# A Qualitative Analysis of Family Dynamics and Motivation in Sessions With 15 Women in Drug Treatment Court

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Substance Abuse: Research and Treatment Volume 13: 1–7 © The Author(s) 2019 Article reuse guidelines: sagepub.com/journals-permissions

DOI: 10.1177/1178221818818846

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ABSTRACT: Women with substance use disorders (SUDs) often experience inadequate health care, mental and physical health problems, trauma, lack of social support, and undermining of support for psychological needs of autonomy, competence, and relatedness needed for motivation and well-being. For women with SUD trying to reclaim sobriety and a healthy life, family can present both barriers and support. The aim of this study is to gain a deeper understanding of the intersection of family relationships with motivation of women in Drug Treatment Court (DTC) to attain their health goals. Data consist of transcribed intervention sessions between trained peer interventionists and 15 DTC participants from The Women's Initiative Supporting Health DTC Intervention Study. This analysis uses a qualitative framework approach to analyze the data. The Self-determination Theory of human motivation and Family Systems Theory provide the conceptual framework to understand how participants' expressions of motivation-related basic needs of autonomy, competence, and relatedness and change-related behaviors interfaced with family support. Analysis revealed more mentions of family in motivation-supportive contexts than in motivation-thwarting contexts, but highlighted complex roles families can play in health of women in recovery from SUD. Providers may be able to incorporate this knowledge to address the needs of this challenging population.

KEYWORDS: substance use disorder, women's health, family support, trauma, motivation

RECEIVED: October 28, 2018. ACCEPTED: November 4, 2018

TYPE: Original Research

**FUNDING:** This work was funded by the National Institutes of Health (NIDA 1K23DA031612-01A1); the McGowan Charitable Fund (524475); and the University of Rochester Center for AIDS Research (NIH P30AI078498).

**DECLARATION OF CONFLICTING INTERESTS:** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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#### Introduction

Women with substance use disorder (SUD) face isolation from family, incarceration, and poverty. They are at increased risk for medical problems including sexually transmitted infections (STIs), HIV, and Hepatitis C Virus (HCV), as well as mental health disorders including post-traumatic stress disorder (PTSD) and depression. SUD, incarceration, trauma, and STI's combine as "syndemic" risks. Intimate partner violence (IPV) is often a part of this syndemic, as a sequel to childhood abuse and unhealthy family relationships.

Women with SUD describe family relationships contributing to substance use and, paradoxically, the importance of family relationships to recovery.<sup>6</sup> Social support can mitigate the impact of childhood abuse and family dysfunction on mental and physical health among people with SUD.<sup>7,8</sup>

The United States has the highest rate of incarcerating women in the world, at approximately 127 women per 100 000.9 Of those in state and federal prison, 65% are estimated to meet the diagnostic criteria for SUD compared with 8% in the general population. Drug Treatment Court (DTC) aims to replace SUD and incarceration cycles with treatment. Generally, DTC graduation requires SUD treatment, 1 year of sobriety, education and employment progress, and obtaining

housing. Drug Treatment Court participants regularly appear in court to report to the judge, have random drug screens, and meet their DTC case manager. 11 On average, recidivism rates decreased from 50% to 38%, with the decrease lasting up to 3 years, and higher effectiveness among women. 11,12 To maximize outcomes, it is worth exploring motivation and family factors that are especially salient for women DTC participants.

Self-determination Theory (SDT) is a general theory of human motivation that assumes people are innately oriented to personal growth and well-being built on the concept that healthy behaviors are supported by autonomous motivation.<sup>13</sup> Self-determination Theory researchers also assume that humans have 3 psychological needs necessary for psychological well-being: autonomy, competence, and relatedness. Autonomy is defined as the experience of being the origin of one's own behaviors, competence as feeling able to reach desired goals, and relatedness as feeling understood and cared for by others and in caring for others. Research shows that when these 3 basic needs are satisfied, humans experience better mental health, initiate and maintain positive health-related behaviors and their outcomes, and experience greater well-being.14 Autonomy support from health care practitioners and important others (non-professionals) positively predicts higher levels

of patient autonomy, competence, and relatedness regarding health-related behaviors, and the increase in autonomous motivation and perceived competence mediate more effective and lasting health behavior change. Particularly for women, it is worth considering how family relationships enhance or thwart motivation for healthy behaviors.

