

# Development of Patient Experience Questionnaire Measuring Patient Satisfaction and Quality Care In Behavioral Healthcare Environment

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# Disclosures

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The speakers have no conflicts of interest to disclose

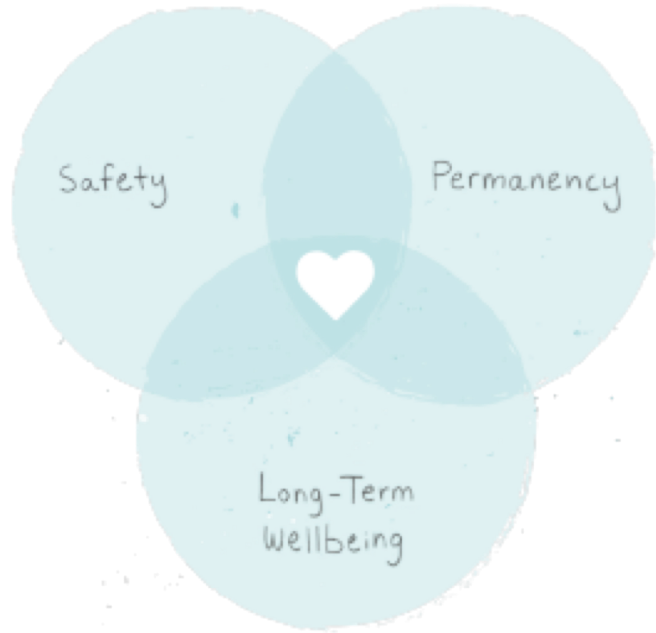
# Learning Outcomes

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Upon completion of this presentation, participants will be able to:

1. Describe KVC Kentucky and its family, child, and youth behavioral health services
2. Describe the development process of the KVC Kentucky Consumer and Family Member Experience and Satisfaction Surveys
3. Discuss the psychometric properties and utility of applying the KVC Kentucky Consumer and Family Member Experience and Satisfaction Surveys

# KVC Health Systems: Vision, Mission, Values



- Vision

- Providing leadership in behavioral healthcare, social services, and professional education through the provision of service delivery models with proven quality and fiscal accountability.

- Mission

- To enrich and enhance the lives of children and families by providing medical and behavioral healthcare, social services and education.

- Values

- Excellence is not an act; it's a habit
- With privilege comes responsibility
- Children grow best in families
- Families know best
- Children can't wait



# KVC Kentucky

- KVC was born in 1970
- Croney and Clark, Inc. in 1999
- KVC/Croney and Clark, later known as KVC Kentucky in 2009.
- Merger brought about a greater capacity for service and commitment to Kentucky's children who are in out-of-home care that continues to this day.
- Philosophy of service guided by professional team's collective years of mental health services and clinical experience, as well as state-of-the-art research findings and "best practice" standards.
- Currently, we have 225+ employees



# KVC Kentucky Services

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- Behavioral Health Services (BHS)
- Treatment Foster Care (TFC)
- Family Preservation and Reunification Services (FPRS)
- Kentucky Strengthening Ties and Empowering Parents (KSTEP)

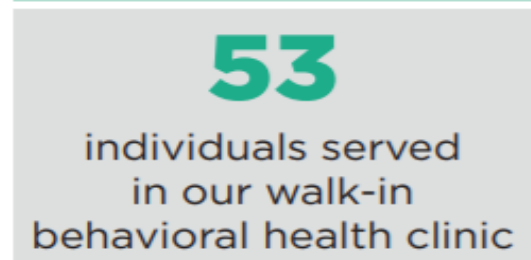
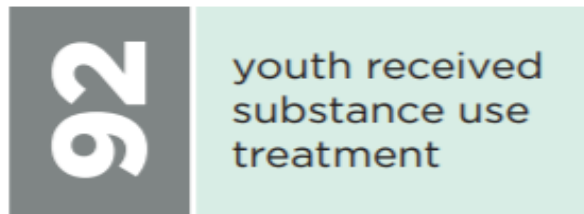


