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Gendered aspects of Danish students' non-medical use of prescription pharmaceuticals for enhancement purposes in the 'performance society'

Jeanett Bjonness

Abstract

This paper is based on narrative interviews with 60 young Danish students. It analyzes two strategies (normalization and augmentation) that students use to meet the expectations in the Danish educational system. A special focus is on how different non-medical use of prescription pharmaceuticals for cognitive enhancement (NMPCE) is related to these two different strategies. The paper uses two paradigmatic, narrative cases to explore and discuss whether and how the 'male strategy' of augmentation is more in accordance with the overall requirement to perform and to be 'special' in the educational system and the 'performance society' than the 'female' strategy of normalization. Of key interest is how recent media discourses affect young male and female students respectively. It seems, that both media discourse and the young students' narratives produce and re-produce quite traditional gender stereotypes.

The paper concludes that crafting a successful self may be a very ambivalent process, often with a sense of insufficiency. The students use pharmaceuticals when they experience a discrepancy between their individual capacities and competences and the outer demand to realize a perfect and well-performed self. On the one hand, the students experience an imperative to perform, on the other hand, they feel that the 'finishing line' is constantly moving and hard to reach. Finally, the paper discusses how gender differences in the ways students negotiate the demands in the educational system, may reflect a normative system of gendered praxis and relations.

Introduction and background

"Pharmaceuticalisation is most productively viewed as a complex, heterogeneous socio-technical process involving a number of dimensions and dynamics" (Williams et al 2011: 711).

This paper aims to contribute to the empirical and theoretical understandings of the relationships between educational pressure and non-medical use of prescription pharmaceuticals (NMPCE). It describes and analyses how young students describe the associations between NMPCE and pressures to perform within the educational system (see also McCabe et al., 2006). More specifically, my aim is to contribute to the knowledge on gendered meanings, and how gendered identities are performed (Terry-McElrath et al. 2009) through the use of different pharmaceuticals each with different motives, used in different settings (Zinberg, 1984), and with different legitimizing narratives. In focusing on these issues, I hope to supplement existing research that have examined how specific educational settings and requirements impact use (Wilens et al., 2008), and how these social settings of use intersect with gender.

In general, the argument contained here builds on three recent developments: reported increased pressure in Western educational systems (Gilliam, 2016; Jackson 2006; Låftman et al., 2013; Pedersen, 2016; Sørensen et al., 2017), an increase in non-medical use of prescription pharmaceuticals for enhancement purposes among healthy college-students (Boyd et al., 2009; LeClair et al., 2015; Maier & Schaub, 2015; Maier et al., 2018; McCabe et al., 2005, 2014; Petersen, 2015; Rabiner et al., 2009; Teter et al., 2010, 2012; Varga, 2012), and claims made in the drug and alcohol field that research needs to incorporate a more theoretically informed focus on gender (Hunt & Antin, 2017; Miller & Carbone Lopez, 2015). While the existing research has suggested a link between the first two developments by noting that the use of stimulants among US college

students is higher in schools with more competitive admission standards (Rabiner et al., 2010:259), the issue of gender within NMPCE has yet to be adequately explored (Green et al., 2009).

Pharmaceuticalisation is a complex and changing process, related to shifting notions of for example normality and disease (Williams et al., 2007). Some researchers use the term 'neuro-enhancement', while others prefer 'cognitive enhancement' to refer to improvement in the cognitive, emotional and motivational functions of healthy individuals through the use of pharmaceuticals (Repantis et al., 2010). This paper uses the term 'NMPCE' to cover the use of prescription pharmaceuticals for reasons other than medically intended and with the purpose of improved performance while studying (LeClair et al., 2015; Maier et al., 2018). Empirically the focus is on two different kinds of enhancement in the material: Some students use pharmaceuticals to improve their performance *up to the norm* – that is 'normalization', to be on level with other students, and some students use pharmaceuticals to improve *beyond the norm* – that is 'augmentation', to be better than the other students (Conrad, 2007).

