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## Beyond health: medicines, food supplements, energetics and the commodification of self-performance in Maputo

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**Abstract** With an increasing range of products in global and local markets, more options are available for individuals to enhance their image and their (cognitive, social and physical) performance. These ‘performance consumptions’ relate to ideals of well-being and improvement, and are based on constructed desires, expectations and needs that go beyond the (often blurred) dichotomy of health and illness. Drawing from mixed-methods research in Maputo, Mozambique, this paper discusses individuals’ use of medicines and other substances – pharmaceuticals, food supplements, traditional herbs, cosmetics and energy drinks – for managing different aspects of their everyday lives. Through an overview of the main consumption practices, we explore the underlying purposes and strategies of users, and the perceived legitimacy and risks involved when using a variety of products accessible through formal and informal exchange channels. From tiredness to sexual and aesthetic management, we show how the body becomes the locus of experimentation and investment to perform in accordance with socially expected roles, individual aspirations and everyday tasks. With insights from individuals’ accounts in Maputo, we aim to add to discussions on pharmaceuticalisation of body management by showing how the emergence of new performance consumptions is articulated with the reconfiguration of more ‘traditional’ consumption practices.

**Keywords:** medicines, performance enhancement, commodification of self-performance, pharmaceuticalisation, mixed-methods, Maputo, Mozambique

### Introduction

#### *Pharmaceuticalisation and performance management*

With an increasingly diverse offer of products in global and local markets, more options are becoming available for individuals to improve self-performance. In the sociological literature,

the increasing use of pharmaceuticals to manage personal improvement and well-being has been conceptualised within the process of 'pharmaceuticalisation' (e.g. Coveney *et al.* 2011, Lopes *et al.* 2015, Williams *et al.* 2008). Pharmaceuticalisation thus captures 'the potentially widespread use and uptake of pharmaceuticals for diverse purposes which extend far beyond the realms of medicine or the strictly medical' (Williams *et al.* 2008: 816). This definition encompasses consumption practices that go beyond therapeutic purposes to other dimensions of individual and social lifestyle, and to a wider consumer culture. Sociological literature on pharmaceuticalisation, however, has largely neglected the role of other non-pharmaceutical products, used simultaneously with or as alternatives to pharmaceuticals, in stimulating performance consumption practices (Lopes and Rodrigues 2015).

The growing popularity of 'enhancement products' includes a variety of substances, such as pharmaceuticals, food supplements, natural/traditional medicines and energy drinks. These are used *strategically* as a means 'to better meet life challenges and/or as self-improvement' (Quintero and Nichter 2011: 343). These 'enhancement consumptions' can encompass several areas of individuals' social and personal lives, for example 'to improve social, emotional and sexual performance in keeping with cultural norms, values and expectations' (idem: 343). While many consumption practices may not necessarily be a way to follow cultural norms, as this paper shows they are often a tool to cope with the pressures resulting from them.

The growing body of sociological and anthropological literature focusing on cognitive, physical and social performance investments shows both increasing variety of substances and possibilities for customising the body (its appearance and performance), and how substances are appropriated and used according to situated needs and/or aspirations. In many contexts, for example, the off-label use of methylphenidate (Ritalin<sup>®</sup>) amongst university students is reportedly increasing (e.g. Coli *et al.* 2016, McGabe *et al.* 2015, Partridge *et al.* 2013). Besides the aesthetical and recreational purposes of 'non-medical' use of this substance (NIDA 2005 cited by Barros and Ortega 2011), most studies focus on the use of such prescription stimulants as a 'study aid' for increased concentration and alertness (Teter *et al.* 2006). The management of sleep has also been raising attention as it is associated with 'health, beauty, leisure and pleasure' (Williams and Boden 2004) and linked to both mental and physical performance. Studies on the pharmaceuticalisation of sleep amongst older (e.g. Pegado *et al.* 2018) and younger people (e.g. Coveney 2012) show the importance of managing sleep for individuals to perform their everyday tasks. Alongside food supplements used for multiple purposes (academic, physical, aesthetical), and other consumptions associated with specific 'subcultures' such as bodybuilding (Monaghan *et al.* 2000), the use of energy drinks, especially amongst youths, has also recently received attention in the literature. These popular drinks are also used as for different purposes, including the recreational; to improve concentration and ability to study (Lopes and Rodrigues 2015); and to enhance athletic performance (e.g. Hoyte *et al.* 2013). Other products to self-manage sexual performance and aesthetics, especially amongst youths, are also increasingly available (Hardon *et al.* 2013). The use of sex enhancers such as sildenafil citrate (Viagra<sup>®</sup>) to increase pleasure and boost male sexual confidence (Both 2016), or the ingestion and/or injection of hormones to shape and feminise male bodies (Hardon and Idrus 2014), are a few examples.

Most of these studies, however, tend to overlook the intersections of more 'traditional' and 'modern' practices, conceptions and resources in the (re)configuration of such consumptions. This paper therefore aims to analyse individuals' practices and perceptions regarding the use of pharmaceuticals, food supplements, cosmetics, herbal/traditional medicines as well as energy drinks to manage the performance of daily tasks, social roles and personal aspirations in Maputo.

Inspired by Goffman's (1959) notion of performance and the management of self-impressions in the 'presentation of the self in everyday life', and Featherstone's (1982) conceptualisation of 'Performing Self' within consumer culture, we focus on the use of medicines and other substances to help manage everyday performance. We use the term 'performance consumptions' (Lopes *et al.* 2015) to focus more on the social and individual purposes of use, rather than on what the substances were produced, prescribed or advised for.

#### *From enhancement to performing (self)*

Besides the literature debates on the ethics around new 'smart drugs' (Cakic 2009, Rose 2008) or 'lifestyle drugs' (Flower 2004, Lexchin 2001), the ultimate purpose of such products, whether to treat or to enhance, also implies a categorisation that presents itself as problematic (e.g. Coveney *et al.* 2011). The most common definitions of enhancement technologies stress their purpose as going beyond health maintenance and body repair (Hogle 2005). The problematic of such a definition serve as a springboard to the discussion of what, then, is considered 'normal' and 'beyond normal' and may have implications in terms of the (social, medical, ethical) legitimacy of such consumption practices. Ultimately, as Synofzik (2009:91) argued, 'every treatment presents a certain form of enhancement'. Therefore, instead of confining our discussion to these two categories (enhancement and treatment), our analytical interest focuses on the 'emic' purposes for which people consume certain products.

