronfenbrenner remained an advocate of the family, firmly believing that the child did not develop in isolation, but within the foundations of family, school, community and society, and argued that stronger ties between these structures aided human development. However, he also recognised that some of the processes which make us human were breaking down in modern society, suggesting that, now more than ever, practitioners should be looking to the forces which act on the developing child.

URIE BRONFENBRENNER, THE PERSON

Urie Bronfenbrenner was born in Moscow in 1917. His family moved to the United States when Bronfenbrenner was six years of age, and he spent the rest of his life as an American citizen. His father, Dr Alexander Bronfenbrenner, was a clinical pathologist and research director at the New York State Institution for the Mentally Retarded, which may in some way explain his son's later interest in developmental psychology.

On graduating from Haverstraw High School in New York, Bronfenbrenner went on to major in psychology and music at Cornell University, where he graduated with a Bachelor's degree in 1938. He then went on to study for a Master's degree in education at Harvard University, followed by a doctorate in developmental psychology, which he gained from the University of Michigan in 1942. Immediately after being awarded his doctorate Bronfenbrenner was inducted into the US Army, where he remained until the end of the Second World War, working as a psychologist on a number of assignments and, on completion of his officer training, working in the US Army Medical Corps.

At the end of the Second World War Bronfenbrenner spent a brief period working for Administration and Research for the Veterans Administration as Assistant Chief Clinical Psychologist, before taking up the position of Assistant Professor of Psychology at the University of Michigan. He remained there for just two years before returning to Cornell University as a faculty member in 1948, where he stayed for the rest of his life.

For much of his professional career Bronfenbrenner sought to change the way in which human development was viewed, encouraging his contemporaries to build bridges between the separate disciplines of human development. He was fascinated by what made human beings human and centred his work on the idea that human development was influenced by the social structure that the individual was a part of. He placed great emphasis on the family and proposed that the study of human development should be undertaken within the context of the immediate family, but he also acknowledged that other parts of the larger social system should not be overlooked and reinforced the importance of culture, faith, economic policy and adult employment as key factors in child development (Lindon, 2007).

Bronfenbrenner's work had a significant impact on social policy in the 1960s and he was a strong advocate for family values. His ideas were influential in the introduction of the Head Start programme in America in 1965. This federal child development programme remains one of the most successful and longest-running programmes in the United States. Designed to stop child poverty, Head Start enabled families with low incomes to access advice and support in areas related to health and nutrition and increased parental involvement in the education of their children. Head Start was designed to increase school readiness for those children living in poverty, with the intention that if these children had the same start in life as more affluent children, then the cycle of poverty would be broken. Bronfenbrenner asserted that the programme

would be most effective if the whole community were involved in providing for the needs of the child at a time when parental involvement in the school environment was minimal. This has now become a cornerstone of the programme.

Following the success of Head Start, Bronfenbrenner went on to investigate further the factors which influenced human development, resulting in his theoretical work centred on ecological systems. In his 1979 book *The Ecology of Human Development*, he identified four (later five) systems, each interlinking and having its own unique but interrelated impact on development. This will be covered in greater detail in the next section of this chapter, but in essence his **bioecological** approach changed the way in which psychologists and social scientists studied human beings.

Bronfenbrenner began to see how the changing nature of society was impacting on young people, raising concerns that the hectic pace of modern life posed as big a threat to children as poverty and unemployment (Lang, 2014). He saw these trends as disruptive and potentially damaging to the next generation of adults in America. Speaking to a US congressional committee in 1969, Bronfenbrenner pointed to scientific evidence which testified to the fact that a societal breakdown threatened the processes which made human beings human (Keating and Hertzman, 1999), stating:

... the signs of this breakdown are seen in the growing rates of alienation, apathy, rebellion, delinquency and violence we have observed in youth in this nation in recent decades. (Bronfenbrenner, 1969: 1838)

Bronfenbrenner remained committed to researching the impact of family on human development and in his later years studied the impact of modern family life and culture on development. In his 1986 article 'Ecology of the family as a context for human development', he drew together research studies on a range of factors impacting family life and values. In this article he raised the concern that at a time when external factors, such as unemployment and poverty, were at an all-time high, policy makers were focusing on organisational issues and were failing to address the bigger issues affecting the nation.

Urie Bronfenbrenner had a long and illustrious career, producing over 300 articles and chapters and writing fourteen books, including *Two Worlds of Childhood: US and USSR* (1974 [1970]), *The State of Americans* (co-authored, 1996), *Making Human Beings Human* (2007), and his most influential text, *The Ecology of Human Development* (1979). His most enduring legacy, however, must surely be the impact he had on the study of human development, changing the face of this area of study to one which saw all aspects of the child being examined in one context.

