

CHAT and HIV/AIDS: An activity system analysis of a lack of behaviour change

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Abstract

South Africa has the largest HIV epidemic in the world. In the absence of a vaccine, prevention of infection becomes a focus within the HIV and AIDS field. Prevention interventions draw on theories of behaviour change to effect changes in the behaviour which leads to HIV infection. The dominant behaviour change theories are individual-centred and assume that individual, rational, cognitive decision-making provides the impetus for action. There has been limited success in effecting change through interventions based on these theories and there is an emergent recognition within the field of the need to understand the cultural and social factors which establish the conditions for HIV infection. This has led to the use of context-centred behaviour change theories in designing interventions. Many of these theories and interventions contain problematic conceptions of the individual-social relationship. Cultural Historical Activity Theory (CHAT) draws on a fundamentally different set of metaphysical, epistemological and ontological assumptions, which provides a different way of understanding the problem of behaviour change in a time of HIV and AIDS.

This paper uses a CHAT perspective to understand the activity systems of male and female youth in a rural area in South Africa, the shifts within these systems over time, and the current state of contradictions within these systems. An historical analysis of sexual activity in this context highlights: key shifts in the mediating artefacts of contraception; significant changes in the gendered responsibility for pregnancy; and important changes in the dynamics of sexual activity, which affect the participants' response to HIV and AIDS. The analysis reveals a particular conceptualisation of HIV and AIDS within the system, and the relative 'crisis' in the systems of male and female youth in this context, providing insight into the lack of behaviour change amongst youth despite the presence of HIV and AIDS.

Please note that this paper is based on material from my doctoral thesis. It is to be read as work in process, with many of the ideas in development rather than finalized. I welcome feedback to develop any of the points I make here. Please do not quote without permission.

1. The problem of HIV and AIDS

It is estimated that there are 32.9 million people living with HIV in the world (UNAIDS, 1998). 22 million (67% of this total) live in Sub-Saharan Africa and three quarters of all AIDS deaths in 2007 occurred in Sub-Saharan Africa. Figure 1 below provides a global view of HIV infection in 2007. Although there are these regional differences, UNAIDS (2008) argues that infections are on the rise in a number of countries including China, Germany, Indonesia, the Russian Federation, Ukraine and the United Kingdom.

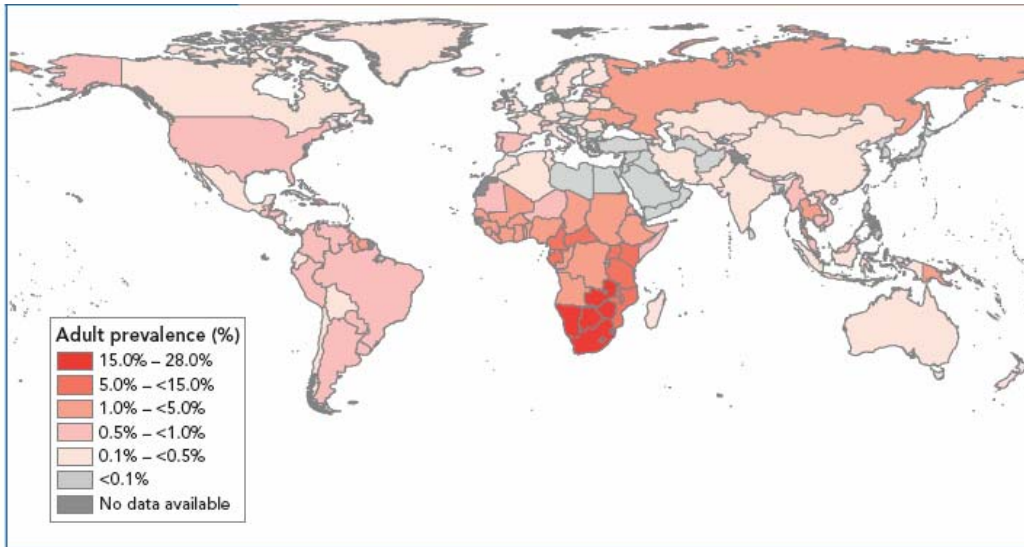


Figure 1. Global HIV infection 2007 (UNAIDS, 2008)

1.1 South Africa

South Africa has the largest population of people living with HIV in the world. It is estimated that in 2007 there were 5.7 million South Africans living with HIV (UNAIDS, 2008), 11.7 % of the total population 48.5 million. The table below provides details of the HIV and AIDS epidemic in South African in 2007.

Total living with HIV and AIDS	5 700 000
Adults aged 15 + living with HIV	5 400 000
Women aged 15 + living with HIV	3 200 000
Children aged 0 to 14 living with HIV	280 000
Adults aged 15 to 49 prevalence rate	18.1%
Male youth 15-24 prevalence	4%
Female youth 15-24 prevalence	12.7%
Deaths due to AIDS	350 000
Orphans due to AIDS aged 0 to 17	1 400 000

Table 1 HIV and AIDS in South Africa in 2007 (UNAIDS/WHO Epidemiological Fact Sheets on HIV and AIDS, 2008 Update)

1.2 Variations in the epidemic

HIV/AIDS, like many epidemics is place-specific in its patterns of transmission. Craddock (2000) argues that it is characterised by regional coordinates of risk and vulnerability. Poverty and disempowerment have played central roles in the transmission of HIV in Sub-Saharan Africa. Some have argued that the particular configuration of historical forces in Africa set into motion by colonial administrations during the early decades of this century (Craddock, 2000), have contributed to this vulnerability. Parker, Colvin

and Birdsall (2006) argue that socio-economic factors increase the possibility of people engaging in practices which heighten the risk of HIV transmission.

There are particular trends across economic strata, age groups and racial groups. These trends exist globally, but reference will be made specifically to South Africa. The majority of HIV-infected people in South Africa are those in the economically active population, between 20 and 49 (Shisana et al, 2005), and female youth are more likely to be infected with HIV, as illustrated in Figure 2 below.

The AIDS epidemic has been identified as a ‘gendered epidemic’. Women and girls in South Africa are disproportionately vulnerable and at risk (Parker & Colvin, 2007). In a pattern typical of a heterosexual epidemic (Whiteside, 2008), Figure 2 illustrates that in 2005¹, for 20-24 year-olds estimated prevalence was 23.9% for females and 6% for males. Amongst 25-29 year-olds this was 33.3% for females, and 12.1% for males. The prevalence amongst male youth 15-24 in 2007 was 4%, whereas for female youth in the same age group it was 12.7% (UNAIDS, 2008). Young females are therefore three to four times more likely to be HIV-positive. Among youth aged 15-24 years, females account for 90% of recent HIV infections (Rehle et al, 2007). Parker et al (2006) argue that women’s vulnerability to HIV infection is linked to physiological factors, as well as gender roles, including social, cultural and economic factors. Women's inequality and lack of control over sexual relationships heightens their vulnerability to HIV and AIDS. Socio-economic factors also drive a racial and geographic variation in the epidemic (Parker, et al 2006). Shisana et al (2005) note that for persons aged two years and older, the HIV prevalence was 13.3% for black², South Africans and 0.6% for white South Africans.

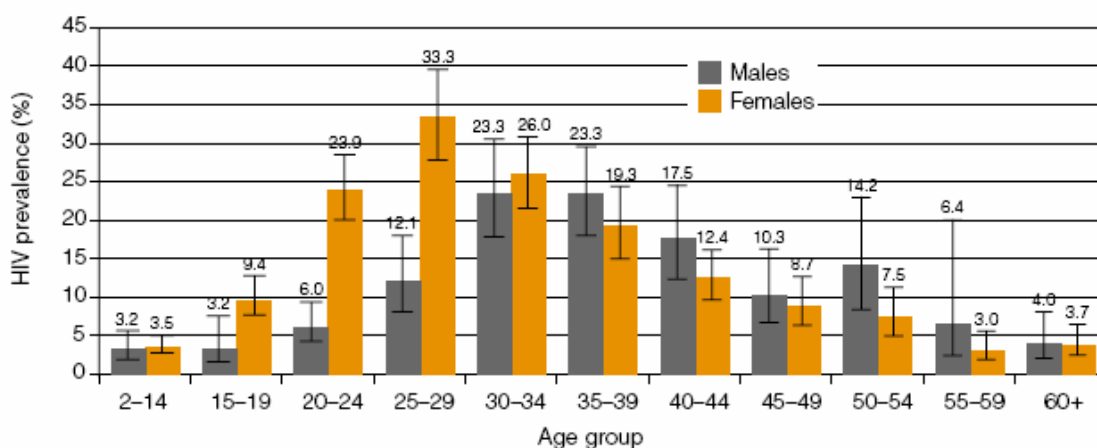


Figure 2. HIV prevalence in South Africa in 2005 by age and gender (Shisana et al, 2005)

¹ The last national behavioural surveillance survey was conducted in 2005. Figures for after 2005 are based on different data sets.

