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Potential Contribution of the Social Representations Theory to HIV Prevention in Uganda: Theoretical and Empirical Issues

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Behavioural change responses to prevent HIV known as ABC (A= Abstinence; B=be Faithful; C=Condom use) in Uganda are widely acclaimed nationally and internationally. However, to date little is known about the mechanisms by which behavioural changes occur, specifically among traditionally high-risk groups like sex workers. Despite possessing accurate knowledge about ABC, these groups experience very high rates of HIV infection still unexplained empirically. Based on a literature review, this paper proposes that the social representations theory (SRT) can inform research into the mechanisms of behavioural change, particularly social representations or worldviews underlying local sexual practices. This understanding can improve efforts in non-European contexts seeking to motivate individual competencies to change risky sexual attitudes and relations. Existing HIV approaches study mainly inter-individual cognitive differences regarding HIV responses creating theoretical and empirical problems obscuring the analysis of culturally sensitive meanings shaping local competence in real world conditions. SRT, which primarily analyses the mechanisms through which scientific ideas like ABC are translated into ordinary thinking, can inform empirical investigations about worldviews shaping meanings that enhance or discourage changing risky sexual relations. Researchers can develop tools to operationalise the social and cognitive aspects of SRT to improve understandings of behavioural change processes and enhance the efficacy of ABC. Despite limitations, SRT opens up a wider space for social research regarding behavioural change responses, key to HIV prevention in countries facing extreme poverty and very high birth rates, particularly Uganda.

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Behavioural change responses to prevent HIV, known as ABC in Uganda, have been nationally and internationally acclaimed a success (Stoneburner and Low-Beer 2004; Stoneburner and Carballo 1997). Despite that, little is known in the literature about the mechanisms or ways in which behavioural change to prevent HIV occurs. Assumptions in existing HIV approaches present theoretical and empirical problems that obscure the analysis of these mechanisms, particularly how worldviews influence risk behavior, essential to explaining HIV transmissions. As shown below, researchers (see Campbell 1998; Joffe and Bettega 2003) have applied SRT in African settings and improved our understanding of the way local competence affects behaviour change opening up a real window of possibility to apply the theory in non-European contexts. Various reasons make this possibility important for HIV prevention in Uganda. Local competencies to change individual behaviour drawing on ABC to prevent HIV spring from the local culture or systems of meaning, knowledge, beliefs and practices that organise sexual attitudes and relations (Parker et al. 1991). Local competence here means the capabilities acquired by individuals and groups in social interactions to draw benefits from health programmes (Campbell 2011; Nhamo et al. 2010; Sen 1992), specifically ABC. Knowledge about how local competence is acquired to combat HIV can provide evidence regarding HIV transmission patterns recently reported by the Uganda Ministry of Health (UMOH), particularly the rising HIV infections in the general population and the persistent HIV infections in high- risk groups (UMOH 2012).

While the current body of research offers important information about the extent of the spread and prevention of HIV, the approaches used tend to focus solely on inter-individual differences, which hinder the analysis of culturally sensitive meanings that are likely enhancing or diminishing competence to change risky sexual relations. These meanings derived from local cultural practices, and the shared symbolic universes that shape local worldviews during ordinary thinking, are what European social psychologists identify as social representations (Abric 2003; Moscovici 2000). I suggest that the analysis of social representations is often ignored in ABC research in non-European contexts particularly Uganda, yet these worldviews appear to significantly influence local competence to change behaviours drawing on the ABC programme. According to SRT, human thinking arises in inter-subjective interactions to cope

with psychic emotions or life risks (such as HIV) (Moscovici 1998, 1976; Joffe 2003). Relying mainly on the reviewed literature and SRT, this paper proposes two main objectives: 1) to demonstrate the theoretical and empirical problems in the existing approaches in HIV social research; 2) to illustrate that SRT can address these problems and be a useful lens to empirically analyse worldviews shaping local competence to change behaviours drawing on ABC.

To effectively implement ABC, individuals require competencies to translate the programme into ordinary thinking. The ABC programme is the national behavioural change response to prevent HIV, known locally as 'slim' in Uganda (Sserwadda et al. 1985; UAC 2012). ABC stresses the education of individuals to abstain from risky sex, reduce sexual partners and use condoms. Other components of the programme are voluntary counselling and testing, early diagnosis and treatment of sexually transmitted diseases, prevention of mother to child transmission and provision of anti-retroviral treatment (UAC, 2012). Inter-subjective communications drawing on various symbolic universes shape local competence to put these aspects of ABC into action in the real world. If that is the case, the lack of analysis of these inter-subjective mechanisms in the existing HIV approaches is a major concern for policy researchers.

Despite the enduring controversy in the literature about the assumed ideal success of ABC (Seckinelgin 2012; Kinsman 2010), empirically grounded analyses to account for the way individuals change behaviours based on their local worldviews remain limited in non-European contexts. Analysis of these social representations is important. They are the dominant meanings, which organise and structure ordinary thinking of individuals and groups in specific social-cultural contexts during interactions and communications (Abric 2003; Campbell 1998; Joffe 2003; Moscovici 2000), including the dissemination of ABC. More importantly, researchers in the SRT tradition (Abric 2003, 2001; Jodelet 1989) have developed methodologies using diverse tools that can be adapted to analyse such worldviews. Thus, SRT can add theoretical and empirical value to the existing HIV research. SRT informed research in non-European contexts could provide solid data about the psychic and symbolic universes from which meanings that optimise or minimise changes in risky sexual behaviour arise. Interestingly, research shows that sexuality is socially constructed rather than simply a natural drive (Abramson 1992; Parker and Gagnon 1995). Sexuality is actualised based on worldviews expressed in texts, symbols or images, which likely influence local competencies in changing sexual behaviours in specific social-historical settings. This paper demonstrates the theoretical and empirical problems existent in current research approaches that particularly obscure the analysis of these processes. It then presents a summary of SRT and its ability

to interrogate these issues and empirically analyse worldviews relating to HIV risk.

