EQUITY THEORY AND DOPING IN CYCLING

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ABSTRACT

The demands of cycling have influenced some cyclists to resort to performance enhancement drugs (PEDs) in their attempt to be competitive. Though punitive measures have been adopted by the World Anti-Doping Agency (WADA), this phenomenon continues to affect the sport. This paper seeks to analyse the doping phenomenon in relation to equity theory posited by Stacy Adams (1965) to understand the cognitive aspect of motivation and its impact of perceived inequity and doping behavior among cyclists. The desire to be competitive at the elite level and the feeling of negative inequity would have contributed to the continuous use of PEDs by cyclists, they try to level the tilted field. The as commercialization of sports, as well as, the culture in cycling has also contributed to this type of behavior.

Key Words: doping, equity, motivation, culture of cycling

INTRODUCTION

The physical demands of professional racing as well as the expectation of sponsors, coaches and spectators have forced many cyclists to seek out ways that can enhance their performance. Before the change in attitude towards doping by cycling governing body Union Cycliste Internationale (UCI) in 1966 (Brewer 2002), and International Olympic committee (IOC) in 1967 (Moller 2010), doping was openly administered by cyclists (Brewer 2002). Moller

(2010, 30) contends that, "it was cyclists who pioneered the use of doping," so as to increase their endurance during the debilitating sixday cycle races. The practice of doping by cyclists provided a coping mechanism to deal with external pressures, which later became an aspect of internal integration in professional cycling (Edwards 2013b). This practice was seen as necessary for their survival in professional cycling.

The use of performance-enhancing drugs (PEDs) in cycling has affected the image of the sport as a result of doping scandals involving some of the world's best athletes – seven times Tour de France winner Lance Armstrong (1999 – 2005), three times Tour de France winner Alberto Contador (2007, 2009, 2010), 2006 Tour de France winner Floyd Landis, and 2004 Olympic Time Trial gold medalist Tyler Hamilton. However, though World Anti-Doping Agency (WADA) and cycling governing body (UCI) have used punitive measures to reduce this phenomenon, concern about the prevalence of doping is nearly as high as when the World Anti-Doping Agency (WADA) was formulated in November 1999 (O'Connor 2012). "Professional cycling team Astana, whose star rider is Tour de France champion Vincenzo Nibali, was rocked by yet another doping scandal with the news that a fifth rider had failed a drug test" (Yahoo News 2014).

The prevalence of doping, even though stricter penalties have been enforced over the years, has been attributed to current developments in medical science and the commercialization of sports (Brewer 2002). These developments have also forced the anti-doping agencies to expend greater financial and other resources in the fight against the use of PEDs by athletes. The need for other approaches in the fight against the use of PEDs by athletes is therefore necessary if there is to be an eradication of this type of behaviour. Stewart and Smith (2008, 281) posited that "a better understanding of motivation will lead to alternatives to legal threats and punishments" in the fight against drug use in sports. Earlier studies devoted attention to the motives that have influenced cyclists to use prohibited drugs (Bilard 2010 and Edwards 2013a). Though an understanding of the motives is important, the cognitive aspect of motivation and its implication on the use of drugs are also pertinent to the study of PEDs by athletes in sports.

Framework

This paper seeks to discuss equity theory, which was posited by Stacy Adams (1965) and applied to understand the impact of perceived inequity and doping behaviour among cyclists. The culture of professional cycling will be addressed, which will be followed by Equity theory of motivation, and finally the motivational framework will be applied to the behaviour of cyclists to reduce inequity through doping. A literature review on the main variables of the study, which include doping in cycling, motivation, equity theory, and WADA was done by the writer.