² Although problematic, racial categorisation within the present context of South Africa still has salience as it reflects historical disenfranchisement.

1.3 The cost of HIV and AIDS

The epidemic has serious immediate and long-term consequences primarily through the effect of death and illness, for example the orphaning of children, and the loss of breadwinners. Since the beginning of the epidemic 25 million people globally have died of HIV-related causes. In 2007, approximately 958 South Africans died every day from AIDS. The number of orphans under 18 years of age in sub-Saharan Africa increased to 12 million in 2007. HIV and AIDS has immense personal, social and economic costs. HIV reduces life expectancy, slows economic growth and deepens household poverty. The poorest people are the most vulnerable and they bear the greatest burden. Parker et al (2006, p. 26) comment that:

As the epidemic progresses, its effects can be felt society-wide in the form of changes in the country's productive capacity, in its budgeting and domestic expenditures, in agriculture and food production, in the functioning of key institutions such as police, and in social service realms such as healthcare and education. HIV and AIDS expands already critical areas of need, including supporting affected families and strengthening healthcare and other social services.

De Waal and Whiteside (2003) argue that HIV and AIDS, climate conditions and deepening poverty could generate a new variant of famine in southern African. Although the virus will eventually be contained, its impact is extremely long term. According to the United Nations Development Programme, HIV has inflicted the "single greatest reversal in human development" in modern history (UNDP, 2005). Living in an intricately interconnected world means that we will all be affected by the collective loss of human potential.

1.4 The status quo

After 27 years of the epidemic and millions spend on interventions, the most recent UNAIDS report comments that the world is "at last making some real progress in its response to AIDS" (UNAIDS, 2008, p. 9). Globally there are declines in the number of new HIV infections and AIDS-related deaths (2005: 2.2 million; 2007: 2 million). However, the AIDS epidemic has not turned back and neither is it 'over' in any part of the world.

In South Africa, thousands of interventions have been funded³ over the last 20 years and some changes have been recorded. For example, reported condom use at last sex has increased markedly. Amongst youth aged 15-24, 72.8% of males and 55.7% of females in 2005 reported condom use at last sex (Shisana et al, 2005). In contrast to patterns earlier in the epidemic, there are also higher levels of exposure to HIV and AIDS. In a national study of 2 448 respondents 20-30 years of age, over a quarter of males (28.6%) and over a third (34.0%) of females had an HIV positive person they knew disclose their

³ Expenditure on HIV and AIDS increased from R4 270 716 447 in 2006 to R4 530 175 220 in 2007 (UNGASS 2008 South African report)

positive status to them; between 13 and 19% of youth had helped care for a person sick with AIDS; nearly half had attended one or more AIDS funerals during the past year; and half knew someone who had died of AIDS in the past year (Parker, et al 2007). There are also changes in knowledge about HIV and AIDS. In the same study 94.3% of males and 93.3% of females knew HIV could be prevented through condom use, and 41.3% had been tested for HIV (Parker et al, 2007). South Africa also has the highest number of people globally accessing antiretroviral (ARV) treatment. The percentage of pregnant women on treatment to prevent the transmission of HIV from mothers to children has increased from 15% in 2004 to 60% in 2007 (UNAIDS, 2008). There has also been a slight decrease in incidence of HIV. Data from antenatal clinics in South Africa show that the country's epidemic might be stabilizing (see Table 2). There are, however, significant conditions on this 'positive' picture. The 'stabilisation' of the epidemic in South Africa is at an extremely high level. More worrying is the lack of evidence of major changes in HIV-related behaviour (UNAIDS, 2008). It has been argued that the behaviour change interventions have had no significant impact on HIV prevalence (Parker et al, 2006).

National HIV survey pregnant women			
	2004	2005	2006
Women under 20	16 %	15.9 %	13.5 %
Women 20-24 years	-	30.6 %	28 %

Table 2 Decline in antenatal HIV prevalence (UNGASS, 2008, South Africa report)

Many South Africa youth have experienced HIV and AIDS directly. Close family members have died of AIDS. They know that HIV is transmitted through unprotected sex. One would imagine that in response to the overwhelming evidence of the existence of HIV and AIDS, and knowledge of how it is a personal risk, that there would be a dramatic response, that individuals would just stop doing what Whiteside (2008) argues, 'drives' the epidemic. This is however not the case. Many youth do not engage in the protective behaviour of using condoms during sex (see Box 1: Lack of behaviour change). In a recent book Steinberg (2008) highlights a similar issue related to participation in treatment programmes. Even if treatment for those ill with AIDS in the form of anti-retrovirals (ARV's) are available, people 'choose' not to take them, they seem to 'choose' to die.

Box 1. Lack of behaviour change

In a recent documentary on the national South African television station (SABC, *Special Assignment, In the Frontline*) the camera crew accompany a home-based care-giver to the homestead of a women in her 30's. She has been very ill with TB and has been diagnosed as HIV positive. Her husband had died a few years earlier. The camera switches to a discussion with a group of school youth (approximately 14-20 years old). Nobuhle, the daughter of the women who has just been visited is in this group. Nobuhle is in Grade 12 and has already had one child, whom her mother looks after while she is at school. The discussion is about HIV and safe sex. Part of it is transcribed below (GM = Group Moderator; F = facilitator; F = female group member; M = male group member; Nobuhle's comments are indicated with her name).

GM: How many of you know people infected with HIV?

Nobuhle: I think maybe six of my family members are infected, and others have died

F: I have two members of family who have died of AIDS, my mother was one of them, my mother and my uncle died of AIDS
 F: At home there are two family members who are infected, and they are still alive, they used treatment.
 ...
 GM: How does it change your behaviour?
 F: It helps us to make the right decisions and protect ourselves from unsafe sex
 ...
 F: ...It seems like it doesn't work because teenagers are still getting pregnant. And HIV and AIDS is still spreading
 GM: How many of you have had children? Don't be shy, just be free, we know that these things are
 F: I have two children, 5 and 2 years old, I got pregnant at 16 years old...
 GM: Why are we still not using condoms, why are we still not doing safe sex?
 F: Most of girls want to buy love, they buy love with their bodies...Once a guy says I don't want a condom, then me, I will do unsafe sex, because I'm scared he will leave me, so I just have to do what he says, because I love him
 ...
 GM: Do we use condoms now?
 All: no [laughter]
 All: sometimes, sometimes, yes
 M: I don't know how to use them
 M: Sometimes our girlfriends say we are stupid if we use condoms. They don't like condoms
 M: How can we eat sweets inside paper? [laughter]
 Nobuhle: I don't like to use condoms. What I can say is that we, one must have only one partner because as we even know they are problems about condoms, they say that we must not use condoms with that number...so I don't trust condoms.

The key question is what is going on here? Why is it that after many interventions informing people of the nature of HIV and AID, the nature of risky sexual practices and the best means to protective oneself, they not change their behaviour? Why do people, who can see the presence of HIV amongst family members and friends, and who know how it is transmitted, and that they can do something about it themselves (in their own behaviour), continue to perform the behaviours that put themselves at risk? Why do they 'choose' to do very little, and most often nothing, about it? This is the problem that my thesis deals with, and which I will attempt to answer to a small degree in this presentation.

1.5 Prevention as the main response to the epidemic

In the face of this kind of epidemic, prevention of new infections is critical. The most common way in which the human immunodeficiency virus (HIV) is transmitted between people is through unprotected sexual intercourse (Parker et al, 2006; Whiteside, 2008). There are biomedical and behavioural 'drivers' (Whiteside, 2008) of the epidemic that increase susceptibility to HIV infection. The biological factors are: age, gender, viral load, presence of other sexually transmitted infections, the mother being HIV positive; and the prevalence of the virus in a particular context (Parker, et al, 2007, 2007; Whiteside, 2008).

