A New Perspective on Human Development

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Abstract: This paper takes a theoretical stance and looks at human development in terms of resources, challenges and risks instead of considering chronological age as a dominant force. Utilising a simplified ecological dynamic model the paper outlines how challenges and shifts in the human life course can act as catalysts for change, dependent upon the resources available to the individual. The paper starts by introducing the Lifespan Model of Developmental Challenge (Hendry & Kloep, 2002) with its notion of resources and challenges. It then goes on to explain how and under which circumstances meeting challenges can lead to development, while avoiding challenges carries the risk of developmental stagnation. Individuals differ in the number and kind of challenges they encounter in their life, but the processes and mechanisms leading to development are the same. The paper proceeds to introduce the notion of normative and non-normative, and illustrates these concepts with examples of potential turning points taken from individual narratives. The paper concludes with a call for a more integrated interdisciplinary approach to the study of human development.

1 Introduction
This paper sets out to discuss a somewhat different view of human development, by taking age out of the equation and substituting it with the notion of ‘resources, challenges and risks’ (Hendry & Kloep, 2002).

At the outset, we want to take a closer look at the resources for development that are available to human beings. All healthy children are born with a certain range and level of fairly similar resources that help them to develop into adult human beings (no one has yet been reported as having developed into a frog Prince!), and to cope with life’s challenges. Importantly, these resources will change and alter over the life course. Furthermore, all babies get bigger, all have a predisposition to learn to walk and speak a language, to see, to hear and to smell, to learn new things and to feel varying emotions. Consequently, Indian and Russian, British and Maori neonates, and those in rich and poor families, behave in much the same way.

Accepting these similarities, we are also very different from each other from the day we are born, and even as foetuses in the womb. Many of our resources are innate, such as certain reflexes. Others are learned, since learning starts in the first seconds of life and will go on until death. Still others are structurally determined, such as nationality or social class. Just as certain potential resources exist for every individual from the very first moments of life in the womb, so too does the inequality in their distribution amongst individuals. Furthermore, some resources are more ‘personal’ to the individual (such as intelligence) and, some are more societal. Hence, they encompass conditions of the individual’s micro-and macro-systems (Bronfenbrenner, 1979) which create different opportunities, such as whether education is available and affordable, the employment situation, climate, laws, health system, and cultural traditions: These are all potential resources.
The idea of a ‘resource system’ to describe an individual’s potential to cope with various challenges has also appeared in sociological literature. Côté (1996) uses the concept of ‘identity capital’, (which consists of sociological assets such as educational level, and psychological resources, such as critical thinking abilities), to describe the resources an individual possesses to deal with the demands of modern living and development throughout the life course. The number and kind of resources can vary at any moment in time, and over the lifespan. New resources are added, others disappear, some characteristics become resources, and some lose their resourceful quality.

In this paper, we argue that it is these resources and their interdependence with challenges stemming from day-to-day hassles to life-shattering events that account for human development across the lifespan – and not, as so often claimed, increasing maturity associated with age.

2 Resources and Challenges

Figure 1 shows some examples of potential resources and potential challenges in the individual’s life. None of the variables within these different categories should be seen in isolation from the others, rather they should be regarded as highly interactive. Biological and socio-structural variables, for example, interact with acquired skills, and together form the basis of self-efficacy, which in turn enhances the learning of new skills. Consider for a moment, a female child who is, because of her gender (i.e. structural resource), not allowed to play boisterously with her peers. She may not develop the skills of self-defence (i.e. skills resource), and thus be at higher risk of becoming an assault victim, which in turn, might have an impact on her self-efficacy and health resources. Low self-efficacy can lead to shyness, fewer social contacts, and thus to less social resources and so on.

![Figure 1 The interdependence of potential challenges and potential resources](image-url)
To take a positive example: A child born with a musical talent might find an adult who is willing to further this gift. Having a mentor and a skill that is admired by peers and potential romantic partners is a good pre-requisite to stay out of ‘trouble’ by not having to impress on peers with more risky, perhaps delinquent behaviours. All this can strengthen self-esteem, and lead to further social contacts and new associated skills.