Research on nonmedical use of pharmaceuticals is largely dominated by large-scale surveys on prevalence, motives, patterns of diversion, adverse effects and misuse (DeSantis et al., 2009; Eickenhorst et al., 2013; Mazanov et al., 2013; McCabe et al., 2014; Rabiner et al., 2015; Teter et al., 2010). This research is made up of different approaches and definitions (Maier & Schaub 2015; Maier et al., 2018), and even though some studies do distinguish by gender, others do not, and hence the picture is somehow confused. Hall et al. (2016:167) report that male college students use illicit prescription stimulants more than female students, and female students felt more pressured by e.g. school and work. However, a recent cross-sectional study in 15 countries (N:1681) about the use of psychoactive substances to increase performance at work or studying, concludes, that while patterns of use did not differ significantly between male and female participants, *motives did* differ (Maier et al. 2018). In this study female participants were more likely to use substances as study aids, to cope with stress and to lose weight, while males used substances more often to get high and to increase their sexual performance (ibid:107). Eickenhorst et al. (2010) although, do not report any important gender differences regarding motives to use pharmaceutical for cognitive enhancement, while Boyd et al. (2009:546) state that female respondents reported greater nonmedical use for self-treatment than males (see also Simoni-Wastila, 2000). So while a larger body of qualitative studies is emerging (Boyd et al., 2006; Petersen, 2015), more empirical research is necessary that explores the gendered differences in motives, experiences and attitudes among young users (Green et al., 2009; Pickersgill & Hogle., 2015:136; McCabe & Boyd., 2012). In the following I will explore three developments underpinning the argument of this article.

The performance society and educational research

Over the last decades, youth studies and sociology have associated the increasing focus on individual achievement and competition with some general changes in Western societies. These general changes have been examined by researchers. For example Sørensen et al. (2017:29, see also Brown, 2003) associate the recent focus on achievement to a 'hard' individualization connected to neo-liberal tendencies that revalue individual freedom, market forces and competition. This individualization implies a sense of society providing nearly limitless possibilities of constructing one's own identity and everyday life through individual choices (see also Illeris et

al., 2009; Woodman & Wyn., 2015), although at the same time creating very limited room to opt out or free oneself from these demands (see also Willig, 2013).

A growing body of literature define contemporary normative self-hood as predominantly active, efficient and well-performing (Brinkmann, 2010; Bröckling, 2015; Rose, 2003; Willig, 2005), and *achievement* is described as becoming the ideal for the 'good life' (Petersen, 2016). For example Skagestad & Madsen (2015), in their analysis of depression in Norwegian young adults associate depression to the increasing demands on the competent individual in late modernity to motivate, optimize and evaluate him/herself in order to increase efficiency and productivity. In individualized performance societies, the Danish sociologist Rasmus Willig argues, that critiques often become self-critiques, and consequently the only possible perceived way to change the situation, is to change oneself (Willig, 2013). This may encourage a great deal of uncertainty (Elliot, 2003), feelings of insufficiency (Ehrenberg, 2010) and sometimes even illness.

In line with these general tendencies, recent educational research reports on an increasing focus on efficiency, performance and accountability in educational policies in many Western societies (Devine et al., 2011:633; Grummel et al., 2009; Sørensen et al. 2017). Devine et al. (2011: 632) suggest that this development places new demands on students which require new kinds of competences. Moreover, these new requirements may create different challenges and insecurities, which may also be gendered. While there has been in educational research a focus on school-based masculinities and achievements (Renold & Allan, 2006; Willis, 1978), studies on what it means to be a young woman operating within a performance oriented educational system, are much less prevalent (exceptions include O'Flynn et al., 2007; Walkerdine., 2003; Youdell, 2005).ii

Enhancement and optimization

Both in the US (DeSantis & Hane., 2010; Petersen et al., 2015) and in Europe (Eickenhorst et al., 2012; Mache et al., 2012; Maier et al., 2018; Singh et al., 2014), methylphenidate, for example Ritalin™, is the prescription stimulant most commonly reported to be used non-medically for cognitive enhancement among students. Existing qualitative studies about NMPCE focus on concentration and on saving time (Coveney, 2011; Krøll, 2019). For example Petersen et al. (2015) argue that the use of prescription stimulants for enhancement purposes among college students in New York is motivated by erasing unwanted thoughts, and becoming more focused and able to concentrate for longer periods, and thus become more efficient.