Self-determination Theory delineates several connections between family support and SDT. First, relatedness is an essential need for all humans, particularly in family relationships. Second, fulfillment of the 3 basic needs is associated with positive relationship outcomes. Furthermore, relatedness support is unique in that both receiving and giving it are associated with high-quality relationships. Last, SDT demonstrates improvement in health outcomes with support from important others. Family Systems Theory (FST) also explains the role of family in health outcomes.

Genetic and social influences in families promote SUD. <sup>18</sup> Yet family can motivate or aid recovery. Family Systems Theory highlights family as a system where each member's actions and emotions affect the others'. Social networks, along with contact with relatives and friends, are powerful predictors of health. <sup>19</sup> Social support or the lack thereof, particularly from family members, can affect SUD. <sup>18</sup>

Given the roles of SDT and family support in healthy behaviors, this study investigates how they may act synergistically for women DTC participants with critical health needs and SUD.

## Methods

We performed a secondary analysis of qualitative data from The Women's Initiative Supporting Health (WISH) DTC Intervention Study, approved by the University Research Subjects Review Board. Research staff recruited English-speaking women aged 18 or older who had a chronic medical condition, between August 2013 and July 2015 from a medium-sized, urban DTC. In this cohort, every participant had either HIV or HCV. Participants performed demographic and trauma measures at baseline.

#### Intervention

The WISH intervention included 6 approximately biweekly 1 hour manualized sessions. Women received bus passes and gift cards for participation. Peer interventionists provided cultural specificity.<sup>20–22</sup> Participants were informed that the purpose of the sessions was to address women's health, defined broadly to include physical health, mental health, substance use, and safety from IPV. Interventionists were trained and supervised (via group review of taped sessions with the supervisor) to deliver the intervention with fidelity in the domains of process and content. Process related to SDT strategies of support for autonomy, competence, and relatedness.<sup>23,24</sup> Content related to the women's needs according to prior research including for physical and mental health care access,

IPV assessment and referral, child care, food, shelter, and transportation.<sup>21</sup> Interviews were video- or audiotaped, transcribed, and de-identified. After screening 115 women, 90 were ineligible (due to absence of a chronic disease), 25 were eligible, 10 were lost to follow-up or received the intervention later, and 15 received the intervention and were included in this study.

## Analysis

A multidisciplinary analytic team, including women with experience as DTC participants or justice involvement, trained peer community health workers, the physician principal investigator (PI), and trained graduate and undergraduate research assistants, watched or listened to all of the intervention sessions in pairs or triads (individuals with prior substance use and justice involvement were in different groups to maximize their representation) and made lists of recurring codes. The group came together to reach consensus and a coding document was developed iteratively. Next the team coded 1 random intervention session from each participant, using the new coding document. With the existing sample, saturation was reached and the analysis captured a broad range of experiences. Team members coded each random session individually, then in pairs or triads, and finally brought the coded transcript to a group meeting for detailed analysis by consensus. Once consensus was reached for a given transcript, the codes and accompanying narratives were entered into Atlas.ti.25

For this analysis, the research team highlighted utterances from the women regarding families on Atlas.ti texts. In the Framework Model of qualitative analysis, a theoretical model is identified within which the utterances can be classified to best describe their meaning. In the intervention sessions, the women DTC participants described motivational factors to make or maintain needed changes in the context of family relationships and concerns. Hence the team identified themes which spanned SDT and FST frameworks to provide the best fit for the data. <sup>26</sup> Codes identified overarching themes connecting autonomy, competence, and relatedness (SDT) and FST. <sup>18,21,27</sup> The combined use of these frameworks allowed for a deep understanding of how the women interact with the family influencers in their lives. <sup>21</sup>

The team then went through each utterance and its family context and came to consensus regarding whether it was supportive or thwarting of each of the 3 specific basic needs described in the SDT of human motivation. When an utterance was "supportive" of a need, it described an experience of the interviewee conveying competence, autonomy, or relatedness, and when an utterance was "thwarting," it was a description of an experience being deprived of 1 of those 3 needs. After the coding documents and did not have any discrepancies. After the coding was completed, the data were interpreted according to overriding behavior change concepts identified by the team. Each of the support of the supp

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#### Results

Baseline demographic information and the number and types of abuse experiences measured by the Lifetime and Current Trauma Assessment are presented (Table 1).<sup>29</sup> Participants were aged 23 to 54 and had 0 to 9 children. Fourteen out of the 15 women had experienced some type of trauma including homelessness, forced sex, physical abuse, or emotional abuse.