The increasing centrality of modern pharmaceuticals in individuals' lifestyle and body management also further blurs other dichotomies such as patient and consumer. Such consumption practices are based on constructed desires, expectations and needs that go beyond the *healthism* ideology (Crawford 1980) and are more related to a wider consumer culture within 'late capitalist society' which emphasises the importance of the body, appearance and performance (Featherstone 1982). The body has become a 'vehicle of pleasure and self-expression' (idem: 18). This relates to what Featherstone calls the *inner* and the *outer* body: the former related to health maintenance and physical performance and the second to the body's appearance and control within social space. As Shilling (1993) suggested, health and appearance have become increasingly associated with each other as they are both part of the 'presentation of self' (Goffman 1959). In this sense, the 'body has become a project to be worked on as part of a person's self-identity' (Shilling 1993: 6). Thus, the new conception of self that has emerged within consumer culture, and its new relationship with the body, is that of a 'performing self' as 'it places greater emphasis upon appearance, display and the management of impressions' (Featherstone 1982: 27).

The construction of (self-) identity, or 'individuality', associated with the emergence of modern societies (see Giddens 1991) also sheds light on the idea of an 'ongoing' process emphasised by the ethnomethodological writings of Garfinkel (1967) in the social construction of (gendered) self (cf. Brickell 2003), and on how gender is performed in everyday interactions (Brickell 2003, Butler 1990, Measham 2002, West and Zimmerman 1987). Although this article does not focus on gender performativity, it is this notion of *doing* and the management of self-performance through the use of medicines and other substances that we want to explore in our analysis.

Following from the notion of 'commodification of health' (Nichter 1989), which refers to the pursuit of health through the consumption of medicines, we look at how the commodification of self-performance together with the global proliferation of products used for such purposes are expressed in local consumptions in Maputo. Through an overview of the main consumption practices shared and discussed by the study participants, we explore the purposes and strategies of users, as well as the perceived legitimacy and risks involved in the use of a variety of products available through formal and informal exchange channels. From tiredness

management to sexual performance and body aesthetics, we show how the body becomes the locus of experimentation and investment to perform in accordance with situated needs or aspirations. Drawing from individuals' experiences and understandings in Maputo, we aim to add to the sociological and anthropological discussions on pharmaceuticalisation of body management, by showing how the emergence of new performance consumptions is articulated with the reconfiguration of older 'more traditional' consumption practices.

In the following section we briefly describe the study setting and recent changes in the Mozambican urban society that set up some of the contextual background for our analysis. We next present the methods used to collect and analyse the data, followed by the main findings of this study. We return to the theoretical discussion in the last section of the paper.

## Setting

Maputo is the capital and most populous city of Mozambique, with approximately 1.3 million people (INE 2017). It is a dynamic and multicultural city, with inhabitants coming from all over the country as well as other parts of the world.

Since independence in 1975, Mozambique, and Maputo in particular, have witnessed rapid political, social and economic changes, with Frelimo's post-independence modernist and socialist reforms, the civil war and the transition to a market economy. Rising socioeconomic inequalities and urban poverty stem from rapid urbanisation, and price and market liberalisation (Hanlon 2010, Pitcher 2002). These changes have had implications for the capital's population, in terms of material living condition and also in terms of individuals' aspirations and ambitions. The rise of international investment, population mobility and the importation of goods in the last few decades have further fuelled the proliferation of 'western' and globalised images, values, lifestyle ideals and aesthetic references.

The impact of these changes on sexuality, family structure and gender relations has received particular attention in the literature (see for instance Arnfred 2011, Aboim 2009, regarding the 2003 Family Law). These influences have further contributed to a multiplicity of (sometimes conflicting) views and practices regarding the (re)construction of male and female identities. As Groes-Green (2009) and Aboim (2009) have shown in their studies of changing masculinities in Maputo, the incapacity of many young men to financially provide for their partners and family has led to a change in the paradigm of male dominance, including the emerging importance of sexuality as a tool of power for men, but also for women (Groes-Green 2013). The concern of many young men with their physical aesthetics, sexual performance and the satisfaction of female partners has become a way to compensate for their lack of financial strength and to seek other forms of power and male authority (Groes-Green 2009).

Emphasising the *agency* of individuals in the quest to fulfil their personal desires and social expectations, these and other studies (e.g. Faria 2016, Manuel 2013) are a useful sociocultural background to better understand some of the consumption practices analysed here.

## Methods

### *Data collection*

This mixed-methods research generated qualitative and quantitative data. The fieldwork in Maputo city was conducted by the first author for a total of 10 months over two phases. During the first phase of data collection (2013–2014), she undertook observations of client-provider interactions in pharmacies, conducted exploratory interviews and informal conversations

with practitioners and representatives from different health-related organisations (pharmacy workers, medical doctors, traditional healers, alternative therapists, a Chinese clinician and members of the Ministry of Health). Additionally, seven focus group discussions (FGDs,  $n = 42$ ) were performed with university students, a theatre group and residents in two socio-economically different neighbourhoods.

The above qualitative information informed the design of a household survey. Using a random route sampling method, a total of 265 questionnaires were conducted in 15 randomly selected neighbourhoods in Maputo city. The criteria for eligibility were: being Mozambican, living in the house, and being 18 years old or more. Enumerators for the questionnaires were undergraduates studying sociology at the Eduardo Mondlane University (UEM). They were trained and supervised by the first author, who accompanied them to the neighbourhoods. The survey covered 265 respondents (one person per household) from multiple religions and ethnic backgrounds. The age range of respondents was 18–87 years old (mean 34). Almost two-thirds (68.7%) were female and 31.3 per cent were male. A slight majority was employed (37.7%) and/or students (27.9%).

In the second phase of fieldwork (2016), more in-depth qualitative data were collected. Repeated follow-up interviews (2–3 encounters) were conducted with 17 participants (15 from the household survey and two from the FGDs) and 10 key informants to explore further the initial main findings. Only individuals who had formally agreed to participate in the second part of the project were contacted. This strategy, shown to be effective in previous studies on medicine use (Rodrigues 2010), allowed the selection of individuals based on their socio-demographic characteristics and consumption practices, and enabled a follow-up of such practices. The selection criteria for the 17 in-depth interviews included an attempted balance in terms of sex (nine men and eight women), age (from 21 to 59, by the time of the interview), school level (from 10th [secondary] grade to university studies) and from 10 different neighbourhoods in Maputo city. The 10 key informants consisted of nine practitioners from different health-related organisations and a personal trainer (PT) working in a gymnasium (gym).

In Maputo, the research project was hosted by the Department of Sociology (through the Health and Society Research Group), Faculty of Arts and Social Sciences, UEM. It received formal ethical approval from the Institutional Committee on Bioethics for Health of the Faculty of Medicine and Maputo Central Hospital (CIBS\_FM&HCM) as well as all the required administrative permissions. Written informed consent was obtained from all individuals from the community who participated in the FGDs, household survey and individual interviews. All other informants gave oral consent.