BRONFENBRENNER'S THEORY

In his study of human development, Bronfenbrenner looked to the factors which directly impact on the developing child – namely, the environment in which the child

resides and the system of relationships within that environment. In developing his Ecology of Human Development theory, he observed that:

A broader approach to research in human development is proposed that focuses on the progressive accommodation, throughout the human lifespan, between the growing human organism, and the changing environments in which it actually lives and grows. (Bronfenbrenner, 1977: 513)

He defined the ecological environment as 'a nested arrangement of structures, each contained within the next' (1977: 514), initially identifying four such structures, adding a fifth in a later iteration (see Figure 10.1). Each layer, or structure, has an effect on the developing child and the interactions between the structures will steer the child's development, thus creating a unique experience for each individual. In his theory Bronfenbrenner identified that a change or conflict in any one layer will have a direct impact on the other layers within the system (Paquette and Ryan, 2001).

In studying child development, then, it is necessary to look not just at the child in the context of their immediate environment, but within their wider environment also. As illustrated in Figure 10.1, Bronfenbrenner's theory proposed that the environment is structured as follows:

- The **microsystem** – the environment closest to the child, the most common examples being the home as the first and most significant microsystem in a child's life, followed by the classroom or day care setting. These environments provide interactions with family, friends, peers, teachers and neighbours, who can be seen to directly influence the social interactions with which the child engages. It is

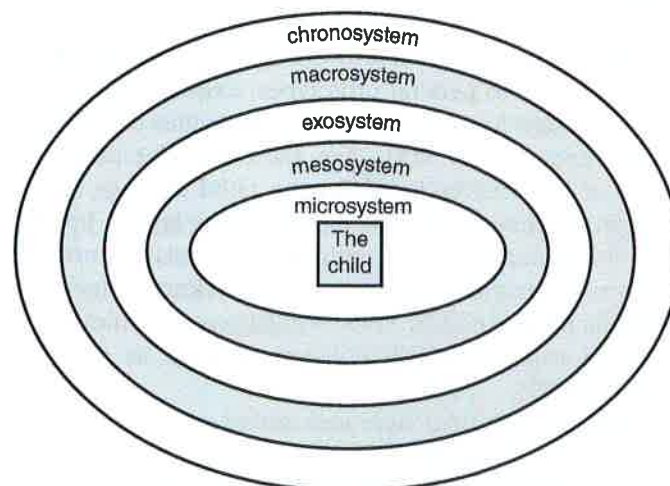


Figure 10.1 Bronfenbrenner's ecological systems model of child development

through the microsystem that the child learns early rules of behaviour and social norms. Bronfenbrenner identified that at this level relationships can exist in two directions, both towards and away from the child. He referred to this as *bidirectional influences* and showed that while the parents can directly influence the beliefs and behaviour of the child, the child can also impact the parents' behaviour. While Bronfenbrenner acknowledged that bidirectional influences could occur within any level, they were at their strongest in the microsystem.

- The **mesosystem** – the existence of two or more microsystems forms the basis for the mesosystem since it is built on the relationships which are formed between the different components within the microsystem and the quality and frequency of the interactions between these. Bronfenbrenner advocated that children's development was optimised when the links between the microsystems were strong. For example, their educational attainment increased if there was effective communication between teachers and parents. Alternatively, if parents showed a poor attitude towards school because of their own experiences, then this could adversely affect children's development.
- The **exosystem** – a part of the child's environment which they are not a direct part of, but which nevertheless influences their development. Bronfenbrenner (1977) saw the exosystem as an extension of the mesosystem and suggested that these might include the world of work, the neighbourhood, mass media, government agencies and communication and transport facilities (Bronfenbrenner, 1977). While the child is not contained directly within that environment, according to Paquette and Ryan (2001) this layer impacts on the child because it interacts with some structure in the mesosystem. For example, a child may be positively or negatively impacted by their parents' work schedules.
- The **macrosystem** – this forms the outermost layer of the child's environment. Bronfenbrenner explained that the macrosystem is fundamentally different from the other layers, 'in that it refers not to the specific contexts affecting the life of a particular person, but to general prototypes, existing in the culture or subculture, that set the pattern for the structures and activities occurring at the concrete level' (Bronfenbrenner, 1977: 515). This, then, includes the laws, customs and cultural values of the society in which the child belongs, which will have a direct impact on the interactions within the other layers. Bronfenbrenner saw this layer as a 'blueprint' in which settings of a similar nature are governed by the same rules or principles; however, he also acknowledged that while many of these are explicitly defined by laws, regulations and rules, macrosystems can also be more informal, in which customs develop as part of everyday life (Bronfenbrenner, 1977).
- The **chronosystem** – this final layer was added at a later date, and, within this layer, Bronfenbrenner acknowledged that human ecology changes over time. Such changes can be external, such as the separation of a child's parents, or internal, such as the physiological changes which naturally occur as the child grows older.

