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Participatory and Collaborative Evaluation Strategies to Support Data-Informed Decisions and Management

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Participatory and Collaborative Evaluation Strategies to Support Data-Informed Decisions and Management

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Introduction

- Building effective behavioral health service systems requires diverse stakeholders.
- Understanding stakeholders' perceptions is critical for system development and assessing the provision of services.
- Moving from collecting required data for a grant to using evaluation information to support data-informed management is possible. This presentation illustrates evaluation strategies to create meaningful participation and collaboration in collecting, analyzing, and using data to support decisions and to monitor progress.
- Further, this study examined the perceptions of stakeholders on the development of Indiana's System of Care (SOC) at state and local levels. The views of stakeholders, including youth, families, and advocates, contrasted with service providers on SOC development in a number of factors.
- Instead of reporting mean ratings, parametric statistics revealed meaningful differences in perspectives.

Methods

Study Participants and Data Collection

Surveys were completed by local stakeholders who had been recruited from local communities and regions by the Indiana System of Care Planning Team and key informants from local communities and regions.

Survey Tool: Systems of Care Implementation Survey (SOCIS, Greenbaum, Friedman, Kutash, and Boothroyd, 2008).

Assessment Year	Number of Key Informants
2014	610
2016	405

Stakeholder Group	N
1. Mental Health Provider	561
2. State	111
3. Education	151
4. Health	25
5. Youth/Family/Advocate	86
6. Juvenile Justice	61

Analysis

Analysis of the SOCIS data was conducted using SPSS. A Welch test (the significance level was $\alpha = .05$.) was used to examine:

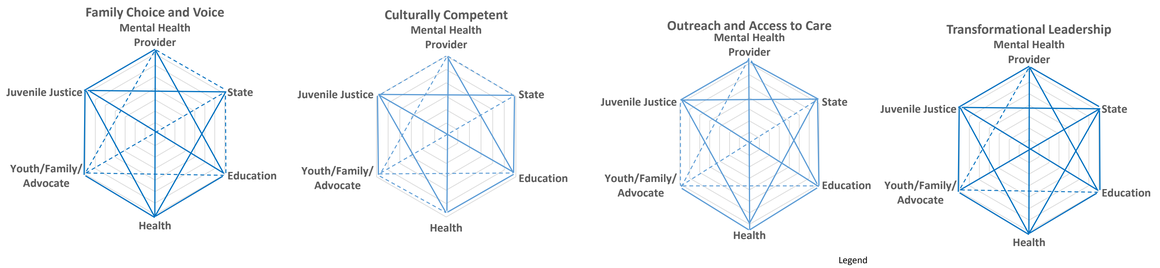
1. Whether key informants differed in their assessment of the SOC factors in 2014 and 2016.
   a) The independent variable was the year the assessment was made i.e., 2016 and 2014.
   b) The dependent variable was the mean rating the informants gave for each SOC factor.

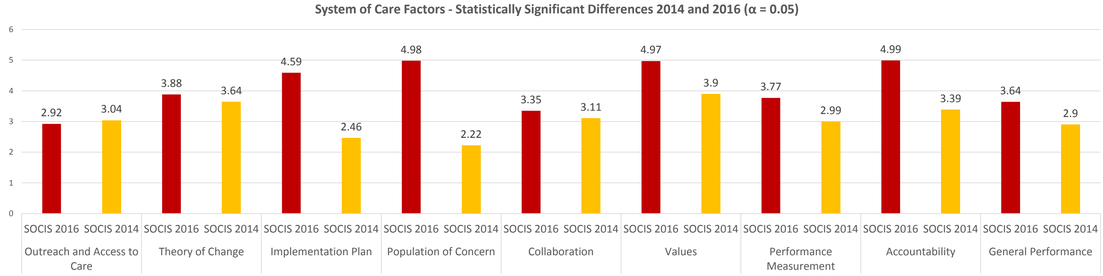
2. Examine the perceptions of 6 groups of stakeholders on the development of Indiana's SOC.
   a) The independent variable was the stakeholder group, i.e. mental health providers, education, youth, family, advocates, etc.
   b) The dependent variable was the mean rating for each SOC factor.

Typically, analyses and comparisons involving two independent groups are done using the independent samples t-test. However, the data structure did not fulfill two of the underlying assumptions of the independent samples t-test – specifically, normality and homogeneity of variance.

Results

- Periodic collection of System of Care Implementation Survey (SOCIS) information identified strengths and ongoing challenges.
- Although mean ratings for many of the 15 factors suggested adequate development, deconstructing the data revealed different patterns of SOCIS responses between the groups of stakeholders (Walton & Evans, 2014; Walton, Karikari, & Garry, 2017). The views of stakeholders, including youth, families, and advocates, contrasted with service providers on SOC development in a number of factors.





Methods contd.

- The Welch test is applicable in cases where the groups being compared do not have the same variance/standard deviations, and when the sample sizes are unequal (de Winter & Dodou, 2012; Ruxton, 2006). Additionally, Welch's t-test also provides the same outcomes as the independent samples t-test when sample sizes and variances are the same (Delacre, Lakens & Leys, 2017).
- With the vastly unequal group sizes and the heteroscedasticity problem, the F statistic was going to be biased, and the significance level could also be miscalculated. This means a Type I error was likely. Therefore, a Welch's ANOVA was used to examine differences among the 6 groups.
- Though the Welch's ANOVA is less powerful than the One-Way ANOVA for homoscedastic data, it is very suitable and much more accurate for data that is heteroscedastic (McDonald, 2014). Post hoc comparisons were conducted using the Games-Howell approach.

Discussion

- A robust framework for interpretation of the findings, reporting, and subsequent data-informed policy and program development and management requires participatory and collaborative approaches (Kurtz & Shimshock, 2011).
- The study provides valuable insight on SOC implementation, enhancing the identification/development of strategies and activities for the effective delivery of behavioral health services to youth and families.

Limitations/Future Study

- A non-probability sampling approach was used, specifically, purposive and maximum variation sampling. The sample may not have adequate representativeness (Padgett, 2008).
- Additionally, the results may have been impacted by the overrepresentation of certain stakeholders, e.g. mental health providers. Thus, the interpretation of the results should be further contextualized.
- Future surveys can employ measures to enhance the recruitment of a more diverse sample. Doing so will enhance the study's generalizability to other settings.

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