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MLB RE>ACT



Report Prepared for

Major League Baseball

by

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EXECUTIVE SUMMARY

Context

Although doping research has increased in span and scale over the past decade, few studies have considered the way athletes approach others' use of appearance and performance enhancing drugs (APEDs). As a consequence, the sporting community are ill-equipped to play an active role in deterring banned substance use in sport which, in turn, prevents a community-based approach to pursuing clean sport.

In response to this gap in anti-doping practice, RE>ACT (which stands for 'recognize' and 'take action') – a clean sport bystander intervention - was developed. The program's innovation lies in its adoption of a self-regulatory approach to doping prevention (i.e., confrontataion), with a particular focus on creating a culture where intervening in doping-related situations becomes the norm rather than the exception. RE>ACT is both research-informed and evidence-based.

Method

An adapted and tailored version of the RE>ACT intervention was delivered within a single MLB Academy in the Dominican Republic for the purpose of determining the feasibility of delivery and engagement levels with the program. The entire academy team participated in the player-focused session. Prior to direct delivery to players, the session was first delivered to Academy athlete support personnel (ASP; M=5, F=1) and they were invited to feed back on the content of the program in an attempt to contextualize it to the specific Academy environment.

Outcomes

Delivering MLB RE>ACT to Academy ASP in the first instance enabled the program content to be contextualised to the specific Academy participating in the program prior to the player-focused delivery. Not suprisingly, delivery to ASP highlighted the importance of using baseball-specific examples in the presentation and delivering the session in the Spanish language only. Scenarios were altered to reflect current issues within the specific Academy and in some cases slides were reworded to better reflect the language of academy players. During the players' session, academy players engaged with videos and group discussions and asked relevant questions. At the end of the session they were invited to create a list of behaviors that they would commit to as a team in order to promote clean sport within their Academy. This 'pledge' was signed by the majority of participants and demonstrated their (a) engagement with the program and (b) commitment to utilizing the skills and knowledge they developed by participating in MLB RE>ACT. Players identified that they wanted to commit to: (a) comunicar lo que pienso y lo que siento (communicate what I think and what I feel), (b) a escuchar cuando alguien me de un consejo (listen when someone gives me advice), (c) a tratarnos como familia, res petandonos y cuidandonos los unos a los otros (treat us as a family, respecting each other and taking care of each other).

Next Steps

The engagement of Academy ASP and players with MLB RE>ACT was high, as evidenced through the pledge and the positive feedback received from the MLB staff team. By delivery this pilot phase we confirmed that the program was acceptable to those it was designed to reach and the delivery model was feasible for widespread implementation. We also identified opportunities to further enhance the positive impact of the program prior to wider implementation. For example, the structure has already been amended in order to invite group conversation earlier in the session. Key learnings from the project included the importance of delivering the session first to ASP and tailoring the program accordingly. Facilitated delivery by a local MLB representative was also key, along with delivery in Spanish. Finally, the pledge activity should be formalized and used to demonstrate engagement and impact. Moving forward, the research team are keen to work with the MLB to determine the appetite, scale and scope of wider implementation, alongside our program evaluation approach.

INTRODUCTION

Although doping research has increased in span and scale over the past decade, few studies have considered the way athletes approach others' use of appearance and performance enhancing drugs (APEDs). In response, RE>ACT (which stands for 'recognize' and 'take action') offers a viable alternative to current practice by developing a bystander intervention that introduces confrontation as an effective self-regulation approach to address doping in sport. To do so, we have applied the established situational model of bystander intervention (Latane & Darley, 1970).

The 'bystander effect' is a robust phenomenon demonstrating that an individual's likelihood to help decreases when passive bystanders are present in critical situations (Latane & Nida, 1981). Conceptualizing this phenomenon, the situational model (Latane & Darley, 1970) provides a sequential outline of the decision-making process a bystander goes through in determining whether or not to intervene: 1) notice a critical situation, 2) interpret the situation as an emergency, 3) develop a feeling of personal responsibility, 4) believe s/he has the skills needed to succeed, and 5) reach a conscious decision to help. Intervening is the last step in the process and situational barriers can halt an individual's progress at any stage; as the number of barriers increase, the likelihood of intervening decreases (Burn, 2009). Thus, a bystander intervention has the potential to empower individuals within sport to address suspected banned substance use.