Table 1 below provides a summary of the main findings of a review of literature on approaches to HIV. PubMed database was consulted by using the search terms 'HIV responses in Uganda', that generated 16 results corresponding to our question. The final results indicated in Table 1 include case studies from researchers in Government and Non-Governmental Organisations (NGO), including national surveys by Uganda AIDS Commission (2012) under the Uganda Ministry of Health and other studies from NGOs (Hogle et al. 2002) and renowned scholars in this field (Kirby 2008; Low-Beer 2004; Stoneburner and Carballo 1997). In general, this study found various styles of HIV prevention interventions. In Uganda two main strategies were identified: risk reduction and behavioural change. These led us to the two dominant HIV approaches in Uganda: the biomedical and bio-behavioural HIV prevention interventions, and to the problems raised by approaches evaluating these interventions briefly presented below.

Table 1. Styles and approaches to HIV prevention intervention in Uganda

Styles of prevention intervention	Approaches to prevention intervention	Methods used (examples)
Risk reduction Sources (Ghani and Boily 2003; Kamali et al. 2003; Tumwesigye et al. 2013; UMOH 2012; Sserwadda et al. 1985)	Biomedical: reducing biological risk	Surveys mainly in ante-natal clinics and hospitals; national surveys, participatory approaches, interviews, open-ended questions
Behavioural change Sources (Coates et al. 2008; Darabi et al. 2008; Hogle et al. 2002; Kirby 2008; Low-Beer 2004; Stoneburner and Carballo 1997)	Behavioural: reducing risky behaviour	self-reports in surveys, demographic surveys, focus groups and in-depth interviews
Structural interventions Sources (Bond et al. 1997; Gupta et al. 2008; Decosas 2002; Obbo 1993; Whyte 1997)	Social: Influencing social factors	Qualitative Ethnography, In-depth interviews, observations
Combination prevention (of all the above) (only	Inter-sectoral: Combining the above approaches at the same time	------

recommendations found) Source (UAC 2012)		
Local Competence Sources (Campbell 2011, 2009; Nhamo et al. 2010; Cottrell 1976; Eng and Parker 1994; Sen 1992)	Lifestyle: Building competent communities to prevent HIV	Qualitative methods Focus groups, semi-structured interviews
Social representations (Abric 2003; Jodelet 1991; Joffe and Bettega 2003; Joffe 2003; Moscovici 2000)	Relational behavioural: Identifying and targeting worldviews, shaping local competence, in this study, to change behaviour to reduce HIV risk	SRT- informed tools that can be adapted (quantitative and qualitative)

HIV RISK REDUCTION IN UGANDA: THEORETICAL AND EMPIRICAL PROBLEMS

The central problem originates from assumptions in studies that evaluate the dominant interventions to reduce HIV risk in Uganda. I begin by demonstrating the theoretical and empirical problems arising from these assumptions, which continue to exist despite great improvements[1] observed in the wake of biomedical prevention interventions. I show specifically that analyses of the mechanisms by which individuals acquire local competence to change risky sexual relations remain obscured. Such analyses are essential to understand how individuals change behaviours to account for patterns in HIV infections and assist policymakers in planning more effective interventions.

Biomedical Approach

Since the beginning of the epidemic in Uganda, the dominant influence on the public health sector has been the biomedical approach to prevention, which draws on medical understandings of risk factors measured predominantly through epidemiological research and monitoring. The main focus has been on reducing the biological risk of HIV infection. Major achievements reached include interventions to screen blood, testing methods, and advances in the provision of treatment (Ghani and Boily 2003; Kamali et al. 2003; UMOH 2012). Current pre-emptive medical procedures are male circumcision,

[1]Improvements include having less than 10,000 babies born with HIV in 2013 compared with 25,000 born with HIV in 2011-this number will decrease to 5000 by 2015 in Uganda, according to the Chairman of the Uganda AIDS Commission (see Ayebazibwe 2013).

prophylactic anti-retroviral treatment and prevention of mother to child transmission. Studies evaluating biomedical interventions rely primarily on surveys to collect epidemiological data about HIV prevalence, incidence, and how HIV is controlled. The main sources are expectant mothers attending ante-natal clinics and individuals testing for sexually transmitted diseases in various hospitals (UMOH 2012).

HIV Epidemiology in Uganda

Recent epidemiological reports indicate rising rates of HIV infection in Uganda. According to the Uganda Bureau of Statistics (UBOS) the population in the country is rapidly increasing (UBOS 2011: iv) largely living in absolute poverty (Population Reference Bureau 2013)[2]. Sadly, in the year 2011 alone, 1.2 million people were reported to be HIV positive, contracted primarily through heterosexual transmission (about 80% of all infections), with women (57%) affected more than other population groups (UAC 2012:2). A steady rise in new HIV infections has been observed from 124,000 in 2009 to 128,000 in 2010 and to 145,000 in 2012 (Nantulya 2012:1). Similarly, in 2011 the percentage of people living with HIV rose to 7.3 (and was higher among women at 8.3%) from 6.4 in the 2004-05 survey among adults aged 15 to 49 (Nantulya 2012:1). Traditional high-risk groups[3], such as female sex workers[4], perennially report higher rates of infection than in the general population. In 2009 alone "commercial sex workers, their clients and partners of clients contributed 10% of new infections" (UAC 2009: vi). Other groups known to be at high risk of new HIV infections in Uganda include truck drivers, informal traders, boda-boda cyclists, fishing communities, internally displaced persons, military personnel, construction workers and other mobile populations (UAC 2012, 2009). Despite reports of accurate knowledge about ABC in the population[5], little empirical data exists about how high

[2] 65 percent of Ugandans lived below 2 US$ per day in 2011 (Population Reference Bureau 2013).

[3]Traditional high risk groups include generally mobile populations, such as female sex workers, truck drivers etc... (UAC 2012:9).

