

Department of Juvenile Justice
Human Research & De-Identified Case Specific Data Requests
Annual Report FY 2022

Administrative Code

On February 9, 2005, 6 VAC 35-170, *Minimum Standards for Research Involving Human Subjects or Records of the Department of Juvenile Justice*, adopted by the Board of Juvenile Justice, became effective. This Administrative Code requires the establishment of a Human Research Review Committee (HRRC) and sets out the conditions required for approval of external research proposals. The Administrative Code was most recently revised on June 24, 2021. Select sections of the regulations are included below to provide an overview of the review process:

6VAC35-170-130. Human Research Review Committee

A. In accordance with § 32.1-162.19 of the *Code of Virginia*, the department shall establish an HRRC composed of persons of various backgrounds to ensure the competent, complete, and professional review of human research activities conducted or proposed to be conducted or authorized by the department. No member of the HRRC shall be directly involved in the proposed human research or have administrative approval authority over the proposed research except in connection with his role on the HRRC.

6VAC35-170-150. Committee review of human research proposals.

In reviewing the human research proposal, the HRRC shall consider the potential benefits and risks to the human subjects and shall recommend approval only when:

1. The benefits to the human subjects outweigh the risks;
2. The methodology is adequate for the proposed research;
3. The research, if nontherapeutic, presents no more than a minimal risk to the human subjects;
4. The rights and welfare of the human subjects are adequately protected;
5. Appropriate provisions have been made to get informed consent from the human subjects, as detailed in 6VAC35-170-160;
6. The researchers are appropriately qualified;
7. The criteria and means for selecting human subjects are valid and equitable; and
8. The research complies with the requirements set out in this chapter.

6VAC35-170-50. Conditions for department approval of external research and data requests.

A. The department may approve research projects and data requests only when it determines, in its sole discretion, that the following conditions have been met:

1. The department has sufficient financial and staff resources to support the request, and, on balance, the benefits of the request justify the department's involvement;
2. The request will not interfere significantly with department programs or operations, particularly those of the operating units that would participate in the proposed research; and
3. The request is compatible with the purposes and goals of the juvenile justice system and with the department's organization, operations, and resources.

6 VAC 35-170-190. Committee reports required.

A. In accordance with § 66-10.1 of the *Code of Virginia*, the HRRC shall submit to the Governor, the General Assembly, and the director at least annually a report on human research projects approved by the HRRC and the status of such research, including any significant deviations from the proposals as approved.

B. The HRRC also shall submit annually to the Board of Juvenile Justice the same report as required by subsection A of this section.

Human Research Review Committee

During fiscal year (FY) 2022, the Department of Juvenile Justice's (DJJ) HRRC was comprised of members from various backgrounds:

- Jessica Schneider, Ph.D. (Chair) – Research Manager, DJJ*
- Robin Binford-Weaver, Ph.D. – Director, Behavioral Services Unit, DJJ*
- Vince Butaitis – Director, 15th Court Service Unit, DJJ*
- Will Egen – Policy Analyst, Virginia Commission on Youth
- Michael Favale – Legislative & Policy Director, DJJ*
- Charles Schmidt – Rights and Accountability Manager, DJJ*
- Rebecca Smith, Ph.D. – Graduate Student, Virginia Commonwealth University
- Lara Todd – Records and Legal Support Manager, DJJ*
- Joseph W. Young, Jr. – Superintendent, New River Valley Juvenile Detention Home
- Erin K. Maloney – Superintendent, Northwestern Regional Juvenile Detention Home

*Members also served on the internal sub-committee that reviewed de-identified case-specific data requests.

DJJ Senior Research Associate, Dhara Amin, Ph.D., served as the Coordinator of External Research.

In addition to reviewing the human subjects research studies as defined in the Administrative Code, an internal sub-committee reviews requests for de-identified case-specific data. The following report includes projects involving either human subjects research or de-identified case-specific data.

In FY 2022, DJJ approved two studies, and, as of June 30, 2022, two proposals were still under review. The following sections summarize the eight studies that were active during FY 2022, including those approved in prior years, as well as the two proposed/pending proposals. (Amendment dates indicate the most recently approved amendment; several projects involve multiple amendments over the course of the project.)