In his later work Bronfenbrenner revised his ecological systems theory of development, redefining it as the *bioecological model*. His rationale for making this revision followed external criticisms of his original model which were centred around a lack of emphasis on the role of the individual, and how their interactions with the environment influenced development. Bronfenbrenner himself acknowledged that this was a weakness of his model; however, as observed by Hirsto, he 'justified the original classification by strongly emphasising the individual to counterbalance the fact that the focus of developmental psychology at that time was firmly on and within the individual' (2001: 30).

Nevertheless, Bronfenbrenner and his colleagues sought to address some of these criticisms (Bronfenbrenner and Ceci, 1994; Bronfenbrenner and Morris, 2007) through the aforementioned bioecological model which placed an increased emphasis on the individual and their dispositions, taking account of interactions between the individual and the environment, alongside the dimension of time (Hirsto, 2001).

The revised model placed an increased emphasis on the differentiation between the four identified components of *processes, person, context* and *time* (PPCT), which can be seen in Figure 10.2.

The first of the four components and the core of his model was processes, which encompassed the interaction between the organism and the environment (Bronfenbrenner and Morris, 2007). Bronfenbrenner identified that human development occurs over a series of increasingly complex interactions, with the complexity arising as a result of the child's physical and cognitive structures growing and maturing (Paquette and Ryan, 2001). He also acknowledged that, to be

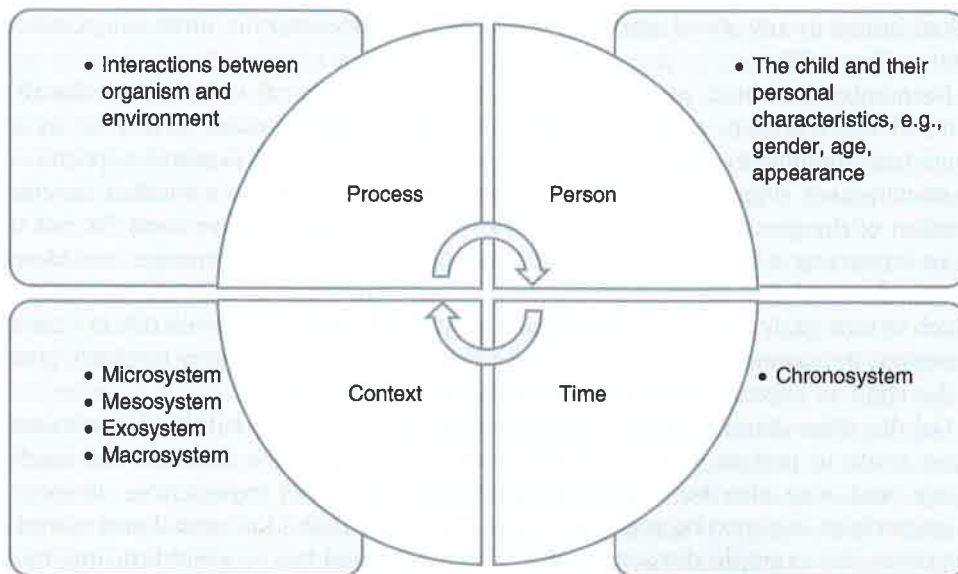


Figure 10.2 The four components of the bioecological model (PPCT)

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effective, interactions need to occur on a regular basis over an extended period of time (Bronfenbrenner, 1993). Bronfenbrenner defined these interactions as **proximal processes** and referred to them as 'the engines of development' (Bronfenbrenner and Evans, 2000: 118). He suggested that these could be found in parent-to-child and child-to-child activities, 'through group or solitary play, reading, learning new skills, studying athletic activities or performing complex tasks' (Bronfenbrenner, 1993: 38). For Bronfenbrenner, the emphasis was on the reciprocal nature of the interactions. These were not just restricted to the interactions between two individuals, but were also determined by interactions with objects and symbols in the environment, thus setting the context (Griffiore and Phenice, 2016). Additionally, he also observed that proximal processes could not be assumed by the mere presence of people in the environment; this would only occur if interactions ensue.