[4]In Uganda, barmaids are often engaged in sex work and report a higher number of sexual partners. They are considered a high risk group along sex workers, fishing communities etc... Carswell (1987) observed in 1987 that barmaids had the highest rate of seropositivity (32 – 67.7%). Almost a decade later in 1996, a study in a Ugandan town on the trans-African highway found that barmaids were 50 percent at a high risk of HIV-1 infection compared to other risky groups (Nunn et al.1996). Between 2008 and 2009, HIV infections remained very high among female sex workers at 37 percent, reducing slightly, but not completely, to 33 percent in 2010 (UAC 2012).

[5]According to a recent national survey "nine in ten adults know that having only one uninfected, faithful partner can reduce the chances of having the AIDS virus." More than 75 percent "know that using a condom every time they have sex reduces the chances of having the AIDS virus" (UMOH 2012:11).

risk groups acquire competencies to change risky sexual relations to effectively implement ABC (UAC 2012).

According to a study by Uganda Ministry of Health, for instance, 92 percent of women aged 15-49 knew where they could get an HIV test compared to 91 percent of men in the same age group. Yet less than one quarter (only 23%) of these men tested for HIV in the past 12 months (of the study) and received the results of the last test compared to 70 percent of women (UMOH:124-125).[6] At the same time, the World Health Organisation (WHO) guidelines on HIV require every individual testing positive with a CD4 count falling below 350 cubic millimetre of blood to receive treatment (WHO 2012). Only about half (290,971) of such people living with HIV/AIDS (577,000) received treatment in 2011, slightly up from 260,865 who did so in 2010, according to the Uganda AIDS Commission (UAC 2012:34). Furthermore, despite widespread knowledge that male circumcision can prevent HIV, the UMOH study revealed that a mere one-quarter of Ugandan men aged 15-49 (26%) were circumcised, almost the same level (of 25%) reported a decade ago in the 2004-05 survey (UMOH 2012:136). Surprisingly, in the same study only 16 percent of women reported using a condom the last time they had sex compared to 13 percent of men (UMOH 2012:23). What's more, in 2013 condom shortages were reported by the chairperson of Uganda AIDS Commission (Ayebazibwe 2013). The above gaps in HIV responses raise important questions about the successes and failures of ABC that require clarification, specifically the behavioural change mechanisms, to enable more effective planning of prevention interventions.

Other major developments in the biomedical approach include using a combination of research methods, such as, participatory approaches and interviews (see Tumwesigye et al. 2013), as well as acknowledging the role of social factors in the spread and prevention of HIV (see UMOH 2012). This is an example of where differences between individuals are examined, rather than the nature of the relationships between them. Studying solely inter-individual differences masks the analysis of the mechanisms involved in changing risky sexual relations important to reverse the epidemic.

[6]According to the study, some of the data regarding women tested in the past 12 months was missing (see footnote 2 page 124) (UMOH 2012:124). Even so fewer men (45%) than women (66%) are reported to have ever been tested and received the results (UMOH 2012-124-125).

Bio-behavioural Approach

The second prevention intervention indicated in Table 1 above is the bio-behavioural approach rooted in bio-medicine. Drawing predominantly on behavioural and social sciences, it emphasises the reduction of particularly risky sexual behaviours as a strategy to prevent HIV. This approach studies solely cognitive differences between individuals ignoring the analysis of the social psychological processes involved. Such analyses could provide data about local competencies or what enhances and discourages the uptake of ABC to clarify the observed HIV transmission patterns.

Relying mainly on individual self-reports, as shown in Table 1, various evaluations of ABC based on the bio-behavioural approach provide interesting findings about decreases in pregnancy rates among teenagers and increases in 'safer' sexual behavioural practices and abstinence (Kamali et al. 1999; Kilian et al. 1999; UMOH 2012). Self-report surveys quantify age at first sex, age at first marriage among women and condom use in the population. Lacking in the literature are empirically grounded analyses of the processes leading to the reported changes to explain how individuals extract benefits from ABC in real world conditions. In addition, evidence-based studies using a combination of research methods, such as, demographic surveys, focus groups and in-depth interviews show that increasing knowledge about ABC among young learners results into changes in individual attitudes and behaviours to prevent HIV (Darabi et al. 2008). The evidence reinforces the commonly held belief that beginning in the 1990s, HIV declines in Uganda occurred through interpersonal communication in social networks drawing on ABC knowledge (Hogle et al. 2002; Stoneburner and Carballo 1997). The success of ABC has been questioned since 2001 mainly due to the observed discrepancies between the epidemiological data supporting the success story and the evidence on the ground (Parkhurst 2001). Missing in this debate is empirical evidence to demonstrate how the success (the effective implementation) of ABC or its failure happens.

Certain emerging approaches[7], such as the structural strategies shown in Table 1 consider contextual social factors as major components in HIV risk reduction and prevention. These factors include social cohesion (Decosas 2002), social networks (Obbo 1993), community involvement (Bond et al. 1997; Whyte 1997), social capital (Low-Beer and Sempala 2010) and other social determinants like gender and income, migration and poverty (Gupta et al. 2008). Other approaches are known as

[7]These emerging approaches remain marginal in HIV intervention prevention in Uganda and for this reason; this study focuses mainly on the problems presented by the first two dominant approaches.

combination prevention that suggest combining the biomedical, bio-behavioural and structural HIV prevention intervention (UMOH 2012). These approaches remain important in HIV prevention, but still fail to explain empirically the mechanisms that lead to the persisting entrenched infections among high-risk groups (see Carswell 1987; Nunn et al. 1996; UAC 2012) and the rising rates of infection in the general population. The section below illuminates, first, the assumptions in the existing approaches hindering this analysis followed by a summary presentation of SRT.

HIV INTERVENTION PREVENTION APPROACHES: ASSUMPTIONS

The assumptions in the existing approaches create various theoretical and empirical problems that prevent the analysis of the mechanisms through which, for instance, high-risk groups acquire competencies to change risky sexual attitudes and relations in the real world. Policymakers frustrated by rising rates of HIV infection may use such information to plan more effective HIV interventions targeting these mechanisms.