Also, some studies focus on how the use of pharmaceuticals is legitimated. DeSantis and Hane (2010), note that undergraduate students in an urban area of the US developed a popular storyline which framed use of stimulants (e.g. Adderal) as both physically harmless and morally acceptable. The students justify their use by arguing that they use safe prescribed drugs, in moderation, for the right reasons (to perform academically), while describing users of e.g. amphetamine as using 'bad stuff' for the wrong reasons (to become intoxicated) (ibid:41).

The focus on efficiency and on using pharmaceuticals for the right reasons are also common traits in our interviews with both the young women and men. As I will illustrate in the results section, there are some interesting gender differences that correspond with a recent Danish survey (Djøf, 2017) about university students that report having used pharmaceuticals for enhancement purposes during their studies. Out of the 8% who reported such use, 16 %, primarily young men, had used the ADHD medicine Ritalin™, while 47%, mainly women, had used the blood pressure medicine betablockers. Given that beta-blockers are produced to lower the blood pressure, but increasingly being prescribed by Danish doctors to treat exam anxietyiii, this parallels the

observation made by McCabe and Boyd (2012:11) that when reporting individual motives for nonmedical use of prescription pharmaceuticals, young women are more likely to report self-treatment motives than young men (see also Butt et al 2016; Conrad, 2005).

While, as noted above, existing research on NMPCE in educational settings often focus on stimulants ADHD like Ritalin™ (Mache et al., 2012; Maier & Schaub., 2015; Singh et al., 2014) there has been far less interest in the use of e.g. beta-blockers.

Gender

Dominant discourses of medicine and drugs also contain underlying or hidden discourses about the reproduction and reconstruction of gender (Blum & Stracuzzi., 2004:270; Hunt & Antin., 2017). One example of how discourses about illness and medicine are also about gender norms is how the Danish media writes about gender and education. Møldrup & Hansen (2006), note that concepts such as 'lifestyle-medicine' are increasingly present in the Danish public discourse. Also, in a study about the Danish media discourse on gender and educational performance, Hansen & Blom (2017) conducted a corpus linguistic analysis of the frames constructed around the concept of straight A girls in Danish national newspapers between 2006 and 2016 (N = 215 articles). They conclude that when well performing girls, often framed with the term 'straight A girls' are presented in the articles, their performance is often associated with concepts like illness and conformity. Even seemingly positive attributes like being diligent and clever are turned into negative assessments. On the other hand, well performing boys are described as relaxed and festive, and often with an 'edge'" (2017:114). The authors suggest that such stereotypes, and the tendency to construct gender as 'a contrasting pair' may have substantial consequences for society's understanding and treatment of young adults in education (ibid:102).

We know little about whether and how young student's use of pharmaceuticals to handle academic pressure differ by gender. Although some research state that "females are at an increased risk for prescription drug misuse due to the fact that they are more likely to become depressed when they experience strain", this link is seldom illustrated empirically (Ford et al., 2014:844).

To examine how strategies are influenced both by how the young students experience different educational settings and how they are affected by gendered media-stereotypes, I will use two paradigmatic cases (Bryman, 2012; see also; Andersen, 1997; Flyvebjerg, 2010). These two cases will exemplify how young women tend to use pharmaceuticals to enhance performance to meet socially expected standards (normalization), whereas young men typically use pharmaceuticals in order to compete and optimize performance (augmentation). Importantly, the cases will also exemplify how young men and women adopt different frames of reference when they discuss and legitimize their NMPCE, in ways similar to those identified within the media.

In light of the presented developments and tendencies, after presenting my methods and the sample, I will explore empirical gendered similarities and differences in how Danish university students experience and negotiate current ideals about performance in academic environments, and the role of NMPCE within these negotiations.

Method and sample

The paper is based on narrative data from in-depth qualitative interviews with 60 (33 male and 27 female) young Danish students between the ages of 18-25. Just over half of the interviewees had used performance-enhancing pharmaceuticals such as Ritalin™ (mostly men) or beta-blockersiv

(only women). In addition, a few of the interviewees associated their use of e.g. cannabis or sedatives with educational performance, however for the purposes of this paper we will focus solely on stimulants (Ritalin™ and Modafinil) and on beta-blockers.