Bronfenbrenner identifies that the proximal processes affecting development will vary significantly depending on the characteristics of each individual – the person – and both the immediate and wider environment in which the processes are taking place – thus reinforcing once again the idea that those factors influencing human development are very much dependent on the characteristics of the individual and their unique interactions with the environment. In his original theory Bronfenbrenner overlooked the unique characteristics of the individual, so in the bioecological theory he took account of features of the child such as physical appearance, age and gender, as well as genetic disposition, how a person responds to stress, temperament and age span in considering reciprocal responses.

In considering the impact of individual characteristics on interactions, Bronfenbrenner and Morris (2007) paid close attention to the **person characteristics** which an individual brings to any social situation. These they divided into the three categories as seen in Figure 10.3.

Bronfenbrenner had previously used the term *personal stimulus* to describe demand characteristics and defined these as those characteristics which act as an immediate stimulus to others, such as age, gender, culture and personal appearance. Bronfenbrenner suggested that these characteristics result in an immediate reaction because of the preconceived expectations which may already have been formed by those interacting with the individual (Tudge et al., 2009). Bronfenbrenner and Morris (2007) observed that demand characteristics can encourage or restrain interactions, which in turn might facilitate or suppress how proximal processes work (Hirsto, 2001). Moreover, developmental processes can be helped or hindered by any feedback given to the child as a result of these outwardly showing characteristics.

On the other hand, resource characteristics are not immediately obvious since these relate in part to mental and emotional resources, such as skills and intelligence, and may also be formed as a result of previous experiences. Resource characteristics can also be seen as the product of an individual social and material resources, for example the access which the individual has to good housing, food and education. In respect of this, Bronfenbrenner and Morris (2007) saw these

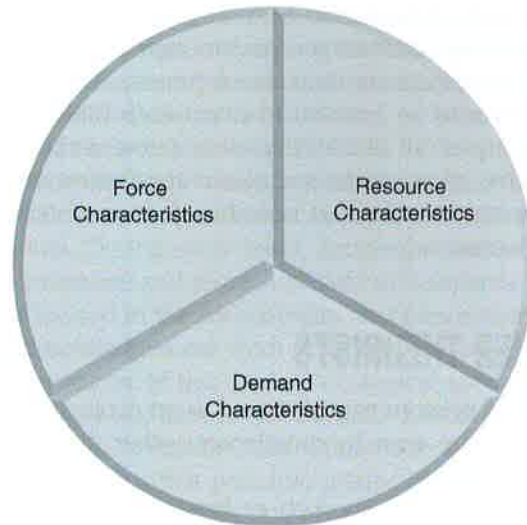


Figure 10.3 Person characteristics as identified by Bronfenbrenner and Morris (2007)

bioecological and biophysiological factors as important in developing the ability, experience, knowledge and skill to ensure that proximal processes are effective at various stages of development.

The final characteristic as observed by Bronfenbrenner and Morris (2007) was that of force characteristics, which draws from the biologically based characteristics of the individual such as temperament, motivation and persistence, which will influence how the individual will respond and react to different stimuli in the environment. Force characteristics can foster or restrain proximal processes, particularly as these are very much influenced by how a child perceives themselves within their environment.

In the final components of the bioecological model, context and time, Bronfenbrenner referred back to his original ecological systems theory and the five elements related to the environment (see Figure 10.1). However, in this revised model the first four elements he referred to as the context, which included the four interrelated systems of the microsystem, mesosystem, exosystem and macrosystem. The final element of time was then captured in the original chronosystem, which as observed by Tudge et al. (2009) is an essential component in any theory of human development. According to Bronfenbrenner and Morris (2007) time could be divided into the subfactors of micro-time, i.e., occurrences taking place at a specific time or within a specific interaction, and meso-time, which relates to the regular occurring activities within a person's environment. Finally, macro-time, which was most closely related to the chronosystem from the original model, acknowledged that developmental processes are most likely to vary according to specific time-bound historical influences which can occur at different stages of the developmental process.

We will see in the following section how Bronfenbrenner's work has influenced how the child is viewed. He encouraged practitioners to view the child through the multiple contexts which impact on their development and, in so doing, he demonstrated how the child could be enabled to reach their biological potential through the shared responsibility of all those who were active within that child's environment, or, as seen above, through the successful application of proximal processes. However, first it is pertinent to look at how Bronfenbrenner's work compared with that of his contemporaries.

LINKS WITH OTHER THEORISTS

While Bronfenbrenner is predominantly viewed as an ecological theorist, it should be noted that his work can be seen to complement other theories, and parallels with other theorists can be drawn.

