Understanding Athlete Behavioral Motivations and Value Characteristics for the Purpose of Clean Sport Education Programming

Final Report

PRESENTED TO:
Tony Cunningham
Senior Manager, Education
WADA

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PRESENTED BY:
David Wyrick, PhD
Prevention Strategies

Jeffrey J. Milroy, DrPH
Center For Athlete Well-Being
University of North Carolina
Greensboro

Ann Kearns Davoren, PhD
Prevention Strategies

Samantha Kelly, MPH
Center for Athlete Well-Being
University of North Carolina
Greensboro

UNC GREENSBORO
Center *for* Athlete Well-being

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Executive Summary

The following summarizes work funded through WADA's 2021 Social Science Research Grant Program opportunity that explored the cultural invariance of relevant anti-doping values among developmental athletes in six countries and tested the feasibility of a cross-cultural values-based mobile education module.

Doping in Sports. Doping involves the use of banned substances and methods to enhance performance and is often fueled by external and internal pressures, including, but not limited to, perfectionism, urgency to perform, and rapid recovery. Protective factors, such as positive attitudes about clean sport, resistance to pressure, and fear of consequences mitigate these risks. Effective anti-doping education must therefore consider these nuances, including sport-specific, age-appropriate, and culturally relevant content. While policies and punitive measures play a crucial role in deterring substance use, research has increasingly emphasized the necessity of preventative, educational approaches grounded in values-based frameworks.

Values-Based Education. Values-based education aims to instill moral and ethical reasoning by fostering core values like respect, responsibility, honesty, fairness, and teamwork. It improves self-esteem, empathy, decision-making, and social responsibility in youth. In sports, it complements anti-doping objectives by embedding ethical principles within the athlete's moral framework, providing an internal compass that opposes doping behavior.

The initiative was guided by a rigorous Delphi Study and evaluated through a comprehensive feasibility assessment across the following countries: Australia, Canada, Denmark, New Zealand, Switzerland, the United States.

Project Objectives. The project was anchored in two overarching goals:

1. To identify core sport values through a Delphi consensus process that could serve as the foundation for a values-based educational approach.
2. To develop and pilot a scalable, mHealth values-based education module informed by the Delphi results and grounded in best practices in online education and anti-doping pedagogy.

METHODOLOGY

Phase 1 – Delphi Study. The Delphi method, a consensus-driven research technique, was employed to identify key values and educational components essential for anti-doping efforts. The panel reviewed a comprehensive narrative literature review prepared by the research team and participated in two rounds of anonymous scoring. Items were scored based on utility and feasibility (for recommendations) and commonness and importance (for values). Items achieving high consensus scores (7 or more on a 9-point scale) were retained.

Phase 2 – Feasibility Study. Using Delphi-informed content, the team developed a prototype mHealth module in collaboration with LeanForward, a firm specializing in e-learning design. The module employed the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) instructional model and was optimized for mobile access.

KEY FINDINGS

Delphi Study Outcomes. The following were prioritized as essential:

- Anti-Doping Education Approaches:

    - Tailored, sport-specific, age-appropriate content.
    - Timely delivery before major competitions.
    - Required education for coaches.
    - Inclusion of knowledge, attitude, life skills, and social skills training.
- Values-Based Components:
    - Use of a consistent value set across gender, nationality, ethnicity, and sexual orientation.
    - Focus on core values such as fairness, honesty, dedication, responsibility, equity, and community.

Feasibility Study Outcomes. Despite lower-than-expected participation, results were favorable:

- Usability: 100% of participants found the video easy to follow.
- Relevance: Over 90% of athletes and coaches felt the content was important and appropriate.
- Engagement: 87% of athletes and over 95% of coaches enjoyed the graphics and presentation.
- Feasibility: All country liaisons agreed the module could be delivered broadly.
- Integration: All liaisons endorsed the module's fit within existing structures.

Implications for Practice and Policy

Practical Translation. The study provides a template for integrating values-based anti-doping education into the day-to-day fabric of athlete development. Specifically:

- Educational programming should be evidence-based, targeting not only knowledge but also risk/protective factors and values.
- Modules should use suitable language, interactivity, and age-appropriate design, particularly for youth athletes (ages 14–18).
- Scalability and integration are critical; modules must be simple to disseminate and align with existing training programs.

Policy Recommendations. The findings support the incorporation of mHealth modules into anti-doping policy at organizational and national levels. Strategic recommendations include:

1. *Stakeholder Engagement*: Maintain ongoing dialogue with athletes and support personnel.
2. *Platform Utilization*: Deliver modules through commonly used digital platforms.
3. *Content Optimization*: Balance brevity with comprehensiveness.
4. *Supplemental Materials*: Develop coach toolkits and discussion guides to reinforce critical messaging.

Conclusion

This project demonstrates that values-based, anti-doping education mHealth modules are both feasible and effective. By aligning content with athletes' lived experiences and core ethical values, the module fosters a holistic approach to clean sport. This study offers guidance for future anti-doping interventions that prioritize sustainability, cultural relevance, and moral development. Policymakers and sport organizations are encouraged to use the findings of this study to support anti-doping education by purposefully utilizing values-based strategies and mHealth technologies to support athlete education.

Anti-Doping Education for Athletes

Real or perceived pressure for athletic performance excellence can lead some athletes to use banned substances (i.e., doping) to artificially enhance their athletic performance (McVeigh et al., 2012; Vargo et al., 2014). Effective anti-doping education is an essential component for promoting skills and behaviors among athletes and other key individuals (e.g., coaches and other Athlete Support Personnel (ASP)). These skills and competencies help to promote and ensure clean sport – that is sport free from athletes who dope. To help ensure that anti-doping education is effective, it is critical that we have a thorough understanding of the risk and protective factors that are related to doping. Risk factors are characteristics that are associated with a higher likelihood of doping among athletes. Protective factors are characteristics that are associated with a lower likelihood of athlete doping.