However, biological susceptibility during unprotected sex is not a sufficient explanation for the extremely high HIV prevalence in South Africa (Parker et al, 2007). In exploring why the prevalence is so high, and why it has particular age and gender patterns HIV and AIDS researchers have highlighted *behavioural* factors which exacerbate the overall risk of contracting HIV. These are often referred to as 'risky practices'. For example, unprotected vaginal/anal sex; early age of sexual debut; high age differentials between sexual partners; sex early in the relationship; ignorance of HIV status; rate of partner change;

concurrent partnerships; sexual assault; transactional sex; breastfeeding; injecting drug needle-sharing; and occupational exposure to HIV (Barnett & Whiteside, 2002; Whiteside, 2008). It is these behaviours which have become the focus of HIV and AIDS prevention attempts.

2. Behaviour change theories and HIV and AIDS

Interventions which aim to address these behaviours draw on, and adapt, theories of behaviour change. Within the HIV and AIDS field, the dominant behaviour change theories drawn on are psychological, individual-centred theories, such as the Theory of reasoned action/the theory of planned behaviour, The Health belief model, and Theories of social learning/Social cognitive theories). Within these theories change is conceptualised as taking place on an individual level and therefore interventions focus on changing individual behaviour, primarily through providing information (Holtgrave, 1997; Kalichman & Hospers, 1997). These theories are based on the premise that “behavioural changes occur by altering... risk perceptions, attitudes, self efficacy beliefs, intentions and outcome expectations” (Kalichman & Hospers, 1997, cited in UNAIDS, 1999, p.6).

In a major simplification I will briefly outline some of the main characteristics of these theories.

- These theories prioritise cognitive processes in decision-making (Airhihenbuwa et al, 1999); Munro et al, 2007)
- Individuals are cast as the rational self-governors of risk (Chan & Reidpath, 2003). Confronted by various alternatives rational individuals will make systematic choices about the actions that will lead most likely to positive outcomes (Munro et al, 2007).
- the perception of risk is assumed to be sufficient to cause a change in behaviour. Interventions thus target ‘cognitions’ in order to change behaviour (Bonell & Imrie, 2001)
- An individual’s intention is seen as the direct precursor to a health behaviour (Pasick & Burke, 2008), and ‘intention’ becomes the major focus in interventions
- Behaviour change is assumed to be dependent on changing the individual’s cognitive structure for example their health beliefs (Kelly, Parker & Lewis, 2001).
- Protective health behaviour is assumed to be the primary driver of individual behaviour (Stroebe, 2000)
- The provision of correct and sufficient information will result in people adopting the recommended behaviour (Melkote, Muppidi & Goswami, 2000)
- The individual is assumed to be able to independently ‘decide’ how to act, that is they have ‘volitional’ control over their behaviour and actions (Melkote, et al 2000; Stroebe, 2000).

The dominant intervention related to these approaches is to increase knowledge and awareness. Twenty seven after the epidemic knowledge levels about HIV and AIDS are higher, but there is a 'gap' between this knowledge and change in behaviour. The gap between knowledge and behaviour change has been referred to as the 'knowledge gap hypothesis' (Viswanath & Finnegan, 1995). Many authors have concluded that changes in knowledge do not lead to changes in behaviour (Aggleton & Homans, 1988; Attawell 1998; Höjer, 1999; Caldwell, 1999; Preston-Whyte, 1999; UNAIDS, 1999; Campbell, 2003). Numerous authors highlight the moderate success in reducing HIV transmission risk and the insignificant change in individual behaviour (UNAIDS, 1999; Caldwell, 1999; Airhihenbuwa & Obregon, 2000; Stephenson, Imrie & Sutton, 2000; Kelly, Parker & Lewis, 2001; Bonell & Imrie, 2001; Richens, Imrie & Weiss, 2003).

The adequacy of the most widely applied theoretical approaches to behaviour change in providing an appropriate framework for bringing about behaviour change has been critiqued in national and international HIV and AIDS literature (see Valdiserri, 1989; Freimuth, 1992; Airhihenbuwa, 1995; Rhodes, 1995; Parker, 1995; Bajos, 1997; Piotrow, Kincaid, Rimon & Rinehart, 1997; Airhihenbuwa, Makinwa, Frith & Obregon, 1999; Airhihenbuwa & Obregon, 2000; Melkote, Muppidi, & Goswami, 2000; Kelly et al, 2001; Dutta-Bergman, 2005; Pasick & Burke, 2008).

The critique has been directed at two key issues:

- the assumption that human behaviour *is rational and driven by cognitive processes*; that actions originate in the realm of cognitive processes; and
- the assumption that decision-making, and thus behaviour, is primarily an *individual level* process (that the individual has unfettered individual agency).

The significant implication of these assumptions is that, within the behaviour change theories, individuals are assumed to be able to *manage* their activity, and therefore respond to risk and change their behaviour (Kelly et al, 2001). For example, as Parker (2005) argues, it is assumed that the individual can, and will, *choose* to engage in risk reduction behaviours such as abstaining; choosing to have non-penetrative sex; choosing to be faithful; choosing to reduce the number of their sexual partners; and, choosing to use a barrier method such as a male or female condom. However, Hollway and Jefferson (2005) argue using the term 'choice' implies imply a rational, decision-making subject that is easily reduced to a model of an information processing, asocial individual. The assumption that action happens as a result of conscious, rational choice, the assumption of the rational intentionality of agency (Kelly, et al, 2001), is highly questionable. Kelly et al (2001) argue that it cannot be assumed that we choose to be sexually active in the ways that we are sexually active, or that sexual activity is only the outcome of individual decision making processes. Sex may private, but it is not individual.

Inherent in the critique of the individual focus is a call for addressing the factors which ‘affect’ individual behaviour such as the structural, and macro-ideological factors. For example, Chan and Reidpath (2003) comment that although HIV transmission takes place on an ‘individual’ person-to-person level, *social forces “heavily pattern”* this transmission. Melkote et al (2000) argue that behaviour *is embedded in context*; that context *is a mediating factor* shaping individuals’ behaviours and attitudes related to HIV and AIDS. A range of authors in the HIV and AIDS field have argued that there are circumstances beyond the individual that affect health and health decision making (Carael, Buve & Awusabbo-Asare, 1997; Stokols, 2000; Sweat & Denison, 1995; Tawil, Verster & O’Reilly, 1995, Dolcini et al, 2004). Behaviour is thus seen to be, in various ways, ‘related’ to or ‘linked’ to context. It is also seen as ‘affected by’, ‘informed by’, ‘shaped by’, ‘mediated by’, ‘constituted by’, ‘embedded in’, and ‘rooted in’ context.

In response to this, many HIV and AIDS interventions have drawn on a different set of theories to address ‘behaviour change’, evidencing a shift to ‘context’. These more context-centred theories originate from sociology, politics, economics and anthropology. Some of the theories are: the Diffusion of Innovation theory; the Theory of gender and power; Social network theory, the Social influence model; and the Theory of individual and social change. Interventions based on these theories have been targeted at the broader level of community intervention rather than changing individual knowledge, attitudes and beliefs (Bonell & Imrie, 2001; Nigg et al, 2007). For example, community mobilisation is used to address some of these social and structural factors which impact on individual behaviour.

Although interventions using these more context-oriented theories have had some success, they are difficult to evaluate because of their scope, and because of a lack of equivalence in measures. Although there has been very little critique of these theories and their applications, the notion of ‘context’ as conceptualised in these theories and is problematic. The term ‘context’ has become one of the most prevalent terms used to “index the circumstances of behaviour” (Cole, 1996, p. 132). However, use of the term does not necessarily provide an appropriate account of the relationship between the individual and context, or between ‘behaviour’ and context. In framing the relationship between the individual and context, ‘context’ is often conceptualised as a container in which behaviour takes place, and the factors which affect the individual are seen as ‘variables’. For example, UNAIDS (1999, p.8) has referred to these as the social, cultural and economic “determinants of behaviour”, or ‘variables’. Both of these conceptualisations are problematic and do not adequately account for the nature of behaviour, nor the relationship between the individual and society.