Proponents of attachment theory, such as Bowlby and Ainsworth, suggest that a child's relationship with the main caregiver, most often the mother, is essential to a child's social, emotional and cognitive development. Both Bowlby and Ainsworth observed that the infant becomes increasingly distressed when separated from the main caregiver, and that if attachments are not secure in the early years then this can have an impact on the child's ability to form bonds and maintain relationships in later life. Through longitudinal studies, Bowlby observed that delinquency or behaviour problems in adolescence could be linked to some form of separation experience in childhood (Smith et al., 2011). This very much reflects Bronfenbrenner's emphasis on the importance of relationships in the microsystem as setting the foundation for all subsequent relationships.

Bronfenbrenner's work can also be seen reflected in the work of social learning theorist Albert Bandura. The premise of Bandura's work is that people learn from one another, through observation, replication and modelling. Bandura posited that most human behaviour is learned, thus he emphasised the importance of a child having positive role models. Like Bronfenbrenner, Bandura suggested that it was the child's interactions with the environment and those within it which impacted on behaviour. He referred to this as *reciprocal determinism*, proposing that an individual's behaviour influences, and is influenced by, both the social world and personal characteristics.

Wong observes that Bronfenbrenner himself admitted to borrowing the core concept of his microsystem, reciprocal activity, from Vygotsky, and likewise his 'conceptualization on "proximal processes" showed a striking similarity to Vygotsky's formulation of the essence of human development' (2001: 370). Moreover, comparisons can also be drawn with Bronfenbrenner's identification of the macrosystem and Vygotsky's socio-cultural theory, since both acknowledged the importance of culture in human development. Nevertheless, while Bronfenbrenner's macrosystem was comprised of societal and cultural expectations and the influences of factors such as the laws, culture

and customs of the society to which the individual belongs, Vygotsky saw culture as more central, particularly in respect of how it facilitates experience and transforms human activity. Vygotsky theorised that children develop cultural tools which are specific to their particular culture, and which are used to help them communicate and make sense of the world (Aubrey and Riley, 2019). In this way Vygotsky places culture central to everyday activity since all human behaviour can be defined as a cultural form of behaviour, which has been shaped by the cultural context and subsequently internalised by the individual. On the other hand, Bronfenbrenner viewed culture as only part of a remote macrosystem, and as such is seen as a separate entity from the more immediate influences located in the microsystem and mesosystems.

Bronfenbrenner acknowledged the work of Glen Elder on life course development as influential in the formation of the original ecological model (Damon and Lerner, 2006). According to Damon and Lerner (2006), Elder's theory had four defining principles, the first three of which can be seen reflected in Bronfenbrenner's outermost layer, the chronosystem. Elder's first principle related to historical time and place, as he theorised that people are shaped by events in history and the events they experience in their lifetimes. In his second principle, timing in lives, he explains that the timing of an event will directly influence the effect it has on an individual. Bronfenbrenner, too, acknowledged this, suggesting that in the event of parental separation, the age of the child will directly correlate with the effect the separation has on their development.

Elder's third principle of 'linked lives' centred on the idea that 'lives are lived interdependently, and social and historical influences are expressed through this network of shared relationships' (Damon and Lerner, 2006: 822). The interdependency of relationships was of course integral to Bronfenbrenner's theory. Interestingly, Elder's fourth principle related to human agency and the individual's construction of the life course. Elder believed that individuals had control over the choices they made and actions taken, and, as we shall see in the next section, this is one area that was underrepresented in Bronfenbrenner's theory.

CRITIQUING BRONFENBRENNER

Tudge et al. (2009) acknowledge that Bronfenbrenner's theory is in a continual state of development, and due to the ever-changing nature of society and its influences on the developing child, it is necessary to apply his earlier theoretical assertions with some degree of caution. Indeed, Bronfenbrenner himself could be seen as one of his biggest critics, stating that:

I have been pursuing a hidden agenda: that of re-assessing, revising and extending – as well as refining and even renouncing – some of the conceptions set forth in my 1979 monograph. (1989: 187)

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While Bronfenbrenner is best known for his ecological systems model, his later amendments were perhaps more reflective of the evolving society in which he lived. In these later iterations he placed more emphasis on how the developing child should be viewed, through the process–person–context–time model (PPCT) as explained above, and as observed by Tudge et al. (2009), on replicating Bronfenbrenner's work, each of these aspects should be equally represented. Tudge et al. (2009) also observe that numerous researchers have used Bronfenbrenner's work as a basis for their studies, but they caution that these should be carefully considered with regard to whether the studies have utilised the earlier outmoded model, which Bronfenbrenner himself questioned, or whether all aspects of the PPCT model have been used as he intended.