Theoretical and Empirical Assumptions

Researchers, policymakers and public health officials involved in HIV intervention prevention in Uganda, mainly draw on assumptions from the rational-choice paradigm. The paradigm assumes individuals to be rational people who choose correct behaviours following expert advice (Coates et al. 2008). It implies, for example, that counselling, testing or mass awareness campaigns carried out by ABC experts automatically influence individual attitudes to avoid risky sexual relations (UAC 2012; Cleland and Ferry 1995; Konde-Lule 1989). The main theories used to evaluate ABC interventions are cognitive and individualistic theories, specifically the health belief model and theory of reasoned action. Others are socio-cognitive theories, chiefly the cognitive theory, diffusion of innovations and social network theories, where social environments are acknowledged but remain under analysed as explained below. Using examples, first I illustrate the theoretical assumptions followed by the empirical assumptions implicit in various studies and the problems they present.

Theoretical Assumptions: Biomedical Approach

The biomedical approach assumes individuals to be rational clients able to implement prescribed pre-emptive medical procedures, such as, condom use or male circumcision to prevent HIV after being

counselled. A major problem is the discrepancy between this assumption and the reality on the ground. As already reported, only a small percentage of people use condoms or are circumcised in Uganda (see UAC 2012). Additionally, the efficaciousness of ABC assessed through a biomedical approach remains uncertain. There is some evidence about the effectiveness of ABC (Stoneburner and Low-Beer 2004), but HIV has not gone away. Efficaciousness means that ABC 'works'. For example, according to clinical guidelines, 'the perfect-use rate of abstinence' as a public health strategy to prevent HIV is 100 percent efficacious (Dailard 2003:5). Despite the awareness that abstinence is efficacious to prevent HIV, individuals clearly have not adopted this behaviour, calling into question the practicality of this advice in the real world. Although individuals may be rational, assuming their unquestionable loyalty to implement ABC interventions on the advice of experts in Uganda, obstructs the empirical analysis of the social psychological processes that shape competencies to abstain, use a condom or adhere to treatment.

Similarly, the capabilities of individuals to extract benefits from ABC to change risky sexual relations can be evident in one context but may not be generalizable to the entire population. Meanings attached to sexual relations in interactions and communications can vary by social contexts (Parker et al. 1991). These meanings often overlooked in studies focusing on only cognitive individual differences call for investigation because they very likely influence individual competencies to implement the medical interventions. I now present the bio-behavioural approach, which raises similar problems, but reveals differences, given its theoretical developments regarding the conceptualisation of risk.

Theoretical Assumptions: Bio-behavioural Approach

Theoretical assumptions in this approach hinder the analysis of the mechanisms by which individuals acquire capabilities to change risky sexual relations. A major difficulty arises from the assumption that ABC interventions automatically influence intentions to prevent HIV. The examples of the health belief model and the theory of reasoned action are presented first. The health belief model assumes that taking preventive actions will benefit individuals to reduce the threat of contracting a disease (Ajzen and Madden 1986; Melkote and Steeves 2001) particularly HIV. On the other hand, the theory of reasoned action an extension of the health belief model assumes, first, that intentions determine individual behaviour (Ajzen and Madden 1986). Second, that to influence actions, intentions must be changed before behaviour change is likely to occur (UNAIDS 1999). Evidence-based studies in

Uganda drawing on these theories (see Darabi et al. 2008) suggest that increasing messages about ABC to the population, for example, influences intentions to alter individual risk behaviours.

If that is the case, how and why, do very few Ugandans at risk of HIV choose to use a condom or test for HIV, even when they possess accurate information about ABC (see UMOH 2012)? It appears that all reality, including HIV, is socially represented (Moscovici 2000). To represent is "to make present that which is absent by means of symbols" (Jovchelovitch 2007:1). In this study, it means that behavioural change responses are socially represented with a cognitive and social content. Beliefs, opinions and attitudes about HIV constitute the cognitive part, while shared social-cultural values and norms from the local sexual practices make up the social component. Researchers drawing on assumptions from the health belief model and the theory of reasoned action often disregard the social content, which is essential to provide evidence about symbolic universes. These universes influence the inter-subjective sexual relations in the real world that can discourage individual choices to change behaviours, regardless of information on risk or intentions to change behaviour. Thus, investigating the context in which behavioural change occurs can lead to adequate explanations concerning the rising rates of HIV infection in Uganda.

Additional studies have examined skills, such as, self-confidence in negotiating sex to prevent HIV in various countries including Uganda (McGrath et al. 2007; Najjumba et al. 2003), following the social cognitive theory. This theory assumes, first, that individual behaviour is the result of the interaction between attitudes, behaviour and the environment. Second, that self-directed change can be achieved if people are provided, not only with the reason to alter a risky habit, but also the behavioural means, resources and social supports to do so (Bandura 1995). Skills, particularly self-confidence to negotiate sex, remain essential to prevent HIV infection. Assuming that acquisition of such skills lead automatically to self-motivation and self-guidance (see Bandura 1995), the theory fails to explain how these changes come about and what methods can accurately analyse the processes involved. Self-confidence to negotiate sex to prevent HIV, just like other skills, develops within social environments drawing from self-efficacy and social modelling (see Melkote and Steeves 2001:133)[8]. Such processes

[8]*Self-efficacy* is the belief in one's personal ability to affect a change which determines the course of action one will choose, how long it will be sustained in the face of resistance, and the resiliency to bounce back in case of setbacks. *Social Modeling* is where people learn vicariously through observing the actions of others and likely judge their own capabilities partly by comparing themselves with others with whom they share similar situations. Models inspire a stronger self-belief. By gaining confidence self-efficiency is achieved (Melkote and Steeves 2001:133).

require individuals to think, identify and categorise the skills during interactions in a way that makes sense to apply them in given social-cultural environments (Moscovici 2000) driven by social determinants of health.