Studies show that the following protective factors ***reduce*** the likelihood that athletes will dope:

- Positive attitudes about clean sport
- Belief in your own ability to resist both internal pressures to dope and external pressures – or pressure coming from others – to dope (Duncan, 2019)
- High levels of success in sport (Devcic, 2018)
- Concerns about potential negative consequences of doping (e.g., physical and psychological harm, suspensions from competition, sanctions, and public humiliation) (Kegelaers, Wylleman, De Brandt, Van Rossem, & Rosier, 2018)

On the other hand, the following risk factors ***increase*** the likelihood that athletes will dope:

- If the athlete is male
- Lack of knowledge of the potential negative consequences of doping
- Concerns with being perfect and making few mistakes (Bae, Yoon, Kang, & Kim, 2017; Devcic, 2018; Ozkan, Torgutalp, Kara, et al. 2020)
- Low levels of athletic success compared to their peers
- Heightened sense of urgency to perform well within their sport
- Real or perceived requirement for a new or improved physical attribute in order to improve or maintain success (Smith & Stavros, 2020)
- Current or past use of permitted and/or low-risk artificial substances (including dietary supplements) (Smith & Stavros, 2020)

Anti-doping education is best accomplished using a comprehensive approach that carefully considers the following:

- individual athlete
- sport context
- role of coaches
- content of the education program
- anti-doping policy, and
- program delivery options.

Let's take a close look at each.

The Athlete

Anti-doping education should be tailored to the athlete whenever possible. Tailored programming helps ensure that the most critical issues and challenges (e.g., the athlete's specific risk factors) and their unique personal characteristics (e.g., culture, language, and age) are addressed.

- All program content and language should be developmentally (e.g., impairments and/or special learning needs) and age appropriate (Gatterer, Gumpenberger, Overbye, Streicher, Schobersberger, & Blank, 2020)
- Whenever possible, program content should be culturally appropriate to the background of the athlete (Königstein, Gatterer, Weber, Schmidt-Trucksäss, Tercier, Blank, 2021). That is, the content should reflect or incorporate an athlete's identity, mindset, tradition, and personal experiences.
- Content should be tailored to specific sports, when possible, to better engage the athlete and help them internalize the information (Overbye, 2017; Westmattelmann, Dreiskämper, Strauß, Schewe, & Plass J. 2018).
- Education should be provided that is timely (e.g., in-season vs. out-of-season; prior to major competitions; in response to high-profile doping scandals, etc.) (Hauw, 2017).
- Content should be closely connected to concerns that are both meaningful to athletes and potentially related to doping (e.g., perfectionism, injury, illness, lack of progress in sport development, pressure from self/others, risk of public humiliation, bans, and monetary fines) (Bae, Yoon, Kang, & Kim, 2017; Hauw, 2017; Overbye, 2017).

Sport Context

Taking into consideration the specific context of each sport can greatly enhance an athlete's understanding and acceptance of the anti-doping educational programming. Sport environments often differ in how they prevent or promote anti-doping efforts. Therefore, it is important to consider sport context broadly: sport, governing body(s), earning potential, typical age of athletes, and the nature in which they operate (Wippert, & Fließer, 2016).

Role of Coaches

Coaches are primarily responsible for setting team or sport culture and, therefore, play an important role in athletes' decisions to use or not use banned performance enhancing substances. Athletes who have coaches who are highly critical, have poor knowledge of doping policies, and who do not discuss anti-doping with their athletes or fellow coaching staff are more likely to dope (Bae, Yoon, Kang, & Kim, 2017). Additionally, providing anti-doping education to coaches is associated with an increase in doping knowledge among coaches and athletes and a greater likelihood among both to disapprove of doping (Engelberg, Moston, & Blank, 2019). Coach anti-doping education should be required and provided in regular intervals over time. Coaches should be able to document that they are encouraging anti-doping and providing anti-doping education to their athletes (Engelberg, Moston, & Blank, 2019).

Content of the Education Program

Due to the complexity of doping in sport, it is essential that anti-doping education target established risk and protective factors (see above). The research literature identifies five primary educational approaches, with each approach addressing specific risk and protective factors that are most associated with the prevention of doping in sport:

1. Knowledge/Awareness-based education
    a. E.g., provide education on the potential side effects, potential negative physical and social consequences of doping, and anti-doping policies (Königstein, Gatterer, Weber, Schmidt-Trucksäss, Tercier, Blank, 2021).

While knowledge/awareness-based education is not sufficient on its own for anti-doping efforts, it is essential as an integrated component with the other four primary approaches.

2. Programming that targets athletes' perceptions and attitudes regarding clean sport
    a. E.g., provide information on why doping is not a good option for athletes and educate all involved in sport that the majority of athletes do not dope (Hauw, 2017)
3. Social skills training that teaches athletes interpersonal communication skills, such as assertiveness, building healthy relationships, and resisting peer pressure
    a. E.g., provide athletes with information on how to say no to doping and what they can focus on instead to develop their athletic ability that does not include doping (Hauw, 2017)
4. Life skills training teaches athletes competencies that help them make informed decisions, solve problems, think critically, cope with stress, and manage their lives in a healthy and productive manner.
    a. E.g., regularly update content and boost and reinforce the concept of lifelong learning (Hauw, 2017; Wippert, & Fließer, 2016)
5. Values-Based Education: Delivering activities that emphasize the development of an individual's personal values and principles.
    a. Build the learner's capacity to make decisions to behave ethically because doping is against the rules and athletes have a moral imperative to value honesty and integrity over winning (Backhouse et al., 2014)

Anti-doping Policy

Anti-doping policies at all levels (local, national, and world) should complement educational programming and help promote consistent adherence

to clean sport behaviors (Overbye, 2017). The athlete voice should be well-represented in all stages of anti-doping dialogue including policy development and implementation. Also, as stated above, the knowledge/awareness component of anti-doping education should include specific efforts to educate athletes on all relevant anti-doping policies.

Program Delivery

There are multiple delivery methods that can be used to implement anti-doping education. Common methods include face-to-face sessions, eLearning, brochures, outreach booths at major events or conferences, websites, social media , etc. It is key that the delivery methods chosen should facilitate ease of learning and interactive engagement by the athlete (Westmattelmann, Dreiskämper, Strauß, Schewe, & Plass J. 2018; Wippert, & Fließer, 2016).

Values-Based Education

Values-based education is defined as an educational process that uses morals and values to promote knowledge, understanding, and empathy, as well as specific skills, such as decision making and goal setting, to encourage ethical behavior (Mergler & Spooner-Lane, 2012; Panev, 2020). Common values that are often included in values-based education to promote the formation of the whole person are: equity, respect, inclusion, fun, determination, fairness, citizenship, honesty, responsibility, and cooperation with others (Amollo & Lilian, 2017; Chambers & Sandford R, 2019; Mergler & Spooner-Lane, 2012; Panev, 2020). Values guide the individual through decision-making based on proper ways of behaving given different contexts and situations.