Our research findings (Erickson, Backhouse, & Carless, 2017) indicate that the bystander effect is harming (1) the doper, by allowing them to continue using a prohibited substance and/or method, (2) the bystander, by making them more susceptible to joining in on the behavior, (3) the clean athlete, by threatening their right to participate in clean sport, and (4) major league baseball (MLB), by threatening its integrity and thus, damaging its reputation.

The situational model of bystander intervention (Latane & Darley, 1970) provides a comprehensive framework encompassing prominent elements from theories that explain human behavior. These include the Theory of Planned Behavior (Ajzen, 1985), Theory of Reasoned Action (Fishbein & Ajzen, 1975), Social Cognitive Theory

(Bandura, 1986), Social Norms Theory (Perkins & Berkowitz, 1986) and the ecological model (McLeroy, Bigbeau, Steckler, & Glanz, 1988) (Long, 2012). While scholars have previously utilized each of these theories in an attempt to examine the doping phenomenon (Backhouse, Whitaker, Patterson, Erickson, & McKenna, 2016), they have never been used in combination to inform an intervention.

Although the shift towards a self-regulatory approach to doping prevention is both novel and innovative, this intervention draws on established theories and program designs. Specifically, the StepUP! Bystander Intervention Program ("StepUP!," N.D.) has been used as a guiding framework. This program was designed for athletes the original design emerged from a pilot study indicating that student-athletes wish to help friends in distress but feel ill-equipped to do so safely and effectively (StepUP!, 2006). Similar concerns were raised in preliminary research with student-athletes from the US and UK conducted at Leeds Beckett University (Erickson, PhD Thesis, 2015; Erickson et al., 2017). They asserted that prohibited substance use warrants action, however, most were reluctant to report it and frequently suggested overlooking it. At the same time, they indicated a willingness to confront APED users, but demonstrated uncertainty in relation to the appropriateness of this approach. Essentially, a commitment to protecting the group and staying loyal to peers caused individuals to hesitate at the thought of reporting doping but they were also concerned about protecting their peers' wellbeing; thus, did not intend to completely ignore the behavior. RE>ACT is informed by the idea that this sense of loyalty can be channelled as a means for encouraging intervention in potential doping situations. Specifically, by equipping and enabling athletes to confront doping situations.

Confrontation is a form of self-regulation and is considered an 'informal sanction' in the form of negative feedback received from significant others (Bowers, 2014). While formal sanctions (bans) are considered strong deterrents to doping and underpin the traditional anti-doping detection-deterrence approach, increasing evidence indicates athletes also perceive informal sanctions to be costly (e.g., Erickson, McKenna & Backhouse, 2015; Overbye, Knudsen, & Pfister, 2013). This suggests that encouraging and empowering athletes to confront APED users could feasibly increase individuals' willingness to engage in the pursuit of clean sport and, in turn, reduce the prevalence of doping in sport. Moreover, it offers a community-based approach to discouraging banned substance use and capitalizes on everyday behaviors as a deterrent.

With a vision for establishing a community-based approach to doping prevention in Major League Baseball (MLB), this project sought to drive further innovation in clean sport by examining the effectiveness of delivering RE>ACT within the MLB setting. Specifically, we sought to adapt, deliver and evaluate the impact of a bespoke MLB RE>ACT package. The first step towards achieving this aim was to pilot the program within one MLB academy in the Dominican Republic (DR) with a view to determine the (i) feasibility of delivery in this context and (ii) engagement levels of participants.

RESEARCH DESIGN AND METHODS

During the initial pilot phase of the project the focus was on the design, development and delivery of RE>ACT to one DR academy. Figure 1 illustrates the process that was followed throughout this stage and a more detailed outline can be found in Appendix 1.