Examples of social determinants of health include gender and income, migration and poverty (Gupta et al. 2008), ethnicity, academic ability as well as shared values and norms that shape local sexual practices. These determinants not only shape the social positions of individuals, but also their social representation of health problems and responses, particularly regarding HIV. Diverse groups socially represent or objectify social reality (of HIV) differently, which they assimilate subjectively and inter-subjectively through historical local symbols and memories (Jodelet 1989; Moscovici 2000). Analysis of these mechanisms can be useful to get evidence about how, for instance, skills to prevent HIV are implemented, which could explain their success or failure rate and help to clarify the HIV transmission patterns. However, studies using the social cognitive theory ignore the analysis of the environment in which skills develop, despite acknowledging it superficially likely due to the over-emphasis put on studying differences between individuals. As a result, analyses of the social psychological processes to cope with HIV drawing from the local practices that shape sexual relations are sidelined.

Other studies have examined the effect of the dissemination of ABC on behavioural change to prevent HIV (Low-Beer and Stoneburner 2003; UMOH 2012) drawing from the diffusion of innovations theory. This theory focuses on what enables or discourages the spread and adoption of a new idea within a community or an organisation (Rogers 1962). In Uganda, various channels have been described as important in the adoption of ABC including, radio/TV programs, workshops, banners, meetings and community sensitization through public leaders (UMOH 2012). Knowledge diffused in these channels remains important in HIV prevention. A major difficulty is that researchers, policymakers and public health officials tend to assume that knowledge through these channels undoubtedly leads to changes in individual risky sexual relations towards abstinence, fidelity or condom use. Often ignored is the analysis of the unconscious social-psychological meanings motivating the adoption, or not, of new ideas, like abstinence. Such analyses can be useful to clarify the gaps observed above in ABC responses, even though information about ABC is widely distributed to the population.

Still other studies following social network theories show that, in the 1990s, interpersonal

communications in social networks led to declines in HIV prevalence (Stoneburner and Low-Beer 2004; Low-Beer and Stoneburner 2003; Thornton 2008). Social network research originates from the 'network approach' in epidemiology (Auberbach et al. 1984), which assumes that networks facilitate disease prevention from one person to another. That is, the structure of a network affects individual members and the network as a whole beyond the behavioural characteristics of individuals (Klovdahl 1985). Networks, nevertheless, are not protected from the influence of social norms and values. Given their likely influence on the individual and group competence for action (Campbell et al. 2011)[9], there remains a need for empirical investigation of these norms relating to behaviour change to prevent HIV.

Empirical Assumptions

On the other hand, traditional methods produce useful data using the dominant research approaches such as surveys, interviews and focus groups based on assumptions that cognitive differences between individual responses to HIV are generalizable to the entire population (Darabi et al. 2008; UMOH 2012). Lacking are empirical analyses of social representations in the local sexual culture, which shape local and individual competence. This is essential to explain changes in risky sexual behaviours that likely generate the HIV transmission patterns in Uganda. According to Abramson (1992), cultural prohibitions and religious taboos complicate the assessment of sexual content. Researchers from a different culture may not represent the local sexual content as rational, since it may contrast with their own representations. Abric (2003), for instance, illustrates that traditional methods can loose track of meanings 'silenced' by respondents who fear to present a bad image before others in certain contexts. Due to their cultural sensitivity, appropriate tools are required to analyse worldviews ignored in studies based on traditional methodological assumptions. The tools can be used to uncover the hidden meanings, which limit or enhance local competence to change risky sexual relations, embedded in texts and symbols shaped by the local culture, important to know to counter their negative effects and accelerate efforts to prevent HIV.

To learn more about these issues, this study turned to other academic sources, which led to SRT (Abric 2003; Joffe 2011; Moscovici 2000, 1961) and the concept of community (local) competence (Campbell 2011, 2009; Cottrell 1976; Eng and Parker 1994; Nhamo et al. 2010; Sen 1992). These

[9]For instance Campbell et al. (2011) reveal that in rural Zimbabwe strengthening local competence relating to HIV/AIDS can optimise the potential benefits of institutional responses or minimize their potential harm.

studies provided a theoretical framework to study social representations and local competence, but were limited in empirical research relating to the study question. SRT is applied mainly in European settings (Abric 2003; Jodolet 1991; Moscovici 2000) where it is associated with laboratory experiments (see Abric 2003). A few researchers applying SRT in African settings have opened up a window of possibility to apply the theory in non-European contexts. Campbell (1998) examined social representations of female sex workers and revealed how they shaped their resourcefulness and creativity in dealing with challenging circumstances that put them at HIV risk in South African gold mines. Joffe and Bettega (2003) studied young adolescents in Zambia and showed that the complexity of motivations shaped their social representations about sexual behaviour. The question is: can SRT inform analyses of worldviews motivating local competence, specifically among high-risk groups to prevent HIV in Uganda? In the section below, I show that SRT can interrogate the above problems and be a useful tool to analyse worldviews in a case study.

POTENTIAL CONTRIBUTION OF SRT TO THE STUDY OF HIV IN UGANDA

SRT can provide a broader lens into research that gathers social, cultural and relational information to clarify HIV transmission patterns or better explain the failings of ABC strategy. SRT studies the translation of scientific and non-scientific ideas into ordinary thinking or common sense (Moscovici, 1998). In this study, it refers mainly to the translation of the contents of ABC strategy and how it is taken up in the real world by lay populations. An additional value of SRT is its interest in the sociological. Sociological inquiry is about uncovering social unconsciousness or unacknowledged social meanings actors give to their actions, which may have the potential for individual and social change in reversing the epidemic. The ability of SRT to analyse how ideas such as ABC become translated into ordinary thinking can be of great contribution in poor resource settings like Uganda. SRT may uncover the social framing of worldviews often ‘mis-recognised’ in the dominant HIV social research, which is essential to understand given their likely positive or negative effect on local competence to change risky sexual relations among high-risk groups. Our particular interest in high-risk groups arises from the assumption held in infectious diseases epidemiology that targeting such groups is the “most efficient and effective prevention strategy” (Sinead et al. 2006:13). Given the great contribution of these groups to HIV infections (see Uganda AIDS Commission 2009), collecting

evidence about how such groups change behaviours can inform efforts towards social change to prevent HIV. Another value is that SRT encourages continuous reflection on its own research interpretations and conclusions, important in analysing sexual practices, which vary by social-historical contexts. This is made possible by the view that all reality, including this study, is socially represented (Moscovici 2000).