Why is Values-Based Education Important?

Values-based education has been shown in previous research to promote the following among youth and young adults:

- higher self-esteem,
- greater sense of self-worth,
- greater receptivity to learning,
- greater sense of belonging and better problem-solving skills (Amollo & Lilian, 2017; Gindi, & Paul-Binyamin, 2021).
- greater self-efficacy (belief in one's ability) and self-reflection,
- better relationships with others,
- enhanced sense of social responsibility (Mergler & Spooner-Lane, 2012).

Through open and honest communication, values-based education can help promote empathy, social and personal responsibility, and can aid in ethical decision-making (Amollo & Lilian, 2017; Mergler & Spooner-Lane, 2012). Success of values-based education can facilitate a sense of belonging and community and can facilitate relationships between athletes, coaches, and the sport community (Gindi, & Paul-Binyamin, 2021).

Values-Based Education in Sport

Sport participation is ideally situated to provide context and community where values like self-control, honesty, compassion, fairness, teamwork, and trust can be taught and celebrated (Amollo & Lilian, 2017). Intentional application of values-based education supports positive athlete development through building character and fostering social and life skills (Chambers F & Sandford R. (2019).

Values-based education should be structured and integrated in a way that ensures that athletes are exposed to a common set of positive sport values that are consistent with the spirit of sport. The spirit of sport is the celebration of the human spirit – body and mind – and is reflected in values we find in and through sport. These values include ethics/fair play/honesty, respect for rules/laws, dedication/commitment, teamwork, and community/solidarity (WADA Ethics Panel: Guiding Values in Sport and Doping; Mortimer, Whitehead, Kavussanu, Gürpınar, & Ring, 2021). The spirit of sport can be promoted through sport regardless of an athletes' social background, nationality, ethnicity, or sexual orientation. Values-based education is intended to be a long-term endeavor with consistent implementation from youth to elite sport.

Values-Based Education as an Essential Component of Anti-Doping Education

Within sport, anti-doping education directly supports and protects what is intrinsically most valuable about sport – fair and equitable sport competition. The simple concept of "clean sport" communicates clearly that common sport values such as equality, fairness, and honesty provide a foundation for all athletes to make ethical decisions (Hunt, Dimeo, & Jedlicka, 2012). Further, clean sport is characterized by a commitment to the value of integrity of sport and fair competition above winning, especially winning at any cost. In comparison, an athlete's use of banned performance enhancing substances violates the spirit of drug- and cheating-free sport. In summary, values-based education serves as an essential component of anti-doping education programs to provide a clear focus on protecting the integrity of sport by preventing deliberate cheating through the use of banned performance enhancing substances.

Implications of Values-Based Education for Coaches

The United Nations Educational Scientific and Cultural Organization (UNESCO)'s "Values Education Through Sport" program indicates that coaches can help young athletes learn values like respect, fairness, inclusion, equality, teambuilding, discipline, and perseverance (Buzi, Jarani, Tregun, Macaro, & Isidori, 2021). Additional research implicates that coaches can play a significant role in upholding common sport values and building a culture where adherence to sport values is the norm (Amollo & Lilian, 2017). Coaches who are sensitive, practice tolerance, encourage athlete expression, promote a supportive environment, and sustain relationships are more likely to integrate values-based education and provide athletes a culture that supports the application of positive values in sport (Mergler & Spooner-Lane, 2012). Additionally, coaches who reflect on their own values and model those values for their athletes further enhance the cultural standard of prioritizing sport values over winning (Mergler & Spooner-Lane, 2012). These findings support the idea that coaches and other ASP can and should go beyond promoting the development of physical skills within sport (i.e., performance/competence character) and highlight the need for and reward athlete behaviors that exhibit core sport values above winning at any cost (i.e., moral character) (Buzi, Jarani, Tregun, Macaro, & Isidori, 2021).

Sport Values

Sport values should be prioritized and modeled by all athletes, coaches, and other ASP. The specific sport values to be emphasized should have broad community support as well. When going through the process of identifying specific sport values, look for values that are reflected in your sport organization's vision and mission and reflect the local culture/context. Involve multiple stakeholders (e.g., athletes, coaches, team physicians, parents, officials, and the general public) in the process to help ensure consistency between your organization's sport values and the values of the surrounding culture/context.

Several sport values that should be considered for inclusion in a values-based component of a broader anti-doping education program include:

- Personal values – values that relate to a person's attitudes, preferences and behavior.
- Inter-personal values – values formed in human interaction. Social values are values that characterize aspects of society.
- Social values – values held by individuals related to doping/clean sport participation.
- Personal responsibility
- Social responsibility
- Morality
    - Moral disapprovals (blame, judging blameworthy, condemnation, sadness)
- Respect
- Sports culture
- Belonging/loyalty
- Reference group opinion
- Sense of belonging
- Excitement
- Warm relationships
- Self-fulfillment
- Being well-respected
- Fun and enjoyment in life
- Security
- Self-respect
- Sense of accomplishment