2.1 Critiquing the critique

Although the critique of earlier theories of behaviour change has been significant, it has not examined the philosophical assumptions of the nature of human behaviour, the way it is related to context, and the impact this has on the individual's ability to be agentic. If achieving 'behaviour change' is premised on inappropriate conceptualisations of the relationship between society and the individual, then it is unlikely to succeed. What is lacking in this theorising is an understanding of: the dialectical interaction between individual and society, the analytic inseparability of the individual and social levels of analysis, and the social nature of action.

I argue that the general conceptual system of cultural-historical-activity-theory (CHAT) has a particular set of epistemological, ontological and metaphysical assumptions which allows one to examine and understand 'behaviour' in a particular way. It therefore provides a particular philosophical and methodological premise for the investigation of behaviour and behaviour change. In addition to this it offers theoretical and conceptual tools and methodological principles to guide the study of a specific phenomenon. The focus in CHAT on dialectically linking the individual to the social structure (Engeström, 1999) thus potentially provides an alternative and useful conceptualisation of behaviour and the possibilities of behaviour change in the field of HIV and AIDS.

3. Cultural-historical-activity theory

Cultural historical activity theory (CHAT), or 'Activity Theory' emerged from a particular set of ideas in a particular historical time to be a significantly different approach to the study of behaviour. With roots in classical German philosophy, the writing of Marx and Engels; and the writing of the Soviet Russian cultural-historical psychology of Vygotsky, Leontiev, and Luria; and the work of the Russian philosopher Evald Ilyenkov (Engeström, 1999; Daniels, 2001; Roth & Lee, 2007) its principles operate as a 'corrective' to the cognitivist, rationalist, individualist and determinist approaches which dominate behaviour change theory. Given that this particular audience is familiar with activity theory, and recognising that this is a major simplification of significant theoretical ideas, I will just outline the main principles of activity theory.

- the development of the activity of *labour* is seen as historically distinguishing humans from animals, and is recognised as having profound effects on the nature of humans (Elhammoumi, 2001).
- this understanding of labour activity is generalised to the notion of 'activity'

- the nature of being human, our ‘essence’ as humans, the ‘self’, is seen as constituted in the social practice of activity. It is argued that we are constituted by our practical activity, by our participation in social and historical practices. The development of the capacity to think and act is generated by/emerges from, participating in forms of practical social activity
- the whole of human psychological phenomena, including human consciousness, is thus derived from socially organised practical activity
- Human nature is thus not merely ‘affected’ by or impacted upon by social or contextual forces, human nature is essentially social.
- As a consequence
 - ‘mind’ cannot be innate, nor externally determined
 - cognitive action cannot be seen as a private and internal mental process
- there is a mutually constitutive and dialectical relationship between individual and context
- the individual and society are not separate entities, but rather an integral system
- Practical human activity thus plays a central role in understanding and explaining human behaviour. In Vygotsky’s terms, the category of human activity (rather than individual cognition, or ‘context’) plays the role of general explanatory category
- the concept of activity thus transcends the dualism between individual subject and objective societal circumstances

This is a radically different conceptualisation of the relationship between ‘external’ factors and ‘individual’ behaviour to that which is found in the HIV and AIDS literature. This conceptualisation has significant implications for understanding human behaviour. The fact that human mind (or cognition or reasoning as in the HIV and AIDS literature) develops within human social activity means that it can only be understood within the context of the meaningful, goal-oriented, and socially determined interaction between human beings and their material environment. Human practices (such as sexual practices), and ‘individual’ human agency are analyzable only in relation to the broader, collective, activity of which they are a part.

3.1 The significance of activity systems

Lave and Wenger (1999, p. 53) have argued that “Activities...do not exist in isolation; they are part of broader systems of relations in which they have meaning”. Activity is seen as a “collective, systemic formation with a complex mediational structure” (Daniels, 2001, p. 86). Engeström (1987) highlights the importance of accounting for the socially distributed or collective aspects of purposeful human behaviour; and the continuous, self-reproducing, systemic, and longitudinal-historical aspects of human functioning.

In this conceptualisation of activity, the unit of analysis becomes the: “object-oriented, collective and cultural mediated human activity, the activity system” (Engeström & Miettinen, 1999, p. 9).

The significance of this conceptualisation of activity as a collective activity system is that it fundamentally reframes the concept of context. Engeström (1996, p. 67) argues that for activity theory contexts are neither containers nor situationally created experiential spaces. Contexts are activity systems. An activity system integrates the subject, the object, and the instruments (material tools as well as signs and symbols) into a unified whole.

This concept of context is thoroughly relational. The system, or given objective context, is not immutable. It is not “something beyond individual influence” (Engeström, 1996, p. 66), rather it is “continuously constructed” by humans in their activity. Joint activity rather than individual activity therefore becomes the focus.

Given this dialectical relationship between the individual and ‘setting’, instead of focussing on the individual subject, the researcher must focus on how the objects and structure of the activity systems, have been and are created by human beings (Engeström, 1987). These activity systems are inherently related to the material practices and socioeconomic structures of the given culture, and they evolve over length periods of sociohistorical time (Engeström, 1996). This means that the system and context of actions (in the form of socio-institutional, cultural and historical factors), need to be described and accounted for, and not ignored or seen as immutable.

Engeström articulates the notion of activity systems through the now familiar heuristic device of a triangle. Following Marx, Engeström (1987) argues that human activity is always governed by a division of labour, by rules, and by the individual’s membership of a particular group of people. This lead to Engeström’s reorganisation of the basic and earlier Vygotskian model of the structure of mediated activity, to incorporate: rules, community, and division of labour (Engeström, 1987; Cole & Engeström, 1993). In insisting that action exists only in relation to these components at the bottom of the triangle Engeström (1987, 1996) expands the unit of analysis for studying human behaviour from that of individual activity, to a collective activity system. This reformulation, together with the mediational model of Vygotsky, results in a particular model of an activity system (see Figure 3 below).

3.1.1 Model of an activity system

Engeström identifies seven minimum elements in a model of an activity system: the subject; the object; the outcome; mediating artefacts (signs and tools); rules; community; and division of labour (Engeström, 1987; Engeström & Miettinen, 1999). Paraphrasing Engeström (1996, p. 67):

The *subject* refers to the individual whose agency is chosen as the point of view in the analysis.

The *object* refers to the ‘raw material’ or ‘problem space’ at which the activity is directed

The object is moulded or transformed into *outcomes*

This happens with the help of physical and symbolic external and internal *tools* (mediating instruments and signs).

The *community* comprises multiple individuals and/or subgroups who share the same general *object*.

The *division of labour* refers to both the horizontal division of tasks between the members of the community and to the vertical divisions of power and status.

The *rules* refer to the explicit and implicit regulations, norms and conventions that constrain actions and interactions within the activity system.

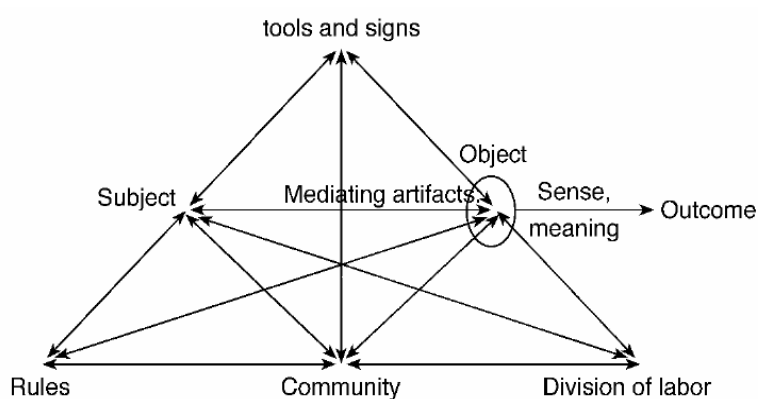


Figure 3. The model of an activity system (Engeström, 2001 p. 135)

The significance of this model is that it is the “smallest and most simple unit that still preserves the essential unity and integral quality behind any human activity” (Engeström, 1987, p. 81). This model enables activity to be analysed “in its inner dynamic relations and historical change” (ibid, p. 83) rather than a static representation of a phenomenon. It also enables an analysis of activity as a “contextual or ecological phenomenon... (concentrating) on systemic relations between the individual and the outside world” (ibid, p. 39). It also enables an analysis of activity as a “culturally mediated phenomenon” (ibid, p. 39), rather than a dyadic organism-environment model. Engeström (1987, p.78) argues that “the model suggests the possibility of analysing a multitude of relations within the triangular structure of activity. However, the essential task is always to grasp the systemic whole, not just separate connections”.