A further critique which Bronfenbrenner himself added was that his early work discounted the role the person plays in their own development, placing far too much emphasis on the context, such as the influence of the environment and people within it. As observed by Christensen (2010), Bronfenbrenner stressed the negative impact of the environment and took little account of the resilience of the individual in dealing with the hardships they may encounter. This is further supported by MacBlain (2014), who suggests that Bronfenbrenner failed to pay sufficient attention to the individual psychological needs of the child.

Doherty and Hughes (2009) extend this idea yet further, suggesting that his theory takes little account of the different ecologies which the child is likely to encounter, particularly in an increasingly globalised society, and more attention should be paid to the interactions of a range of people within the child's environment who will impact the individual throughout their lifespan.

Within a theory that places so much emphasis on the child and family and their whole environment it is easy to see how the work can become outmoded. When Bronfenbrenner first began developing his theory he could not have contemplated the rapid changes which have since occurred in society, particularly the enormous influence of technology. However, his work should not be underrated and, providing it is seen in the context of its time, still has value in helping us to understand the ecology of human development.

APPLYING BRONFENBRENNER IN THE CLASSROOM

Bronfenbrenner asserted that:

... a child's ability to learn to read in the primary grades may depend no less on how he is taught than on the existence and nature of ties between the school and the home.
(1979: 51)

He goes on to say that 'it requires us to look beyond single settings to the relationship between them' (1979: 51). Bronfenbrenner's theory can be seen as extremely relevant to the classroom, and the importance of home and school working together in the best interests of the child cannot be understated.

The transition which the child makes from home to school or early years setting is a significant one and marks a change in the role of the child from a member of a family group into a participant in a more formal setting, which for the most part is populated by strangers (MacBlain, 2014). It is important that this first transition from home to school is a positive one, since potentially this can set the tone for all future transitions and the child's future engagement in educational settings. As such, it is essential that home and school work together in the best interests of each individual child.

As we have seen previously, Bronfenbrenner defined the mesosystem as the relationships which develop between the immediate environments of the child, and if this interrelationship is both frequent and of a high quality, then this will have a direct impact on the development of the child (Foley and Leverett, 2008). So, when considering transitions, we can see how the role of the key worker in early years settings can impact on the effectiveness through close interactions with the parent. The 2021 Early Years Foundation Stage (EYFS) statutory guidance sets out that 'each child must be assigned a key worker' (Department for Education [DfE], 2021: 27) and defines their role as one which 'ensures that every child's care is tailored to their individual needs' (2021: 27) and offering 'a settled relationship for the child and building a relationship with their parents' (2021: 27). This may be as straightforward as the practitioner understanding the child's likes and dislikes, favourite toy and so forth, which can be used as a means of engaging with the child, particularly in times of distress. Likewise, it is important that settings keep parents abreast of progress and attainment, with the EYFS statutory framework outlining requirements as follows:

Parents and/or carers should be kept up-to-date with their child's progress and development. Practitioners should address any learning and development needs in partnership with parents and/or carers, and any relevant professionals. Assessment should inform an ongoing dialogue between practitioners and year 1 teachers about each child's learning and development, to support a successful transition to key stage 1. (2021: 18)

The provision of information for parents continues as the child progresses through the education system, as schools have a statutory duty to prepare annual reports for parents which should include comments on general progress alongside any noteworthy achievements. Furthermore, opportunities should be provided for parents to discuss their child's progress with the class teacher (Gov.UK, 2021). This potentially provides parents with the opportunity to continue with a child's education in the home environment. There has, in recent years, been an increased focus in the primary age range on the importance of homework, which extends beyond reading with children to being more actively involved in other aspects of the wider curriculum.

Of course, transitions do not just occur between home and school and, as the child grows older, transitions within the school environment, from class to class or school to school, can be equally difficult for some children. Such transitions can be eased significantly if communications within educational settings are made. For example, it

is common practice for a child's attainment record to be passed between settings, ensuring that educational needs can be met. Likewise, other relevant information passed between settings can help to ease the transition, thereby increasing the child's chances of educational success.

A child's success in school can also be impacted by systems within the wider environment, the exosystem, and here schools may look to these to gain a better understanding or appreciation of why a child might be behaving in a certain way. In his later studies Bronfenbrenner saw the instability and unpredictability of family life as being particularly harmful to a child's development (Addison, 1992). Addison expresses that where relationships in the immediate mesosystem break down, the child will lack the stability required to successfully interact with the wider environment. Equally, if there is a lack of positive affirmation from the closest caregivers then the child will look for that affirmation elsewhere, in some cases forming inappropriate relationships, particularly in the adolescent years. Practitioners can look, then, to what might be happening within the direct mesosystem in order to account for a possible change in behaviour. Indeed, Paquette and Ryan (2001) suggest that it is increasingly the role of the school and teachers to provide the stable, long-term relationships which are so important for healthy development and which, in modern-day society, can sadly be lacking in the home environment.