### *Data analysis*

The quantitative data were analysed using IBM SPSS Statistics 20. Both FGDs and interviews were recorded and transcribed. These were first analysed through a thematic content approach (Green and Thorogood 2014), to distinguish different dimensions of analysis and types of consumptions. Next, using a phenomenological perspective (Schutz 1970), we looked at the experiences of users, as well as the perceptions of non- and prospective users, in terms of their reasons and motivations for using (or not) the available products for a variety of situations, the associated risks, their main sources of information and access, and the strategies used for dealing with certain conditions. We considered all kind of products individuals used when managing different aspects of their everyday life, including in terms of prevention, well-being and enhancement of their daily performance.

In the following section, we present a statistical overview of the main consumption practices, which will then be complemented by, and articulated with, qualitative data collected in different stages of the research.

## Findings

### *Statistical overview of the main consumption practices*

The survey results show individuals used an array of products (medicines, cosmetics, drinks) for many different purposes. The questionnaire included two blocks of questions regarding potential performance consumptions: one contained a list of products and the other a list of possible consumption situations. Tables 1 and 2 summarise the main results.

Around 48 per cent ( $n = 127$ ) of individuals reported having consumed at least one of the listed products.<sup>1</sup>

The most commonly consumed ones were: energy drinks (25.9%), mainly reported for fatigue, hangover and leisure; SK Derm (19.5%), for pimples, allergy, stains and skin in general; and aloé vera/Mangana (17.9%), for moisturising or lightening the skin. All these products were mostly recommended by friends or family, or taken on their own initiative.

Overall, the consumption of these products was higher amongst young people,<sup>2</sup> especially in their 20s, and individuals with higher economic<sup>3</sup> and educational<sup>4</sup> backgrounds. It was also slightly higher amongst men (the main consumers of energy drinks) than women (the main users of SKDerm) but with no significant differences.

Regarding the list of possible situations which might have motivated consumption,<sup>5</sup> 36.2 per cent ( $n = 96$ ) of the respondents reported having taken a medicine or other product for at least one of the purposes on the list.

Table 2 shows that 20 per cent of all respondents used something to 'improve the image/aesthetics' (mostly products to apply on the face, pharmaceuticals and others); 9.1 per cent took something to 'improve good mood' (mainly energy drinks, but also pills); and six per cent took something to 'increase physical resistance' for professional or sport purposes (mainly energy drinks). In most of these situations no health provider was consulted, and individuals followed their own initiative or their friends'/family's suggestions.

Table 1 *The three most commonly consumed products*

<i>List of products</i>	<i>(%)</i>
Energy drinks	26
Sk Derm <sup>®1</sup>	20
Aloe Vera/Mangana	18

<sup>1</sup>SK Derm is an ointment and contains betamethasone (corticoid), clotrimazole (antifungal) and gentamicin (antibiotic). It is indicated for acne and one of the reported side-effects was skin lightening.

Table 2 *The three main situations managed with substance consumption*

<i>List of situations</i>	<i>(%)</i>
Improve image/aesthetics	20
Improve good mood	9
Increase physical resistance	6

The percentage of those who consumed something to improve their performance was, again, higher amongst individuals with higher economic<sup>6</sup> and educational<sup>7</sup> backgrounds. It was also slightly higher amongst men (especially for improving good mood and physical resistance) and young adults (particularly for improving their image and physical resistance), though with no significant differences.

#### *Energy Drinks as a boost to everyday performance*

Amongst the survey respondents who were later interviewed, some expressed how physically and mentally tiring their everyday lives were. Many interviewees did not consider (or could not afford) managing tiredness by consuming any substance. Others resorted to painkillers or anti-inflammatory drugs (especially Ibuprofen) as body relaxers, or opted for energy drinks to enhance physical energy and improve their mood.

While, in many situations, energy drinks were consumed for a recreational purpose, in most reported circumstances they were strategically used to help perform different tasks and roles. In most cases, people had started using energetics due to workload and work-related stress, when studying, or the combination of both activities. Consumption was mainly encouraged by peers to study longer, work harder, give relief from tiredness and perform additional activities.

The *multifunctionalities* attributed to these drinks were also manifested in the strategies reported by the study participants: to combine studying in the morning with evening working (and sometimes counterbalanced later with sleeping pills to manage sleepiness/awakeness); to enable daily work along with household duties (performing the 'good' mother or housewife); and to be able to perform other physical activities after a full working day (such as engaging in sexual activities). In all these situations energy drinks were used to cope with and to help individuals perform their multiple roles as students, workers, mothers, husbands or lovers.

According to some interviewees and FGD participants, one of the main purposes of consuming energy drinks, especially amongst young men, was for sexual activities. One example of such a need for stimulating the body came from a 23-year-old young man, married and father of a 2-year-old baby. Working as a mechanic, he used energy drinks on heavy work days, both for work and after work activities. Although hesitant about the use of sexual enhancers, he was familiar with the most popular ones (such as Viagra, Furunbao, Enzoy and the traditional Mozambican Gonazororo) through accounts of many of his friends:

I've already felt curiosity in trying out, but I've never tried. The only time I'd needed a stimulus, I used an energetic [drink]. It was a hard day at work. I came home and I came across this situation. So, I decided to take an energetic because it would stimulate me a bit more. (male, 23)

While the use of sexual enhancers was considered a 'delicate issue' and a 'taboo' by all informants, the use of common energy drinks or other 'in-between' strategies (i.e. non-medical products, such as raw egg, black beer, etc.) to stimulate the body for sexual purposes was more openly disclosed. Yet, according to most study informants, the use of sexual enhancers was a widespread and growing practice, especially amongst young people.

#### *Commodification of sexual performance*

A variety of sexual enhancers is available at pharmacies, shops, supermarkets, street markets and through informal vendors in Maputo. According to pharmacy workers, these were amongst the most requested medicines without prescription. Although, according to the study participants, products to boost sexual performance have long been used, patterns of use seem to be changing. As a 60-year-old study informant described:



In the old days, men [above 40s, 50s] needed to go to a traditional healer to get the product. The healer used to prepare it with several plants, put [it] in a bottle and people would drink it along. Besides giving more energy, it cleaned the blood, the veins and the person stayed well. But nowadays young people want to play longer. (male, 60)

He referred to such products as ‘fortifiers’ that were primarily for older people who lacked energy for an active sexual life. His description underlines a holistic conception of medicine and the body, where these more ‘traditional’ concoctions were prepared not only to improve sexual activity but also to rehabilitate the body as a whole. This differs from ‘modern’ medicines (and certain commercialised substances) that are sought as quick, private and easily accessible fixes for specific sexual encounters. It also highlights the therapeutic relations in which such substances were embedded; something ‘modern’ medicines allow to eschew due to their potential ‘liberating’ effect (Van der Geest and Whyte 1989, Whyte 1988).