CULTURE OF PROFESSIONAL CYCLING

The cycling culture provides a means of survival for members in the professional cycling fraternity whereby unwritten rules developed over years are rigidly enforced by the members. Moller (2010, 72) posited that "professional cycling has an elaborate moral code. There are strict, if unwritten, rules for what one must, shall or shall not do". Stovitz and Satin (2004, 216) postulated the importance of the unwritten rules by positing that, "the ethos (unwritten rules) of the game is more relevant than the written rules as a context for interpreting the moral quality of individual behaviours". These rules have facilitated the cyclists in their internal integration and external adaptation, resulting in social solidarity and confidentiality or a strong in-group mentality (Edwards 2013a). The culture of the fraternity has "an essential difference between the morality that prevails inside of cycling and the morality that reigns outside its special domain" (Moller 2010, 88-89). The activities and decisions made by cyclists before, during and after events are seldom known or discussed with outsiders. Among the actions that are part of the cultural factors is the non-disclosure of what had taken place within teams and races. This practice was referred to by (Moller 2010) as 'the law of silence'. The disclosure by any member of what had taken place, even after their competitive days are over, results in them being sanctioned even by close friends, as was the case with Paul Kimmage, a former professional rider from Ireland (Moller 2010). Kimmage (as cited in Moller 2010) provided a "picture of the culture of cycling" (Moller 2010, 89). Kimmage was perceived as a traitor, and acknowledged that not even his close friends from his competitive days spoke to him.

In their attempt to cope with the demands of sponsors, teams and other stakeholders, cyclists did whatever was needed to provide the desired results, which included buying the loyalty of other cyclists. The hierarchical structure of teams was important in facilitating the tactical work required to win races, since "a strong leader cannot win races with any consistency without a strong team supporting him" (Brewer 2002, 281). However, during the early days of professional cycling, support riders' earnings were inadequate to satisfy their cycling and social needs throughout the year (Brewer 2002). Due to the low pay earned by support riders, as well as their desire to remain in the sport, many depended on arrangements before and during races for their survival (Moller 2010). The practice of fixing races was traced as far back as the First World War (ibid). However, race fixing was resented during that period by independent riders in the Tour de France who complained about teams partaking in such activities (ibid). "The buying and selling of races, although not nearly as routine outside the criterium circuit, spilled over into other races, a fact acknowledged by rider Tom Simpson" (Brewer 2002, 283). The income from such arrangements whether within teams or with other cyclists from rival teams was used to subsidise the low salary of the support cyclists. Support riders were also allowed to win less important races by their team leaders, thus rewarding them for their sacrifice throughout the season (Brewer 2002). Though this practice was prevalent in the early days of professional cycling, some races are still "routinely 'fixed' in advance by the riders, guaranteeing a popular rider or recent Tour de France standout would win. In return, prize money would be split amongst participants, ensuring that all riders benefited from playing their 'part' in the fix" (Brewer 2002, 283). This practice has remained a part of the culture in professional cycling.

The physical demand of professional racing and the expectation of sponsors, coaches and spectators have forced many cyclists to seek out ways that can enhance their performance. To overcome their perceived or real deficiency, or perform at the desired level, another practice - doping, developed over the years, became part of their mechanism for external adaptation. Also, as was earlier stated, the practice of doping provided a coping mechanism to deal with external pressures. This practice later became an aspect of internal integration in professional cycling. The practice was seen as necessary for their survival in professional cycling, and was intended to provide cyclists with additional tools needed to satisfy the desires of other stakeholders (Kimmage 1998 as cited in Moller 2010). According to a star rider Rik van Steenbergen (as cited in Brewer 2002) "the top riders were obliged to be fresh each time and they couldn't do that without stimulants. Nobody could or ever will be able to do that because there are no such things as superman. Doping is necessary in cycling" (Brewer 2002, 284).

The use of illegal drugs had also become institutionalized over the years, as this type of behaviour was not just restricted to individuals, as "team administrators, support staff, and teammates were all involved in the organisation and expansion of doping" (Brewer 2002, 285). The practice of using drugs to enhance competitiveness had become a necessity rather than a mere desire for many of the cyclists. The "requirement to 'keep up with the Joneses' has been described by psychologists as a 'prisoner's dilemma', whereby the only real option for an individual within the game is to seek the illegal advantage, because each participant must assume that his opponents will do the same" (Stovitz and Satin 2004, 218). This situation has been further compounded by the non-disclosure of what takes place within teams by their members. The dilemma faced by professional cyclists "is that each individual is in the same position, and therefore

must act accordingly by assuming that all others will attempt to gain the illegal advantage" (Stovitz and Satin 2004, 218). Cyclists' belief that others are using performance enhancing techniques have cause many to accept this as a norm rather than an exception in the sport. The culture of silence has also contributed to this practice over the years. The situations that many are faced with have contributed to this type of behaviour, which has become widely accepted in the cycling fraternity, with some new members seeing their introduction to drugs "more like a ritual of initiation" (Moller 2010, 88). "The social organization of doping was governed by structures of custom in the classical period, initiated and administered by individual racers mainly with the assistance of coaches and/or other racers" (Brewer 2002, 285).