# Over the last year, we helped people in many ways:

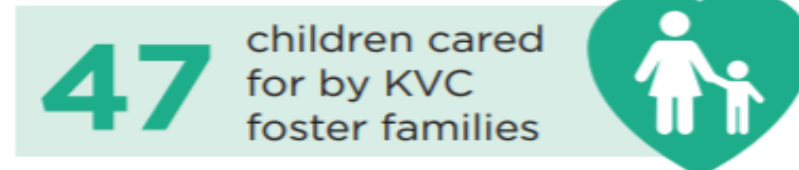
## TOTAL IMPACT



## BEHAVIORAL HEALTH



## FOSTER CARE



## STRENGTHENING FAMILIES



safely remained with  
or reunited with  
their families after  
receiving family  
preservation and  
reunification services



# Developing the Consumer Experience and Satisfaction Survey

- August 2<sup>nd</sup> 2017: Meeting between UK College of Nursing and KVC Kentucky regarding Consumer Satisfaction Survey
  
- August 23<sup>rd</sup> 2017: KVC Work-group developed a Client Satisfaction Survey draft after review of:
  - The Picker Patient Experience Questionnaire (PPE 15, Jenkinson, Coulter, & Bruster, 2002)
  - Client Satisfaction Questionnaire (CSQ 8, Attkisson & Greenfield, 1995)
  - Patient Satisfaction Questionnaire (PSQ, Marshall & Hays, 1994)
  - Outcome Rating Scale and Session Rating Scale (ORS, SRS; Miller, Duncan, Brown, Sparks, Claud, 2003)
  
- Finalized surveys by February 2018

# Consumer and Family Experience Surveys

- 23 items each
  - 5 point Likert scale (strongly agree to strongly disagree)
- 5 domains each
  - Service team skills
  - Service team manners
  - Perceived outcomes
  - Improved functioning
  - Accessibility of services

**KVC Kentucky** KVC Behavioral HealthCare Kentucky, Inc.  
Family Preservation & Reunification Services  
2250 Thunderstick Drive, Suite 1104

### Consumer Experience Survey

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
<b>Service Team Skills</b>						
The service team assisted me in identifying my needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My service plan was created based on goals I identified.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service team and I followed a plan designed to meet my needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt supported in making needed changes to my plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was able to help design my aftercare plan before finishing my services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After services ended, I was able to use my aftercare plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Service Team Manners</b>						
I feel the service team respected my culture (race, religion, culture, sexuality, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel the service team treated me with dignity and respect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt supported by the service team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understood what the service team was talking about with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Perceived Outcomes</b>						
The service team supported me in learning and practicing new skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about the services I received.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend KVC to a friend or family member.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Improved Functioning</b>						
I am better able to accomplish daily activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am better able to get along with my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am better able to make and keep friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am better able to handle hard situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am better able to deal with a crisis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can find help when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Accessibility</b>						
The service team worked around my schedule.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service team met with me as scheduled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the after-hours support services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was easy for me to get all the services I needed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What about your services did you find helpful?

What about your services did you find unhelpful?

What could KVC do to make services better?

What are your concerns and/or complaints about the services you received?

Age: \_\_\_\_\_ Gender: \_\_\_\_\_ Race: \_\_\_\_\_ County: \_\_\_\_\_

Have you ever received services from KVC in the past?  Yes  No If Yes, please specify: \_\_\_\_\_

Please identify which program you participated in:  
 Family Preservation & Reunification Service (FPRS)  
 Behavioral Health Services (BHS)  
 Treatment Foster Care (TFC)

Please specify which services you received:  
 Case Management  Comprehensive  
 Therapy  Community Support  
 Psychiatry  Other: \_\_\_\_\_

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(859) 254-1055

### Family Experience Survey

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>Service Team Skills</b>					
The service team assisted me and my family in identifying our needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our service plan was created based on goals we identified.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service team and my family followed a plan designed to meet our needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We felt supported in making needed changes to our plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We were able to help design the aftercare plan before finishing services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After services ended, we were able to use the aftercare plan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Service Team Manners</b>					
We feel the service team respected our family culture (race, religion, sexuality, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We feel the service team treated us with dignity and respect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We felt supported by the service team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We understood what the service team was talking about with us.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Perceived Outcomes</b>					
The service team supported us in learning and practicing new skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We feel good about the services our family received.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We would recommend KVC to a friend or family member.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Improved Functioning</b>					
My family is better able to accomplish daily activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family is better able to get along with each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family is better able to identify and maintain appropriate supports and services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family is better able to handle hard situations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family is better able to deal with a crisis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family can find help when we need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Accessibility</b>					
The service team worked around our schedule.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service team met with us as scheduled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We were satisfied with the after-hours support services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was easy for my family to get all the services we needed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What about your services did you find helpful?