Best Practices for the Development of Online Modules

The development of online educational mHealth modules has gained substantial attention in recent years. Whereas there are a variety of methods and strategies to optimally develop an effective mHealth module, research highlights a set of core practices that can be used to enhance learning outcomes, learner engagement, and knowledge retention. Key themes from the literature include *instructional design frameworks*, *relevance and authenticity of content*, *usability and accessibility*, and *technological integration*. ***Instructional Design Frameworks.*** Many effective online modules are grounded in established instructional design models. For example, the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) and the Community of Inquiry (CoI) framework are frequently used in online educational and/or prevention content (Branch, 2009; Garrison, Anderson, & Archer, 2000). These models emphasize learner-centered design, iterative feedback, and the integration of cognitive, social, and teaching presence. Additionally and when appropriate, online programming can be enhanced by using digital elements to encourage active, self-directed learning through real-world problem-solving (Morris & Rohs, 2021). ***Relevance and Authenticity of Content***. Content relevance is a key driver of learner engagement. Research supports the inclusion of authentic tasks, case studies, and problem-based scenarios that reflect real-life contexts (Herrington, Reeves, & Oliver, 2010). The end-user is more likely to engage actively with the content if it holds some sort of meaning with them or aligns with their values, needs, and goals. Aligning module objectives with the end-users goals and needs increases motivation and perceived value of the programming. This is critical if there are multiple components of the programming. For example, focusing on relevancy and authentic content increases the likelihood that the user will come back to subsequent content (Knowles, Holton, & Swanson, 2015). ***Usability and Accessibility.*** Ease of access is critical in online learning environments. mHealth modules should be designed with Universal Design for Learning (UDL) principles, ensuring accessibility for learners with varying abilities and learning styles (CAST, 2018). Navigation should be intuitive, with clear instructions, consistent layout, and minimal cognitive load. Compatibility across devices and browsers also enhances accessibility. For example, when developing online content, it is beneficial to learn from potential end-users to learn about their usability and accessibility priorities so that the developed education can meet their needs effectively. Learning about whether an online module is easily accessible, relevant, and feasible to use is critical to its future success and sustainability. ***Learner Engagement and Interactivity.*** Interactive elements such as quizzes, discussion boards, multimedia, and gamification can significantly boost engagement and knowledge retention (Chen & Wu, 2023). Providing immediate feedback, opportunities for reflection, and peer collaboration supports deeper learning. Scaffolding and adaptive learning paths help accommodate different skill levels and learning paces. ***Evaluation and Continuous Improvement.*** Ongoing evaluation through learner feedback, performance metrics, and usability testing is essential for refinement (Kirkpatrick & Kirkpatrick, 2006). Incorporating analytics helps identify learning gaps and inform content updates and instructional strategies as well as increases the sustainability of the mHealth module.

Methods

Phase 1 - Delphi Study

The Delphi method is an established methodology for aggregating expert opinion to reach consensus. Consistent with best practices for using the Delphi method, our process included exploration and evaluation phases (Adler et al., 1996). As part of the exploration phase, Drs. Wyrick and Davoren (Research Team) conducted a narrative review of: (1) values-based education; (2) doping prevention for athletes; and (3) sport values. Based on the narrative review, the research

team outlined (1) common sport values for developing athletes; (2) recommendations for effective values-based education; and (3) recommendations for effective doping prevention. This information was packaged into a narrative review, which was then provided to the Delphi Panel during the evaluation phase.

The Delphi Panel consisted of 18 members from the 6 participating countries: one anti-doping education expert, one coach, and one developmental athlete from each country. The panel was emailed the narrative review and a link to an anonymous online survey for scoring the values and recommendations. Drawing on the narrative review and their own expertise, panel members scored each value on commonness and importance and each values-based education and doping prevention recommendation on utility and feasibility (Adler et al., 1996 & Zumsteg et al., 2012). Utility is defined as whether the recommendation will improve doping prevention efforts for development team athletes. Feasibility is defined as the degree to which the recommendation could be implemented. For each dimension, scores were on a nine-point scale, with higher scores indicating the value is more common/important or the recommendation is more useful/feasible. Panel members also were invited to provide comments about each dimension. Mean scores for each value and recommendation were calculated separately for commonness/importance and utility/feasibility. Any value or recommendation with a rounded mean score of 3 or less on either dimension was discarded, and any with a rounded mean score of 7 or more on both dimensions was included in the final product. Values and recommendations that receive a rounded mean score >3 but <7 on either dimension were revisited in a 2nd round of voting. As with the first round of scoring, panel members scored each value and recommendation.

Phase 2 - Feasibility Study

Multiple stakeholders from five of the six participating countries contributed to the feasibility study, including developmental youth athletes, coaches, and ADO staff.

Delphi results on the values that are common across gender, sport, and culture and best practice recommendations for values-based education and doping prevention were used to develop and pilot an mHealth values-based educational doping prevention module designed by the research team. The following steps outline the development and testing procedures.

1. **Content development.** The research team developed objectives and an outline for the values-based educational module. The Expert Advisory Panel reviewed the outline and provided guidance for revisions that ensure the content drew on the most current research and identified any content gaps.

2. **Finalizing Content.** The research team revised the content and sent it to the EAP. The research team and EAP continued revising and seeking feedback via emails until the full consensus was reached on the final outline and objectives.

3. **Storyboarding.** We partnered with LeanForward, a U.S. based educational design firm specializing in the development and delivery of e-learning, to create a detailed script (storyboard) for the final content. The EAP reviewed the script and provided feedback. Based on the feedback, LeanForward made necessary adjustments to the script and confirmed these revisions with the research team before moving on to technical development.

4. **Technical development.** LeanForward completed technical development of the mHealth values-based educational doping prevention module. LeanForward used the ADDIE (analyze, design, develop, implement and evaluate) instructional design model and learning theory to maximize comprehension, retention, and behavior change. The module was built to HTML5 web standards for delivery via mobile devices (iOS or Android). An alpha review compared the fully functional module against the approved script. The research team provided feedback to

LeanForward, and they completed all necessary revisions. A beta review confirmed that all alpha review changes were complete and the module was ready to pilot.

5. **Pilot Test Design.** We used a posttest-only design to assess feasibility and technical merit. Using a purposive stratified sampling strategy, the research team aimed to recruit 30-50 developmental team athletes and 10-15 coaches in collaboration with each of the 6 participating national anti-doping organizations. The age range of sampled athletes was 14 – 18 years, and we attempted to recruit approximately equal numbers of male and female. Parental consent was received from parents for athletes under the age of 18. Athletes and coaches received a $10 gift card for participating. We obtained names and email addresses of participants and used Qualtrics survey software to deliver the module and the posttest. Qualtrics allowed us to track participation and deliver targeted non-respondent follow-ups.

6. **Feasibility and Technical Merit.** Surveys provided data on three aspects of feasibility/technical merit: (1) Acceptability – is the module usable, appropriate, fit within group culture, and effectively engage athletes, (2) Implementation and Reach - can the module be successfully delivered broadly to athletes, and (3) Integration – extent to which delivery of the module can be integrated with existing developmental team organization processes and resources. Open-ended items elicited suggestions for improvement in all three areas. Feasibility and technical merit were demonstrated by achieving an average Likert scale rating of 4 or higher on 5-point scales for acceptability, implementation and reach, and integration (Greene et al., 2015; Greene et al., 2020; & Weiner et al., 2017). The survey also included free text response items to further solicit feedback on the mHealth education delivery.