DELIVERY OBJECTIVE & DESIRED OUTCOMES

The overall project objective was to determine if the delivery model is acceptable to the target population and feasible for widespread implementation. In addition, the following outcomes were desired:

- 1. Determine opportunities that individuals perceive to be interventionworthy within MLB academy setting.
- 2. Increase appreciation for intervention-worthy doping-related situations.
- 3. Change perceptions of personal roles and responsibilities for intervening in these situations.
- 4. Provide individuals with the skills and resources necessary to effectively intervene and encourage intervention among their peers.



Figure 1: Project Outline

PHASE 1: CONTENT DESIGN AND DEVELOPMENT

It was clear from the onset of the project that the established RE>ACT program would need to be modified for implementation within the unique DR Academy context. Figure 2 outlines the rigorous process that was followed in order to achieve this.



Figure 2: Process of designing session content

The first step towards modifying RE>ACT was to reduce the length of the program from two hours to one hour in order to increase academy players' engagement with the session. During the process of shortening the session, local cultural norms were considered and to begin with, the MLB representatives in the DR briefed Dr Erickson on common issues and challenges associated with the academy structure and the DR culture in general (e.g., financial limitations, syringe culture, limited education). Next, Dr Erickson visited the DR to gain personal exposure to the DR culture, and the academy context more specifically. She also had the opportunity to observe the MLB representative give a drug-related presentation to academy players in two separate academies; thus, providing insights into the current approach to drug education within the academies and offering an example of academy players' levels of engagement with such presentations. During this visit the drafted MLB RE>ACT content was reviewed alongside MLB representatives and through continuous dialogue the content was further adapted and reduced. The revised session was reviewed by the research team to ensure that key messages had not been lost and to check that there was still a clear narrative to the structure. Next, the MLB RE>ACT content – including the RE>ACT model (see Figure 3) – was translated from English to Spanish by the MLB representatives to accommodate delivery to the players. The model was also further modified by replacing words with pictures where possible (see Figure 4).



Figure 3: RE>ACT and MLB RE>ACT Models

In its final format (60 minutes), MLB RE>ACT (a) introduced the theories and evidence underpinning the situational model of bystander intervention and concepts related to effective confrontation and (b) facilitated an opportunity for participants to apply the skills and knowledge they garnered in addressing specific substance use situations: dietary supplements, APEDs and drugs of abuse (these were identified by the MLB representatives as the most prevalent). The MLB RE>ACT session is interactive and includes opportunities to consider and discuss approaches to addressing tailored hypothetical substance use scenarios (see Appendix 2 for a session outline). After the MLB RE>ACT session was designed, it was piloted with athlete support personnel (ASP)¹ linked to the identified Academy. The audience provided feedback on content, appearance, and delivery style of the session and this was used to further refine program content prior to player delivery. A key outcome of this exercise was deciding that all case study examples should be specific to the MLB context rather than sport more broadly. It was also noted that the specific Academy involved was already familiarizing players with the bystander framework, but not in the context of drug use/abuse. Accordingly, there was a unique opportunity to help alert players to the opportunity to translate prior knowledge to a new context. The pilot session with ASP also confirmed the need to deliver RE>ACT to players in Spanish (rather than English). The ASP session was delivered by Dr Erickson in English and simultaneously translated to Spanish by an MLB representative. This served as an efficient approach for the purposes of delivery to ASP, however, it lengthened the delivery time and also required consistent pauses in delivery. ASP in attendance identified that this approach would make it difficult for players to maintain focus.

Another key outcome stemming from sharing MLB RE>ACT with ASP first was that it led to important changes in the wording that was used in the presentation. For example, one of the strategies proposed to help players determine whether or not to intervene in a substance use situation was titled as a 'Cost/Benefit Analysis'. This language was highlighted as problematic because ASP felt that the players would determine that the benefits of taking banned substances – even if caught – would outweigh the costs. In light of this, the strategy name was amended to 'Decisional Balance'. Finally, ASP suggested making an amendment to the scenario (you are in the gym and you see a teammate taking a dietary supplement that you know is banned) because they felt players would not actually 'know' that a supplement was banned. The scenario was therefore amended to read: you are in the gym and you see a teammate taking a dietary supplement that you know is not certified.