Recruitment took place using leaflets and posters and a Facebook page with the text: "Do you use anything to thrive or perform better while in education?"^v In addition, we gained contact to students and a number of student counselors who acted as doorkeepers (Bryman 2012) by doing recruitment presentations about the project in 10 different educational institutions. Three trained interviewers conducted semi-structured interviews (1½-3 hours duration) between September 2015 and July 2016. Most interviews took place at the researchers' offices, although some were conducted at the young peoples' educational institutions or in their homes. We asked general questions about social background, everyday student life, well-being and future dreams, as well as more specific questions about academic ambitions and possible stress and concerns. One section of the interview schedule focused specifically on the role of pharmaceuticals and illegal drugs in the participants' strategies to perform and excel in the academic environment. We were particularly conscious of the ways in which the participants were affected by the public discourse about education, performance and stress. For example, we asked them to reflect about media headings like: "A+ girls are going down with stress".

The material was coded and analyzed using the program Nvivo. The first line of coding identified broader themes such as social background, well-being, performance pressure, motives, and availability. Later, when starting to develop analytical categories, the code on performance pressure became more detailed, and was sub-coded into themes of legitimation, differentiation, competition, perfection and ethical concerns.

In the analysis of the data, two large groups emerged: While all students felt the pressure to perform, some conceptualized the pressure as negative and pharmaceutical use as ethically questionable, and others presented pressure and competition as motivating and pharmaceutical use as a legitimate means to achieve personal goals. Interestingly the first group consisted mainly of young women using beta-blockers, and the second mainly of young men using stimulants. In order to illustrate the strategies of these two groups, which were also the two largest groups, I will examine in more detail two contrasting cases: Hanna and Axel. These specific narratives can be viewed as representative or paradigmatic (Bryman, 2012; Flyvebjerg, 2010), in the sense that a case study design consists of a few in-depth, illustrative cases (Hagan, 2006), of interest because they belong to the particular collection of cases in a study, that share common characteristics (Stake, 2009). Thus the narratives of Hanna and Axel *exemplify* some of the *typical* links between pressure and NMPCE in the groups they represent (Bryman, 2012:70, see also Renold & Allan, 2006; Russel & Tyler, 2002). In contrast to quoting many different informants, the cases potentially give a deep, contextualized knowledge and a nuanced view on a specific reality (Flyvebjerg, 2010) and they permit considerations about how different logics and aspects are connected in individual student's life-courses (see also Ingholt et al., 2012). The comparison of Hanna's and Axel's narratives about social background, their college years and the role of the peer-group, as well as how they associate NMPCE to the pressures they experience, both in college and in the university, provides a sense both of similarities in experienced pressure, as well as how different kinds of NMPCE develop from different individual experiences in different settings *over time*.

All research participants were informed about the purpose of the study and that they would be guaranteed anonymity and the right to withdraw from the study at any time. They received two cinema tickets as an honorarium for their participation. Also, because some of the students

became quite emotional in discussing their experiences, we provided contact information for support services when needed. The study was reported to the Danish Data Protection, and was followed by a research group of competent peers.

Results: Gendered strategies of normalization and augmentation

The sense of inadequacy makes you strive for small goals, but you never reach the goal, before there is a new one. You ask yourself where did I come from, because the finish line moves all the time (Philip, 22).

Most of the students in our study perceive NMPCE as a means to deal with their own expectations as well as those of their teachers, family and friends and also broader societal expectations, for example as presented in the media. They construct their use of pharmaceuticals as a response to the imperative to being an active, competent and well-performing individual. Although presenting these expectations, the ways in which the students negotiated them through using pharmaceuticals differed. First, using prescription stimulants such as Ritalin™ is more common among young men whereas young women tended to use beta-blockers (see also Djøf, 2017). Second, we discovered significant differences in the ways in which women and men conceptualized and legitimized their use of pharmaceuticals: respectively *normalization* (bringing the performance up to the socially expected standards and what they consider 'normal') and *augmentation* (improving performance beyond the norm, and what they consider excellent, see also: Conrad, 2007).

The normalization strategy is represented by Hanna (21). She describes a childhood in a nonacademic home with alcohol problems and a father suffering from mental illness. Hanna attended public primary and secondary schools and is currently studying journalism. She does not have a diagnosis, but her doctor prescribes her beta-blockers to avoid anxiety in relation to her exams, just "to be safe", as Hanna remarks. In her spare time she does voluntary work, and has had some issues with an eating disorder.