Indeed, the increasing accessibility of ready-to-use products across the city, some at quite affordable prices, and the convenience of their access points seemed to suit users’ demands. Some pharmacists reported that Friday and Saturday evenings were the ‘sales peaks’ for sexual stimulants and condoms, and morning-after pills (emergency contraceptives) on the following days. The availability of these products ‘in the streets’ further enabled their widespread dissemination amongst different layers of society. Enzoy,<sup>8</sup> for example, became popular for being sold in informal street stalls at a low price, as a young adult male described. Another popular product was Furunbao, a Chinese medicine, also available in the streets as well as in pharmacies and other shops (including Chinese grocery stores).

The growing offer of products goes hand in hand with individuals, particularly young people, being increasingly in contact with different aesthetical and performative images and ideals in the media, and the internet in particular. A 35-year-old interviewee, for instance, discussed how increased access to the Internet and the effects of globalisation were changing ‘the good values we brought from our heritage’. He explained how girls tried to look like Beyoncé or party hard like Britney Spears, or how boys tried to follow certain performative standards such as the ones promoted by the pornography industry. The influence of pornographic films on sexual practices, expectations and aesthetics amongst young people was also mentioned by few others, and is consistent with other studies both in Maputo (Osório and Cruz e Silva 2008) and in other African urban contexts (e.g. Both 2016).

Men also highlighted the pressure to satisfy women. One interviewee who had started using sexual enhancers a few years before the interview described some of the ‘modern’ challenges:

[Today] there are vibrators. The girls already use it. At ages you cannot imagine! So, when you find someone with a vibrator, you no longer give her pleasure as the vibrator does. Then you, being a man, will want to overcome that vibrator. You will resort to other things. Because she demands it and says it to our face! (male, 38)

Expressions like ‘overcome the vibrator’ or ‘dominate her’ were used when describing the challenges of a desired male sexual performance, and what it may represent in terms of their *manhood* (cf. Aboim 2009, Groes-Green 2009). This brings us back to the theoretical debate on whether individuals are consuming these products to restore their (‘normal’) energy or to go beyond it. While a few interviewees considered the consumption of sexual stimulants as a way of restoring energy lost because of stress, excessive workload, high alcohol consumption and a poor diet, most argued that sexual stimulants were mainly to enhance and go beyond their ‘normal’ capacities.

The variability and fluidity of such (often contested) purposes are also expressed by some of the consumption strategies and trajectories. The consumption experience of the previously

quoted interviewee illustrates this point. He started using energy drinks to stimulate the body, but later decided to try out something more effective:

We, men, depending on our own body, we have several products that we take to stimulate. A Red Bull, for example, for some people works well. I always took Red Bull, but in conversations between men, they ended up saying that 'this and this [product] is better than that'. So, we are in that phase of wanting to try everything. We have new [girl] friends and you know what these situations are like. So, we end up experimenting.

Despite the often-present notion of the singularity of the body in expressions like 'depending on our own body' (similar to the relational notion of compatibility in Hardon *et al.* 2013), it was especially based on privately shared experiences that the logic of experimentation took place. The secrecy of such consumptions, especially regarding female partners, was important to maintain the good reputation. Yet, sexual performance consumptions were not exclusive of men, as we illustrate next.

#### *Different strategies, shared concerns*

Discussions about sexual enhancers were mostly around men's use, but a few women also shared their consumption strategies. Besides the new products available to increase pleasure during sex, some women referred to the use of traditional medicines (but also other products, such as lemon or tea leaves), for tightening the vagina and/or stretching the vaginal labia.

One woman had what she called her 'private kit', a small case full of little plastic bags containing different traditional roots, dried herbs and branches. Amongst other things, she had different products for tightening the vagina and lightening her skin. Having three children from her ex-husband, she was now dating a European man. She used different strategies to keep him attached to her and always made use of her kit whenever they went out. As she argued:

As I've already seen, there is no love au naturel, you have to add this to be loved. (...) But this is not to be used with a poor man, you must keep it in your house. It is for the love of your life, or for the man who will help you living well. (female, 38)

Some of the products she used derived from Northern Mozambique and neighbouring countries. She referred to them as the beauty secret of Macua women, which they used in traditional initiation rites at the age of 12. 'After all, they were not born beautiful', she remarked. According to the female informants, these products are now sought in Maputo as a way to 'compete' with women coming from the North, and also to 'catch' certain men. In this sense, the use of these products seems to be 'disembedded' (Giddens 1990) from its original meanings, where they were used as part of initiation rites to 'becoming a woman' (Bagnol and Mariano 2011) within a 'shared socialisation' practice (Arnfred 2011). Instead, they are used as individual strategic tools to achieve a better sexual performance in order to increase success in finding and keeping the best partner.

#### *Aesthetical performance and changing beauty standards*

Commodification of self-performance was also expressed in the use of different substances for the management of other parts of the *outer* body. One-fifth of the survey respondents used something to 'improve image/aesthetics' (Table 2), especially applications for the face. SKDerm was one of the most mentioned products. As one female interviewee said, 'it has become fashionable'. It is indicated for acne,<sup>9</sup> but the side-effects make this cream appealing because it lightens the skin. The few women who talked about their own use, highlighted its aesthetical purposes of looking more beautiful and how their skin complexion contrasted with

the other girls whenever they went out. The use of whitening products raised controversial discussions amongst study participants. These were, however, less about the symbolic meanings behind the motivation to pursue a whiter skin (see for example Blay 2011), than the additional side-effects and the immediate disclosure of its use to others, due to its visual effects.

The management of self-performance encompassed multiple domains and performance consumptions, sometimes simultaneously. The previously quoted female interviewee illustrates this point. Along with diverse substances to enhance her sexual performance, she used other beauty products (including SKDerm, to make her skin lighter), which enabled her to produce and sustain a multi-dimensional performance standard. Not just a working single mother, who sometimes resorted to energy drinks to cope with home duties, she also performed as a beautiful and attractive woman, as well as an exceptionally skilled lover. As part of her *self-performing*, there were also other aesthetical characteristics she pursued. With the particular goal of dating a foreigner, who could provide her with emotional and financial stability, she emphasised both her 'exotic' African attributes, and what she perceived to be a more western female beauty ideal. When talking about such beauty standards, she described how certain notions of body aesthetics have changed during the last decades in Maputo:

We, Africans, by nature, must be chubby. Men like everything filled up. My deceased godfather used to tell me: 'you have to put some weight on, men don't like skinny women like that'. So, that [idea of skinny women] came from outside. (...) [After the civil war] foreigners started appearing here. They were beautiful foreigners, whom we weren't used to: big, muscular and everything there. And they came with that idea from there, which we did not know, that women are skinny. So, they chose the skinny ones. I was once told in the face by one foreigner whom I liked a lot: 'you are so pretty, just a pity you are so chubby'.