¹ Athlete Support Personnel (ASP) are considered Any coach, trainer, manager, agent, team staff, official, medical, paramedical personnel, parent or any other Person working with, treating or assisting an Athlete participating in or preparing for sports Competition

Key Modifications

- All case study examples based on MLB
- Deliver player session in Spanish
- Change wording from 'cost/benefit analysis' to 'decisional balance'
- Modify the scenarios to better reflect players' knowledge levels

PHASE 2: EVALUATION TOOL

The priorities for the pilot delivery of MLB RE>ACT were to determine (i) feasibility of delivery and (ii) engagement levels of academy players with MLB RE>ACT. However, it was deemed worthwhile to start considering potential evaluation options. Within the unique DR academy population, the use of traditional evaluation measures (e.g., questionnaires) is hindered by such things as: the language barrier, limited educational level of players and the one hour time limit for delivery. In light of this, after discussions with intervention experts, MLB representatives and the wider research team, it was determined that for the purposes of the pilot delivery, we would trial the option of asking direct questions pre- and post-intervention (via a pencil and paper survey). Participants were asked to respond to three questions [(1) I know how to address drug use in sport, (2) I believe I can address drug use in sport, (3) I will address drug use in sport] using a likert type scale ranging from 1 (strongly agree) to 5 (strongly disagree). The post-intervention survey was the same but included an additional open ended question [from RE>ACT, I learned (please describe below)].

Due to concerns over the feasibility of utilizing this approach, it was also decided that at the end of the session players would be invited to create a 'pledge' (i.e., actions that they commit to following). Players were collectively invited to determine a contract that they wanted to adhere to in relation to pursuing clean sport. The session facilitator recorded the statements on poster paper and then players were invited to sign the statement. The document was delivered to one of the Academy ASP after the session and they were advised to post it wherever they felt was most appropriate (e.g., locker room, classroom, etc.). It was anticipated that the latter form of measuring impact would garner greater engagement from the players than the former since it empowered them to create their own contract rather than asking them to respond to pre-determined questions. It also minimized potential language barrier issues.

PHASE 3: RECRUITMENT AND DELIVERY

The MLB determined the Academy to pilot MLB RE>ACT in. Once this was confirmed, the associated ASP were offered an opportunity to be introduced to the program. As agreed with the MLB representatives, only those players who were 18 years of age and over were invited to participate in the evaluation process. A total of six athlete support personnel (M=5, F=1) attended the overview session. Meanwhile, the entire academy team attended the player focused session (no ASP were present). Of these, 20 players provided their informed consent.

At the start of the session all participants 18 years and older were provided with an Information Sheet, Informed Consent document, and a pre- and post-intervention survey. Players were provided with an overview of the Information Sheet (Appendix 5) by the facilitator and the key points were also reiterated on the presentation slides. Next, the facilitator walked the players through the Consent Form (Appendix 6) and emphasized why it was important, and he asked participants to circle their responses and sign the document. Then, they were asked to fill out the preintervention survey and place it under their seat once they were finished. At the end of the session, participants were invited to complete the post-intervention survey and then return the documents to the research team.

OUTCOMES

The players actively engaged with the videos and reflected upon and responded to the questions posed by the facilitator. This demonstrates the relevance and impact of the videos and also emphasizes the benefit of facilitating an interactive session. The scenarios were well received and invited dialogue from the players. It is worth noting that the majority of players suggested they would not do anything in the instance of seeing a player taking a dietary supplement that they knew was not certified. This suggests that further education on the risks of dietary supplements might be worthwhile within this specific Academy (and perhaps more broadly).

As expected, the formal evaluation tool (survey questions) proved challenging for the Academy players and resulted in few of them actually completing it pre- and post-intervention. It also took a significant amount of time (15 minutes) for the facilitor to explain the evaluation (purpose and procedures) because he received many questions from participants and, in turn, this reduced the time available to actually deliver MLB RE>ACT. Based on observation, the majority of players who did submit the pre- and post-intervention survey actually filled out both versions after the session (rather than filling out the pre-intervention survey at the start of the session); therefore, eliminating the possibility of determining pre- and post-intervention scores. This suggests that traditional means of determining intervention impact are not necessarily appropriate within this population. Due to the observed limitations of the survey, it was determined that inputting and evaluating player responses would not be appropriate at this stage of the project.