Put differently, SRT has a potential empirical and theoretical value in non-European contexts, which rests upon acknowledging that ordinary thinking is not merely rational but also relational. SRT addresses a major theoretical problem presented in the dominant approaches that study HIV in Uganda, which assume that sexuality is universally understood in the same way. SRT states that all reality is socially represented (Moscovici 2000) including sexual relations. Theoretically, 'social representations' constitute a cognitive and social system. As a cognitive system, 'social representations' refer to an organisation of "a body of information, beliefs, opinions and attitudes about a given object" (Abric 2001:43) in our case HIV. As a social system, 'social representations' are shared social-cultural values and norms embedded in the local sexual culture that organise and structure worldviews about sexual attitudes and relations. This understanding is useful to gain insights into different contexts and provide evidence about behavioural changes that explain HIV transmission patterns in Uganda.

SRT adds more potential value to the study of HIV by its ability to inform empirical investigations seeking to provide concrete data about worldviews in non-European contexts. SRT assumes that diverse groups objectify social reality in given social-cultural contexts. They assimilate it through symbols and memory subjectively, inter-subjectively and objectively (Jodelet 1989; Moscovici 2000). If this is the case, making sense of HIV and the process of changing behaviour in relation to this social object, will involve more than simply processing information about abstinence, reducing multiple partners or condom use. Health professionals, development officials and the lay population can hold radically contrasting meanings arising from differences in worldviews through which sexual relations are objectified. The resulting action in response to the social object (of HIV) will be different. In using an SRT lens, it is acknowledged that scientific ideas, specifically the contents of ABC, are not simply processed. They are transformed and implemented based on worldviews during ordinary thinking in the real world because all thinking develops to cope with psychic or emotional tensions (Moscovici 1976). Or rather, human thinking arises to deal with life risks (Joffe 2003) and is expressed in texts, symbols and historical memories. These processes call for empirical analysis to understand

how they influence local competence to extract benefits from external programmes, such as ABC.

Similarly, SRT carries the potential value of informing the development of research tools that can be used to investigate social processes of meaning-making in given contexts, particularly worldviews associated with responses to the risk of "slim". These tools will be closely scrutinised for their ability to identify or use linguistic forms in selecting culturally sensitive categories to construct questions. Thus, scientifically appropriate and rigorous methods will be required that use tools able to sample both the cognitive (minds of individual) and symbolic meanings (minds of social groups) regarding responses to "slim". This is so because "responses to risk is a highly social, emotive and symbolic entity" (Joffe 2003:55). The motivations to think and do certain actions such as changing risky sexual behaviour are complex and difficult to study. They contain unconscious, non-verbal and symbolic elements based on worldviews (Jodelet 1991), which define local competence.

Abric (2003, 2001), for example, suggests a methodology using triangulation or various tools to investigate the organisation (cognitive and social) of social representations. Some of these social representations are muted during social communications. Adapting these tools to social-cultural contexts is essential because the real world is less likely explicable using universal tools, especially to study sexual practices, which are subject to ever changing historical contexts. Appropriate tools will be required to elicit culturally sensitive meanings hidden during interactions in certain specific contexts in Uganda.

Limitations of SRT

While describing social representations in a scientific manner is a problem given their complex symbolic nature, the exact ontological status of social representations remains debatable (Lahlou and Abric 2011). Thus, social representations are not only difficult to define but also to investigate empirically. Despite that, social representations can be a useful lens to analyse worldviews. Worldwide, people use symbols or social representations to interact (Abric 2003). In this study, social representations mean an organisation of cognitive and social meaning that shape local competence to change sexual attitudes and relations to prevent HIV drawing on ABC in real world settings.

CONCLUSION

This paper highlighted the assumptions in existing HIV approaches that draw on the rational-choice paradigm and how they limit investigations of worldviews in non-European contexts. SRT could be a useful tool to analyse worldviews that inform the local sexual practices. This knowledge can be applied to motivate local competence to change behaviour in a Ugandan context. A major contribution of this study overall can be in prompting the design of empirical studies seeking to provide evidence about behaviour change mechanisms to explain HIV transmission patterns. Policymakers may use the evidence to enhance local competence to effectively implement ABC in non-European contexts. More questions remain unanswered specifically about the appropriate tools required to undertake SRT-informed research. Despite limitations, SRT is a useful theoretical perspective that opens up a wide space to investigate behavioural change responses, a key to preventing HIV infections and reversing the epidemic in non-western countries. Knowing how behavioural change occurs, particularly in high-risk groups, presents opportunities to improve HIV prevention efforts in resource-limited contexts like Uganda.

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REFERENCES

Abric, J., C. (2003). La recherche du noyau central et de la zone muette des représentations sociales. In J.C. Abric (Ed.), *Méthodes D'étude Des Représentations Sociales*, (pp. 59-80), Ramonville Saint-Agne : Erès.

Abric, J., C. **(**2001). A structural approach to social representations. In K. Deaux, G. Philogène (Eds.), *Representations of the Social: Bridging the Theoretical Traditions,* (pp. 42-47),

Malden, Mass.: Blackwell Publishers.

Abramson, P., R. (1992). Sex, lies and ethnography. In G. Herdt and S.Lindenbaum (Eds.), *The Time of AIDS: Social Analysis, Theory and Method,* (pp. 101-123), London: Sage Publications.

Ajzen, I., and Madden, T., J. (1986). Prediction of goal-directed behaviour: Attitudes, intentions and perceived behavioural control. *Journal of Experimental Social Psychology,* 22. 453-474.