7. **Data Analysis.** The research team analyzed quantitative data in multiple ways: (1) Producing a frequency table to illustrate the responses of participants for each survey item, (2) Creating composite scores for each of the feasibility criteria, and (3) Performing composite score analyses.

Results & Findings

Phase 1 - Delphi Study

Response

The Delphi Panel consisted of 18 members from the 6 participating countries: one anti-doping education expert, one coach, and one developmental athlete from each country. There were two rounds of voting in total, and Table X illustrates the response by country and role we received in each of the voting rounds.

	Anti-Doping Expert		Coach		Athlete	
	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
Australia	0	0	2	1	1	1
Canada	1	1	1	1	2	1
Denmark	1	1	2	1	2	0

New Zealand	1	1	1	2	1	0
Switzerland	1	2	2	1	4	2
United States	2	2	1	1	2	2
TOTAL	**6**	**7**	**9**	**7**	**12**	**6**

Findings

There were three primary areas for which the Delphi Study aimed to generate feedback from the contributors:

1. Anti-doping education programs or resources that help prevent athletes from using substances such as anabolic steroids or blood doping.
2. Values-based education as part of anti-doping efforts. Values-based education teaches and cultivates positive and ethical behaviors that are consistent with the "spirit of sport."
3. Specific values that may be a part of the values-based education include personal and sport values. Examples of personal values are a feeling of responsibility towards others, discipline, and self-control. Examples of sport values are fair play, respect for rules, and teamwork.

A Delphi Study works by a repetitive voting / clarification cycle until consensus is reached by the contributors. Two rounds of voting were needed for the purposes of this study. Items that reached consensus are:

Anti-doping education

- Ensuring anti-doping education program content is age-appropriate
- Ensuring anti-doping education program content is tailored to specific sports
- Ensuring anti-doping education programming is timely (e.g., before major competitions)
- Requiring anti-doping education for coaches
- Offering anti-doping education that targets knowledge about doping (e.g., doping rules and policies)
- Offering anti-doping education that targets athletes' attitudes about doping and clean sport
- Offering social skills training as a part of anti-doping education that teaches athletes interpersonal communication skills, such as assertiveness, building healthy relationships, and resisting peer pressure
- Offering life skills training as a part of anti-doping education that teaches athletes skills that help them make informed decisions, solve problems, and think critically
- Offering anti-doping education that targets the development of an individual's personal values and principles

Values-based education

- Using the same set of values in anti-doping education programming regardless of sport
- Using the same set of values in anti-doping education programming regardless of gender
- Using the same set of values in anti-doping education programming regardless of country/nationality
- Using the same set of values in anti-doping education programming regardless of sexual orientation
- Using the same set of values in anti-doping education programming regardless of ethnicity

Specific values

- Personal responsibility feeling of responsibility towards others
- Respect for other participants
- Fun and joy
- Respect for self

- Sense of accomplishment
- Dedication and commitment
- Fair play
- Equity
- Honesty
- Cooperation with others / Teambuilding / Teamwork
- Discipline / Self-control
- Respect for rules / laws
- Courage
- Healthy body and mind
- Healthy relationships with others
- Sense of community within the team

Phase 2 - Feasibility Study

Response

The original proposed sample for Phase II stipulated 30-50 developmental team athletes per country as well as 10-15 coaches per country. Despite extending the data collection period by 8 months and receiving recruitment assistance from WADA, we ended the study with 71 athletes and 20 coaches in total.

Country	Athletes	Coaches	Liaison
Australia	0	0	0
Canada	8	6	1
Denmark	12	7	1
New Zealand	27	3	1
Switzerland	7	1	1
United States	17	3	0
Missing	0	0	0
Total	**71**	**20**	**4**

While the numbers fall short of our proposal, we do have robust gender and sport diversity among our respondents. We stayed in close consultation with our liaisons in each of the six participating countries and learned some valuable lessons that may be taken into consideration in future WADA grant proposal reviews:

1. Some liaisons do not have direct access to athletes or coaches. They were reliant on others for making introductions to try to generate a sample in their country. There was a lot of passing people from one contact to the next to finally get to someone who might have
2. In some countries, the consent process required that we had participants opt-in through a sign-up process before we could send them the module and survey. Many indicated initial interest; however, they did not complete the study despite several reminders.
3. In some countries, the coaches were a barrier due to perceived survey fatigue among the athletes, including at least another two concurrent studies being conducted.

Findings

Phase 2 included an evaluation of the mHealth module that was developed based on the values identified in the Delphi Study. Data was collected on three important aspects of feasibility/technical merit: (1) **Acceptability** - the extent the values-based educational mHealth module is usable, appropriate, fits within group culture, and effectively engages athletes, (2) **Implementation and Reach** - the extent the mHealth module can be successfully delivered broadly to athletes, and (3) **Integration** – the extent to which the delivery of the mHealth module can be integrated with existing developmental team organization processes and resources and is scalable.

Select findings can be found below, and the full codebook of findings can be found in Appendix A.

Usability:

- All athletes, coaches, and liaisons found the video to be highly usable. For example, 100% of the athletes, coaches, and liaisons who participated said that they believe most developmental athletes would find the video easy to follow.

Appropriateness:

- The majority of athletes, coaches, and liaisons found the video to be highly appropriate and relevant to their needs. For example, athletes, coaches, and liaisons (93%, 95%, 98% respectively) who participated said that the video addressed topics that are important to themselves or their athletes.

Engagement:

- The majority of athletes, coaches, and liaisons found the video engaging. For example, athletes, coaches, and liaisons (87%, 95%, 100% respectively) who participated said that they liked the graphics in the video.

Feasibility:

- All liaisons agreed that using this video as a part of anti-doping education efforts would be feasible. For example, 100% of liaisons said that it would be easy to deliver this video to a large number of developmental team athletes in their country.

Integration:

- All liaisons agreed that this type of education could easily be integrated into their organization's developmental team process.

Recommendations and Implications

Translation of Research into Community Engaged Practice

After completing phases 1 and 2 of this project, it was determined that the developed mHealth module was well-received by participants, appropriate in content and delivery, and has the potential to be easily integrated into existing developmental athlete education.