Bronfenbrenner would, however, caution against this type of relationship, suggesting that in order to be effective such relationships need to be consistent and enduring, something which schools and teachers are unable to effectively accommodate. Instead, Bronfenbrenner advocates home and school working together, with schools particularly providing a nurturing and supportive environment. He urged the creation of policies which would support the primary caregiver in their role in the child's development. We have already seen how this led to the Head Start programme in the United States, but we should at this juncture mention a similar programme in the UK – namely Sure Start, which was also intended to provide a supportive network for parents.

Introduced in 1998, Sure Start's remit was to provide a supportive network for parents from pregnancy through to children reaching school age. Housed in Children's Centres, predominantly in socially deprived areas, parents could access a range of services, bringing together health, education and parenting support services in a coordinated way. As with Head Start, policy makers recognised that children from deprived areas did less well in school than their more affluent peers and, as such, in order to redress the balance, support needed to be provided in the formative years, before it became too late. Reflecting Bronfenbrenner's work, Sure Start was aimed at educating parents and improving the chances of success through strengthening family values and ensuring that all stakeholders took full responsibility for the developing child.

The importance of the interactions between family and school can also be seen reflected in the latest revision of the Early Years Foundation Stage, which clearly states in its introduction that 'good parenting and high quality early learning together

provide the foundation the children need to make the most of their abilities and talents as they grow up' (DfE, 2021: 5). The document also advocates 'partnership working between practitioners and with parents and carers' (2021: 5). Likewise, keeping parents informed of their child's progress is also an important component of the document, particularly regarding the two-year progress check. In fact, the importance of parents as partners is a consistent theme throughout and is highly relevant when considering the importance that Bronfenbrenner placed on the mesosystem as a firm foundation on which the other layers are built.

Educational practitioners can then take much from his work, particularly when we consider how society is evolving and changing. In an increasingly global society, it is important that teachers have an awareness of the cultures and values which may be dictating the child's lifestyle, as well as understanding how wider issues affecting family life may have an adverse effect on a child's development. It is only through an appreciation and understanding of these that the setting can meet the best interests of the child.

OVERVIEW OF APPLICATION: IDEAS FOR APPLYING THE BIOECOLOGICAL MODEL IN THE CLASSROOM

Bronfenbrenner's bioecological model proposes that development is underpinned by processes which comprise of complex, reciprocal interactions between people, objects and symbols in the environment - it is important, then, that opportunities are presented for these processes to be facilitated. Following are some suggestions as to how this might be achieved.

- Encourage teacher-student relationships through combining instructional time with opportunities for personal agency and engagement.
- Take time to get to know learners in order that appropriate personalised learning programmes can be developed. Consider this from the perspective of force characteristics, for example a shy child may require a different approach than one who is more outgoing.
- Avoid stereotyping children according to gender or socio-economic status, seek to provide equal opportunities for all, and ensure that this is communicated to the whole school community, including parents, who may have their own preconceived ideas.
- Recognise the impact of transitions on children and take account of how temperament might impact on individual reactions to transitions. Ensure that transitions are managed with sensitivity and care.

(Continued)

- Develop meaningful relationships with parents and carers, encouraging direct involvement with school activities such as homework, attending parent evenings and holding high expectations for achievement and success.
- Recognise how the home background might impact on a child's approach to learning and attitude towards school. Seek ways of learning about the children's home background on transition to the setting to accommodate this, for example through home visits.
- Consider how proximal processes are working in the classroom by reflecting on the quality of interactions undertaken by the pupils, e.g., pupil to teacher, pupil to pupil, interactions with the environment. Seek ways of increasing the complexity of interactions.

SUMMARY

Bronfenbrenner is viewed as one of the leading figures in the study of human development, and his *ecological systems theory* not only changed the way in which human development is viewed but also spearheaded a significant number of studies in the field of human development. Later known as the *bioecological systems theory*, Bronfenbrenner's theory outlined the importance of the child's own biological environment as the key to their development and stressed that it was the quality and context of these environments which will have the most significant influence on their development. He stated that the child's interaction with their environment is a complex one, a complexity which increases as the child matures and develops.

Besides his ecological systems theory, a lasting legacy left by Bronfenbrenner is the US Head Start programme, of which he was a co-founder. This programme arguably changed the lives of children and families living in poverty in the United States and was also responsible for the inception of similar programmes in other countries.