Auberbach D. M., Darrow W. W., Jaffe H. W. and Curran J., W. (1984). Cluster of cases of the acquired immune deficiency syndrome: patients linked by sexual contact. *American Journal of Medicine,* 76, 3. 487-492.

Bandura, A. (1995). *Self-efficacy in changing societies*. New York: Cambridge University Press.

Bond, G., C., and Vincent, J. (1997). Community Based Organizations in Uganda: A Youth Initiative. In G., C. Bond, J. Kreniske, I., Susser, J., Vincent (Eds). *Aids in Africa and the Caribbean*, (pp.99-113), Boulder: Westview Press.

Campbell, C. (2011). Social capital and reduced female vulnerability to HIV infection in Rural Zimbabwe. *Population and Development Review,* 37, 2. 333–359.

Campbell, C. (2009). *Building AIDS competent communities: possibilities and challenges*. Paper presented at AIDS 2031 meeting, Salzburg, March 2009.

Campbell, C. (1998). Representations of gender, respectability and commercial sex in the shadow of AIDS: A South African case study. *Social Science Information,* 37, 4. 687– 707.

Carswell, J., W. (1987). HIV infection in healthy persons in Uganda. *AIDS,* 1, 4. 223-227.

Cleland, J., and Ferry, B. (Eds.) (1995). *Sexual behaviour and AIDS in the developing world*. Bristol: Taylor and Francis World Health Organization.

Coates, T., J, Richter, L., Caceres, C. (2008). Behavioural strategies to reduce HIV transmission: how to make them work better. *Lancet,* 372, 9639. 669-684.

Cottrell, L., S. (1976). The competent community. In B.H. Kaplan, R. N. Wilson, A. H. Leighton (Eds.), *Further Explorations in Social Psychiatry,* (pp. 195-209), New York: Basic Books.

Darabi, L., Akinrinola, B., Serumaga, K., et al. (2008). *Protecting the next generation in Uganda: New evidence on adolescent sexual and reproductive health needs.* New York: Guttmacher Institute.

Eng, E., and Parker, E. (1994). Measuring community competence in the Mississippi Delta: the interface between program evaluation and empowerment. *Health Education Quarterly,* 21, 2. 199-220.

Ghani, A. and Boily M., C. (2003). The epidemiology of HIV/AIDS: Contributions of infectious disease epidemiology. In G. Ellison, M. Parker and C. Campbell (Eds.), *Learning from HIV/AIDS,* (pp. 59-87), Cambridge: Cambridge University Press.

Gruber, J. and Caffrey, M. (2005). HIV/AIDS and Community Conflict in Nigeria: Implications and challenges. *Social Science and Medicine,* 60, 6. 1209-1218.

Gupta, Rao G, Parkhurst J., O, Ogden J., A, Aggleton P, Mahal A. (2008). Structural approaches to HIV prevention. *Lancet,* 372, 9640, 764-775.

Jodelet, D. (1991). *Madness and social representations*. Hertfordshire: Harvester-Wheatsheaf.

Jodelet, D. (1989). *Les représentations sociales*. Paris, P.U.F.

Joffe, H. (2011). AIDS research and prevention: a social representational approach. *British Journal of Medical Psychology*, 69, 3. 169-190.

Joffe, H. (2003). Risk: From perception to social representation. *British Journal of Social Psychology*, 42, 55–73.

Joffe, H. and Bettega, N. (2003). Social Representation of AIDS among Zambian Adolescents. *Journal of Health Psychology*, 8.616-131.

Jovchelovitch, S. (2007). *Knowledge in context: Representations, community and culture.* London: Routledge.

Kamali, A., Carpenter, L., M., Whiteworth, J., A., et al. (1999). Seven-year trends in HIV-1 infections rates and changes in sexual behaviour among adults in rural Uganda. *AIDS,* 14, 4.427-434.

Kamali, A., Quigley, M., Kinsman, J., et al. (2003). Syndromic management of sexually-transmitted infections and behaviour change interventions on transmission of HIV-1 in rural Uganda: A community randomized trial. *Lancet,* 361, 645-651.

Kilian, A.,H.,D., Gregson, S., Ndynabangi, B., et al. (1999). Reductions in risk behavior provide the most consistent explanation for declining HIV-1 prevalence in Uganda. *AIDS,* 13, 3. 391-398.

Kinsman, J. (2010). *AIDS Policy in Uganda: Evidence, ideology, and the making of an*

African success story. New York: Palgrave Macmillan.

Klovdahl A., S. (1985). Social networks and the spread of infectious diseases. The AIDS example. *Social Science and Medicine,* 21, 11.1203-1216.

Konde-Lule, J., K., Berkley, S. F., and Downing, R. (1989). Knowledge, attitudes and practices concerning AIDS in Uganda. *AIDS* 3, 8. 513-518.

Lahlou, S. and Abric, J-C (2011). What are the "elements" of a representation. *Papers on Social Representations*, 20, 20.1-20.

Low-Beer, D., and Sempala, M. (2010). Social capital and effective HIV prevention: community responses. *Global Health Governance* 4, 1.1-17.

Low-Beer, D. (2004). The alphabet of AIDS prevention. *The Lancet,* 364:19-20.

Low-Beer, D., and Stoneburner, R. (2003). Behaviour and communication change in reducing HIV: is Uganda unique? *African Journal of AIDS Research*, 2, 1. 9-12.

McGrath, J., W., Celentano, D., D., Chard, S. E. et al. (2007). A group-based intervention to increase condom use among HIV serodiscordant couples in India, Thailand, and Uganda. *AIDS Care,* 19, 3. 418-424.

Melkote, R., S. and Steeves, L., H. (2001). *Communication for development in third world: theory and practice for empowerment*. London: Sage Publications.

Moscovici, S. (2000). *Social representations: Explorations in social psychology*. Gerard Duveen (Ed.), Cambridge: Polity.

Moscovici, S. (1998). The history and actuality of social representations. In U. Flick (Ed.), *The Psychology of the Social* (pp. 209–247), Cambridge: Cambridge University Press.