The perceived importance of these new bodily standards, together with recent health concerns of becoming overweight, prompt her to invest in losing weight, with intensive physical exercise and the use of a popular Chinese tea (helping her lose around 44 pounds). Despite variations regarding such standards, and the motivations for achieving them, these changing notions and investments around aesthetical performance were present in most study participants' accounts, both men and women. In the following subsection, we explore further some of those strategies, particularly within gym consumption practices.

#### *Gym consumptions and the body as a locus of experimentation*

According to the household survey, one-third of respondents practiced some kind of sport or physical activity, both for health and/or aesthetical purposes. As one FGD participant described:

We now care a lot about our aesthetics and there are many pills and teas which we, people of the gym, take to be able to have that desired physique. Women worry more about their fat, to remove it, otherwise we will not look at them. I don't know what the names are, but there are a lot of pills, and for the gym people to have muscles there are some pills too, we also use that ... (male, 35)

This and other FGD participants discussed how both men and women seek different aesthetical goals, and how different substances are increasingly becoming part of their strategies. He continued, pointing to the influence of the media on such standards:

It started to be in the present time, because all we do has to do with what we see from the outside, the television and so on. So, we also want to be like that. And as if that was not enough, they make it easier for us with all these medicines.

Alongside the growing variety of products to help shape the body, an increasing number of gyms and fitness centres have been opening in Maputo (Ribeiro 2014). In such environments, personal trainers (PTs) play a major role as advisers and initiators of certain performance consumptions.

One PT working in a small gym close to the city centre mentioned that they started selling energy drinks and later introduced other products. Some clients wanted to lose weight, others wanted to boost muscles and were not achieving their goals with training alone. Often asked for advice and for quick(er) solutions, PTs started recommending supplements and other products that gradually became available in the gym. These included pre-workout (for extra energy) and post-workout supplements (to alleviate muscle pain), protein bars and shakes, testosterone, anabolic steroids, creatine, energy drinks, glutamine-based tablets, green tea, etc. Some of them, he admitted, were brought illegally from South Africa to Maputo. As he had no formal training, the best way he found to know the products and to test their effects was by trying them out himself.

I used myself as a guinea pig, so I could advise others. I've even tried anabolics, but I have not taken them since November. I was gaining a lot of muscle mass, so I stopped. I decided to stop and take only protein and energy drinks.

He continued, elaborating on what he called the 'myth' around the side effects of taking testosterone:

There is a myth circulating around that testosterone decreases the size of the penis and decreases sexual potency. But it's the contrary. Testosterone increases sexual potency. It has some adverse effects, yes. The person sometimes gets a bit out of their mind (laughs). I took it myself and sometimes it made me more nervous. But I found a way to control myself.

Such embodied form of experiential knowledge was, then, the basis for advising his clients. The lack of training of some PTs together with the lack of information available to users, led clients to also use their own bodies to assess the products. It was, thus, mostly based on such shared experiences that most individuals managed their consumptions in an attempt to achieve the desired results.

While the motivations for consumption varied, it was the *performing self*, whether as an individual or as a group member, that was at stake. This participant's consumption is illustrative of this last point:

I started [using supplements to boost my muscles] by induction, it was not an advice. I thought: 'Epa, this one is big. He hangs out with me, he's my personal friend, we're going to the disco. This one is also big, we're a group, I've to be big too so the whole group is complete'. So, we'd go out, we'd go to clubs, and so on. It was a lot of gym and we consumed. (male, 33)

The aesthetics of the body were not, therefore, just a matter of looking more attractive. As emphasised above, the bodily performance was also about building an identity (Giddens 1991, Shilling 1993). These supplements were thus *a means to an end* (cf. Monaghan *et al.* 2000); in this case, belonging to a group, where this shared consumption was part of a wider set of shared practices and circumstances.

#### *Performance consumptions: risk perceptions and management strategies*

As we have shown so far, most performance consumptions were organised around limited information and were mainly based on shared experiences with peers. The role of social

networks as the main source of information, advice and, sometimes, access to the products was manifested amongst different performance domains. The novelty of some products, and the fact that their recommendation practices were mainly out of the medical domain, resulted in concerns about possible side-effects and risks associated with their use. These were often present in individuals' accounts, and were particularly salient in relation to sexual performance.

The perceived risks associated with the use of sexual enhancers were indeed one of the key factors influencing product choice. One of the attractive attributes of Furunbao, for example, was the fact that it was a Chinese *natural* product. As emphasised elsewhere regarding therapeutic medicine use in Maputo (Rodrigues 2016), one of the risks individuals associated with 'chemical products', i.e. pharmaceuticals, was possible dependency. The perceived risk of depending on substances to perform in a certain way cut across most of the consumptions in general, but was a particular concern regarding sexual activity. In this latter situation, depending on drugs was not so much associated with maintaining a certain level of performance, as was the case of certain products used for aesthetical purposes. The main concern was the possible damage to the natural capacities of the body; i.e. the use of sexual enhancers could result in men not being able to engage in sexual activities anymore without taking pills – a dependency which could affect *manhood*. As one interviewee argued:

A man who is a man must use his individual strength. (. . .) The negative consequence [of the use of sexual enhancers] is that you may no longer be a real man. (male, 36)

While the purpose of consumption seemed to relate to a specific form of *performing manhood*, the fears around possible irreversible damages were present in individuals accounts and, according to most interviewees, a risk consumers ran.

Generally, the management of perceived risks entailed different strategies: opting for natural products; reducing doses as a way of controlling possible side-effects (e.g. energy drinks, beauty products); or mixing pharmaceutical with 'softer' products (e.g. SKDerm with other creams, before applying on the face). The wide dissemination of certain products and popular brands amongst individuals' social networks, however, counterbalanced some risk perceptions. The common use of drinks like Red Bull© or Monster©, for example, seemed to contribute to a general idea around them as 'normal drinks' that also helped 'improve good mood' and/or 'restore the strength' of the body.