Now, this view of individual resources would not be a systemic one if we regarded the resource system as static and closed. Of course, this is not the case: Firstly, as already mentioned, potential resources interact with each other so that they can enhance and/or inhibit each other. For example, physical attractiveness can be a resource in many social contexts and enhance self-esteem. However, it can also inhibit the learning of social skills – the individual relying solely on good looks to be accepted by peers. Or, being a talented soccer player can enhance one’s health and fitness and gain peer approval, yet it can also lead to sports injuries and fiercely competitive attitudes to others – and in some young people, being an active sports participant during adolescence even predicts heavy alcohol use in young adulthood (Peck, Vida & Eccles, 2008)!

Secondly, the resource system participates in other open systems. So, while in some situations being a creative, critical thinker could bring one a King’s sponsorship, in other circumstances it could lead one to the hangman’s noose! Or to take a more contemporary example, being a creative and critical thinker could win one a doctoral scholarship, in other contexts could bring one the boss’s disapproval and dismissal. Social embeddedness in a community and strong links with one’s family can be a powerful resource in meeting various challenges, but it can turn into a disadvantage when it prevents a young person from moving away to pursue an university education or a career (Henderson et al, 2007). A plethora of material resources can buy better food, healthier housing and better health care, as we can observe in the richer countries of the world. It also enhances the probability for obesity, alcohol and drug dependency and inactivity, as the same statistics show (WHO, 2008). Thus, potential resources can become disadvantageous while potential disadvantages can become beneficial, depending on the interaction with other elements in the participating systems.

![Fig 1](image)

**Fig 1** Potential resources (white) interacting with potential health challenges (shaded)
Thirdly, some resources which are beneficial in the short term can become potentially harmful or even highly risky in the longer term. The increasing availability of unskilled, temporary part-time work in Western societies does give young people work-experience and a wage. However, if they continue to rely on the same or similar jobs for some years into the future it may constraint their opportunities to gain complete freedom from their parents, because these wages are too low and too unpredictable to allow for independent living (Martin, 2002). Or, even more dramatically, drugs prescribed to offset depression may in the long-term lead to drug dependency.

This is because challenges are defined by resources, and vice versa. Only by knowing an individual’s resources can we decide whether a particular task is a challenge, and only by knowing a particular task can we decide if an individual has the resources to deal with it. What we are trying to say here is that it is impossible to view resources without looking at challenges at the same time: the two are inexorably linked, in fact they are part of the same open system, and what we are really analysing is not resources on one hand and challenges on the other, but the relationship between the two.

To illustrate this further, no potential resource is a resource in isolation. For example, is it a challenge for a young people to manage their own flat? It can well be, if they never had to do any house keeping before. But it is no more than a mere routine task for those who have participated in household tasks in their parental home for many years before. Similarly, having a lot of money can most certainly be a resource, if the challenge is of a nature that can be solved with money (for example, hiring a cleaner, if the individual lacks cleaning skills himself). However, money can also be completely irrelevant in other situations (e.g. when sitting an exam) or even a disadvantage (e.g. looking at an array of expensive Belgian chocolates whilst trying to be on a healthy diet). Actually, money can be changed from a potential resource into a challenge, if there is a lack of economic planning skills (as is often observed in lotto-millionaires, for whom sudden riches can be more than they can handle).