The augmentation strategy is represented by Axel (24). He describes a childhood in an academic home, and he has attended a private school. Currently Axel is studying trade business at a prestigious university. He does not have a diagnosis but he buys the ADHD medicine Ritalin™ from a friend who has a diagnosis. His rationale is that he wishes "to be the best in the long run" and to be able to differentiate himself from others. He works out a lot and he spends long hours in the library.

Both Axel and Hanna performed well at their respective studies and obtained good marks, but as we shall see in the following, they use different pharmaceuticals and have different reflections about their use as well as different frames of reference for their legitimations of use.

High school experiences

Even though both Hanna and Axel, started using pharmaceuticals at the university, the quotes discussed below illustrate, how they record their handling of pressure to perform even during their high-school years. Axel says:

The upper secondary school - I always sat on the back row and played mobile phone games (...) In the 1st year I didn't really bother. Just had fun. And 2nd, started partying, and in 3rd it was school (...) I knew when I had not performed well enough - so it was easy enough.

While Axel did experience pressure to perform in high-school, he describes being quite relaxed about it and being able to perform when expected of him. Hanna, on the other hand, experienced an intense and negative pressure to perform throughout all high-school years, that made her feel stressed:

It was very much the thing that we should perform well. Because there is a thinking in this system that if you do not get the best grades, then you cannot get into the best programs. Then you cannot get the best job - and then you live in a cardboard box. If you get a D in chemistry, you live in a cardboard box the next minute (...) There's this ladder you can climb, otherwise, you'll fall. There was the feeling that if you got bad grades then all opportunities disappeared. If you get the good grades then all possibilities were open.

Many of the female students, like Hanna, felt pressured in a negative way, while most of the male students, like Axel, describes playing around throughout most of high-school.

Hanna is also concerned about how bad grades made possibilities disappear: "If you got bad grades then you could just sit and be nothing, right." This concern in Hanna's narrative about getting bad marks and connecting this to a fear of 'falling' is less common in the interviews with the young men. Axel, and most of the other male participants, present being at school and studying as relatively easy, and found it uncomplicated to perform well when they needed to. Even when some of the young men describe negative pressure, they don't present it as threatening as the young women do.

Competition and pressure

Also, when discussing well-being and performance more generally, significant differences emerge. For Hanna, the imperative to perform permeates all aspects of her life, and constitute a negative pressure:

You have to live in a big city, you have to have a nice apartment, you have to have the perfect life. And at the same time, while you are a student, you have to live wild, and still perform well.

Furthermore, Hanna records that her girl peer-group at high-school worked well, until a new culture of internal competition developed, and one of the group, who was considered not being serious enough about her studying, wasn't welcome in the group anymore. Hanna feels bad about being competitive with her fellow student, and expressed guilt about excluding her.

In the interview Hanna exemplifies the experienced pressure and constraints in the educational system by referring repeatedly to stereotypic gender images in the media. She experiences that in, for example, films about children and young people: "Boys have strange noses and red hair and stuff like that. And then the girls: They are all blondes and they perform well at school and everywhere". It seems reasonable to suggest that Hanna's understanding of herself as a young woman and student is affected by discursive gender stereotypes, where women are expected to look nice and perform well, whereas men have more freedom. She questions what she sees as a narrowly defined feminine ideal, and moreover, later in the interview she makes an explicit connection between notions of being indifferent and notions of masculinity: "There is something

masculine about being indifferent. It is kind of cool when those high school boys try not to care too much.”

Hanna’s perception of male indifference (for instance, in relation to school performance) is recognizable in Axel’s narrative about high school. When Axel enters the university though, he becomes more focused. He embraces the competition, and labels it as both legitimate, fun and motivating to compete internally in his peer-group: “There is a lot of competition (...) I think it’s cool. I think it’s quite awesome - I think most people do”. He doesn’t experience that anybody is excluded.

So far, we have seen that Hanna often conceptualizes her own actions as necessary reactions to negative imperatives. She often uses the term ‘I have to’ and is very concerned about fitting in: “What is allowed? Do I still fit in? Am I strange now? No matter how much I try to throw these kinds of questions away, they keep coming back.”

Axel on the other hand, although also conceptualizing e.g. the working out as an imperative, frames it as a free choice to take part in a motivating and enjoyable competition:

I think a lot about health. And again - I think it is fun. I do workout with some friends, and that is also a competition, although in that scene I can live with them being stronger than me.