In some situations, side-effects were also viewed as indicators of efficacy. This was the case of Chinese teas used for losing weight. Having diarrhoea when consuming such products was, according to some informants, a common effect. One interviewee said that when she was feeling sick with such strong effects, she was told at a grocery shop that sold these products: 'Where have you seen weight loss without diarrhoea?' Perceiving it as a common symptom prevented her from going to the hospital. By doing so, and eventually solving the situation with other medicines she knew, the cycle of such performance consumption was kept outside the medical domain.

## Concluding discussion

This article sought to explore practices and understandings around the use of medicines and other substances – i.e. pharmaceuticals, food supplements, cosmetics, herbal/traditional medicines and energy drinks – for managing individuals' bodily performance in Maputo. As 'vehicles of ideologies' (Nichter and Vuckovic 1994), these globally proliferating products, sold

and sought for a variety of purposes, carry with them specific ideals of performativity and well-being, and project (new) possibilities in different spheres of everyday life, including work, education, beauty, health, care and well-being. As we have shown, the increasing availability of such products, through different formal and informal distribution channels, opens up opportunities for individuals to configure their performative selves, and above all, reshape expectations around their performance. These substances, and their use, are part of a wider consumer culture that cultivates the importance of self-performance (Featherstone 1982). Yet, as also shown, these investments are not made in a vacuum. They are sought as tools to fulfil socially expected roles and individual desires and aspirations, which are rooted in locally specific contexts of consumption.

From tiredness management to sexual performance and body aesthetics, the diversity of individual needs and aspirations that motivated the consumptions analysed in this paper are entangled with local reconfigurations of notions of selfhood, femininities and masculinities, gender roles and broader social relations (see for example Aboim 2009, Faria 2016, Groes-Green 2009, 2013, Manuel 2013). These are part of, and result from, larger social, political and economic changes, which included rapid urbanisation and a transition to a market economy (Pitcher 2002), and thus a wider circulation of goods, lifestyle ideals and aesthetic references particularly in Maputo. Such reconfigurations were particularly salient amongst youths, the ‘makers and breakers’ of society (Boek and Honwana 2005) and young adults, who are creative producers of change and continuity (Manuel 2013). Many of these consumptions reflected different pressures and anxieties resulting from these (ever changing) gender, individual and/or collective subjectivities.

Through several empirical cases, we have shown how certain shifting standards around the *inner* and *outer* body (Featherstone 1982) are perceived by and impact on study participants in Maputo. Most importantly, we have analysed how the strategies used by individuals to achieve such performative standards are likewise changing. The use of medicines and other substances as tools to such ends was not, however, evenly regarded as desirable or appropriate by all participants. Indeed, the co-existence of different, and sometimes conflicting, local understandings and practices reflected the unevenly perceived legitimacy of certain performance consumptions. The valorisation of the natural characteristics of the body, for example, seemed to go against the idea of adding something ‘artificial’ to its ‘natural’ functioning, possibly resulting in dependency. Consumers, however, emphasised the perceived pressures on their performance, whether directly by others or by the imperatives of their daily obligations. The secrecy of some consumption therefore also became part of the performance.

Following the logics of pharmaceuticalisation of everyday life (Williams *et al.* 2008, 2011), as discussed in the introductory part of this article, the commodification of self-performance in Maputo expresses an expansion of medicine use by ‘healthy people’ for purposes considered by the study participants as being mostly outside the medical (and, particularly, biomedical) domain. In this sense, examples from Maputo illustrate a wider social phenomenon in which the construction and (re)presentation of self- (Giddens 1991, Shilling 1993) or social (Monaghan *et al.* 2000) identity and subjectivities are increasingly pursued through the use of medicines and other commercial substances.

Such processes, however, take different shapes in the local contexts where they occur. As we have shown, consumption strategies involved the use of common pharmaceuticals as a tool to perform in certain situations, such as anti-inflammatory and painkillers as body relaxers (see also Hansen *et al.* 2008); the off-label use of certain products, such as SKDerm, due to their desired side-effects; the reconfiguration and ‘disembedding’ (Giddens 1990) of more ‘traditional’ practices, such as those related to sexual performance (see also Haxaire 2011); and the emergence of new investments such as the use of supplements to achieve desired aesthetical

standards, and the use of energetics to help in the management of everyday tasks. This shows how the emergence of new performance consumptions is articulated with the reconfiguration of older 'more traditional' practices.

The inclusion of a broad range of substances in our analysis, enabled exploring more nuanced and contextual aspects of such process, where the use of pharmaceuticals is articulated with, and sometimes substituted by, other 'in-between' or more natural (or 'traditional') options. As found in previous studies (Lopes *et al.* 2015), natural medicines or supplements can be instrumentally used in the very process of pharmaceuticalisation. It is in such a pragmatic consumption context that the intersection of 'traditional' and 'modern' products used to deal with the pressures to perform in certain ways takes place. Access to such diverse substances outside the domain of (traditional) medical encounters, made possible through their commercialisation (or commoditisation, cf. Kopytoff 1986), allows for different ways of appropriation that best fit individuals' interests, and best resonate with their life-world (Schutz 1970).

The variability of consumption purposes and trajectories, as presented in this article, also emphasise the limitations of analysing such practices according to a therapeutic/restorative versus enhancement framework. As we have shown, individuals appropriate the substances available to them in different ways, with the aim to improve certain aspects of their bodily performance. Yet, as many examples have also illustrated, improvement does not always, nor necessarily imply going beyond the 'natural' capacities of the body. Instead, discussions around the use of such substances were rich in showing the fluid range of subjective purposes of certain consumption practices. Hence, rather than categorising these investments in a dichotomised way, we framed them as performance consumptions with the aim to understand the 'emic' purposes of use; i.e. what individuals sought to achieve through the use of different substances.

Individuals' social networks played a prominent role in (re)creating and disseminating such practices, and new social actors such as personal trainers also emerged in this performance consumption arena (see also Clamote 2015). These diverse sources of advice, however, were not always able to provide users with more expert information and orientations. The scarcity of reliable sources of information further induced the reliance on socially shared experiences, usually within a strict group of members of personal networks, and the use of the body as the locus of experimentation to assess the effects, and side-effects, of the products (see also Hardon and Idrus 2014, Raposo 2016). Such embodied experiential knowledge, built on the basis of creative experiments with different products and dosages, was thus a way of dealing with the perceived risks and the uncertainty of the results given the singularities of each body.

This paper has provided an overview of the main performance consumptions shared by study participants in a globalised context such as Maputo city. As this and other studies (e.g. Hardon *et al.* 2013, Lopes *et al.* 2015) have shown, the generational aspect of performance investments play an important role on how possibilities of change and improvement are perceived and managed; while individuals' socioeconomic and educational backgrounds of individuals appear, as well, as conditions for stimulating certain types of investments. Considering these different consumptions and performance investments together, as part of a broader picture of the performing self, was important. A deeper understanding of the dynamics involved in the use of medicines and other substances in these and other performative areas needs to be further explored.