Similarly, whenever young people’s risk behaviours and lifestyle choices are regressed on a series of potential predictors in psychological research, ‘education’ emerges as a strong protective factor. This kind of research, however, springs not only from a relatively static cause-and-effect view of the world, it is also biased with a normative definition of what constitutes a ‘healthy outcome’, thereby ignoring all the micro-processes that become invisible in a regression model and/or lost in the error variance. It might be true that a higher level of education is correlated with less risky behaviour, but it is also true that in many peer cultures today, academic ability and an aptitude for studying are regarded as ‘uncool’ and make the ‘nerd’ vulnerable to bullying and social exclusion. That might effectively stop her/him from participating in drinking parties – but is it really a healthy outcome? Further, what is it that seems
to be ‘protective’ about education? Is it the academic skills achieved, is it the teachers’ supervision that keeps young people off the street, is it the better work prospects that come along with better degrees, is it an enhanced self-esteem? Again, we need to know the processes and mechanisms that work to protect some young people from engaging in some risk behaviours. Simply forcing thousands of disengaged, alienated teenagers to attend two more years of compulsory schooling, as is currently being debated in the UK, seems unlikely to succeed. Education might be a resource for many young people in many contexts, but being a good statistical predictor does not necessarily make it a panacea. It is the obvious limitations of this kind of research, that have led dynamic system theorists to urge for abandoning variable centred studies in favour of person centred research (Valsiner, 1997)

Thus, while the task determines what a resource is, the number and kind of potential resources within an individual’s resource system determine whether or not the particular task the individual meets turns out to be a routine chore, a challenge or a risk. Elder (1986, 1987), for example, has shown that during the Great Depression in the United States, being called up for military service had a differential impact on young men depending upon when in their life course it happened. It had positive effects on younger men, who had just left high school, because it saved them from unemployment, and gave them the opportunity to learn entrepreneurial skills, which were important for their future careers. Nevertheless, the same military service had negative effects on older men, because it disrupted their careers and their families.

3 Meeting Challenges and Development
In other cases, stressors that disrupt the continuity of one’s life can act as ‘catalysts for change’ (Fiske & Chiriboga 1991). Therefore, a certain amount of stress can be regarded positively from a developmental point of view, because it can lead to the acquisition of new skills (Aldwin 1992). Hence, a task can be a clearly positive experience, or it may contain negative elements that, nevertheless, lead to growth. For example, having a physical handicap has, for some people, been the antecedent to enormous personal growth, whereas something as apparently desirable as getting a promotion can be disastrous for a person who lacks the managerial skills to cope with new responsibilities. Gottlieb, Still & Newby-Clark (2007), in analysing the impact of life events on development in emerging adults, concluded that while development was limited by negative experiences, growth arose from life-events that varied a great deal in their desirability, ranging from the very negative to the very positive.
As a systemic framework, the resources-challenge model is a useful, simplified tool for analysing the changing life courses of individuals in changing societies by taking into account the ways different individuals encounter different experiential challenges, utilise a varying set of resources in meeting these; and by explaining how challenges, resources and risks are all dynamically linked across the life course. It can also provide insights into how some individuals develop, and others ‘stagnate’ either by choice of lifestyle or through lack of relevant challenges and resources.

Each time an individual meets a challenge, the system of challenges and resources comes into a state of imbalance, as the individual is forced to adapt his or her resources to meet this particular challenge. This adaptation can be short-lived if the resources easily match the challenge, as in dealing with routine tasks. On the other hand, it can be a long, anxiety-provoking process, when the challenge is significant (or when there are several challenges encountered at the same time, see Coleman & Hendry, 1999) and matching resources are not easily available. If the individual is eventually able to solve the task, his or her resources are transformed and increased, and it will be easier to cope with similar challenges in the future. In other words, the individual has changed, and development has occurred.

What this means is that there need to be challenges for development to occur – or to use the terminology of dynamic systems theory, the system needs an input in order to become unbalanced and to re-organise on a more complex level. The idea of a
‘conflict’ that triggers change is actually not new within developmental psychology, we can find it for example in the notion of equilibration in Piaget’s theory, in the necessity of crises in Erikson’s stage theory, and in Riegel’s (1979) dialectical psychology.