EQUITY THEORY OF MOTIVATION

Motivation

Individuals are motivated to do things as a result of a need, which can be as a result of a "physiological or psychological imbalance" (Luthans 1995, 141). The intensity of the drive is determined by the incentive to be achieved, which will ultimately alleviate the need. Motivation is seen as the force that directs an individual's behaviour, as well as the persistence and intensity of their actions (Steers *et al.* 2004), so as to satisfy specific needs. The motive or drive of an individual contributes to both acceptable and unacceptable behaviour, since "motives often affects a person's perception, cognition, emotion, and behaviour" (Reiss 2004 179). The environment in which the behaviour takes place is also important, since it can influence the type of motivation at a particular time or period.

While content theories of motivation provide a basis to understand human behaviour as it relates to needs, they are not the only theories that contribute to the understanding of drive, intensity and persistence of human behaviour. Thus, since the reward or incentive may be desirable to the individual, the drive to alleviate the need may not be as intense if there is a belief that others are receiving more benefits for similar efforts/inputs. Therefore, what goes on in the individual's mind is just as important as what is desired by the individual, and the environment in which the action is to take place. The feeling of equity or inequity can affect an individual's attitude and subsequently their behaviour. "Equity theory offers a welldeveloped theoretical framework to study the (lack of) balance between inputs and outcomes" (Van Yperen 1997, 318). "Adams's version of equity has been the most widely researched and accepted version," and will be used as a reference during the remainder of this paper (Scholl 1981, 590).

Equity Theory

"The central assumption of equity theory is that justice is a function of the proportionality of outcomes to inputs of the person and comparison targets" (Van Yperen 1997, 318). However, the conclusion that there is inequity does not have to be real, it is the individual's perception that matters, which ultimately affects their behaviour. "The theory suggests that when individuals find themselves in an inequitable situation, they have several options to cope with this lack of reciprocity" (Van Yperen 1997, 318). The actions that can be taken by the individual include "restoration of actual or psychological equity, altering the comparison target, and leaving 'the field' (i.e. dropping out)" (Van Yperen 1997, 318). Inequity can be either positive or negative – mismatches which favour the individual or the comparison with others, respectively" (Disley et al. 2009, 57). "Inequity creates tension or distress in the individual (i.e., anger when the person feels under-benefited, guilty when they feel over-benefited). This tension, or distress, motivates the person to reduce or eliminate the inequity. The magnitude of the perceived inequity, the tension experienced, and the strength of motivation to reduce inequity are linearly related" (Disley et al. 2009, 57).

The 'process' commences with the individual analyzing the situation or circumstances before them in relation to the activity. "To determine the fairness of a situation, the individual compares their perceived ratio of inputs to rewards, to the corresponding ratio of a 'comparison other' (often called a referent other)" (Disley *et al.* 2009, 57). In the remainder of the paper the term "comparative other" will be used *in lieu* of comparative target, since both imply comparing ones situation with another individual seen as similar to some extent. "Inputs and rewards are defined, respectively, as what an individual perceives they contribute to and what they perceive they receive from a relationship" (Disley *et al.* 2009, 57). The belief that the ratio of inputs to rewards or outcomes is dissimilar will influence the individual to attempt to restore or "maintain an equitable balance between inputs and outcomes by perceptual change, behavioral change, or leaving" (Scholl 1981, 591).