Regarding anti-doping education recommendations. It is critical that anti-doping interventions or programs target known risk and protective factors of anti-doping (guided by current and relevant literature) and not merely knowledge alone. Risk and protective factors targeted by the intervention or program should have documented evidence of their effects on the targeted outcome (e.g., anti-doping). For example, the mHealth module developed during this project targeted knowledge as well as attitudes about doping, life skills and social skills. Likewise, anti-doping programs or interventions should focus on the most impactful anti-doping values. For example, the content of the mHealth module

developed during this project focused on the three anti-doping values that received the greatest endorsement from the Delphi study, (a) personal responsibility, (b) fair play, and (c) honesty. Next anti-doping interventions or programs should be relevant to the target population using suitable language/terminology and use instructional design techniques that engage the intended user. The mHealth module designed during this project was purposefully developed to include language and interactions that were suitable for athletes aged 14–18. Whereas elements of the mHealth module were designed with instructional strategies specific for the intended audience, the values-based education was applicable for other demographic characteristics of the intended recipient, such as race, gender, country of origin, and sport, which allows for the mHealth module to be standardized and easily integrated into other educational efforts.

Similar to the importance of targeting known risk and protective factors of anti-doping as well as the most important anti-doping values, feasibility and technical merit ought to be considered. This project provides insights into three important aspects of feasibility and technical merit, (a) *Acceptability* - the extent the values-based educational mHealth module is usable, appropriate, fits within group culture, and effectively engages athletes, (b) *Implementation and Reach* - the extent the mHealth module can be successfully delivered broadly to athletes, and (c) *Integration* – the extent to which the delivery of the mHealth module can be integrated with existing developmental team organization processes and resources and is scalable. The results of the evaluation suggest that the developed value-based mHealth module demonstrated feasibility and technical merit; however, there are important factors to keep in mind when delivering an mHealth module such as this one over time. First, ongoing engagement with stakeholders to solicit their feedback is critical to ensure the sustainability of acceptability, implementation & reach, and integration. Second, specific implementation platforms or communication that could be easily used to disseminate an mHealth module should be explored. For example, if an ADO has a platform where athletes and coaches regularly visit, they should consider delivering an anti-doping module like the one developed as part of this project to their population through that same platform. Third, the length of mHealth modules such as this one is important to the audience; length (shorter is better) and effectiveness (including the necessary content) should be balanced. Finally, although supplemental materials were not to be developed as part of this project, several coaches said with an mHealth module such as this, they would like to have resources and supplemental materials to assist them with discussing the contents of the mHealth module with their athletes.

Translation to Existing Anti-Doping Policy

The successful development and evaluation of the mHealth anti-doping module during Phases 1 and 2 of this project offer a timely and evidence-informed opportunity for integration into existing anti-doping agency policy. The module demonstrated both relevance and feasibility, suggesting it is well-positioned for institutional adoption and scalable implementation. ***Alignment with Existing Evidence-Based Anti-Doping Education Principles.*** To be effectively integrated into policy, anti-doping interventions must transcend knowledge-based approaches and strategically target well-established risk and protective factors. The mHealth module developed during this project aligns with this mandate by incorporating content grounded in current literature and designed to influence multiple domains critical to anti-doping behavior (e.g., attitudes toward doping, and the development of life and social skills related to doping). Moreover, the developed mHealth module is structured around three anti-doping values identified through a Delphi study as being most endorsed by stakeholders. These values form a strong conceptual foundation that anti-doping agencies can adopt or embed within broader values-based education initiatives. ***Relevance to Target Populations.*** The mHealth module

developed during this project module is tailored to adolescent athletes (ages 14–18), incorporating appropriate language and interaction styles to engage this demographic. Its design considers not only age but also generalizes on demographics such as race, gender, nationality, and sport context, allowing for broad applicability and cultural adaptability. Anti-doping agency policy should recognize this versatility as a means to standardize education delivery across diverse athlete populations while maintaining meaningful engagement. ***Feasibility and Technical Merit as Policy Pillars.*** Integration into policy must also consider the technical and operational feasibility of educational tools. This project offers compelling evidence across three key domains: (1) *Acceptability*: Athletes found the module usable, culturally appropriate, and engaging, (2) *Implementation and Reach*: The module demonstrates potential for widespread delivery using digital platforms commonly accessed by athletes and their support personnel, and (3) *Integration*: Designed to align with existing team and developmental sport infrastructure, the module can be seamlessly embedded into regular training or onboarding protocols. Anti-doping agencies should explicitly support digital modules that meet these criteria, encouraging the use of mobile-based platforms for standardized and cost-effective educational outreach. ***Strategic Recommendations for Policy Integration.*** To institutionalize the module within anti-doping frameworks, the following strategies are recommended: (a) *Stakeholder Engagement*: Policies should mandate ongoing consultation with athletes, coaches, and support personnel to ensure sustained relevance, acceptability, and cultural fit of the mHealth module, (b) *Platform Integration*: Anti-doping agencies should evaluate and leverage existing digital platforms used by athletes and coaches (e.g., training apps, athlete portals) as dissemination channels, (c) *Content Optimization:* Policies should require that digital modules balance brevity with comprehensiveness—ensuring they are short enough to maintain engagement while containing essential educational content, and (d) *Supplementary Support*: Although not part of the original project, coaches expressed a desire for complementary resources. Policy could encourage the development of toolkits or discussion guides to help coaches reinforce learning outcomes in practice settings.

The mHealth anti-doping module developed during this project presents a scalable, values-based, and athlete-centered solution that aligns with modern educational principles and digital communication trends. Anti-doping agency policy should prioritize its adoption as part of a broader, systemic commitment to ethical athlete development.

Final financial statement

WADA Finance Details

	Originally planned for the project (USD)	Spent to date (05-31-2025)	Balance to date (05-31-2025)	EstimatedCost of activities for the remainder of the program	Adjusted Total (**)
Research assistants	23,000.00	23,000.00	0.00		0.00
Consulting services	0	0.00	0.00		0.00
Equipment	0.00	0.00	0.00		0.00
Supplies	27,020.00	30,317.61	-3,297.61		-3,297.61
Travel expenses	0.00	0.00	0.00		0.00
Additional expenses	50,000.00	50000	0.00		0
Overhead	20,004.00	20,004.00	0.00		0.00
Total	120,024.00	123,321.61	-3,297.61	0.00	**-3,297.61**

Research Assistants:

- $23,000 for Pauline Privitera for the duration of the project

Supplies:

- Incentives: $2,617.60
    - Sweatshirts: $1,032.74
    - Shipping: $584.86
    - Gift Cards: $1,000
- Module Development: $24,750.00
- ITC Translation Services: $2950.01
    - $1,996.06
    - $580.69
    - $96.66
    - $276.60