This conceptualisation of the activity system reframes the individual-social relationship articulated in the HIV and AIDS literature. This conceptualisation is of a fundamentally inter-related and dialectical interaction between individual and society. In comprehending the social nature of being human, and how

individual action is inextricably situated within a system of interrelating processes and components, the dualism between individual and social levels of analysis is overcome. The possibility of an individual rational cognitive decision-making process; and the possibility of a socially determined individual are both discounted.

Emerging from this particular set of metaphysical, epistemological assumptions activity systems have specific characteristics which guide the analysis of human behaviour in a particular way. This conceptualisation of activity systems was applied in a research study in South Africa.

4. The research study

This paper reflects on data collected in 2000-2003 which focussed on socio-sexual dynamics in a deep rural context in South Africa.

4.1 Research design: The study used a qualitative research process to explore sexual experiences, sexual practices and responses to HIV and AIDS. The principles of understanding and exploring an activity system were used throughout the research process, and in the process of analysing the data.

4.2 Sample: The participants in the research process were all residents of a particular geographic area in the Eastern Cape province in South Africa. The research context was formerly a 'homeland', created by the apartheid government as a residential area for black people. It is a deep rural area and historically provided a source of labour for the mines in Johannesburg. It is one of the poorest parts of South Africa with high rates of unemployment; many people subsisting on government pensions (\$121 per month) and other forms of social support (child grants, disability grants). Most of the inhabitants seek work out of the area in towns 100-1000 km away. There are no tarred roads in the area, electricity was introduced in 2002, and there is limited piped water. Most of the houses are wattle and daub structures and some of the houses are permanent brick structures. Services include a daily clinic staffed by out of town nurses; one high school and a few primary schools. These conditions reflect the socioeconomic legacies of apartheid.

Participants were sampled across gender and within particular age categories (45 participants, 27 female and 18 male; ages 10-71). The wide age range of the participants was a deliberate attempt to access perspectives on both current and historical practices.

4.3 Data collection: Data was collected using interviews and focus group discussions in English and *isiXhosa*⁴, the mother-tongue language of the participants. Interviews were conducted with 12 participants in the 15-55+ age group, with approximately two males and two females of each age group. Some of the interviews were conducted with married couples, or partners in relationships. Focus groups were conducted with the younger children (age 10-14), and also with two groups of youth (male and female separately, age 16-25). Data was collected by the author and also by two research assistants working for the Centre for AIDS Development Research and Evaluation (CADRE)⁵, for the purposes of their own study. The data was translated and transcribed.

The focus of the interviews and focus groups was on the participants' introduction to sex, sexual experiences, the norms and conditions for engaging in sexual relationships, knowledge about HIV and AIDS; and contraceptive use. There were, however, some constraints on this data. As Burja (2000) argues, the study of sexual activity is a focus on what is private, covert, and usually hidden behind closed doors. Given the private and personal nature of sexual activity one cannot research the activity directly. In this study the focus was thus on the conditions around the act, how it is set up and how it is 'afforded'. Information about sexuality is not readily volunteered. In addition to this, given the gender norms in relation to sexuality, male participants might be given to exaggeration whereas female participants might be more inhibited in expressing their views about, and experiences of, sexuality. Accounts given also tend to be normative. Delius and Glaser (2002) argue that oral sources potentially offer the best route into the very personal realm of sexual history. Descriptions are limited by what is remembered, and also influenced by a colouring of the past. However, they do provide a useful perspective on the past and provide an initial point to understanding the processes of change in a particular context, especially used in relation to more contemporary accounts (Delius & Glaser, 2002)

Another 'set' of data comprised a review of the anthropological, historical and population studies literature to provide an historical perspective on the nature of sexual practices in similar contexts.

4.4 Data analysis: Transcripts were analysed using thematic coding and following key principles of activity system analysis. Three main concepts guided the process of analysis: heterogeneity, historicity and contradictions (Engeström, 1987; 1999).

Heterogeneity

⁴ "Xhosa" is a term that refers to both a linguistic category (those that speak *isiXhosa*) and an ethnic group which was, during the apartheid era, restricted to living in the former Ciskei and Transkei homelands.

⁵ The author is grateful to CADRE for their permission to use this data.

Activity systems are not homogenous, but composed of a multitude of often disparate elements, viewpoints and voices, each with its own history and potential (Engeström, 1996). Analysis of the system involves a scrutiny of all the disparate elements and viewpoints of the various levels in the system and the relations between the components of the system.

Historicity

‘Mediated’ activity contains sediments of past activities, and cultural forms. History is “present in current practices ... manifestations of basic historical types of thinking and practice...coexist as layers within one and the same current activity system” (Engeström, 1996, p. 92). In addition to this, humans are not stable and unchanging, but characterised by qualitative transformations. Engeström and Miettinen (1999, p.11) argue that the “underlying principles of historicity and material continuity ... are simply methodological conditions for understanding and analyzing change and resistance to change, transformation and stagnation”.

Contradictions

In the historical development of human activity over time, activity systems become increasingly penetrated and saturated by the basic socio-economic laws, and they are subsequently characterised by the contradictions which correspond to these basic socioeconomic processes (Engeström, 1987; 1996).

Components of the system are constantly being constructed, renewed, and transformed as outcome and cause of human life. Contradictions exist within each component of the activity system (primary contradictions), between the disparate elements of the system (secondary contradictions), and between one activity system and another activity system (tertiary contradictions). The life of an activity system is therefore characterised by discontinuity, crises, upheavals and qualitative transformations (Engeström, 1987).

Drawing on Ilyenkov, Engeström emphasised the significance of these tensions which “get aggravated over time and eventually tend to lead to an overall crisis of the activity system” (Engeström, 1996, p. 73). This state of ‘crisis’ leads to new forms of activity, and inevitably, to change. Contradictions are thus essential to the activity system as a dynamic source of transition (Engeström, 1987). They are ‘the motive force of change’.

The inherent contradictions of the activity system can therefore be analysed as the source of development of that system, including its individual participants. Engeström (1996) suggests that the process of

analysis focuses on concrete modes of the activity (current and historical), tracing disruptions, troubles and innovations. Each component of the activity system is at once historical (containing 'sediments' of the past), and potential (containing the future possibilities). This process of analysis thus includes "both historical continuity and local, situated contingency" (Engeström & Miettinen, 1999, p. 9). This leads to the hypothetical identification of the internal contradictions of the activity system; and leads potentially to an understanding of the 'development' of the activity.

The key process in the study of an activity system is therefore to identify and analyse the contradictions which exist within and between the disparate elements of the system, and between different activity systems. Following this there were three aspects to the analysis of the data:

1. Analysis of activity systems: To simplify matters, four representative activity systems were constructed using the data from all of the participants. The four activity systems were: that of a young female participant, a young male participant, an older male participant, and an older female participant. This was based on the assumption that the process of engaging with an activity system as a unit of analysis calls for complementarity of the system view and the subject's view. The analyst constructs the activity system as if looking at it from above. At the same time, the analyst must select a subject, a member (or ...multiple members), of the local activity, through whose eyes and interpretations the activity is constructed. This dialectic between the systemic and subjective-partisan views brings the researcher into a dialogical relationship with the local activity under investigation. The study of an activity system becomes a collective, multi-voiced construction of its past, present, and future zones of proximal development. (Engeström, 1987, cited in Engeström & Miettinen, 1999, p. 10)
2. Analysis of the phenomenon 'historically': The activity systems of the young male and female participants were contrasted with those of the older male and female participants. The historical and anthropological review of sexual practices in similar contexts was used as an additional historical perspective on the phenomenon.
3. Analysis of the tensions and contradictions within the activity systems: Any tensions and contradictions within components of the system, and between components of the activity systems, and to a limited extent between activity systems, were identified and explored. This enabled a perspective on the 'relative' state of 'crisis' in each activity system.

What I will present next is some of the findings from this analysis in order to illustrate how activity theory, in the form of activity system analysis, provides a way of understanding behaviour, and behaviour change (or lack of behaviour change).

5. Findings

In this analysis I will use some of the data to illustrate the nature of the activity systems of the participants in this particular context, and to reflect two central issues: how has sexual activity in this context changed over time, and what mediates sexual activity in this particular context?