In accordance with § 32.1-162.19, *Human research review committees*, an executive summary of completed projects can be found in Appendix A.

I. Active Studies

Evaluation of a Comprehensive Community-Level Approach to Youth Violence

Researchers: Derek Chapman and Diane Bishop

Institution: Virginia Commonwealth University

Study Type: De-Identified Case-Specific Data Request

Approval Date: November 28, 2017; amended January 28, 2020

The purpose of the study is part of a larger project aimed at learning more about youth violence in low-income neighborhoods of Richmond, Virginia. The researchers will examine retrospective, de-identified data for youth between the ages of 10 and 24 who were associated with an intake case at Richmond City Court Service Unit (CSU) between January 2012 and December 2019. The researchers requested data on intake decisions, youth demographics, offense information, Detention Assessment Instrument (DAI) ranking, select Youth Assessment & Screening Instrument (YASI) items, length of stay (if applicable), and recidivism rates. Since the researchers are interested in low-income neighborhoods of Richmond (e.g., Mosby Court, Gilpin Court, Creighton Court) they requested individual block-level geographical data. The researchers trained the DJJ Research Unit staff on how to clean and geocode the data manually. The researchers identified the variables they need from DJJ, and the data and the data dictionary were delivered to the study's researchers in July 2020. The researchers reviewed the data, and data analysis and reporting is underway. The researchers plan to ask for the remaining data (2020 and 2021) and expect to complete this study in 2023.

Virginia Personal Responsibility Education Program Innovative Strategies (VPREIS)

Researcher: Amanda Dainis

Institution: James Madison University

Study Type: Human Research

Approval Date: February 20, 2018; amended March 29, 2019

Final Report Submitted: August 29, 2022 (See Appendix A)

The purpose of the study was to evaluate the *Vision of You* program, an evidence-based teen pregnancy online program. The program's main objectives included the following: (i) to reduce the frequency of sexual activity, (ii) to reduce the number of sexual partners, (iii) to increase contraceptive use among participants, and (iv) to increase knowledge related to healthy sexual practices. The program was implemented at juvenile detention centers (JDCs) throughout the state along with 14 other types of sites. The researcher used a randomized control trial, with the control group receiving an alternative program. The youth data collection was completed with 105 participants across nine JDCs. The programming for this project ended in March 2021, and the grant ended at the end of 2021. The researcher found that the program had high fidelity and positive ratings from participants. It also had a positive effect on two of the three main behavioral outcomes of interest: number of sexual partners and occurrence of contraception use. Regarding both of these outcomes, the treatment group youth engaged significantly less in these risky behaviors than youth in the control group. A third behavioral outcome, rate of recent sexual activity, was not found to be significantly impacted by participating in the program.

Process Evaluation of the Virginia Department of Juvenile Justice Regional Service Coordinator Model

Researcher: Kelly Murphy

Institution: Child Trends

Study Type: Human Research

Approval Date: August 10, 2018; amended August 26, 2022

The purpose of the study is to conduct an in-depth evaluation of DJJ's Regional Service Coordinator (RSC) model by conducting focus groups and semi-structured interviews with CSU staff, RSC staff, and youth as well as analyzing administrative data. The study has three primary objectives: (i) conduct a process evaluation of the RSC model to understand the extent to which it is being implemented as intended; (ii) provide an initial assessment of the extent to which implementation of RSC model is associated with youth outcomes; and (iii) translate and disseminate findings to target audiences, such as DJJ, other systems that are interested in similar models, and stakeholders. This evaluation is planned to be conducted over a period of four years. The researcher conducted 17 interviews with direct service providers and 14 focus groups with CSU staff. The researcher worked with the Deputy Director of Community Programs to increase recruitment efforts with the CSU staff. The researcher was unsuccessful in recruiting youth to be interviewed. In addition, after some outreach assistance from DJJ, the researcher paused judge interviews due to COVID-related limitations. The researcher is also continuing her work to develop a web-scraping tool to create maps depicting youth's needs and available service providers.