Moscovici, S. (1976). *Social influence and social change*. Translated by Carol Sherrard and Greta Heinz. New York: Academic Press.

Moscovici, S. (1961). *La psychanalyse, son image et son public.* Paris : Presses universitaires de France.

Najjumba, M., I., Ntozi, J., Ahimbisibwe, E., et al (2003). Risk perception and condom use in Uganda. *African Population Studies,* 18, 1. 67-80.

Nantulya, V. (2012). *To protect yourself, your child and your spouse: the choice is yours*. Kampala: Uganda AIDS Commission.

Nhamo, M., Campbell, C., and Gregson, S. (2010). Obstacles to local-level AIDS competence in

rural Zimbabwe: putting HIV prevention in context. *AIDS Care*, 22, Supp 2. 1662-1669.

Nunn, A., J., Wagner, H.,U., Okongo, J.,M., et al. (1996). HIV-1 infection in a Ugandan town on the trans-African highway: prevalence and risk factors. *International Journal of STD &AIDS,* 7, 2.123–130.

Obbo, C. (1993). HIV transmission through social and geographical networks in Uganda. *Social Science and Medicine,* 36, 7. 949-955.

Parker, R.,G. and Gagnon, J., H. (1995). *Conceiving sexuality: Approaches to sex research in a postmodern world*. New York/London: Routledge.

Parker, R.,G., Herdt G. and Carballo, M. (1991). Sexual culture, HIV transmission and AIDS. *Journal of sex research*, 28,1.77-98.

Parkhust, J., O. (2001). The crisis of AIDS and the politics of response: The case of Uganda *International Relations,* 15, 69-86.

Rogers, E.M. (1962). *Diffusion of innovations.* New York: Free press.

Seckinelgin, H. (2012). The global governance of success in HIV/AIDS policy: emergency action, everyday lives and Sen's capabilities. *Health and Place*, 18, 3. 453-460.

Sen, A. (1992). *Inequality re-examined.* Cambridge: Harvard University Press.

Serwadda, D., Wawer, M., J., Musgrave, S., et al. (1992). HIV risk factors in three geographic strata of rural Rakai District, Uganda. *AIDS* 6, 9. 983-990.

Serwadda, D., Mugerwa R., D., Sewankambo, N., K., et al. (1985). Slim disease, a new disease in Uganda and its association with HTLVIII infection. *Lancet* 326, 8460. 849-852.

Sinead, D., M., Glenda G., Ashraf K. et al. (2006). AIDS prevention in South Africa**.** *The Southern African Journal of HIV Medicine,* 7, 2. 13-17.

Stoneburner, R., L. and Low-Beer, D. (2004). Population-level HIV declines and behavioural risk avoidance in Uganda. *Science,* 304, 5671.714-718.

Stoneburner, R., L. and Carballo, M. (1997). *An assessment of emerging patterns of HIV incidence in Uganda and other East African countries*. Geneva: International Centre for Migration and Health.

Thornton, R., J. (2008). *Unimagined community: Sex, networks, and AIDS in Uganda and South Africa*. Berkeley: University of California press.

Tumwesigye, B., T., Nakanjako, D., Wanyenze, R., et al. (2013). Policy development,

implementation and evaluation by the AIDS control program in Uganda: a review of the processes. *Health Research Policy and Systems,* 11, 7.1-6

Uganda AIDS Commission (2012). *Global AIDS response progress report: Uganda Jan 2010-Dec 2012.* Kampala: Uganda AIDS Commission.

Uganda Bureau of Statistics (2011). *Statistical abstract 2011*. Kampala: Uganda Bureau of Statistics.

Whyte, S. **(**1997). *Questioning misfortune: The pragmatics of uncertainty in Eastern Uganda*. Cambridge University Press: Cambridge.

World Health Organisation (WHO) (2012). *Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low and middle-income countries: Recommendations for a public healthy approach.* Geneva: WHO.

Internet Sources

Ayebazibwe, A. (2013). Why these interventions hold the key to HIV/Aids prevention. *Daily Monitor,* Retrieved Dec 2, 2013 from http://www.monitor.co.ug/Magazine/Health---Living/why-these-interventions-hold- the key-to-HIV-Aids.

Decosas, J. **(**2002). *The Social Ecology of AIDS in Africa.* Draft paper prepared for the UNRISD project HIV/AIDS and Development March 2002 Retrieved March 24, 2009 from http://www.unrisd.org/unrisd/website/document.nsf/d2a23ad2d50cb2a280256eb300385855/e60aad2efa4882f4c1256bb8004f2f3f/$FILE/decosas.pdf.

Hogle, J., A., Green, E., C., Nantulya,V. and Stoneburner, J. (2002). *What happened in Uganda? declining HIV prevalence, behaviour change and the national response: project lessons learned case study*. Washington, D. C.: USAID Office of HIV/AIDS, Bureau for Global Health, Contract number HRN–C–00–99– 00005–00, Retrieved March 24, 2009 from http://www.usaid.govt/pop_health/aids/Countries/Africa/Uganda_report.pdf.

Kirby, D. (2008). *The Success in Uganda. An analysis of behavior changes that led to the declines in HIV prevalence in the early 1990s.* Retrieved Sept 26, 2010 from http://programservices.etr.org/base/documents/Uganda-BehaviorsFormat.pdf.

Population Reference Bureau (2013). H:\World - Data Profile. Data Finder by the Population Reference Bureau.htm. Retrieved May 2, 2013, from http://www.prb.org/DataFinder.aspx.

Uganda Ministry of Health (2012). *Uganda AIDS indicator survey preliminary report*. Retrieved Oct.

31, 2014 from http://dhsprogram.com/pubs/pdf/AIS10/AIS10.pdf.

UNAIDS/PennState Project (1999). *Communications Framework for HIV/AIDS: A New Direction.* Retrieved March 6, 2010 from http://data.unaids.org/Publications/IRC-pub01/jc335-commframew_en.pdf.

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