In this presentation I want to focus on contrasting an historical perspective with the current perspective because this reveals, the processes and conditions which I believe underpin current practices. In addition to this, one of the main issues is how 'risk' is conceptualised by the participants in relation to the activity. The risks faced over time are different, and I argue, because the conditions for particular activities are established historically, participants respond to the risk differently. This, in turn, has an impact on whether behaviour change takes place or not.

In all of these quotations the number of the interview or focus group is indicated first, then the gender of the participant is indicated with F for female or M for male, and the last number is the age or age group of the participant/s.

A perspective on the past: Red blankets and bull fighting

The first account I present is a detailed one and I include it because it provides an historical perspective on the context and some of the conditions under which sexual activity occurred, in this case the first sexual experience. It also provides an idea of the main 'community' of this particular participant in which the activity is learnt, viz. that of older female youth, who instruct the participant in the 'correct' behaviour within this activity, articulating some of the norms of this context. It also contains various contextual references which locate the activity in a particular time period, and indicate various mediational artefacts, for example, the use of a 'red blanket' to enable the activity to take place in the veldt. This account is also illustrative of some of the dynamics of the sexual interaction, explicating the roles and responsibilities of the actors viz. that male partners initiate the activity of sex and that female partners resist this initiation.

And then I asked from the older girls what I should do. And I was told that if you, you are going to leave with this boy, you must bring ibhayi with you. You know ibhayi, it is something you wrap around your..... ibhayi is the one that you wrap around you, and I had to carry that and our's was a little bit bigger, because I would have to make it a blanket there. But I would have to come with that and also I was wearing er...umbhaco, which is that shorter skirt which we were using.... And I was told that I would have to leave, because I was not going to a room, and so you would start with ibhayi, to put it on top of the grass so that you can make it.....easy for....So he (the boy) told me to put the blanket, the ibhayi down.... So I was told, by the older girls, to drag the things, and not do it as quickly as he asked me to. ...so I delayed the process of laying there like a....But eventually I did. And then he told me to come and sleep with him. I also delayed that, the whole process of sleeping with him. But eventually I

came and slept on the blanket... I faced the other way around, the other side, as I was told by the bigger girls that this is how you have to do it, you don't face to him... Then he told me to face to him. I delayed the process. And eventually I did it....One thing we disagreed about...he wanted me to take off my panty. I didn't agree with him as my mother warned me about that. Until it was morning. (3f 49)

The dynamics of the interaction are echoed in the words of another, older female participant:

... Well what normally happened was that the boy would keep following you and you would keep retreating ... In fact when you went back to the spot where you had been the previous night you would find a trail from where you had been shifting and moving away from the boy and he would keep following you, so there was this trail, as if bulls had been fighting. (16f 55)

Rule: avoid pregnancy

There were historically particular norms in this context which mediated sexual activity. These norms are expressed quite explicitly by both male and female older participants. The dominant 'rule' was that of 'avoiding pregnancy'. Caldwell et al (1989) argue that child-bearing creates shifts in the way that a social group relates by affecting lineage, inheritance rights and therefore access to land and resources. Premarital pregnancy thus disrupts the social fabric.

If you were to make a girl pregnant, then that would be very bad. (3m 51)

My grandmother used to tell us that we should never allow a man to come close to us, in fact we should never allow them to come anywhere near us or to touch us...(My grandmother) told me that a man is not supposed to touch a girl's body and that it was the girl's duty not to allow the man to go anywhere near her. (16f 55)

Tools to avoid pregnancy

Older participants refer to particular practices which operated as a form of contraception to prevent pregnancy. One of these was intercrural sex (thigh sex). The use of 'we all' in the extract below illustrates the dominance of this 'rule' in the context at that time:

We all knew that we were not supposed to let our man anywhere near us, you could allow a man to go as far as the thighs, but no penetration was allowed. We all understood this and we used to talk about it. We all knew that the danger was in becoming pregnant so we were trying to avoid this at all costs... You would actually feel this wetness on your thighs and you would know that the man has ejaculated but you wouldn't allow him to have real sex with you. (16f 55)

Significant historical changes are evident in these norms, and will be discussed later.

Virginity inspection

Besides the restraints imposed within the activity itself, historically there were significant social processes which ensured adherence to 'avoiding' pregnancy. Amongst the older participants there were references to 'virginity inspections' in which older women in the community would at periodic intervals, physically inspect girls to ensure that they were still virgins.

... girls used to be inspected then by elderly women so that if she'd done things the wrong way (had sex), you (the boy), would be in trouble. We were afraid to do the wrong thing.... We knew that if girls had real sex... if a man penetrated, then the old women would see this and would want to know who had done this to the girl and she would be obliged to say... (18m 56)

Transgression of the prohibition on penetrative sex was socially stigmatized. Participants speak of being isolated and shunned by ones peers, and 'mourning' a girl if she became pregnant.

When one got pregnant, then you were isolated from the other girls. They would run away from you, so you would be on your own. 5f 53

In the event of a young girl falling pregnant there would also be an increase in parental surveillance, restricting girls to the homestead and subjecting them to 'inspections'.

Pregnancy obviously has individual costs, however, it also carried consequences beyond the individual. The state of pregnancy was not private and the pregnancy was not simply a matter between the couple. There was a distinct social response to pregnancy.

Social castigation

Before the 1960's a girl's pregnancy, and even the suspicion that 'real sex' had taken place, would be met with social process of castigation in the form of *isihewula*. In this process the girl's family would march to the boy's family's house to 'lay a complaint' and sing songs about the event, castigating him for the act and demanding compensation for the 'damage' caused. The process incorporated the payment of a penalty, a cow or a sheep to the family of the girl. A fine was also paid to the girl's mother as compensation for 'damaging' the girl.

the women would go to the boy's home to report that the boy had damaged their child. This was done publicly... The womenfolk would lodge a complaint and then a cow (a large one) or a sheep, would be chosen for the women to take home. The cow would then be slaughtered, not in the usual way, but below the kraal (18m 56)

...there was also a goat, as a penalty fee, because you have 'sinned against the mothers', because they are the ones who are looking after the girls, and now you have damaged all that, so you would also perhaps (give) a goat to the mothers only. (5f 53)

Significantly, the cost of this 'damage' was carried by men in the family, that is, the boy who caused the pregnancy, but more significantly, his father. The consequence of pregnancy thus 'costs' the father his wealth:

The mistake of playing inside (penetration) is taking the ... family's wealth in the form of cattle... it was stressed to me that you should never ever play inside because your family might be fined cattle for that'. 19m 55+

Pregnancy was thus a social, rather than solely or even primarily, an individual concern. It was collectively monitored and carried severe financial penalties. The fact that individual actions have consequences on levels far beyond the individual sphere of existence seemed to ensure that parental communication about sex and sexuality primarily about regulating the occurrence of pregnancy rather than regulating sex *per se*.

Historically, there was also a strong male element in the regulation of sex, possibly because of these consequences. Fathers, and male children, seemed to have taken more responsibility for regulating sexual activity. For example, fathers would talk directly to their sons about the risks of particular sexual practices:

When you were at a certain age, the father would tell you not to sleep with girls as they did not want any extended families to contend with. 18m 56

Male children were advised about the consequences of their actions, for example, the consequences of touching a girl in the genital area:

We were told that you would have a disease, you would be abhorrent, detestable if you did. You would develop acne and no-one would like you. There was no chance to wash your hands to prevent disease. You absolutely shouldn't touch her there. 18m 56

The social and financial consequences of pregnancy were a strong deterrent to individuals engaging in penetrative sex, constructing a particular set of boundaries around certain kinds of sexual acts, and 'mediating' the activity of sex.

There is a distinct awareness on the part of the male partner of the consequences of their actions, their 'rights', and the fact that they would be held accountable for their actions (their 'responsibilities'). One of

the participants (3f 49) comments that her male partner '*knew that he didn't have a right to*' engage in penetrative sex.

We were careful not to have any production between us two (5m 71).

Whenever I played with a girl, we played on the thighs and that was okay (19m 55+)

In a significant division of labour, male and female partners in the activity assumed joint responsibility for preventing pregnancy:

And even when he got you the boy would not say that you should open your thighs, if you had your thighs closed then he would accept that. (16f 55)

Although both male and female partners played a role in constraining sexual practices, the male partner's awareness of his responsibilities, and his behavioural response to prevent pregnancy, is more explicit in the historical accounts of sexual practices.