Rigorous Evaluation of the Virginia Department of Juvenile Justice's Second Chance Act Reentry Reform

Researcher: Kelly Murphy

Institution: Child Trends

Study Type: Human Research

Approval Date: October 30, 2019; amended March 9, 2020

The purpose of the study is to conduct an evaluation of DJJ's reentry reform efforts. The researcher aims to examine (i) the extent to which DJJ is implementing the recommendations developed during the Second Chance Act Juvenile Reentry Reform Planning Grant, (ii) the extent to which the agency's services align with the youth's needs, (iii) what the youth's participation in reentry services look like, and (iv) how the implementation of the reforms have impacted youth outcomes. The evaluation will be conducted over a four-year period, including a pilot period. The evaluation includes focus groups with various stakeholders, such as DJJ's reentry advocates, parole officers, juvenile correctional center (JCC) counselors, and more. The researcher is also creating a Virginia Longitudinal Data System (VLDS) data request to examine long-term outcomes for youth involved with the juvenile justice system, which will be submitted as a separate project proposal.

Juvenile Delinquency and Adult Gun Sales: Comparative Effect of Different Minimum Age Standards for Firearm Purchase

Researcher: Jeff Swanson

Institution: Duke University

Study Type: De-Identified Case-Specific Data Request

Approval Date: August 19, 2020

The purpose of the study is to conduct a comparative analysis of three southern states with different laws regarding juvenile delinquency records and the minimum age standards for gun sales. The researcher selected three states that have differing thresholds for the minimum age of gun purchase for people with juvenile criminal records. By working with multiple state agencies, the researcher plans to conduct a longitudinal comparison of gun-related adverse outcomes in order to provide an evaluation of the effectiveness of the minimum-age standards in preventing gun violence and suicide. The researcher provided DJJ with letters of support from the other agencies to ensure the feasibility of this study and are coordinating the logistics of the various data requests. Currently, the researcher is integrating the three datasets they received from Virginia state agencies and are waiting to receive the dataset from the fourth and final agency, Virginia Department of Health.

The Impact of Dental Operatory Color on Anxiety in Adolescents in Juvenile Detention

Researchers: Tegwyn Brickhouse and Matilda Sullivan

Institution: Virginia Commonwealth University

Study Type: De-Identified Case-Specific Data Request

Approval Date: November 23, 2020

Final Report Submitted: January 18, 2022 (See Appendix A)

The purpose of the study was to examine the impact of color on patients in the JCC's dental facility rooms. Previous studies indicated that in private dental facilities, the color in dental operatory rooms can influence the patient's anxiety levels. The researchers aimed to determine if a similar result is found in a JCC, specifically at Bon Air JCC. As part of Bon Air JCC's facility operations, Operatory Room A was painted blue and yellow, and Operatory Room B was not altered. A random number generator was used to determine which room would be used for the first day. After that, the rooms were alternated weekly. At the conclusion of the appointment, the dental assistant asked the patient questions from the Continued Quality Assurance Survey. The researchers requested data from this survey. The data included 300 visits among 164 patients. A majority of the appointments were routine (65%), 22% were sick calls, and 13% were restorative. The researchers found that youth did not show statistically significant differences in anxiety in colorful and non-colorful dental operatory rooms. However, it was clinically significant that youth had slightly higher levels of anxiety in the unaltered room.

Virginia Department of Juvenile Justice
Human Research, FY 2022

Exploring Perceptions of Juvenile Court Service Personnel: Do Cognitive-Communicative Skills Impact Outcomes for Juvenile Offenders?

Researcher: Allison Chappell

Institution: Old Dominion University

Study Type: Human Research

Approval Date: December 9, 2021

The purpose of the study is to examine CSU staff's views on the relationship between youth's communication skills and the legal process, including outcomes and decision-making. Existing research found that nearly half of juvenile offenders have a cognitive-communicative disorder that can impact their ability communicative effectively and appropriately. The researcher aims to gather qualitative data at CSUs 2 (Virginia Beach) and 4 (Norfolk) to assist with creating a formal survey instrument, which will allow the researcher to collect statewide data on staff's and other stakeholder's views on cognitive-communicative impairments and their impacts.