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## Notes

- 1 The following products were analysed: SKDerm, Bio-Ritmo/Sargenor, Aloé Vera/Mangana, Red Bull/Dragon/Monster, Steroids/Creatine, Xenical, Viagra/Silagra, Furunbao, Enzoy and Gonazororo.
- 2  $\chi^2(3) = 10.583, P = 0.014$ .
- 3  $\chi^2(2) = 17.217, P < 0.001$ .
- 4  $\chi^2(3) = 35.684, P < 0.001$ .
- 5 The list included performing at school exams; calm down when nervous/restless; improve studying/concentration; improve good mood; improve image/aesthetics; increase physical resistance; stimulate sexual practice.
- 6  $\chi^2(2) = 7.395, P = 0.025$ .
- 7  $\chi^2(3) = 10.577, P = 0.014$ .
- 8 Enzoy is an energy powder drink sold in small packs and was amongst the most cited products during the interviews.
- 9 According to the pharmacists consulted during the study, SKderm is subjected to medical prescription, but most pharmacies sell it over-the-counter.

## References

- Aboim, S. (2009) Men between worlds – changing masculinities in urban Maputo, *Men and Masculinities*, 12, 2, 201–24.
- Arnfred, S. (2011) *Sexuality and Gender Politics in Mozambique: Rethinking Gender in Africa*. Woodbridge: James Currey.
- Bagnol, B. and Mariano, E. (2011) *Género, sexualidade e práticas vaginais* (Gender, Sexuality and Vaginal Practices). Maputo: DAA/FLCS/UEM.
- Barros, D. and Ortega, F. (2011) Metilfenidato e Aprimoramento Cognitivo Farmacológico: representações sociais de universitários (Methylphenidate and cognitive pharmaceutical improvement: social representations among university students), *Saúde e Sociedade*, 20, 2, 350–62.
- Blay, Y. (2011) Skin bleaching and global white supremacy: by way of introduction, *The Journal of Pan African Studies*, 4, 4, 4–46.
- Boek, F. and Honwana, A. (2005) Introduction: Children & Youth in Africa: agency, identity and place. In Honwana, A. and Boek, F. (eds) *Makers & Breakers – Children & Youth in Postcolonial Africa*, pp. 1–18. Oxford: James Currey.
- Both, R. (2016) A matter of sexual confidence: young men's nonprescription use of Viagra in Addis Ababa, *Ethiopia, Culture, Health & Sexuality*, 16, 5, 495–508.
- Brickell, C. (2003) Performativity or performance? Clarifications in the sociology of gender, *New Zealand and Sociology*, 18, 2, 158–78.
- Butler, J. (1990) *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.
- Cacic, V. (2009) Smart drugs for cognitive enhancement: ethical and pragmatic considerations in the era of cosmetic neurology, *Journal of Medical Ethics*, 35, 611–5.
- Clamote, T.C. (2015) Reverberações da medicalização: paisagens e trajetórias informacionais em consumos de performance, *Sociologia, Revista FLUP*, 24, 35–57.



- Coli, A., Silva, M. and Nakasu, M. (2016) Uso não Prescrito de Metilfenidato entre Estudantes de uma Faculdade de Medicina do Sul de Minas Gerais (Non-prescription use of methylphenidate among students of a medical school in the Southern of Minas Gerais State), *Revista Ciências em Saúde*, 6, 3.
- Coveney, C. (2012) Cognitive enhancement? Exploring Modafinil use in social context. In Pickersgill, M. and Keulen, I. (eds) *Sociological Reflections on the Neurosciences*, pp 203–28. Bingley: Emerald.
- Coveney, C., Jonathan, G. and Williams, S. (2011) The sociology of cognitive enhancement: medicalisation and beyond, *Health Sociology Review*, 20, 4, 381–93.
- Crawford, R. (1980) Healthism and the medicalization of everyday life, *International Journal of Health Services*, 10, 3, 365–88.
- Faria, I. (2016) Therapeutic navigations – national and transnational quests for fertility among Mozambican women and men. PhD thesis, University of Amsterdam.
- Featherstone, M. (1982) The body in consumer culture, *Theory, Culture & Society*, 1, 2, 18–33.
- Flower, R. (2004) Lifestyle drugs: pharmacology and the social agenda, *Trends in Pharmacological Sciences*, 25, 4, 182–5.
- Garfinkel, H. (1967) *Studies in Ethnomethodology*. Malden: Blackwell.
- Giddens, A. (1990) *Consequences of Modernity*. Cambridge: Polity Press.
- Giddens, A. (1991) *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge: Polity Press.
- Goffman, E. (1959) *The Presentation of the Self in Everyday Life*. New York: Doubleday & Company Inc.
- Green, J. and Thorogood, N. (2014) *Qualitative Methods for Health Research*, 3rd edn. London: Sage.
- Groes-Green, C. (2009) Hegemonic and subordinated masculinities: class, violence and sexual performance among young Mozambican men, *Nordic Journal of African Studies*, 18, 4, 286–304.
- Groes-Green, C. (2013) ‘To put men in a bottle’: eroticism, kinship, female power, and transactional sex in Maputo, *Mozambique, American Ethnologist*, 40, 1, 102–17.
- Hanlon, J. (2010) Mozambique: ‘the war ended 17 years ago, but we are still poor’, *Conflict, Security & Development*, 10, 1, 77–102.
- Hansen, D., Hansen, E. and Holstein, B. (2008) Using analgesics as tools – young women’s treatment for headache, *Qualitative Health Research*, 18, 2, 234–43.
- Hardon, A. and Idrus, N. (2014) On Coba and Cokok: youth-led drug-experimentation in Eastern Indonesia, *Anthropology & Medicine*, 21, 2, 217–29.
- Hardon, A., Idrus, N. and Hymans, T. (2013) Chemical sexualities: the use of pharmaceutical and cosmetic products by youth in South Sulawesi Indonesia, *Reproductive Health Matters*, 21, 41, 214–24.
- Haxaire, C. (2011) ‘Better than Viagra®’. The Guru (Gouro) tooth stick, a 100% natural product’ – ethnopharmacology in times of the World Wide Web, *Curare – Zeitschrift für Medizinethnologie*, 34, 1–2, 36–50.
- Hogle, L. (2005) Enhancement technologies and the body, *Annual Review of Anthropology*, 34, 695–716.
- Hoyte, C., Albert, D. and Heard, K. (2013) The use of energy drinks, dietary supplements, and prescription medications by United States college students to enhance athletic performance, *Journal of Community Health*, 38, 575–80.
- INE, Instituto Nacional de Estatística (National Institute of Statistics). População projectada por distritos, Maputo Cidade 2007–2040 (projected population by districts, Maputo City 2007–2040). Available at <http://www.ine.gov.mz/> (Last accessed November 2017).
- Kopytoff, I. (1986) The cultural biography of things: commoditization as process. In Appadurai, A. (ed.) *The Social Life of Things: Commodities in Cultural Perspective*, pp 64–91. Cambridge: Cambridge University Press.
- Lexchin, J. (2001) Lifestyle drugs: issues for debate, *Canadian Medical Association Journal*, 164, 10, 1449–51.
- Lopes, N. and Rodrigues, C. (2015) Medicamentos, consumos de performance e culturas terapêuticas em mudança (Medicines, performance consumptions and changing therapeutic cultures), *Sociologia, Problemas e Práticas*, 78, 9–28.
- Lopes, N., Clamote, T., Raposo, H., Pegado, E., *et al.* (2015) Medications, youth therapeutic cultures and performance consumptions: a sociological approach January, *Health*, 19, 4, 430–48.