If we leave the theoretical terminology for a moment and turn to some real life examples, we can easily see how young students, starting for the first time at university, see themselves confronted with a whole range of new challenges. To leave home, find new friends, adjust to a different way of teaching and learning, managing their own economy and spending their evenings unfettered by parents are all new experiences that tax their resource systems and brings them out of equilibrium. There will be a time of confusion, during which all elements of the system – existing resources and existing challenges (which vary with the history of the individual) as well as emerging challenges and emerging resources (which vary with the new environment, such as support systems of the university, subject specific demands, peer group climate, housing conditions etc) interact and re-organise themselves into a new system with a new attractor point: a competent student is evolving from the confused freshman. However, when time comes, this system will be shaken up again, and the student will have to re-organise into an employee!

Meeting a challenge that ‘disturbs’ the system can be both exciting and anxiety-provoking. Every organism has processes by which it defends itself against, overcomes, or adapts to such perturbations (Ford & Lerner, 1992), and each response to such a disruption means simultaneously losing an existing secure position (i.e. development as risk) and an increase in possibilities (i.e. development as progress). This creates feelings of both hope and insecurity in the individual (Dreher, 2007), and explains why it is sometimes more comfortable to try to avoid further challenges and to choose ‘the way of least resistance’ (in systemic terms: to keep to the old attractor state). Subjectively this is a comfortable state, but it does not offer a great deal of potential development. Hendry & Kloep (2002) have chosen to call this situation ‘contented stagnation’.

An example of this can be a young person, who objectively has the resources (e.g. money, skills, available housing) to leave the parental home, but finds it much cheaper and more comfortable to stay and have his meals cooked, his room cleaned, and his laundry washed. This is a reasonable adaptation to the existing circumstances, but it does not offer him the chance to learn the skills of independent living.

Conversely, when an individual does not have the resources to seek out further challenges, this also prevents development because the individual just maintains the status quo and is not able to change. Hendry & Kloep (2002) have called this ‘unhappy stagnation’ because it is imposed, not chosen. An example could be a young girl who had poor grades in school and is unable to find work locally, yet wants to have her own flat. However, she ends up without education or employment and unable to leave her parental home as she hoped.

To summarise, human change comes about by a systemic interaction of different resources and challenges, and not simply by the passing of time. Every new challenge causes the system to change. This can consist of a re-organising of the system and a
major transformation; or of avoiding challenges and keeping the system more or less near to equilibrium. Only the first of these options leads to what we would term ‘development’.

4 Non-Normative Shifts
The processes and mechanisms of change are the same for all humans independent of culture, cohort and age; yet what makes them so different across these parameters are life experiences. On the one hand, all normal babies develop into adults, and eventually they grow old and die. On the other hand, some of them will become parents, some will not, some will be outstanding in intellectual pursuits; others will hardly learn to read or write. Some will spend most of their adult lives in prison; others will live in mansions; and still others in a tin hut in the forest or in an urban slum.

In addition, young people will each have unique experiences from the very first day of birth. A second child in a family is actually not living in the same environment as its older sibling, even if it might appear so superficially. Firstly, an older brother or sister exists. Secondly, the parents are some years older, more experienced and, possibly, in a different phase of their life, friends and relatives do not react in the same way to the arrival of each new child, there are different peers to interact with in the nursery school, and so on. In other words: Everyday life is different in many small aspects, which collectively and interactively lead to a different life course. The different challenges individuals meet across their lifespan play a significant role in human diversity in development.

There are certain changes in life that will happen to all humans relatively independently of the influences of their physical and cultural environment. These changes are ‘maturational shifts’ caused mainly by normal biological mechanisms, such as puberty, the menopause and ageing. Even if there are certain variations in the onset and duration of these maturational changes between individuals within the same culture, and between groups in different cultures, the processes involved, and the biological outcomes, are similar for all human beings. These shifts are expected and experienced by everyone. They are nevertheless a challenge, because the individual will have to cope and adjust to them psychosocially. However, the possibility to prepare for them and the presence of older role models make them relatively easy to face. It is maturational shifts that account for the similarity in human development throughout the world, and which led some earlier psychologists to believe that all development follows a given, genetically determined pattern.

