PDP & YOU PROGRAM AND UPDATES



March 28, 2022



WELCOME TO PDP



Welcome and Introductions

- Welcome from Dr. Leeman, PDP Director
- Welcome from Dr. Cook, Director of SHARC



Developing and Writing a SHARC Concept



Introduction to SHARC Concepts System

What is a Concept?

What do I need to do for a Concept?

SHARC Concepts System: How to Use The Concepts System to Access Data for SHARC Research Projects

https://sharc-research.org/



What is a Concept?

A **Concept** consists of one or more specific research questions with defined aims supported by a fully-developed research plan and data analysis plan.

Concepts can be submitted to request <u>approval for analysis of</u> <u>existing data</u>, or to conduct an <u>ancillary project to ongoing data</u> <u>collection</u> (add new data collection or modify an existing project).



Steps to Concept Development

- Generate a Concept idea and identify the appropriate SHARC Project to support your data request
- 2. Review current and past Concepts to see what has already been done and to identify potential Co-investigators/Writing Group members
- **3.** Review relevant literature, identify a theoretical framework
- **4.** Refine your Research Question

 Meet with SHARC Data Team to confirm availability of data for variables of interest



Steps to Concept Development

- **5.** Define Specific Aims and Hypotheses
- Develop inclusion/exclusion criteria for new data collection or to define a subset of the data
- 7. Develop data analytic plan: balance between need to answer research question and your skill level
- **8**. Identify goals for your work (e.g, abstract, paper, grant)
- **9.** Identify any special support you will need (e.g., subject area expertise, data analysis, IRB submission, staff training, etc.)



SHARC Concept Research Plan Form

- 1. Concept Title
- 2. Abstract (maximum 400 words)
- 3. Background
- **4. Specific Aims & Hypotheses** (maximum 200 words, not including references)
- 5. Approach

Include a summarized study design(s),
Any inclusion/exclusion criteria for new data collection
or to define subsample(s)

Analytic methods & sample size/power calculations For projects that will use participant specimens, describe the criteria for selecting specimens, lab testing methods, and the procedures for quality assurance/control



SHARC Concept Research Plan Form

- 6. Will the concept have any need for receiving identifiers in the data set?
 If yes, please explain.
- 7. What are the goals of this work (e.g., abstract, paper, grant, etc.)
- 8. Indicate any special support you will need (e.g., data analysis, IRB submission, staff training, etc.)
- 9. References



Lead Concept Investigator: Angel Algarin

Concept: Life Goals among people living with HIV in Florida:

A quantitative analysis of the "Why Try" model

Aims:

- 1. Describe goals listed among people living with HIV in Florida and measure goal dimensions based on importance, difficulty, and motivation sources.
- 2. Analyze how HIV-related stigma is associated with
 - i) the total number of goals participants list,
 - ii) the average difficulty of each of their goals,
 - iii) the average importance of each of their goals.
- 3. Conduct an exploratory analysis to examine if marijuana use may be a moderator in the relationship between HIV-related stigma and our goal outcomes.



Lead Concept Investigator: Angel Algarin

Approach to Data Analysis:

Linear regression analysis was used to analyze continuous outcomes:

- (1) the total number of goals participants list,
- (2) the average difficulty of each of their goals,
- (3) the average importance of each of their goals.

All participants were included from the MAPLE study.

Product:

Manuscript published in Quality of Life Research.



Angel Algarin: Helpful Suggestions

For all parts of the process:

- Find a good theoretical framework
- By finding a theoretical framework you are interested in, you can compare which variables line up with the framework and which one's don't. This can help determine if the dataset is appropriate for use in testing your hypothesis.

Idea generation:

- Take some time with the codebook. Which variables 'speak' to you?
- It is important to find things that you are interested in looking at. This will further your research interests and will drive you to want to continue to do the work.

Data analysis considerations:

- Considering data analysis without knowing the data can be hard.
- o Imagine talking through the steps you would take to determine what analyses you will use to test your hypotheses to a reviewer.
- Make table shells table shells can help save you time later when you are writing your paper and it gives the reviewers of the Concept a clear idea of what you will be measuring and how you will operationalize it.



Angel Algarin: Helpful Suggestions

Working Collaboratively with a concept group:

- Upon your Concepts acceptance you receive a letter with names of everyone on your Concept group.
- The easiest thing to do is send an email to all authors and Concept group members upon receipt of that letter and use that email chain to keep all correspondence together.