When I ask whether there is a competition about looks, and Axel answers: “No, just generally how successful you are, overall”.

The tendency then, seems to be that Hanna, like many of the other women, feels negatively obliged to act in certain ways to live up to expectations, while Axel and many of the young men seem to *embrace* the obligation to perform and also to experience the pressure as a necessary and legitimate motivation in the competition. In general, the young men seem to be more relaxed and indifferent about the possible negative social consequences of their own strategies than the young women.

NMPCE – a legitimate strategy or cheating?

In the students’ narratives about pharmaceutical use similar gendered patterns appear. In the case of Axel, he presents his Ritalin™ use as unproblematic and he associates it positively with being focused and active (DeSantis & Hane 2010). He sees the use of pharmaceuticals as a means to avoid unwanted states of mind like passivity and lack of concentration (Petersen et al., 2015). Also, in a similar way to the students presented by Rabiner et al. (2010:259), Axel uses Ritalin™ to enhance academic performance and ameliorate concentration problems, problems that may undermine his academic career. He associates Ritalin™ with “ambitious people, who really want something”. Interestingly, he conceptualizes use as a means to help him become the responsible and successful person that he feels obliged to be, and also wishes to become.

Hanna, on the other hand, labels NMPCE as ‘cheating’ and compares her use of betablockers with doping: “It’s like cheating, using beta blockers, isn’t it? If I was a cyclist, it would have been doping.” Accordingly, Hanna is ambivalent about her use of betablockers and feels that she should do without. Furthermore, she worries that NMPCE may transform her into a kind of person that she does *not* wish to become. Overall, ethical reflections about what one *should* do are far more common in the female than the male narratives.

This difference may be attributed to contrasting motives described for using Ritalin™ and

Beta-blockers, respectively normalization and augmentation. An argument to interpret the narratives as gendered though, is that a young woman (Louise, 21) who uses Ritalin™ much like Axel, to stay awake for longer hours while studying medicine, presents her use in more ambivalent ways like Hanna. Also, her reflections about cheating and about the pressure as something negative, are much like Hanna's. Finally, Louise, like Hanna, is concerned about the kinds of people the individualized performance society produce. And also, even male users of Ritalin™ who are more ambivalent about use than Axel, show little interest in ethical questions about for example cheating. Their ambivalence is more about health and side effects. For example Philip (22) is concerned that Ritalin™ causes pimples.

Different frames of reference

There are also gendered patterns in the ways the two 'kinds' of users frame their use as morally acceptable, and with whom they compare their use. Axel strongly differentiates himself and his use of Ritalin™ from the ones he considers 'losers' - for example, marihuana users:

I do not take it because it is healthy. I do not use marihuana either, even if that is a natural substance. But that's because I do not like those who smoke hash. I know someone who is smoking hash. And they get dull and slow, and I want to be quick and fast. It's a bit in the opposite direction, right? Natural or artificial - what I care about is whether it works.

Axel, as we can see, constitutes his own practice as non-disgusting, while labelling other drug-users disgusting (Lawler, 2008:141). A lot of the other male users also constituted themselves as doing the right thing (see also DeSantis & Hane., 2010), as opposed to other drug-users who 'dope themselves down' (e.g. Thomas, 21). At the same time though, Axel constructs himself as being indifferent as to whether some people consider his use as doping or unethical, as long as his use permits him do something special and unique:

Academic doping? Well, that might be. Because it's illegal and not everyone can afford it. But then again - you have to differentiate yourself. Then I do not care if it is - I do not see it as cheating, not like direct cheating, I certainly do not.

In contrast, Hanna questions the legitimacy of her NMPCE. She explains her use of beta-blockers with a concern about the risk of becoming unsuccessful, marginalized, and, as she stated, to end up in a cardboard box. She conceptualizes use as a life insurance and a risk-management strategy - as a means to be in control: "I just had the idea that I could not do it without it, so I took the betablocker and was like, well, that makes me safe (...) it is more out of a fear of failing, than about a wish to have an A."