Change and maintenance-related behavior codes in relation to families were Parenting, Overcoming Trauma, Maintaining Family Relationships, Maintaining Mental Health, Maintaining Physical Health, Maintaining Sobriety, and Emotional Self-regulation, overlapping with the SDT need categories of autonomy, competence, and relatedness (Tables 2 and 3). There were more utterances in the autonomy supportive category than in the autonomy thwarting category. The most frequently noted change and maintenance-related behaviors was parenting in the autonomy supportive category. The second most frequent change-related behavior was overcoming trauma in the autonomy thwarting category. The most frequently noted SDT need was relatedness (supportive), and the second most frequently noted SDT need was competence (supportive).

## Parenting

Parenting was the most frequently described change-related behavior, more in the autonomy supportive category than the autonomy thwarting category. Janice (a pseudonym) described wanting to be a better parent as supporting her change in substance use:

I really had had enough, and my son. I wanted to be there for my son.

Multi-generational relationships sometimes thwarted competence for healthy behaviors. Patricia found it hard to coordinate meeting her needs to get to appointments and take her medications with those of her daughter and grandson:

My daughter... lives at home, my 23-year-old, with my grandson... I'm with him a lot, and he's a handful, and she's kind of always pushing him off on me. I hate to say it like that, but "I've got to go to this and that," and then here I am scattered all over the place. It's hard.

## Overcoming trauma

Overcoming trauma was the most unequally distributed change-related behavior between supportive (2 utterances) and thwarting (24 utterances) categories. Thwarting utterances often related to childhood abuse from family members and IPV that participants were overcoming. Some participants used the competence gained from their thwarting experiences as Kimberly describes the childhood abuse in her family:

I don't regret anything in my life . . . I've learned something from everything. All the rotten things that have happened to me.

**Table 1.** Participant characteristics (N = 15).

	N
Interview number	
1	4
2	3
3	3
4	3
5	1
6	1
Age range	
20-30	6
30-40	3
40+	6
Education	
Less than high school	3
High school diploma/General	4
Educational Development	4
Some college	6
College degree	2
Children	
None	2
1-2	6
3-4	4
5+	3
Homelessness	
Yes	11
No	4
Incarceration	
Yes	14
No	1
Partner status	
Single	4
Separated	2
Divorced	3
Non co-habiting	4
Co-habiting	2
Emotional abuse or neglect	<del>_</del>
Yes	13
No	2
Physical abuse	
Yes	13
No	2
Forced to have sex	
Yes	9

Lucinda describes autonomy and relatedness in her supportive family relationships after being thwarted by IPV:

By then, you're so used to it because it doesn't happen all at once, like stages... By the time he does get abusive, you're so used to it, you don't leave. And when you do, you think... "Oh, I want my family back together... He's changed. He's not doing it." And then I go back, and in a matter of weeks he's doing it again. He'll never change, and I understand that, and I'm okay with that. My son is my family. My mom is my family, and my best friend is my family. I have a family. I don't have to have him to be a family. I already have a family.

# Maintaining family relationships

Maintaining positive changes frequently required support, both from families to the women and from women to their children. They are repairing family relationships through SUD recovery as Jasmine describes with her adult daughter as she treats her health problems:

She has been a lot of support for me... When I was using, she never gave me a lot of support... because I was in my addiction, but now that I'm clean she gives me a lot of support, a lot of feedback, a lot of compliments... and it feels good... that I do and I did have family out there that cared about me when I was in my using... It was tough love.

Denise typifies such a strong need for relatedness for herself and her children that she keeps going back despite being repeatedly thwarted, which interferes with her own physical health treatment:

My mom's mental health has definitely traumatized the children extremely bad... I try to keep my kids away from her. I want them to have a relationship with their grandmother so bad that no matter how many times she keeps screwing me over, I keep going back... especially now that she's sick. But even when she's sick, she's... sometimes negative and detrimental... I don't want my kids around it.