Optimizing Supervision and Services Strategies to Reduce Reoffending: Accounting for Risks, Strengths, and Developmental Differences

Researcher: Gina Vincent

Institution: University of Massachusetts Medical School

Study Type: De-Identified Case-Specific Data Request

Approval Date: December 30, 2021; amended May 10, 2022

The purpose of the study is to (i) identify which risk and protective factors are most strongly associated with reduction in recidivism to inform supervision practices, (ii) examine which services and supervision practices facilitate positive youth development and reduce reoffending, and (iii) assist with capturing data regarding protective factors, service usage, and reoffending to inform decision-making. The researcher is requesting archival data from 2015-2017 to serve as a baseline, to include risk assessment, demographic, offense history, case management, service, and recidivism data. The researcher is also requesting prospective data from five CSUs, which are piloting a protective factors survey for comparison purposes and to understand how services impact youth outcomes.

II. Proposed / Pending Studies as of June 30, 2022

National Juvenile Court Data Archive Project

Researchers: Melissa Sickmund and Sarah Hockenberry

Institution: National Center for Juvenile Justice

Study Type: De-Identified Case-Specific Data Request

Approval Date: August 15, 2022

The proposed study is not a traditional research study, but rather its purpose is to contribute data to an archive that creates national estimates of juvenile court delinquency, status offenses, and case processing. Historically, DJJ has participated in the data archive project; however, due to revised internal processes, the HRRC requested an updated amendment packet for consideration. The researchers are requesting data from calendar years 2021-2023 and are not requesting any sensitive identifiers.

Research on Juvenile Reoffending

Researcher: Zachary Hamilton

Institution: Nebraska Center for Justice Research, University of Nebraska – Omaha

Study Type: De-Identified Case-Specific Data Request

Approval Date: August 31, 2022

The purpose of the proposed study is to examine YASI risk and needs profiles in relation to gender, race, ethnicity, family structure/type, rural and urban settings, and poverty. The proposed study aims to advance the researcher’s original work in a previously approved project by analyzing additional variables. The original study examined data from 10 states’ risk assessments and identified advancements for state, agency, or youth-specific gender responsiveness and outcomes. In addition to the main goals, the researcher will provide DJJ with a state recidivism comparison, a task which DJJ’s Research Unit is unable to complete due to various barriers that the researcher can overcome with direct access to other states’ data. The researcher is requesting data from FY 2015-2021, to include risk assessment, demographic, offense history, treatment need, supervision location, case management, and recidivism data.

III. Denied Proposals

No research proposals were denied during this fiscal year.

IV. Administratively Closed Proposals

Administratively closed proposals include proposal packets the Coordinator of External Research or the HRRC reviewed, but the agency did not hear back from the researcher(s) after providing feedback and/or requests for revisions. No research proposals were administratively closed during this fiscal year.

Appendix A: Executive Summaries of Completed External Projects

Note: Executive summaries are completed by the researchers, and the content is not revised by DJJ.

**Virginia Personal Responsibility Education Program Innovative Strategies (VPREIS)
Executive Summary**

Date: August 29, 2022

Purpose

The Evaluation of Vision of You in the Commonwealth of Virginia

Grantee

Grantee Name: James Madison University

Project Lead: Dr. Kim Hartzler-Weakley

Email address: hartzlkm@jmu.edu

Evaluator

Evaluator's Organization: Dainis & Company, Inc.

Evaluator Lead: Dr. Amanda Dainis

Email address: Amanda@DainisCo.com

Intervention Name

Vision of You (VoY)

Intervention Description

The Vision of You program is an interactive, self-paced online curriculum addressing comprehensive sexuality education, as well as healthy life skills and relationships. VoY utilizes engaging video, animation, interactive components, and gamification principles. The program consists of nine 45-minute units over four to six weeks for a total of 6.75 hours of programming. The units cover the following topics: (1) concepts of identity; (2) healthy relationships and red flags for unsafe relationships; (3) communication with trusted adults; (4) providing and requesting consent; (5) reproductive anatomy and medical treatment; (6) STI prevention; (7) clinic visits; (8) methods of protection; and (9) setting and achieving future goals.