We can see that Hanna's narrative is about 'medically enhanced normality' (Møldrup 1999). She is not like Axel, aiming to be the best or to differentiate herself from others, instead she uses betablockers to be in control of her nerves to be able to 'breathe' well enough, to be on a level with her fellow students:

I see it a bit like most of them [fellow students] breathe quite well [do not have exam anxiety]. So, I'm just trying to get up on level with them; don't I? I don't

really know how much I'm cheating ... I'm much better off than I would have been if I took some brain-enhancing. I do not see it as something so very different from the fact that most people drink coffee. For example, to stay awake.

In the quote Hanna differentiates herself from 'people like Axel', who use Ritalin™ for what she considers problematic, chemical, 'brain-enhancement'. After all, she says: "I only use heart medicine". But even though she legitimizes her own use, Hanna is also explicitly concerned about whether or not she is 'cheating'.

In summary, Hanna in high school and also in her university studies presents competition as mainly negative. She sees the use of beta-blockers, although prescribed by her doctor, somehow as cheating and as unfair. Despite presenting ethical concerns about whether other students also have the same opportunities as herself, and the fact that she wishes to dissociate from the 'performance-society', she finds herself ambivalently taking beta-blockers to be safe. In contrast, Axel enjoys competing and stresses the perceived advantages of the use of pharmaceuticals. He talks about how they support his feeling of being in control of his own time and energy and thus being able to compete more effectively. For him, the aim is not to become like others – but rather to differentiate himself from others. The image he presents as the motivation for use is not to avoid the cardboard box (like Hanna), but to become world famous. While Hanna presents a logic of 'equality, and considers NMPCE a 'safety net', Axel presents a logic of differentiation, and considers his use more like a 'launching pad'.

Discussion and conclusion

This paper has analyzed two different ways of perceiving and legitimizing the usage of NMPCE to meet the expectations operating within the Danish educational system. Both Hanna and Axel, respectively use pharmaceuticals as a strategy to meet and negotiate existing societal demands and power relations (Ettorre 1992; Friedman & Alicca 1995; Maher 1997).

Hanna dislikes and is critical of the competitive educational system. She presents her own use of pharmaceuticals (beta-blockers) as a necessary, but highly ambivalent way of performing, to fit in, and 'be like the other students'. Axel, in contrast, presents competition as a motivating factor and as a game that he wishes to master. He does not display ambivalence or speculation as to whether his use of Ritalin™ is legal or illegal, ethical or non-ethical. For him, the central question is: what is possible (Petersen 2010:19) and what does it take to be the best?

In this final section I will discuss how gender differences in the ways Hanna and Axel meet, negotiate and possibly even challenge the demands in the educational system, may reflect a normative system of gendered praxis and relations (West & Zimmerman 1987).

On the one hand, the strategies seem to work for both Hanna and Axel in the short run: they live up to the performance-imperative and achieve good marks. On the other hand, the ethical concerns of Hanna and the other women regarding the legitimacy of their practices as well as the unproblematizing attitude of the men may exemplify and re-produce traditional gender attributes and logics.

Hanna's and Axel's different motivations for and reflections over NMPCE emphasize the point that the relationship between agency and resistance in processes of identity formation is complex (Clegg, 2008; Skeggs 2004). Identities are situated social practices in which individuals "perform roles that are relational and embedded in norms and expectations related to both self and 'other'" (Divine 2011:633). Furthermore, the societal conditions for 'doing gender' (West & Zimmerman 1987) by 'doing drugs' (Measham 2002) are dynamic and changing as selves are always 'crafted'

(Kondo 1990) in specific situations, under the influence of specific gendered norms. Finally, the gendered crafting of the self is both dependent on context and on the dispositions brought to the situation by the actor (Ahmed 2004; Bourdieu 1990).

I have suggested that to be able to understand the complex formation of performing selves in neoliberal times it is important to study the ways in which the (social) media discuss and represent gender and performance. The Danish study referenced in this paper, shows that the Danish media connect women's high achievement to something unhealthy and men's achievements to something more normal and sound. It is impossible to point to direct links between the media discourse and the narratives, but given for example Hanna's thought about how many films give more space to masculine than feminine diversity, it is reasonable to assume that media discourses do influence the ways that young students understand and present themselves.