Additional Expenses:

- $50,000 total for Drs. Wyrick and Davoren for the duration of the project

Overhead:

- $20,004 for the duration of the project

APPENDIX A – Phase II Survey Findings

1. Please indicate your participating country: [COUNTRY]
   - Australia
   - Canada
   - Denmark
   - New Zealand
   - Switzerland
   - United States

Total response by country and group

Country	Athletes	Coaches	Liaison
Australia	0	0	0
Canada	8	6	1
Denmark	12	7	1
New Zealand	27	3	1
Switzerland	7	1	1
United States	17	3	0
Missing	0	0	0
Total	71	20	4

2. In what year were you born? _____ [YEAR]

[PROGRAMMING NOTE: Add rule that only a four digit number can go here. Alternatively, we can program with a drop down starting at Before 1960 thru 2010 and After 2010 as options]

Ø Mean age of coaches and liaisons was 43 with a range of 24-61.

3. Which of the following most accurately describes your gender? [GENDER]
   - Male
   - Female
   - Prefer to self-describe as _____ (nonbinary, gender-fluid, agender, etc.)
   - Prefer not to say

	Athletes	Coaches	Liaison
Male	39%	70%	75%
Female	61%	30%	25%
Prefer to self-describe	--	--	--

Prefer not to say	--	--	--
Missing	0	0	0

4. What do you consider to be your **primary** sport? [SPORT_ATH

NOTE: Asked of athletes and coaches only

[PROGRAMMING NOTE: Drop down box]

- Aerobic gymnastics
- Alpine skiing
- Archery
- Artistic gymnastics Athlete = 7; Coach = 1
- Artistic swimming Athlete = 2; Coach = 2
- Badminton Athlete = 1
- Baseball Coach = 2
- Basketball Athlete = 4
- Beach handball
- Beach volleyball Athlete = 1
- Biathlon Athlete = 1
- BMX freestyle
- BMX racing
- Bobsleigh
- Boxing
- Breaking
- Canoe / Kayak flatwater Athlete = 1
- Canoe / Kayak slalom
- Cross country skiing Athlete = 1
- Curling Athlete = 1
- Diving Athlete = 1; Coach = 3
- Equestrian
- Fencing
- Figure skating
- Football (soccer) Athlete = 4
- Freestyle skiing
- Futsal
- Golf
- Handball
- Hockey (Field)
- Ice Hockey
- Judo Athlete = 2
- Karate
- Luge Athlete = 1
- Marathon
- Modern pentathlon

- Mountain bike Athlete = 2
- Nordic combined
- Rhythmic gymnastics
- Road cycling Athlete = 7
- Roller speed skating
- Rowing Athlete = 6; Coach = 1
- Rugby Athlete = 1; Coach = 1
- Sailing Coach = 1
- Short track speed skating
- Skateboarding
- Skeleton
- Ski jumping
- Snow board Coach = 1
- Speed skating
- Surfing
- Swimming Athlete = 5; Coach = 5
- Table tennis
- Taekwondo
- Tennis Coach = 1
- Track cycling Athlete = 3; Coach = 1
- Trampoline
- Triathlon Athlete = 2
- Volleyball Athlete = 2
- Water polo
- Weightlifting
- Wrestling Athlete = 12
- Sport not listed Athlete = 4; Coach = 1
- Other:_____

Athlete missing = 0
Coach missing = 0

[PROGRAMMING NOTE: New page]

Please [AD1] watch the video below. When the video is finished, click the next arrow at the bottom of the screen.

VIDEO

5. Did you watch the entire video?
   - No
   - Yes

	Athletes	Coaches	Liaison
No	6%	10%	--
Yes	94%	90%	100%
Missing	7	0	0

6. On what type of device did you watch the video?
   - Mobile phone
   - Tablet
   - Laptop or desktop computer
   - Other (write in)

	Athletes	Coaches	Liaison
Mobile	55%	40%	0%
Tablet	--	--	--
Laptop or desktop	45%	60%	100%
Other	--	--	--
Missing	7	0	0

[PROGRAMMING NOTE: New page]

USABILITY

7. How much do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I found the video easy to understand Missing athlete: 4 Missing coach: 0 Missing Liaison: 0	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: 8% Coach: -- Liaison: 25% Total: 7%	Athlete: 46% Coach: 60% Liaison: 75% Total: 51%	Athlete: 46% Coach: 40% Liaison: -- Total: 43%

I think most developmental athletes would find this video easy to follow Missing athlete: 4 Missing coach: 0 Missing Liaison: 0	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: 0% Coach: -- Liaison: -- Total: 1%	Athlete: 9% Coach: 15% Liaison: 75% Total: 13%	Athlete: 48% Coach: 70% Liaison: 25% Total: 52%	Athlete: 42% Coach: 15% Liaison: -- Total: 34%
I think developmental athletes could complete this type of education independently Missing coach: 0 Missing Liaison: 0	Coach: -- Liaison: -- Total: --	Coach: 10% Liaison: 0% Total: 8%	Coach: -- Liaison: -- Total: --	Coach: 15% Liaison: 25% Total: 17%	Coach: 65% Liaison: 50% Total: 63%	Coach: 10% Liaison: 25% Total: 13%
I found that this video worked as expected Missing athlete: 4 Missing coach: 0 Missing Liaison: 0	Athlete: -- Coach: 5% Liaison: -- Total: 1%	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: 15% Coach: 15% Liaison: 25% Total: 15%	Athlete: 46% Coach: 65% Liaison: 50% Total: 51%	Athlete: 39% Coach: 15% Liaison: 25% Total: 33%

8. Were you able to watch the video in one sitting?

NOTE: Asked of athletes only

a. No – 8%

b. Yes – 92%

Missing: 7

9. Did you need help accessing the video?

NOTE: Asked of athletes only

a. No – 100%

b. Yes

Missing: 7

[PROGRAMMING NOTE: Display only if answer above is YES]

NOTE: No one selected "yes" above, so no one received this matrix.