## Maintaining mental health

Because the women were aware that HCV treatment could worsen depression symptoms, they were reluctant to start treatment unless symptoms were controlled. Participants frequently described their mental health being thwarted by negative experiences including childhood trauma and losing relationships with family members. Alex described the loss of relatedness with important others contributing to her depression:

I do [feel] depressed once in a while; it comes and goes. I mean I've been through so much and I really have no one, like no family . . . I find myself like alone. I go to meetings and seek . . . friends in the AA meetings, NA meetings just to not feel alone. So I do have them, I consider them as family but I [get] depressed cause I don't have my own family. I did so much in my teenage years growing up and stuff so it's so hard for my family to trust me again. My depression basically comes from there cause I feel lonely . . .

Families were also a source of support for mental health as Mary responded when asked about her support system that the intervention encouraged prior to beginning HCV treatment:

Well, definitely my family, my mom and my dad, my boyfriend, my sponsor, my AA sponsor and my best friend. Those are . . . my main people.

# Maintaining physical health

Women often described the competence required to attain or maintain physical health, as well as the competence health would provide to them. They wanted to stay healthy to care for their families or after encouragement from family. Doris wished she had kept herself healthier so that she could experience the joy and satisfaction of sharing important life events with her expected grandchild:

My daughter is carrying a baby now, and I don't know if I'll be able to see my grandchild graduate because of the way I abused my body and with the hepatitis C and . . . a lot of . . . other health issues.

Doris' poor physical health and fear of being ill and homeless led her to accept a need-thwarting relationship with an abusive partner for financial reasons. Then she pursued relatedness by moving in with her children and grandchildren, but feelings of incompetence overwhelmed her ability to get HCV treatment:

I'm a single mom, four children. I have a grandson, too, and they all live at home. I'm a drug addict. I have diseases. I don't have a job. I'm a mess.

## Maintaining sobriety

Maintaining sobriety was one of the most frequently described health goals. Kelly indicates that her mother's support and relatedness leave her feeling more autonomously motivated and competent to not use again:

Those thoughts come like, "I know what would take this pain away."...

It puts me in a bad space. So I called my mom.

Lois describes how children were allowed to make a choice to use alcohol in her family during childhood, resulting in internalization of unhealthy values and loss of self-regulation:

Drinking was acceptable in my house when I was 6, 7 years old at Christmas, Thanksgiving, and New Year's. All of us kids were allowed to have a drink on the holidays.

# Emotional self-regulation

Women described both support and thwarting as they tried to regulate their emotional responses. Despite a lack of competence support from her mother, Rosa controlled her anger:

Even if [my mother's] comment was right or wrong, the fact that I was calm, I stayed with the facts when I said something, and I just . . . told her how I felt instead of just "you're wrong, you're this and you're that . . . "

Anita described her autonomous motivation to improve her parenting style and efforts to regulate her emotional responses.

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Table 2. Codes categorized by behavior and self-determination theory-based support.

BEHAVIOR	SUPPORTIVE	SUPPORTIVE		
	COMPETENCE	AUTONOMY	RELATEDNESS	
Parenting	8	9	9	26
Anger Control	1	2	3	6
Overcoming Trauma	_	1	1	2
Maintaining Sobriety	6	5	6	17
Maintaining Mental Health	5	2	3	10
Maintaining Physical Health	8	6	4	18
Maintaining Family Relationships	6	4	10	20
Spirituality	1	3	1	5
Total	35	32	37	104

Table 3. Codes categorized by behavior and self-determination theory-based thwarting.

BEHAVIOR	THWARTING			TOTAL
	COMPETENCE	AUTONOMY	RELATEDNESS	
Parenting	10	6	7	23
Anger Control	2	2	_	4
Overcoming Trauma	6	8	10	24
Maintaining Sobriety	2	4	_	6
Maintaining Mental Health	5	7	7	19
Maintaining Physical Health	2	<del></del>	_	2
Maintaining Family Relationships	_	<del>-</del>	7	7
Spirituality	<del>_</del>	_	_	0
Total	27	27	31	85

She did not describe guilt as a motivator. Although she is not always successful, she is mastering new skills which would support all 3 of her daughter's psychological needs:

It's challenging. My whole way of parenting and everything is a work in progress right now. I have no answers, and I don't always handle myself the way I want to handle myself.