- Manuel, S. (2013) Sexuality in cosmopolitan Maputo: the aesthetics of gendered practice through the lenses of class. In Obrist, A. and Macamo, E. (eds) *Living the City in Africa: Processes of Invention and Intervention*, pp 195–212. Schweizerische Afrikastudien 10. Berlin: Lit-Verla.
- McGabe, S., Knight, J., Teter, C. and Wechsler, H. (2015) Non-medical use of prescription stimulants among US college students: prevalence and correlates from a national survey, *Addiction*, 99, 96–106.
- Measham, F. (2002) 'Doing gender' – 'doing drugs': conceptualizing the gendering of drugs cultures, *Contemporary Drug Problems*, 29, 335–73.
- Monaghan, L., Bloor, M., Dobash, R.P. and Dobash, R.E. (2000) Drug-taking, 'risk boundaries' and social identity: bodybuilders' talk about ephedrine and nubain, *Sociological Research Online*, 5, 2, 1–12.
- Nichter, M. (1989) *South Asian Case Studies*. Dordrecht: Kluwer Academic Publishers.
- Nichter, M. and Vuckovic, N. (1994) Agenda for an anthropology of pharmaceutical practice, *Social Science Medicine*, 39, 11, 1509–25.
- Osório, C. and Cruz e Silva, T. (2008) *Buscando sentidos: Género e sexualidade entre jovens estudantes do ensino secundário, Moçambique* (Gender and Sexuality Among Young High School Students, Mozambique). Maputo: WLSA Moçambique.
- Partridge, B., Bell, S., Lucke, J. and Hall, W. (2013) Australian university students' attitudes towards the use of prescription stimulants as cognitive enhancers: perceived patterns of use, efficacy and safety, *Drug and Alcohol Review*, 32, 295–302.
- Pegado, E., Lopes, N. and Zóximo, J. (2018) Pharmaceuticalisation and the social management of sleep in old age, *Ageing and Society*, 38, 8, 1645–66.
- Pitcher, M. (2002) *Transforming Mozambique: The Politics of Privatization, 1975–2000*. Cambridge: Cambridge Press University.
- Quintero, G. and Nichter, M. (2011) Generation RX: anthropological research on pharmaceutical enhancement, lifestyle regulation, self-medication, and recreational drug use. In Singer, M. and Erickson, P. (eds) *A Companion to Medical Anthropology*, pp 339–55. London: Blackwell Publishing.
- Raposo, H. (2016) O risco e os consumos de performance na população jovem: entre as concepções e as práticas (Risk and performance consumptions among young people: between conceptions and practices), *Revista Portuguesa de Saúde Pública*, 34, 2, 186–95.
- Ribeiro, E. (2014) Satisfação do Consumidor dos Serviços Oferecidos pelos Ginásios Particulares da Cidade De Maputo: Análise das Causas e Consequências (Consumer satisfaction with services provided by private gymnasiums in Maputo city: analysis of the causes and consequences). PhD thesis, ISCTE – Instituto Universitário de Lisboa.
- Rodrigues, C.F. (2010) Consumos Terapêuticos: notas e reflexões metodológicas (Therapeutic consumptions: notes and methodological reflections). In Lopes, N. (ed.) *Medicamentos e Pluralismo Terapêutico – práticas e lógicas sociais em mudança*, pp 267–82. Porto: Edições Afrontamento.
- Rodrigues, C.F. (2016) Medicines and Therapeutic Pluralism in Maputo: exploring modalities of trust and the (un)certainities of everyday users, *Health, Risk & Society*, 18, 7–8, 385–406.
- Rose, S. (2008) How smart are smart drugs?, *Lancet*, 372, 9634, 198–9.
- Schutz, A. (1970) *On Phenomenology and Social Relations*. Chicago: The University Chicago Press.
- Shilling, C. (1993) *The Body and the Social Theory*. London: Sage Publications.
- Synofzik, M. (2009) Ethically justified, clinically applicable criteria for physician decision-making in psychopharmacological enhancement, *Neuroethics*, 2, 89–102.
- Teter, C., McGabe, S., LaGrange, K., Cranford, J.A., et al. (2006) Illicit use of specific prescription stimulants among college students: prevalence, *Motives, and Routes of Administration, Pharmacotherapy*, 26, 10, 1501–10.
- Van der Geest, S. and Whyte, S. (1989) The charm of medicines: metaphors and metonyms, *Medical Anthropology Quarterly*, 3, 4, 345–67.
- West, C. and Zimmerman, D. (1987) Doing gender, *Gender & Society*, 1, 2, 125–51.
- Whyte, S.R. (1988) The power of medicines in East Africa. In Whyte, S.R. and Van der Geest, S. (eds) *The Context of Medicines in Developing Countries: Studies in Pharmaceutical Anthropology*, pp 217–33. Dordrecht: Kluwer Academic Publishers.

- Williams, S. and Boden, S. (2004) Consumed with sleep? Dormant bodies in consumer culture, *Sociological Research Online*, 9, 2, 1–12. Available at <http://www.socresonline.org.uk/9/2/williams.html> (Last accessed September 2017).
- Williams, S.J., Seale, C., Boden, S., Lowe, P., *et al.* (2008) Waking up to sleepiness: Modafinil, the media and the pharmaceuticalisation of everyday/night life, *Sociology of Health and Illness*, 30, 6, 839–55.
- Williams, S.J., Martin, P. and Gabe, J. (2011) The pharmaceuticalisation of society? A framework for analysis, *Sociology of Health and Illness*, 33, 5, 710–25.