The target population for this evaluation study was youth between the ages of 13 and 19 who were being educated in non-traditional settings, including: (1) Virginia's juvenile detention centers, (2) alternative education programs and / or night school programs, (3) Community Services Board (CSB) programs and (4) third-party service provider programs. The VoY curriculum was delivered online to participants. It is self-paced but trained proctors were present to assist with any technological issues (while maintaining participant privacy). The proctors were staff from the partner sites, who had participated in a training focused on the operation of the curriculum. Partner sites also had a VoY staff member assigned to them to help them with any questions or issues that arose.

Comparison Condition

Eat, Move, Win (www.healthyeating.org) was an optional program for the comparison condition (control) group. The control group is a combination of youth who chose to participate in the Eat, Move, Win program and youth who did not.

Comparison Condition Description

Site partners had the option of utilizing a short nutrition program to engage the control group youth during programming time. The nutrition program is called Eat, Move, Win (www.healthyeating.org). The program is delivered online, over five sessions, with no prescribed number of program hours. Students complete this program at their own pace. The five topics covered are: Food and You, Optimal Nutrition, Nutrient Gaps, Eating Patterns, and Taking Action. None of the content overlaps with either the adult preparation topics or other topics covered in the VoY curriculum.

Behavioral Outcomes

The evaluation of Vision of You (VoY) aimed to assess the following behavioral outcomes, as measured by self-report at a 9-month post-program data collection point: Occurrence of sexual activity (vaginalsex), number of sexual partners, and occurrence of contraceptive use (including condoms and other contraceptives).

Non-behavioral Outcomes

Additionally, the study included the impact evaluation of a non-behavioral outcome related to future orientation (goals, planning, and foresight), as measured by a 10-item scale. The following implementation measures were also collected and analyzed: Number of youth completing all lessons of VoY, average duration of the program, time it takes for individual lesson completion, and students' comparison of VoY with other sexual health education programs.

Sample and Setting

The youth in the target populations were already involved with the partner site, and all eligible youth were invited to participate in the study. Partner site staff identified eligible youth according to the following criteria 1) they are in 9th through 12th grade and between the ages of 13 and 19, 2) they have sufficient time left in their educational program, CSB participation, or detention facility to complete the curriculum, 3) they have not had any prior participation in the study, and 4) they have at least a 5th grade reading level. All participants gave written assent or consent (if over 18) and their parent/guardian gave consent (for participants under age 18). The VoY project staff expected to enroll at least 720 students into the study from a minimum of 14 partner sites across Virginia. Over the project period, 23 site partners were engaged in enrolling youth and assisting with program implementation: seven alternative education programs, nine juvenile detention centers, one community service board, and six third-party service providers. The final number of enrolled students was 790, but the final sample (due to the impact of the COVID-19 pandemic on programming) was 626.

Research Design

This study is a randomized control trial (RCT) with randomization occurring at the individual level. JMU staff worked with contacts at each site to assist in identifying potential participants. Staff at each site gathered parental consent (or consent from youth over 18) and youth assent. Consent was obtained in person (at schools, service provider program sites, and CSB offices) and by mail or an electronic platform (at juvenile detention sites). Youth assent was obtained in person via paper and

pencil. Once consent was obtained, site staff called JMU staff to determine if the participant had already been involved in the study at any site. If they have not previously enrolled in the study, the participant was randomly assigned using a random number generator during the phone call. After completing the baseline survey, youth were told of their assigned condition.

Data Collection

Youth in both groups were surveyed four times: at baseline, immediately post-program completion (or 5-6 weeks post-baseline for control group youth), 3-months post-program (approximately 4 months post-baseline for control group youth), and 9-months post-program (approximately 10-months post-baseline for control group youth). All survey data was collected using a web-based survey. If utilization of the web-based survey was not possible, a paper-based instrument was provided by site partner staff. The impact analysis focuses on the data collected at the 9-month post-program timepoint.

For the implementation study, data on fidelity, attendance, duration of lessons and overall program were obtained by the program software, and youth perception of the program was collected via survey instruments. This data was collected through fidelity tracking within the online program and constructed response questions on the surveys.

Methods

To analyze the multivariate data for the behavioral outcomes, logistic regressions (LR) and a zero-inflated negative binomial regression model were conducted. Effect sizes, where appropriate, were also calculated and a simple t-test of group means was implemented for the analysis of the non-behavioral outcome regarding future orientation. Descriptive statistics are reported for implementation analysis measures.