10. Did you ask any of the following to help you access the video?

	No	Yes

Coach	o	o
Parent	o	o
Teammate	o	o
Sibling	o	o
Other _____	o	o

APPROPRIATENESS

11. How much do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
This video addressed topics that are important to (my athletes / me) Missing athlete: 5 Missing coach: 0 Missing Liaison: 0	Athlete: 2% Coach: -- Liaison: -- Total: 1%	Athlete: -- Coach: 5% Liaison: -- Total: 1%	Athlete: 3% Coach: 10% Liaison: -- Total: 4%	Athlete: 20% Coach: 20% Liaison: -- Total: 19%	Athlete: 55% Coach: 50% Liaison: 75% Total: 54%	Athlete: 21% Coach: 15% Liaison: 25% Total: 20%
The content of the video was applicable to developmental athletes (like me) Missing athlete: 5 Missing coach: 0 Missing Liaison: 0	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: 11% Coach: 30% Liaison: 25% Total: 16%	Athlete: 61% Coach: 60% Liaison: 75% Total: 61%	Athlete: 29% Coach: 10% Liaison: -- Total: 23%
The content of the video was relevant to developmental athletes (like me) Missing athlete: 5 Missing coach: 0 Missing Liaison: 0	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: 3% Coach: -- Liaison: -- Total: 2%	Athlete: 8% Coach: 30% Liaison: 25% Total: 13%	Athlete: 67% Coach: 65% Liaison: 75% Total: 67%	Athlete: 23% Coach: 5% Liaison: -- Total: 18%
Anti-doping education is important for all athletes Missing athlete: 5	Athlete: 2%	Athlete: --	Athlete: --	Athlete: 3%	Athlete: 14%	Athlete: 82%

There is a need for education like this Missing coach: 0 Missing Liaison: 0	Coach: 5% Liaison: -- Total: 4%	Coach: -- Liaison: -- Total: --	Coach: 10% Liaison: -- Total: 8%	Coach: 10% Liaison: 25% Total: 13%	Coach: 30% Liaison: 75% Total: 38%	Coach: 45% Liaison: -- Total: 38%
This video would be a good addition to our developmental athlete team education Missing Liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 50%	Liaison: 50%	Liaison: --

ENGAGEMENT

12. How much do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I liked the graphics in the video Missing athlete: 4 Missing coach: 0 Missing Liaison: 0	Athlete: -- Coach: -- Liaison: -- Total: --	Athlete: 3% Coach: -- Liaison: -- Total: 2%	Athlete: 10% Coach: 5% Liaison: -- Total: 9%	Athlete: 22% Coach: 15% Liaison: 75% Total: 23%	Athlete: 49% Coach: 55% Liaison: -- Total: 48%	Athlete: 15% Coach: 25% Liaison: 25% Total: 18%
The video was interesting to watch Missing athlete: 4 Missing coach: 0 Missing Liaison: 0	Athlete: 2% Coach: -- Liaison: -- Total: 1%	Athlete: 5% Coach: 5% Liaison: -- Total: 4%	Athlete: 18% Coach: 25% Liaison: -- Total: 19%	Athlete: 30% Coach: 20% Liaison: 25% Total: 28%	Athlete: 40% Coach: 35% Liaison: 75% Total: 41%	Athlete: 6% Coach: 15% Liaison: -- Total: 8%
I would like more videos like this Missing athlete: 4 Missing coach: 0 Missing Liaison: 0	Athlete: 2% Coach: -- Liaison: -- Total: 1%	Athlete: 10% Coach: 5% Liaison: -- Total: 9%	Athlete: 13% Coach: 15% Liaison: -- Total: 13%	Athlete: 30% Coach: 20% Liaison: 75% Total: 30%	Athlete: 34% Coach: 55% Liaison: -- Total: 37%	Athlete: 10% Coach: 5% Liaison: 25% Total: 10%

IMPACT

13. How much do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
This video helped me think about behaviors related to doping Missing athlete: 5 Missing coach: 0	Athlete: 2% Coach: 0% Total: 1%	Athlete: 3% Coach: 0% Total: 2%	Athlete: 6% Coach: 10% Total: 7%	Athlete: 15% Coach: 40% Total: 21%	Athlete: 64% Coach: 40% Total: 48%	Athlete: 11% Coach: 10% Total: 11%
Connecting anti-doping education to sport values is important Missing athlete: 5 Missing coach: 0	Athlete: -- Coach: -- Total: --	Athlete: -- Coach: -- Total: --	Athlete: -- Coach: -- Total: --	Athlete: 8% Coach: 10% Total: 8%	Athlete: 39% Coach: 30% Total: 37%	Athlete: 53% Coach: 60% Total: 55%
I would recommend this video to other developmental athletes Missing athlete: 5 Missing coach: 0	Athlete: 2% Coach: -- Total: 1%	Athlete: 5% Coach: -- Total: 4%	Athlete: 6% Coach: -- Total: 5%	Athlete: 15% Coach: 40% Total: 21%	Athlete: 50% Coach: 55% Total: 51%	Athlete: 23% Coach: 5% Total: 19%
This video helped me understand how to apply my values to important decisions Missing athlete: 5	Athlete: --	Athlete: --	Athlete: 8%	Athlete: 15%	Athlete: 49%	Athlete: 29%

FEASIBILITY

14. How much do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
I think using a video like this to educate our athletes about doping would be easy Missing liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 50%	Liaison: 25%	Liaison: 25%

This video seems easy to implement with developmental athletes Missing liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 50%	Liaison: 25%	Liaison: 25%
This video seems easy for developmental athletes to use Missing liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 25%	Liaison: 50%	Liaison: 25%
This type of education could easily be integrated into our organization's developmental team process Missing liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 50%	Liaison: 25%	Liaison: 25%
This video would be easy to add to our developmental team athlete resources Missing liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 50%	Liaison: 25%	Liaison: 25%
It would be easy to deliver this video to a large number of developmental team athletes in our country Missing liaison: 0	Liaison: --	Liaison: --	Liaison: --	Liaison: 50%	Liaison: 25%	Liaison: 25%

15. After watching this video, do you feel differently about your ability to compete clean?

NOTE: Asked of athletes only

a. Yes, I feel **more** confident I can compete clean – 57%
b. Yes, I feel **less** confident I can compete clean – 2%
c. No, I feel no different about my ability to compete clean – 42%

16. Did this video change your intention to compete clean?

NOTE: Asked of athletes only

a. Yes, it made my intention to compete clean **stronger –** 60%

b. Yes, it made my intention to compete clean **weaker -** --

c. No, it had no impact on my intention to compete clean – 40%

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