The fear of, or 'risk' of pregnancy is thus an integral part of the 'object' of the activity of sex. It is present in the activity system and together with the social sanctions, mediates the nature of sexual activity, and the outcome of sexual activity.

Activity systems of youth (currently)

I will now turn to current perspectives on the activity of sex. The data takes a slightly different form because of the different questions asked in the focus groups with youth. However, it provides an important perspective on the nature of the activity of sex.

Young male participants were asked why they engaged in sex, and their responses assist in framing their conceptualisation of the 'object' of the activity. Male youth identified pleasure, identity, reputation and virility as key motivations for engaging in sex:

I just have sex for pleasure and to just satisfy (10m 16-25)

One engages in sex because you don't wanna be seen as a weak man. (FG3 Male youth 16-25)

(I have sex for) procreation so that my family name doesn't end after I die, because my father made us and I have to make other children as well (10m 16-25).

Norms/rules and conventions

Sexual activity amongst the youth in this context was governed by a particular set of norms which in turn created particular conditions for sexual activity. In defining the frame in which sexual activity takes place, these norms prescribe the 'choices' available to individuals to engage in protective health behaviour.

One of the dominant norms for both male and female youth was that of being sexually active.

(Laughs) It is funny, we laugh at her if she doesn't have a boyfriend, if boys are not proposing to her (laughs). (7f 19)

(If a young male is not sexually active) they will also call you a soil snake, the one that doesn't have a poison..., you are not dangerous, you are not doing anything... You have no 'buhlukhu', buhlukhu means quite dangerous. You are a snake that has no poison. (4m 19)

Another dominant norm was that of multiple partners, particularly for men. This, and having concurrent partners, has been identified within the HIV and AIDS literature as a significant risky practice, particularly in a high HIV prevalence context such as South Africa:

A man normally has one real girlfriend he loves, and the others to fool around with whenever he wants to have sex (10m 16-25).

With girls it's not really accepted, even other girls like call those girls with more than one boyfriend "Ho's". Whereas with us it's like if you have more than one girlfriend, you're a man. And like we boast about such things... (10m 16-25).

Shifts across time

Accessing accounts from a wide range of participants enables one to obtain an historical perspective and to observe shifts in sexual activity in this particular context across time. Each of these shifts contributes in some way to changes in overall changes in the nature of sexual activity, although some have more of an effect than others.

One example of a shift is changes in the conditions under which sexual activity occurred. Across the data references were made to participants no longer having to use the 'veldt' as a site of sexual activity. Instead, participants comment that they had access to their 'own rooms'. This needs to be contextualised. A typical homestead in this rural context consists of one central hut or house, and several additional 'rooms'. Each of these rooms may in fact be more than one room, but the significant factor is that they are not inter-leading, but separate structures, facilitating activity out of parental view. As participants became

older, and as parents noticed an interest in sexual activity on the part of their children, they were provided with their 'own' rooms. The extract below illustrates a permissive approach to sex on the part of a woman age 55+. The fear of pregnancy is still evident, however, this parent condones the sexual activity of her children.

Well I allow my children to go (and sleep with a boy) when I see that they're old enough to go...No, I never actually say 'you can go', but I just allow it to happen... No. If I catch them at it, then I feel that I have to tell them to go and protect themselves through family planning. What I don't want is for her to get pregnant before time. ... Well these days children will just go, they're free to go because they now have their own rooms and don't have to share a room with their parents so there is a chance to sleep out and go and meet with their boyfriends. And I think it's different even with the parents because we don't really mind that they sleep out as long as you know who the boy is, then you allow it to happen. ... Ja, they go and we pretend not to know. But it happens that sometimes in the morning when it's time for her to make tea that you find that she's not there, she hasn't come back yet... You can only scold her when she comes back and tell her that this is not the time to be coming back and that she should make sure that she's not seen by people. You tell her that, it's not that she shouldn't go out or sleep out and go to her boyfriend, but it's not proper for her to be seen by other people, for other people to know that she had slept out and she was only then coming back. You tell her to come back early in time to make tea and wash and go to school. (16f 55)

There were also significant shifts in the nature of the activity of sex, with penetrative sex becoming the norm.

Things were changing and you could hear it from your friends, especially those who were coming from the townships⁶ that tell you. And they would tell you that this is an old thing that you are doing. We are no longer doing that. We are going directly, to intercourse, not just around the thighs, between legs. (3m 51)

These shifts obviously had an effect on the nature of sexual activity. More important however are the reasons for these shifts. What caused the shift to a more 'open' or 'permissive' attitude to sex on the part of parents, and a demise of the restriction on penetrative sex? To understand this we need to turn to the historical and demographic literature.

A new mediating artefact: injectable contraceptives

In the 1970's the South African government was concerned about the 'threat of a growing population of black people. In a classic text on family planning policy and the 'black peril', Brown captures the concern of the apartheid state in this quotation:

There is no *sense* in withstanding the enemy beyond the country's borders while the far more serious population explosion within its borders is allowed to continue unchecked. (Van Rensburg, 1972, p.156, cited in Brown, 1987, p. 256)

⁶ Townships are residential areas in towns which were, historically, 'black' areas.

Family planning programmes were devised to control the expansion of the black population. Family planning clinics outnumbered primary health care clinics and were positioned on the borders of the 'homelands'. They provided free and accessible injectable contraceptives to black women living in these homelands. This form of contraception could be taken without one's partner's knowledge or permission, and only had to be taken every three months. In the homeland areas of Ciskei and Transkei, uptake was exceptionally high. The reason for this favourable response to a rather reactionary government policy is complicated and was partly because of the social meaning of pregnancy in the research context, as well as the need for women to be relieved of the burden of child-bearing (Chimere-Dan 1993; Burgard, 2004).

Injectable contraceptives operate as a significant mediating artefact in the activity of sex, changing the nature of the activity. With the female partner being on the injectable contraceptive, the activity of sex is 'freed' from the risk of pregnancy, and the activity of sex shifts from intercrural sex to full intercourse. In stark contrast to the older participants, the 'risk' of pregnancy does not govern the activity system of the younger participants.

I wasn't scared of pregnancy because I was taking the contraceptives. (7f 19)

Many of the older participants commented on the shift to more open displays of sexuality amongst youth in this context, and the greater permissiveness of parents.

Ja, now they sleep like adults, like old people, like married people and they use contraceptives and there is no girl who is sure that 'I'm a girl', 'she's a girl', because a girl then would be a female who had never slept or who had intercourse with a boy. So that's the difference now (3f 49)

Interestingly, it is both the youth's parents, and the youth themselves who initiate the use of injectable contraceptives. The role of mothers in the surveillance of their daughter's contraception perhaps reflects on the social cost of pregnancy to females in this context.

When I started with my menstrual cycle, I told my mother, and my mother sent me to the clinic for the contraception (1f 27)

... my daughter started (having sex) at 14, and I just told her to go get an injection because I can't stop her doing that and I don't go with her to school. (13f 36-45)

...And also when I started getting interested in boys, my mother called me again and said 'My child, I think that you should go to the clinic for contraceptives, because I don't want you to get pregnant'. And she told me that 'I'm not giving you a ticket to sleep around and have every boyfriend in this village, because if you do that you might contract bad diseases'. (9f 18)

However, there is a significant shift in the division of labour. Whereas for the older participants, both male and female sexual partners took responsibility for the prevention of pregnancy, after the emergence of the injectable contraceptive, the responsibility seems to shift to that of mothers and daughters. The gendered nature of this shift is partly determined by the fact that the injectable contraceptive is a female hormonal contraceptive: because the female partner has to obtain the contraceptive, the male partner does not have to assume any responsibility in the sexual act for the risk of pregnancy.

However, this shift of responsibility has implications for responsibility for sexual health risks related to HIV and AIDS, and in particular, the use of condoms. These youth are sexually active in a time when pregnancy can be prevented. However, unlike previous generations, they are sexually active in a time when HIV and AIDS is a major risk and the injectable contraceptive is not a protective barrier against HIV transmission. This leads to the question: what was the youths' response to HIV and AIDS?

Where is HIV and AIDS in the activity system of youth?