The experiences of Hanna, and many other women in our study, indicate that they do not operate in the competitive educational system quite as obviously or playfully as their male counterparts. As it turned out, the male participants in our study adapted to the societal demands willingly and enthusiastically. This paper illustrates that when, as is the case for many of the young women, societal demands are not compatible to personal values regarding achievement under education, the 'crafting of a self' becomes an ambivalent process (Day 1999; Kolind & Bjønness 2017). These young women experienced ambivalence in the tension between the current demands of being active, flexible, responsible and a self-realizing individual (Rose 2009; Willig 2005) and their individual dispositions (Bourdieu 1997) and aspirations. In fact, our material indicates that the 'male' strategy of augmentation and differentiation is more in accordance with the overall requirement to perform and be 'special' in the educational system and in the 'performance society' more broadly than is the female strategy of normalization and equality.

In our study, the young men simply seem to thrive better in a system experienced as competitive. While many of the young female students attempted (and succeeded) to perform and compete, they often associated their success with a sense of unease (see also Skeggs 2004 showing how young females adopt certain positions, even though they feel uncomfortable in doing so) and discomfort (Ahmed, 2004; Renold & Allan., 2006:470). One could ask how these young women's experiences of both college and the university as stressful and their continuous reflexive engagement in what is considered right and wrong, cheating or not relates to the tendency in the Danish media to associate achieving women as boring, conventional, and vulnerable. And also, it is interesting how the insufficiency and ambivalence related to trying to perform well, often mentioned by the women in our study, relate to the increasing numbers of young women diagnosed with stress, depression, anxiety and eating disorders in the Danish society (Sundhedsstyrelsen, 2018).

Within the tension between goals and competences the young students, both male and female experienced 'insufficiency' (Ehrenberg 2010) - that goals were hard to reach without the use of 'optimization technologies' (Rose, 2003). As I have outlined in this paper, for my research participants, insufficiency appears when there is a discrepancy between the individual student's felt capacities and competences and the demand to realize a performing self. The feeling of insufficiency for some, mostly women, involve an ambivalent sense of stretching against reaching the same level as their peers. For others, mostly men, the insufficiency is related to more specific goals like becoming the best and the need to differentiate oneself from others. For both groups there is an imperative to perform, but the 'finishing line' is constantly moving (Willig 2005). The stretching towards an undefinable and ever-moving goal requires what Divine et al. (2011) label

‘an elastic self’, and a part of this ‘elasticity’ is to be willing to use medicine, even when for many, use is seen as possibly unethical or unhealthy.

This study on the one hand presents NMPCE as (re)producing gendered stereotypes (Skeggs 2004). There is though, also another possible interpretation. While Hanna’s use of beta-blockers may be seen as an adjustment to a performance-oriented society, and exam-anxiety may be seen as feminine (Møldrup 1999), such use may also be interpreted as a gendered resistance: By using beta-blockers Hanna does what it takes *not* to be stopped by something reported to be a problem for far more women than men, namely exam anxiety. Focusing on that aspect of her pharmaceutical use, makes it possible to interpret Hanna’s strategy as a resistance to some more general gendered patterns for example as problematized by Sørensen et al. in their media analysis. However, one could, like Sørensen et al. worry about the epistemological consequences for both female and male students if female high achievers in dominant societal discourses are presented as boring, conventional, and vulnerable while male achievers are presents as the ideal and the norm.

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i Although there is not much research on gendered aspects of pharmaceutical enhancement, e.g. Osborne et al. (2017) find some interesting gender differences in non-medical opioid use, and suggest that further research on gender differences is needed.

ii Not only has gender been largely ignored but so also has the intersection between gender and class. For example Renold & Allan (2006) note that while many middle class girls seem to somehow embody discourses of perfect academic achievement, working class female students may feel more ambivalent about such discourses. While recognizing the importance of a focus on the intersection of gender and class, for the purpose of this paper I solely focus on gender.

iii We recognize that exam anxiety is a condition that sometimes may qualify for medical treatment.

iv Like the above mentioned study by Djøf (2017) categorize the use of beta-blockers as NMPCE. The reason for this categorization is that the young women in our material explicitly use beta-blockers with the purpose to enhance their performance in order to strive for academic goals that they otherwise experience as unobtainable (Møldrup 1999). A further reason to categorize use of beta-blockers as enhancement is that some users say, that they think they would do fine without them, but that their brain works better with the pharmaceutical, because their heart beats more slowly.iv

v While using such a broad question, we recruited participants using very different kinds of substances. The most common pharmaceuticals though, were Ritalin and Beta-Blockers.