Writing and Publication process

- Work closely with your lead mentor during the writing process to get feedback.
- By addressing issues of the senior author now, co-authors can spend more time giving you comments based on their expertise vs writing guidance.
- Give your team concrete deadlines people are busy; by giving people deadlines and reminders, you can help them remember to review your abstract/paper.

Start with an abstract first!

 This has dual benefits as it is one more product you can add to your CV that you presented, but is also a great stepping stone in framing how your paper will look.



Lead Concept Investigator: Becca Fisk-Hoffman

Concept: Predictors of negative consequences of alcohol consumption in the Florida Cohort

Aims:

- 1: Describe the burden of the negative consequences of drinking among the Florida Cohort study population overall and which consequences are most common in this population. We hypothesize that being unhappy because of their drinking, feeling guilty or ashamed because of their drinking, and drinking getting in the way of personal growth will be the most common consequences.
- 2: Determine how well drinking status (heavy, binge, and low-level) predicts the number of negative consequences of drinking experienced in the last 12 months, while controlling for sex, age, and household income. Heavy and binge drinkers will probably have the higher SIP-R scores compared to low-level drinkers



Lead Concept Investigator: Becca Fisk-Hoffman

Approach to Data Analysis:

The average overall SIP-R score and average score for each domain were computed with a standard deviation for the overall population. The relationship between overall SIP-R score and drinking status were examined using a multivariable linear regression model. The final model was selected using a backwards step-wise selection method, where the initial model includes all variables p>0.25 in pairwise associations between the SIP-R score and each covariate. The analyses was carried out using SAS.

Product:

Manuscript published in Substance Use & Misuse.



Becca Fisk-Hoffman: Helpful Suggestions

Idea generation:

O It is important to identify a subject area that interests you and then specify a Research Question that you can get excited about.

Be open to feedback from the Concepts Committee and your Writing Team

O My analysis plan changed a ton over the process (for the better) and that was a great learning experience.

Write a strong introduction for your Concept

O A strong introduction makes the overall writing process a lot easier because you can [re]use that original introduction in a potential manuscript and also use it in your methods and discussion.

For questions, you may contact Ms. Becca Fisk-Hoffman at: RFisk@ufl.edu



Lead Concept Investigator: Veronica Richards

Concept: Transdermal alcohol concentration in persons living with HIV compared to persons without HIV at similar levels of alcohol consumption

Aims:

- 1. Determine if TAC reaches higher peaks for persons living with HIV than persons without HIV at similar levels of alcohol consumption
- 2. Determine if persons living with HIV have a higher area under the TAC curve at similar levels of alcohol consumption than persons without HIV



Lead Concept Investigator: Veronica Richards

Approach to Data Analysis:

Two indices derived from SCRAM (Secure Continuous Remote Alcohol Monitor): peak TAC (reflecting level of intoxication) and TAC area under the curve (TAC-AUC; reflecting alcohol volume)—were the main outcomes. Self-reported alcohol use (drinks/drinking day) measured by Timeline Followback was the main predictor. To examine whether factors of interest were associated with TAC, we used individual generalized estimating equations (GEE), followed by a multivariate GEE model to include all significant predictors to examine their associations with TAC beyond the effect of self-reported alcohol use.

Product:

Abstract accepted at Society for Epidemiologic Research 2021.



Veronica Richards: Helpful Suggestions

Strategies to move the Concept forward to become a manuscript

Write a strong background to support your Concept

O A compelling background can be used again in your manuscript

Understand the data sample

O This is helpful in designing your analysis plan

Consult with experts

- O Biostatisticians for data analysis
- O Content experts



Other Points about the SHARC Concept System

Faculty mentorship

Remain in contact with your Writing Team/Collaborators

Pre-Concepts (limited)

Please plan ahead (conferences)

DoH approval & DUA with state surveillance system data

Open Science recommendation



What Happens AFTER I Submit my Concept?

Concept received and sent out for peer-review

14-day target

Peer review can also lead to new collaborators

Next, your Concept goes to review committee

Results in approval or request for revision

Training requirements: IRB (Taylor), DUA (Alex)

Work begins on the Concept

Progress reports

Inform us/upload: abstracts, manuscripts, publications

THANK YOU SH)\RC