Although the survey was not effective, the players actively engaged with the pledge activity and collectively they identified specific statements that they wanted to commit to as a team, with the majority of them voluntarily signing the document. Specifically, the Academy players commited to: (a) comunicar lo que pienso y lo que siento (communicate what I think and what I feel), (b) a escuchar cuando alguien me de un consejo (listen when someone gives me advice), (c) a tratarnos como familia, res petandonos y cuidandonos los unos a los otros (treat us as a family, respecting each other and taking care of each other). Importantly, when the document was shared with a member of the Academy ASP he asserted that he was going to post it in a visible location within the Academy and enquired about the possibility of us returning at a later date to engage with the new Academy players. This suggests that more creative and engaging forms of impact measurement have the potential to be effective and should be used in place of (or at least alongside) traditional approaches such as surveys.

REFLECTIONS

Engage athlete support personnel first.....

Delivering MLB RE>ACT to ASP first proved to be a very valuable exercise and enabled us to tailor the program to the context of the specific Academy that we were engaging with rather than to academies more broadly. This should become the standard approach as it would ensure that both ASP and players are able to experience maximum benefits from engaging with the program. For example, delivering to ASP first allowed us to adapt the scenarios to ones that had previously been encountered within that particular Academy. This approach also allowed ASP to be familiarized with the MLB RE>ACT content which is critical to ensure that players are receiving a consistent message from the MLB RE>ACT content and ASP.

Delivery in the native language...

Having delivered the program in English (to ASP) and witnessed it being delivered in Spanish (to players), it is apparent that delivering in Spanish is the ideal option for the academy players in the DR. Having a local MLB representative deliver the player session enhances its relevance further and should be the approach utilized for future delivery where possible.

Create an informal learning environment...

Practically, the delivery classroom proved to be a challenge. It was too small for the number of players in attendance, there were no tables (which made it difficult for players to write) and the only option for the seating arrangement was to have the seats in formal lines facing the front of the room. In the future, it would preferable to have a more informal set up that allows for casual discussion among the players and presenter. This will miminize the feeling of MLB RE>ACT being a presentation and allow for a more group-based session.

Make it feel MLB...

Looking ahead, it is worth considering adopting the MLB color scheme for the program presentation and documents. The more the program can be tailored to reflect the MLB (academy players' desired end goal) the more relevant it will feel.

CONCLUSION

The initial piloting of MLB RE>ACT in a DR Academy demonstrated that the program is relevant to the context, encourages interaction and reflection and is feasible for delivery in this setting. Players engaged with the scenarios offered and asked various questions in relation to the content. They also committed to self-selected behaviors that they feel will support clean sport within their specific Academy.

Familiarizing academy ASP with the contents of MLB RE>ACT prior to player-focused delivery presents a unique opportunity to determine what the players already know (i.e., education interventions they have received to date) and familiarize ASP with the content of RE>ACT so that they can reinforce the key principles and concepts within their teams. It also allows the presentation to be tailored to reflect current issues/challenges within the specific Academy (e.g., scenarios that they may have faced recently). Continuing to deliver the two separate sessions is encouraged given that it simultaneously benefits the researchers and facilitator (by familiarizing them with the specific Academy's ethos), the players (by increasing the relevance and bespoke nature of the program) and ASP (by familiarizing them with the concepts and theories underpinning MLB RE>ACT).

NEXT STEPS

The pilot delivery of MLB RE>ACT facilitated substantial group discussion and engagement. However, it was identified that group dialogue was not introduced until the latter end of the program. Accordingly, the program content has now been rearranged in order to invite group participation earlier in the session. To further enhance the impact and benefits of participating in MLB RE>ACT, we will also seek to determine a more appropriate and effective means for measuring impact as we move from determining *feasibility* to the *impact* of MLB RE>ACT. As a starting point, we will formalize the pledge aspect of the program. For example, by identifying a specific document (e.g., poster paper) for the statements to be recorded on and providing a means (e.g., picture frame) for mounting it in a noticeable place within individual academies.