What about your services did you find unhelpful?

What could KVC do to make services better?

What are your concerns and/or complaints about the services you received?

Who's completing this survey:  Parent/Guardian  Child/Minor  Other Family Member

Have you ever received services from KVC in the past?  Yes  No If Yes, please specify: \_\_\_\_\_

Please identify which program you participated in:  
 Family Preservation & Reunification Service (FPRS)  
 Kentucky Strengthening Ties & Empowering Parents (KSTEP)

Please specify which services you received:  
 Case Management  Therapy

Family Information:  
 Race: \_\_\_\_\_  
 County: \_\_\_\_\_

# Study Purpose

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- The purpose of the study was to psychometrically evaluate the KVC Kentucky Consumer and Family Experience Surveys with the aims of assessing:
  1. Reliability and
  2. Construct Validity



# Design and Procedure

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- Retrospective analysis of 422 anonymous responses from families and consumers receiving KVC Kentucky services
- Surveys were sent electronically and paper and pencil out between March 1<sup>st</sup> to December 31<sup>st</sup>, 2018
- Approval from the University of Kentucky Medical Institutional Review Board (April 25<sup>th</sup>, 2019)

# CONSUMER EXPERIENCE SURVEY COMPLETERS (N=100)

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- Mean age 17.4  $\pm$  13.0 years
- 76.0% Caucasian
- 60.0% Females
- 60.0% Urban dwellers
- 78.0% First time service users
- 85.0% Behavioral Health Service (BHS) Program

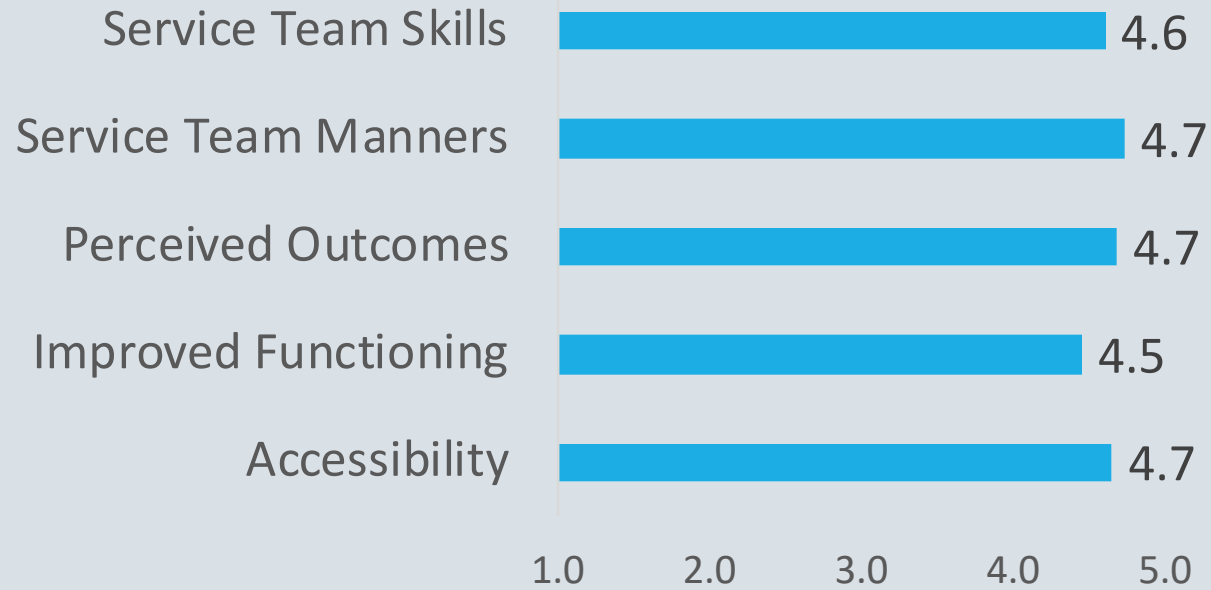
# FAMILY EXPERIENCE SURVEY COMPLETERS (N=322)