A significant focus of the research process was to assess the 'response' of participants to HIV and AIDS. By 'response' what was meant was the position of the participants in relation to the problem of HIV and AIDS, whether it was a problem for them personally, or more broadly a problem in society. Many youth denied that it was present in the research context:

We haven't heard of anyone with AIDS around (here). (FG3 young males 16-25)

Although HIV and AIDS was probably not as pervasive in the research context at the time of data collection as it is now, there were individuals in the research context who were HIV positive. In discussions about HIV and AIDS amongst the youngest participants (10-14 years old), the sexual practices of those affected by HIV and AIDS were seen as deviant, evidence of 'othering' and stigmatisation. However, most of the research participants demonstrated sound knowledge of HIV and AIDS. They understood how it was transmitted and what protective health behaviours were needed to prevent infection.

I know that it is a disease that is transmitted through sexual contact. (11m 23)

You shouldn't sleep with another person because you'll get AIDS from sleeping with someone who already has it (FG5 young boys 10-14)

If one is getting AIDS it is usually because you have slept with those people without using condoms, then you get AIDS. (4f 15)

However, in a dynamic illustrative of the 'knowledge-gap hypothesis' mentioned earlier, this knowledge has had very little impact on sexual practices, for example, the norm of 'multiple partners' was still dominant, despite awareness of the risk of HIV. When asked whether they had changed their behaviour as a result of HIV and AIDS, the participants of the focus group of young females commented:

None have stopped sex because of hearing about AIDS; We cannot help but continue practising sex, it was here before we were born, how can we stop? (FG2 young females 16-25)

The young male participants had a similar view:

There's no change, we'll have AIDS whether many or less girlfriends (FG3 young men 16-25)

Although we hear about AIDS, none have one partner to show that we are scared of HIV/AIDS, some have 3 or 4 partners. (FG2 young females 16-25)

The use of condoms during sex is the main form of protection against HIV infection. These participants seemed adequately aware of the fact that using a condom during sex prevented the transmission of the HIV virus. However, many of them commented that condom use was not a norm, and that they had personally not used, and would not use, a condom. Condoms, although present in this context, were thus not seen as an artefact that mediated the activity of sex.

Well I'll be honest with you. I know about AIDS. I'm aware that it's a disease that kills. But so far I have never used a condom and I think even among my peers it's quite common that a condom is not used because we do sit and talk about these things. We know AIDS is there but you know we haven't used condoms no, I'll be honest with you ... Ja, we've never tried it, in fact I have never and most of my friends haven't ever tried it. In fact among my peers I've never heard anyone saying they've ever used a condom. No, we just don't use it, we've never tried it (11m 23)

Things are still done same way as before AIDS came, people don't want to use condoms still (FG2 young women 16-25)

Even if you want to use it, girls would say 'No, what if it slips into my vagina?' (FG3 young men 16-25)

People in the community hate them (FG3 young men 16-25)

No, (laughs) its funny, its not the same as if one is not wearing it (7f 19)

One could argue that, given all of these responses, HIV and AIDS seems to barely enter into the activity system of these youth.

The relative 'crisis' in the activity system of youth

This last extract is used to illustrate a central finding in the study: the activity system of young male youth seems to be relatively stable. There is no significant tension between any of the components of 'his' activity system. This 'lack of crisis' sustains his engagement in sexual activity in its current form: as a rather risky activity in which HIV and AIDS does not feature centrally. The extract below is drawn from the interview with participant 11m 23. "P" represents the participant, and "I" the interviewer. In this extract the participant seems to consider his practice of concurrent partners as unproblematic, and possibly as 'normative'. He also presents himself as 'needing' sex, and resorting to another partner because he has cannot 'have' his girlfriend all the time. This is the same participant who openly states that he knows about the risk of HIV, and he knows that condoms are protective measures, but that he has never used a condom.

P: Ja, ja, I do sometimes (have other partners) but even with them I don't use the condom but it's not common. I only do this when my girlfriend is away. Because my girlfriend is often away at school, she doesn't go to school around here. I plan it such that whatever other girl I have will be away during the holidays when my girlfriend is back and in that way there won't be any problems.

I: And if your girlfriend were around the whole year ... What would you then do, would you still have other girlfriends even then, even if she were around the whole year?

P: Yes, I think I would, because you know it does happen sometimes that I might not see her for quite a while because her mother is around and, ja then, I think I would definitely have other girls because of that reason.

I: When you say you don't see her for quite a while, what kind of time are you referring to?

P: Well perhaps a week would pass without my seeing her, ja, because her mother is there and there is no chance for us to meet, ja, that's the main reason why I would have, otherwise if I were to see her everyday, I mean have a chance to be with her all the time then I don't think I would need to have other girls.

I: So that's the only reason, the fact that you don't get her all the time?

P: Yes, I'm quite sure if I could get her all the time then I wouldn't have other women, I'm quite positive about that.

I: When you say all the time, what are you referring to, what do you mean by all the time, getting her all the time?

P: When I think I would be satisfied with seeing her perhaps twice a week, I mean what puts me off is that I will feel like being with her and then there won't be a chance to see her and perhaps a week will go by without having any chance to be with her, then this is what I do not like. What I find difficult to put up with. It would be nice to see her on a Wednesday and then again on a Saturday, you know. Not necessarily everyday but then for her to be available when I feel like spending time with her...

In summary, there are significant differences in the activity systems of older and younger participants, indicating that sexual activity in this research context has changed over time. The two major changes in these activity systems are the introduction of a different mediating artefact (the injectable contraceptive); and the presence of an additional 'risk' factor (HIV and AIDS). The injectable contraceptive mitigates the risk of pregnancy and creates the possibility for engagement in a new form of sexual activity, penetrative

sex. However, this sexual practice carries a greater risk in relation to the threat of HIV and AIDS. There is also a demise of the social processes such as *ishewula* and virginity inspection. Although there are other factors which impact on the demise of these practices, the removal of the threat of pregnancy means that it is not necessary to have the same level of surveillance and social sanctioning of sexual activity. In addition to this, the nature of the contraceptive as a female hormonal contraceptive, and the removal of the threat to the wealth of the father in the family, shifts responsibility for pregnancy, and thus responsibility for contraceptives, with mothers and daughters assuming a primary role

It is this shift in the gendered nature of responsibility for pregnancy and for safe sex practices that lays the basis for current health behaviour practices. The shift to the injectable contraceptive frees the male partner from responsibility for protective health behaviour in the activity of sex. In addition to this, condom use is not a norm in this context. The male participant is thus further enabled to not engage in the protective health behaviour of condom use. Contrasting the historical and current activity systems thus reveals the processes and conditions which underpin current practices.

Another significant issue in this study is how 'risk' is conceptualised by the participants in relation to the activity. The risks faced over time have changed and because the conditions for particular activities are established historically, participants respond to the risk differently. This, in turn, has an impact on whether behaviour change takes place or not.

For many of the participants, and for the younger male participants in particular, HIV and AIDS are not conceptualised as part of the object or as a negative outcome. They are not 'in' the activity system. HIV therefore does not cause a tension or contradiction to the extent required to bring about a change or disruption within the activity system leading to the emergence of a new activity system. For the young male participant, the activity system is not in crisis. It is this, I argue that explains the lack of 'behaviour change' on the part of these young participants.

One could then question what would bring about a crisis in the activity system? Answers to this question would perhaps assist in designing interventions to 'change' behaviour. I will not discuss 'interventions' in this paper partly because of time constraints, but also because they form the subject of another paper to be presented at this conference in the symposium on *CHAT perspectives on the African continent*.

6. Concluding points

In conclusion this paper illustrates the utility of a CHAT approach within the field of HIV and AIDS. Its utility rests in its dynamic and dialectical conceptualisation of the relationship between behaviour and

context, which is in contrast to the dominant views contained in the behaviour change theories. Examining the activity system of sexual practice, from the various points of views of different 'subjects', and also through a historical lens, rather than studying sexual activity through identifying key risky practices of the individual, explicates how activity and individual agency is contingent on context. It also illustrates the fundamentally social nature of human behaviour. In assessing the nature of the tensions and contradictions in the activity system, one can understand some of the dynamics of 'behaviour' which forms the focus of HIV and AIDS interventions. Activity theory as expressed through activity system analysis thus provides a significantly different conceptual framework through which one can understand 'lack of' behaviour.

7. References

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