Summary/Takeaways

Findings

The results of the randomized control trial conducted over the past four years indicate the Vision of You program had a positive effect on two of the three main behavioral outcomes of interest: number of sexual partners and occurrence of contraception use. Regarding both of these outcomes, the treatment group youth engaged significantly less in these risky behaviors than youth in the control group. A third behavioral outcome, rate of recent sexual activity, was not found to be significantly impacted by participating in the VOY program. Regarding the non-behavioral outcome, future orientation, there was a small but significant difference between treatment group and control group at the 9-month data collection mark.

The Vision of You program was implemented with near-target fidelity. In all, 71% of the youth completed all nine units of the curriculum, with 83% completing at least 78% (7 units) of the program. Further, as the program was intended to be completed in 4-6 weeks, another fidelity measure of program duration was collected: Over the three years of program implementation, 82% of youth completed the program within six weeks. To gauge the program satisfaction of Vision of You, youth were asked how much they liked the Vision of You program compared to other, similar programs. Overall, 82% of the youth who responded to the item liked the program “much better” or “a little bit better” than other programs. Further, the majority of the youth (78%) reported liking it “much better.”

Recommendations/Next Steps

Further research utilizing the online Vision of You program should be conducted with different subgroups of the target population, such as urban youth in non-traditional educational settings. Additionally, implementation of VoY with high-risk youth in traditional educational settings is also of interest. Further, if time and resources allow, examining the VoY program as a self-paced program in comparison to the same content delivered in-person by a facilitator could yield important information about the effectiveness of technology in teaching sexual health education to youth in today's technology-heavy world.

The Impact of Dental Operatory Color on Anxiety in Adolescents in Juvenile Detention Executive Summary

Matilda Sullivan and Tegwyn Brickhouse

Date: 1/18/22

Purpose: The purpose of our study is to compare incarcerated patient dental experiences in an operatory room with color as opposed to an operatory room without color using requested de-identified data from the DJJ. Our goal is to provide Bon Air and other juvenile justice facilities with valuable research that will improve patient dental experience that will result in long term improvements in oral healthcare participation by residents.

Summary/Takeaways:

This study was reviewed and approved by the Institutional Review Board at Virginia Commonwealth University and the Department of Juvenile Justice. With permission from the Department of Juvenile Justice, one of the two dental operatory rooms was painted approved blue and yellow paint colors. The second dental operatory room was left unaltered. A random number generator was used to select either the colorful or non-colorful operatory for service the first day. After the first day, the rooms alternated weekly, with all services in one room for one week and all services switching to the other room the following week. Following the procedure, the dental assistant (DA) asked the patient the questions on the Continued Quality Assurance survey (Figure 3), and recorded their answers on the attached form while the dentist left the room to avoid bias. The DA then recorded the dental code for the visit, type of dental procedure (Routine, Sick call, Restoration, and Surgery), and indicated the room condition. Data was collected for 9 months rather than the expected 6 months due to temporary internal closures attributed to COVID-19 outbreaks within the facility. Operatory Room A was colorful. Operatory Room B was non-colorful. Statistical analyses were performed on the blinded data.

This study revealed that juvenile inmates at a singular correctional facility did not show statistically significant differences in anxiety in colorful and non-colorful dental operatory rooms. However, it is clinically significant that the children did respond to the survey with slightly higher levels of anxiety in the non-colorful room. In the colorful room, patients self-reported “little to no anxiety”, while in the non-colorful room, the scores increased in range with some individuals reporting “moderate anxiety”. The type of appointment visit and number of repeated visits did not alter the level of anxiety in either the colorful or non-colorful room.

The negative impacts of COVID-19 in a correctional facility setting and the respite of visiting the dentist while incarcerated during the pandemic may have affected the anxiety scores.

Recommendations/Next Steps:

Future studies may be needed to determine if audio-visual distraction techniques can play a role in anxiety reduction in juvenile correctional facilities. Strategies to protect the psyche of juvenile inmates during dental appointments should still be studied to improve oral health outcomes for an at-risk population.