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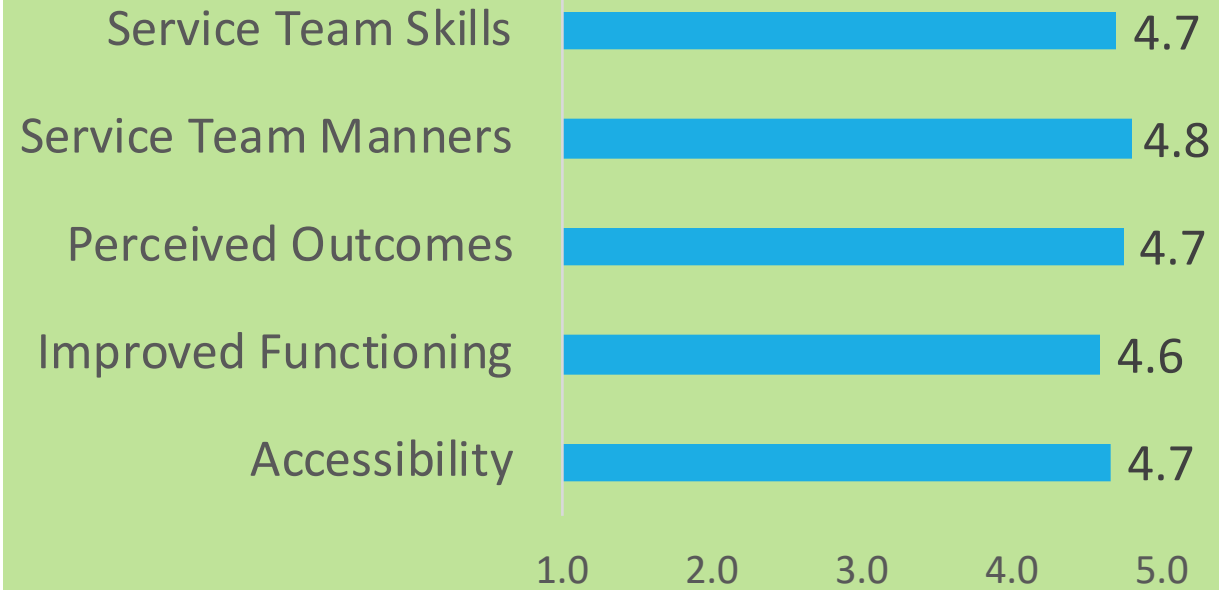
- 87.6% Caucasian
- 45.7% Urban dwellers
- 98.4% Parents/Guardians
- 80.7% First time service users
- 94.7% Family Preservation (FP) Program
- 73.6% Case Management services

# Satisfaction with Services

Consumer Satisfaction Scores  
(N=100)



Family Satisfaction Scores  
(N=322)



# Reliability Analysis

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- Inter-item correlation coefficients
  - Range of individual items between .15 to .85
  - Average between .15 and .50
- Cronbach's alpha coefficients
  - Range from 0 to 1
  - Values closer to 1 indicate higher internal consistency
  - Values  $\leq 0.7$  should be used with caution



# Validity Analysis

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- Exploratory factor analyses
  - Eigen values  $> 1$  indicate factors
  - Percent variance explained ranges from 0 to 100%
  - Dimensions tell if there are more than one way to explain the concepts (latent variables) explained by the measures
  - Item loadings are how strong the item is correlated to overall concept (within a subscale or as a whole)

Subscale	Number of items	Cronbach's Alpha	Inter-Item Correlation
Service Team Skills	6	0.874	0.587
Service Team Manners	4	0.903	0.766
Perceived Outcomes	3	0.864	0.768
Improved Functioning	6	0.929	0.695
Accessibility	4	0.868	0.642

## CONSUMER EXPERIENCE SURVEY SUBSCALE ITEM ANALYSES

Subscale (Fit indices)	Eigenvalue	Number of Dimensions	Percent Variance	Item loadings
Service Team Skills (KMO=0.84. BTS<0.001)	3.953	1	66.0%	0.690-0.890
Service Team Manners (KMO=0.75. BTS<0.001)	2.533	1	84.0%	0.909-0.932
Perceived Outcomes (KMO=0.50. BTS<0.001)	1.768	1	88.0%	0.940-0.940
Improved Functioning (KMO=0.89. BTS<0.001)	4.474	1	75.0%	0.821-0.897
Accessibility (KMO=0.82. BTS<0.001)	2.871	1	72.0%	0.814-0.886