# Discussion

This study found more descriptions of family as supporting than thwarting the 3 needs that mediate motivation for change, yet women were challenged by balancing their needs against those of their families. Women strove to improve their health, sobriety, and well-being for themselves and for their families. Autonomous motivation for the women's own recovery emerged with their autonomous motivation to support their families. Prior research supports positive associations between family support and SUD recovery. Parenting was found more frequently in the supportive category than the thwarting category,

coinciding with findings that having children can aid recovery, and that relatedness satisfaction comes from supporting others, as well as from being supported.<sup>30</sup> Thus, their own recovery was positively motivated by supporting their family. Conversely, negative associations occur between motherhood and SUD recovery as women get overwhelmed by children's needs.<sup>31</sup> The women seemed to be aided by support and emotional connection from family members, but needed to focus on meeting their own emotional and physical needs during early stages of recovery. It is possible, that at times, the women accessed more controlling regulations (such as guilt), rather than autonomous self-regulation resulting in unsatisfying experiences and behaviors, but further study is needed to understand this.

Many of the women were recovering from childhood family trauma. This is consistent with existing literature noting the association between SUD and trauma, notably childhood abuse, IPV, and sexual assault.<sup>5,32</sup> PTSD prevalence among women with SUD is nearly 3 times that among the general population.<sup>33</sup> Furthermore, trauma-informed SUD treatment

compared with usual SUD treatment for women demonstrated higher satisfaction with services, higher drug abstinence rates, and lower mental health symptomatology.<sup>34</sup> This is also consistent with SDT that greater support and satisfaction of autonomy, competence, and relatedness results in improved mental health and well-being.<sup>13</sup> Our results support recommendations to increase availability of trauma-informed SUD services to help women and their families and training these clinicians to support patients' psychological needs.<sup>34</sup>

Intimate partner violence was reported by most study participants. Between 67% and 80% of women in treatment for SUD have IPV histories, both as risk factors and outcomes. 32,35 Intimate partner violence is a form of family- and usually gender-based violence that affects the whole family. In this study, women reported widespread effects on themselves and their children. Medical providers who care for families must be mindful that IPV often goes under-reported. 18,36

Social support positively affects health among women in particular.<sup>8</sup> Furthermore, family support helps reduce or eliminate SUD among women with mental illness and SUD.<sup>7</sup> Support, socioeconomic status, homelessness, and incarceration among women with SUD have a strong impact on substance use, as well as morbidity, and must be considered in planning interventions.<sup>19</sup>

Family can have a negative influence on those with SUD, can trigger substance use and associated unhealthy behaviors, and can lay behavioral and genetic foundations for SUD. 10 However, family can also be an aid in recovery as they know each other better than outsiders, understand recovery barriers and motivators, and can provide valuable information to providers. 18 Our study supports the notion that SUD treatment should judiciously include families.

Participants described a relationship between family support, intrinsic motivation, and behavior change, as theorized in SDT.<sup>13</sup> The frequency and nature of coded comments alluding to family as supporting or thwarting motivation-related needs is striking. Further examination is needed on the role of family in support of autonomy, competence, and relatedness, and how it relates to health behavior change.

## Strengths and limitations

A study strength is that the population attended only 1 DTC, as there is variation in DTCs operations, and participants had similar community resources. This study was not designed to be statistically generalizable, as it was 15 women in 1 county DTC. In line with the objectives and strengths of qualitative methodology, the study findings provide insight about a similar population of women in DTC and may allow for broader inferences.

A study limitation is that interventionists aimed to address participant health needs and did not routinely ask about families. Nonetheless, all women raised family-related issues, providing rich data to analyze the experiences of the women through this lens. Furthermore, these interview data did not capture participant outcomes.

### **Conclusions**

Women with HIV or HCV who commit drug-related crimes and participate in DTC are at risk for interrelated physical and mental health disorders, trauma, and social disruption, which families can worsen or improve. Evaluating whether family relationships are supportive or thwarting of motivation for health-related behavior change and recovery for women in DTC may be helpful in supporting women participating in DTC and planning for their future. Further study is needed regarding what factors aid women in completing DTC in the context of family relationships that can be both positive and negative and the roles of family members in their success. This study adds to the literature by highlighting the potential benefit of addressing family dynamics when determining treatment plans and how families can increase or decrease motivation of women in DTC.

## Acknowledgements

We are grateful for the women who participated in the interviews, Precious Bedell and JoZ Powers for conducting the interviews, and the Drug Treatment Court staff for allowing recruitment. The primary investigator had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

#### **Author Contributions**

ZEG, AA, NPC, GW, and DSM contributed to the analysis of the data and writing of the article. DSM and GW contributed to study design.

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