In order to support the wider DR academy system, it is proposed that the next step in this program of research is to implement the updated MLB RE>ACT program within the wider DR academies. Delivery to both ASP and players is suggested in order to ensure that players are receiving reinforcement and encouragement from ASP for implementing the skills and knowledge they have gained through participation in MLB RE>ACT. Also, to ensure that the facilitator is aware of education interventions that players have previously received and the particular Academy ethos; thus, able to tailor the MLB RE>ACT content accordingly prior to delivery. Specifically we suggest that:

- A further Academy team is identified and engages with the updated MLB RE>ACT program (delivered by a local MLB representative)
- MLB RE>ACT is delivered across the academies (to players and ASP) and tailored to each specific academy where posisble
- Collectively, the research team and MLB staff design an appropriate measure for determining program impact
- Players who have participated in MLB RE>ACT receive regular booster sessions that allow them to engage with further (current) scenarios and discussions

REFERENCES

Backhouse, S. H., Whitaker, L., Patterson, L., Erickson, K., & McKenna, J. (2016). Social Psychology of Doping in Sport: A Mixed Narrative Synthesis. Retrieved from: https://www.wadaama.org/sites/default/files/resources/files/literature_review_update_-

_final_2016.pdf

- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bowers, L. D. (2014). Counterpoint: The Quest for Clean Competition in Sports: Deterrence and the Role of Detection. *Clinical Chemistry*, 60(10), 1279-1281. doi:10.1373/clinchem.2014.226175
- Burn, S. (2009). A Situational Model of Sexual Assault Prevention through Bystander Intervention. Sex Roles, 60(11-12), 779-792. doi:10.1007/s11199-008-9581-5
- Erickson, K., McKenna, J., & Backhouse, S. H. (2015). A qualitative analysis of the factors that protect athletes against doping in sport. *Psychology of Sport and Exercise*, *16*, *Part 2*, 149-155. doi:

http://dx.doi.org/10.1016/j.psychsport.2014.03.007

- Erickson, K. (2016). Doping in Sport: A Cross-National Qualitative Analysis of Track and Field Athletes. Unpublished Thesis. Leeds Beckett University. UK.
- Erickson, K., Backhouse, S. H., & Carless, D. (2017). "I don't know if I would report them": Student-athletes' thoughts, feelings and anticipated behaviours on blowing the whistle on doping in sport. *Psychology of Sport and Exercise, 30*, 45-54. doi:<u>http://dx.doi.org/10.1016/j.psychsport.2017.01.005</u>
- Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley.
- Latane, B., & Darley, J. M. (1970). The unresponsive bystander: Why doesn't he help. New York: Appleton Century Crofts.
- Latane, B., & Nida, S. (1981). Ten years of research on group size and helping. Psychological Bulletin, 89, 308-324. doi:10.1037/0033-2909.89.2.308
- Long, J. (2012). University of Virginia's Step Up! Program: An Evaluation. Retrieved from: http://stepupprogram.org/wpcontent/uploads/2014/04/UVA_StepUp_Evaluation_Bridget_Long_May3_2012. pdf

- McLeroy, K., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, *15*(4), 351-377.
- Overbye, M., Knudsen, M. L., & Pfister, G. (2013). To dope or not to dope: Elite athletes' perceptions of doping deterrents and incentives. *Performance Enhancement & Health*, 2(3), 119-134. doi:http://dx.doi.org/10.1016/j.peh.2013.07.001
- Perkins, H., & Berkowitz, A. (1986). Perceiving the Community Norms of Alcohol Use Among Students: Some Research Implications for Campus Alcohol Education Programming. International Journal of Addictions, 21, 961-976.

StepUP! (2006). Pilot Survey. Retrieved from:

http://stepupprogram.org/docs/worksheets/STEPUP_Worksheet_Post_Test_and_ Evaluation.pdf

StepUP! Program (No Date). Accessed April 17, 2017: www.stepupprogram.org.