## CONSUMER EXPERIENCE SURVEY FACTORIAL ANALYSES

Items	Item Loadings	
	Dimension 1 (Services)	Dimension 2 (Outcomes)
The service team assisted me in identifying my needs.	0.651	0.334
Able to help design my aftercare plan before finishing services.	0.281	0.885
After service ended, I was able to use my aftercare plan.	0.195	0.881
I would recommend KVC to a friend or family member.	0.790	0.300
I am better able to accomplish daily activities.	0.724	0.377
I am better able to make and keep friends.	0.781	0.225
I am better able to handle hard situations.	0.736	0.296
The service team worked around my schedule.	0.672	0.490
I am satisfied with the after-hours support services.	0.847	0.076
It was easy for me to get all the services I needed.	0.643	0.425
Variance explained by dimensions = 67%. KMO = 0.905. BTS < 0.001. MSA range = 0.825-0.943.		

**CONSUMER EXPERIENCE SURVEY-SHORT FORM (10-Items)**  
**Cronbach's Alpha = 0.917. Inter-Item Correlation = 0.541.**

Subscale	Number of items	Cronbach's Alpha	Inter-Item Correlation
Service Team Skills	6	0.895	0.608
Service Team Manners	4	0.901	0.696
Perceived Outcomes	3	0.810	0.602
Improved Functioning	6	0.913	0.635
Accessibility	4	0.799	0.540

## FAMILY EXPERIENCE SURVEY SUBSCALE ITEM ANALYSES

Subscale	Eigenvalue	Number of Dimensions	Percent Variance	Item loadings
Service Team Skills (KMO=0.90. BTS<0.001)	4.029	1	67.0%	0.753-0.889
Service Team Manners (KMO=0.82. BTS<0.001)	3.095	1	77.0%	0.818-0.908
Perceived Outcomes (KMO=0.71. BTS<0.001)	2.204	1	73.0%	0.840-0.875
Improved Functioning (KMO=0.89. BTS<0.001)	4.192	1	70.0%	0.693-0.920
Accessibility (KMO=0.79. BTS<0.001)	2.628	1	66.0%	0.755-0.863

## FAMILY EXPERIENCE SURVEY FACTORIAL ANALYSES

Items	Item Loading	
	Dimension 1 (Services)	Dimension 2 (Outcomes)
The service team assisted my family in identifying our needs.	0.743	0.210
Our service plan was created based on goals we identified.	0.725	0.421
We felt supported in making needed changes to our plan.	0.779	0.327
We were able to design the aftercare plan before finishing services.	0.631	0.390
We feel the service team respected our family culture.	0.824	0.242
We understood what the service team was talking about with us.	0.759	0.326
The service team supported us in learning and practicing new skills.	0.658	0.434
Feel good about the services our family received.	0.782	0.387
Family is better able to accomplish daily activities.	0.349	0.725
Family is better able to get along with each other.	0.199	0.848
Family is better able to identify and maintain appropriate supports	0.357	0.733
Family is better able to deal with a crisis.	0.264	0.795
My family can find help when we need it.	0.399	0.574
We were satisfied with the after-hours support services.	0.290	0.609

Variance explained by dimensions = 62%. KMO = 0.952. BTS < 0.001. MSA range = 0.922-0.971.

**FAMILY EXPERIENCE SURVEY-SHORT FORM (14-Items)**  
**Cronbach's Alpha = 0.936. Inter-Item Correlation = 0.534.**

# Summary of Findings

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- The KVC surveys both demonstrated suitable reliability and validity
  - Subscales on Consumer Experience survey had Cronbach's alphas from 0.868-0.929; and percent variances from 66.0% to 88.0%
  - Subscales on the Family Experience survey had Cronbach's alphas from 0.799-0.913; and percent variances from 66.0% to 77.0%
- Reduced survey versions demonstrated slightly improved reliability and validity
  - Consumer Experience survey (Cronbach's alpha=0.917; Inter-item correlation=0.541)
  - Family Experience survey (Cronbach's alpha=0.936; Inter-item Correlation=0.534)



# Future Directions

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- Refine the survey as needed
- Adopt the surveys to be used KVC system-wide with option of the long or short form depending on service setting
- Continue evaluating outcomes of services beyond consumer satisfaction
  - Examine specific service outcomes (e.g., outcome of therapeutic modalities on specific outcome measures)
  - Examine service impact (e.g., community level service outcomes)

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# Questions

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