The behaviour that is likely to be pursued as a result of the felt negative inequity will vary depending on the perceived power of the individual in the situation at that given time. The extent of the need to be fulfilled will also contribute to the action(s) the individual is likely to take to restore equity. The greater the need, the less likely the individual will leave the field. Such an individual is more likely to change the comparative other or try to restore actual equity. The option of leaving the field will occur if the need is not great, or the need can be fulfilled in another way. The investment made by the individual will also influence the individual's commitment to the activity, since greater investment will result in greater commitment, which will also eliminate the option to leave the field. The option of changing the comparative other is likely to occur if the individual is unable to change their actual input (decrease) or that of the comparative other (increase), or the reward of either parties. However, if the reward sought by the individual is highly desirable, changing the comparative other will not be an option to reduce the inequity, since there will be no change in the individual's reward. Where the reward is highly desirable, the individual will have to take alternative action(s) to restore equity. Decreasing the input will only be an option if such an action would not affect future rewards (Van Yperen 1997). As such, where the reward is highly desirable, unless there is a guarantee that a reduction of the input will not result in a reduction of the existing reward, such action will not be taken. The action(s) that are most likely to be taken are those that can increase the reward of the individual if they have the power to increase it either directly or indirectly.

EQUITY THEORY AND DOPING BY CYCLISTS

Cycling is the job of a professional cyclist whose basic and social needs have to be fulfilled by his or her cycling activities. Therefore, at this level there will be greater emphasis on extrinsic rewards rather than intrinsic rewards. The orientation of the professional cyclist would have changed over time moving from task orientation interested in acquiring skills or mastering tasks, to outcome orientation - winning or beating an opponent. "At the elite and professional levels, the desire to beat competitors controls the actions of the individuals, and whatever is needed will be done to realise the desired outcome, as the individual becomes less task-oriented and more outcome-oriented" (Edwards 2013b, 26). As such, in elite sports athletes and their support groups would have accumulated considerable "investment of time and energy in pursuit of athletic excellence (i.e., financial demands or costs, time demands or costs, and personal costs)" (Van Yperen 1997, 318). To compensate for their investments, the rewards for successful cyclists are often great (fame, financial rewards), due to the commercialization of sports in recent years (Van Yperen 1997). Stewart and Smith (2008, 283) also postulated that "the escalation of commercial interests in sport has added another pressure on athletes to perform to maintain corporate sponsorships and to acquire as much wealth as possible during their brief and risky career life-span".

Therefore, competitive cyclists who feel under-benefited, "because they invest more time and energy in their sport career than their peers", but feel disproportionally rewarded (Van Yperen 1997, 323),

will respond to the situation in any way they perceive as appropriate in their attempt to restore equity. Elite and professional cyclists will not consider leaving the field as a viable option, even when there is felt negative inequity, because of their investment and their desire to fulfill their social and other needs. This was the case with Kimmage who "did not simply choose to leave the sport once he understood what was going on" in professional cycling (Moller 2010, 87). Other responses to felt negative inequity hypothesized by Adams was for the individual to change his or her input or output (Bretz and Thomas 1991). To cope with the lack of reciprocity as it relates to reward for their investment the elite and professional cyclists "will not do well to cut down on these investments because an undesired side effect might be a decrease in their performance level" (Van Yperen 1997, 323). A decrease in performance will ultimately affect the rewards such as fame, medals, and endorsements sought by the cyclist, and as such not a likely response to restore equity. An increase in the input by the comparative other can lead to an improvement in performance, and hence the reward for the comparative other, which will not reduce the cyclist's felt negative inequity. While changing the input may not reduce the felt negative inequity, a change in the comparative other can reduce the felt negative inequity. However, this will not change the success or performance of the elite or professional cyclist, whose efforts/inputs are targeted towards achieving success, which will ultimately increase rewards. "Moreover, restoring equity by increasing one's rewards is not always possible" because rewards are based on performance or output (Van Yperen 1997, 323).

"Sport is by its very nature competitive, and athletes are continually seeking ways of securing a competitive edge over rivals" (Stewart and Smith 2008, 291). The culture of the sport will therefore have a significant influence on the action that is likely to be taken by the cyclist who feels disproportionally rewarded. Elite cyclists are pressured to 'keep up with the Joneses' because of the practice of doping in cycling. If a cyclist is of the opinion that the comparative others are using illegitimate means to improve performance, then in an attempt to restore equity he or she must do likewise if equity is to

be restored. Paul Kimmage (1998 cited in Moller 2010, 79) posited that "he was just leveling the playing field so he could compete with others". The viable option that most cyclists are likely to consider in such a situation is to 'keep up with the Joneses' as was earlier stated thus a vicious cycle of perpetual doping emerges. The culture of cycling would have a significant influence on a cyclist resorting to PEDs, since it is the general belief that others are doing the same thing. By resorting to PEDs, there should be an improvement in the cyclist's performance, which will be similar to the comparative others, thereby increasing the likely reward of the cyclist and restoring equity. By using PEDs cyclists are able to reduce their felt negative inequity after recognizing improvements in their performance. Therefore, doping is often considered as the only viable option by most cyclists. This is expected to result in greater extrinsic rewards such as fame, medals, and endorsements, which is what an elite cyclist would have set out to accomplish.