Bronfenbrenner used his ecological model to raise awareness of the potential problems which exist in an ever-changing society, and provided a model by which those working with young people could begin to pre-empt these and, in doing so, provide an environment more conducive to healthy child development. He was a firm advocate of the family and their individual values and believed that the way forward was to nurture the developing child within the family structure. However, he also encouraged the notion that home and school should work closely together, suggesting that 'schools and teachers should work to support the primary relationship and to create an environment that welcomes and nurtures families' (Paquette and Ryan, 2001: 3).

Bronfenbrenner recognised that to fully understand human development it was important to consider the ecological system in which growth occurred, thus changing the nature of studies from a fragmented one to a holistic one. He urged all those who

were part of a child's development to work together in the best interests of the child and worked tirelessly to address some of the harmful influences which he believed modern-day society had encouraged.

GLOSSARY OF TERMS

Bioecological model

A model of human development proposed by Urie Bronfenbrenner and Stephen J. Ceci in 1994 as an extension of Bronfenbrenner's original ecological systems theory. The model examines the relationship between organisms and their interactions with the environment. The key focus for the work was on the individual, which Bronfenbrenner believed had been overlooked in his original model.

Chronosystem

The final tier of Bronfenbrenner's ecological systems theory which encapsulates the key events that happen during a child's development, including life transitions and major historical and environmental events. According to Bronfenbrenner, experience of such events will influence how the child interacts with future events.

Ecological systems theory

A theory developed by Urie Bronfenbrenner which attempts to explain how children are influenced by a range of different environmental factors as they grow and develop. Presented as a series of five consecutive circles with each one showing aspects of the environmental factors which influence development to different degrees.

Exosystem

The environmental setting which the child does not have active involvement in, but is influenced by nevertheless. For example, a parent may be forced to take a job away from home in times of high unemployment, which might adversely affect the child.

Macrosystem

Relates to aspects of a child's culture which might influence growth and development. This usually relates to a child's heritage or identity as being part of a larger group with shared beliefs and culture.

Mesosystem

The second level of Bronfenbrenner's ecological systems theory which looks at the interactions between two microsystems. For example, a child's parents interacting with

their teachers would be a mesosystem, thus building a bridge between two key aspects of a child's life.

Microsystem

This is the smallest part of the ecological systems theory, and the one which is the closest to the child. This then is the most influential in terms of the developing child and has the most direct influence. The microsystem includes family, schools, religious institutes, neighbours and peers.

Person characteristics

Bronfenbrenner acknowledged the impact of person characteristics on human development, identifying three specific ones which he believed to be particularly influential in the application of proximal processes across the lifespan. These were demand characteristics, force characteristics and resource characteristics.

Proximal processes

Reciprocated interactions between a child and their immediate external environment. According to Bronfenbrenner this might include interaction with people, the physical environment or objects within the environment, with such transactions driving development and contributing to the child's competences and general well-being.

FURTHER READING

Bronfenbrenner, U. (1974 [1970]) *Two Worlds of Childhood: US and USSR*. London: Penguin.

In this, Bronfenbrenner compares two aspects of childhood, in Russia and America, showing how cross-cultural research can be used to gain a better understanding of childhood.

Bronfenbrenner, U. (ed.) (2005) *Making Human Beings Human: Bioecological perspectives on human development*. London: Sage.

A series of works which present Bronfenbrenner's own thoughts on the bioecological theory of human development.

Cairns, R.B., Elder, G.H. Jr and Costello, E.J. (eds) (1996) *Developmental Science*. Cambridge: Cambridge University Press.

Elder's Chapter 3 – 'Human lives in changing societies: Life course and developmental insights' – is an examination of the study of the life course as a means of studying human development. The author offers an alternative but complementary theory to Bronfenbrenner's.

Frost, N. (2011) *Retinking Children and Families: The relationship between children, families and state*. London: Continuum.

An examination of the complex relationship between children, families and the state. The book draws on contemporary research to examine the changing face of childhood.

Hayes, N., O'Toole, L. and Halpenny, A.M. (2017) *Introducing Bronfenbrenner: A guide for practitioners and students in early years education*. Abingdon: Routledge.

An introduction to Bronfenbrenner's work specifically for practitioners working in the early years. The book uses practice-based research to illustrate how aspects of Bronfenbrenner's work can impact on setting-based practice.

Shelton, L.G. (2019) *The Bronfenbrenner Primer: A guide to develecology*. New York: Routledge.

A breakdown of each component of Bronfenbrenner's theoretical models, with practical examples of how the framework can be applied in practice.

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