Human beings within one cultural setting are closely similar. Hence, the people in individualistic societies of rich Western nations differ significantly from the collective cultures of the developing countries. However, even within the same culture, there are sub-cultural differences (i.e. men compared to women, working classes compared to middle and upper classes, different religious groups, youth sub-cultures and regional variations). For example, in the USA, differences have been observed as to when and why young people from varying cultural backgrounds leave home. Catholics leave home later than all other groups, while fundamentalist-Protestants leave home at a fairly early age for marriage, and liberal-Protestants do so to go to college (Goldscheider & Goldscheider, 1994).
As we have previously commented, cultures change over time: Ancient Britain was different from modern Britain, and being a teenager in the 70’s posed different challenges than those facing an adolescent today. Thus, while all members of all cultures share the same maturational shifts, one significant set of influences that causes differences between cultures, are the developmental transitions we call ‘normative-social shifts’, and to a certain degree, those we call ‘quasi-normative shifts’.

Normative shifts are changes in one’s life that are prescribed by law for all members of certain well-defined groups: Within a country, these could be for example, starting school, achieving adult legal status, retiring from paid employment. These shifts occur in the lives of almost all members of a particular culture at given times in their life. Thus, they are predictable, expected, and shared with peers. Age-graded procedures like these are to be found in every society, though their enforcement varies considerably by culture.

Quasi-normative shifts are experiences which are not prescribed to the same degree, but common and socially expected to occur within a certain age-range in a given culture. Examples for these shifts are: leaving the parental home, age at first marriage, getting a first job, parenthood, and other cultural symbols like age-related clothes fashions, hair style and musical interests. Both normative and quasi-normative shifts account for similarities between members within certain cultural groups, and for differences between cultural groups; and these normative and quasi-normative shifts are not static within a culture or sub-culture. Since cultures themselves are open systems, expectations vary concurrently with changes in the cultural system: Hence, expectations about childhood, adolescence and young adulthood continuously change over the course of history, between societies and within societies.

Moreover, there is a range of non-normative shifts awaiting the individual across their life course. Non-normative shifts are changes that do not occur for everyone, but only for some, perhaps for very few individuals. The number of possible non-normative shifts that can occur across the life course is almost infinite, though examples could include: a serious accident or injury, but also moving to a foreign country or a radical career change. These shifts can be developmental ‘turning points’ (or ‘turning processes’), and they can have enduring consequences by affecting subsequent events through a process of cumulative advantages or disadvantages (‘cascading constraints’, in the language of dynamic system theory). However, we should keep in mind that many of these ‘transitions’ do, in reality, consist of multi-phasic processes of relatively long duration. They frequently comprise a succession of several ‘points of choice’, and not single, short-lived events (Elder 1998). Thus, these shifts present the individual with a host of challenges, and each of these can be dealt with more or less successfully.

Figure 4 shows a diagram that has been constructed from the narratives of a number of individuals at different points of their journey across the lifespan.¹

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¹ These case studies were compiled by the Welsh National Institute of Adult Continuing Education as part of a collaborative study with the co-authors of this paper, and supported by a grant the British Broadcasting Cooperation.
Figure 4 Examples of triggers for developmental change
5 Conclusion

To sum up: We argue that it is these individual processes of change, acting in concert with all other elements of the wider system that explain human development rather than the simple passing of time. We develop by meeting and coping with a myriad of challenges from day to day – and not just by adding years to our lifespan. This view also implies that we cannot study these phenomena fully from the perspective of one discipline alone.

We need to encourage scientists of all persuasions to join a new revolution, and truly engage in interdisciplinary research, in fact, we want to advocate an entirely new science, the science of human change (see Figure 5).

Figure 5: An interdisciplinary science of Human Change
6 References