CONCLUSION

Commercialization has dominated the minds of elite athletes resulting in a win at all cost attitude in sports. "This hypercommercialized sporting world and its associated ideologies of competition, global expansion, and market domination drive a sport culture that values doing whatever it takes to gain a competitive edge" (Stewart and Smith 2008, 284). The feeling of inequity has contributed to the practice of doping in cycling, since individuals are of the opinion that without doping their chance of winning on a tilted field is impossible. The culture of secrecy in cycling has also contributed significantly to the practice of doping, as it provides an enabling environment for such behaviour. Most elite and professional cyclists believe that the only way they can succeed is to do what the others are expected to do, which will guarantee lucrative rewards if they are successful. The use of PEDs is seen by many cyclists as leveling the playing field. It should be noted that fair play can only be fair if all participants are playing under the same conditions, which will never happen, since man was not born with

identical talents, and do not use identical methods to prepare for events.

Though athletes are aware of the potential damage to their health as a result of PEDs, the behaviour persists in the elite and professional levels of sports. The desire to succeed has been a powerful force driving the actions of cyclists, which over time becomes the norm, and in some instances the only purpose for existence. Stewart and Smith (2008, 286) postulated "that participation in sport may itself be a kind of addiction, fuelled by the gratification of improving performance and increasing public recognition". The fame associated with outstanding performance has made it more compelling for some individuals to do whatever is needed to succeed at the elite and professional levels. The thought of their names being associated with outstanding performance long after their formative years would have provided enough reason for some cyclists to use PEDs. This desire has also lead to the development of new means to avoid detection by the authorities. The desire to win and not be detected for PEDs has led to creativity by individuals and groups as they try to accomplish as much extrinsic rewards as they can during their formative years.

"Sport is played for higher, sometimes much higher stakes, whether these be economic, political-national, personal or a combination of all three" (Stewart and Smith 2008, 282). This added pressure on athletes has also contributed to the greater desire for success, and the win at all cost mentality permeating sports. Cyclists who have high investments in sports and competitive instincts are less likely to take alternative actions (doping) in such situations, as competition is undertaken to determine superiority. However, a change in the behaviour of cyclists as it relates to doping will only occur if there is a change in the environment in which they operate. Unless there is a change in the environment - culture, individuals not using PEDs will have feelings of negative inequity.

This paper has established that there is a link between the perception of inequity by elite and professional cyclists and doping in cycling. Earlier papers addressed the issues of intrinsic and extrinsic motivations and doping in cycling, as well as needs of individuals influencing the practice of doping in cycling. However, future studies can investigate which cyclists are more likely to use PEDs from a holistic motivation prospective. Such an understanding can assist in early identification, so that support mechanisms can be provided for those individuals, which can ultimately reduce the propensity to use drugs in cycling. Though a punitive approach to eradicate such behaviour has been embraced by WADA, the practice of doping continues to permeate the sport of cycling.

WADA's punitive approach which involves reacting to the unacceptable behaviour can be supplemented with another approach which can be used to avoid the behaviour from occurring in the first place. While it may be impossible to eliminate the use of PEDs in cycling, all attempts should be made to reduce its use as much as possible. Therefore, another issue that can also be considered for future studies is masculinity. Stewart and Smith (2008, 288) posited that "for some athletes, the combination of illegality, risk of exclusion, and potential for physical damage can be part of the attraction of taking drugs". They also indicated that rather than reducing the practice "a punitive anti-doping policy may unintentionally increase the appeal of drug use for some hypermasculine athletes because of its association with deviant and highrisk behavior". The fight against the use of drugs requires a better understanding of the various issues that have contributed to the practice. A significant reduction of the prevalence of doping in cycling can only occur if appropriate actions are taken.

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