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ORIGINAL PAPER

The Moderating Effect of Generalized Anxiety and Financial Knowledge on Financial Management Behavior

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Abstract
When financial and mental health issues intersect, the study and practice of financial therapy is warranted. The purpose of this study was to determine the extent to which the following two psychosocial constructs—financial knowledge and generalized anxiety—are associated with and related to risky financial management behavior. Research findings from a sample of 110 clients who sought services at an integrated service clinic suggest that anxiety and financial knowledge individually are significantly associated with financial behaviors. In addition, evidence suggests a moderating effect between anxiety and financial knowledge exists. The outcomes associated with this study can be used by not only financial therapists, but also mental health clinicians and financial professionals when developing, presenting, and implementing behaviorally focused treatments, interventions, and counseling recommendations within the professional's scope of practice.

Keywords Anxiety · Financial knowledge · Financial behavior · Financial therapy

The Financial Therapy Association (2019) defines financial therapy as: "… a process informed by both therapeutic and financial competencies that helps people think, feel, and behave differently with money to improve well-being through evidence-based practices and interventions." A key element associated with the practice of financial therapy is the need for financial therapists to combine knowledge, tools and skills that are commonly used independently by mental health and financial services professionals when helping clients/patients.[1]

As shown in Fig. 1, financial therapy is conceptually informed by multiple distinct fields of study and practice generally grouped as: (a) finance, economics, and financial planning and (b) therapy and mental health. A financial therapist blends elements from multiple fields when developing, presenting, and implementing behaviorally focused treatments, interventions, and counseling recommendations.

Consider a client who seeks the help of a financial therapist to learn how to better deal with important household financial decisions and behavior. In this case, assume that the prospective client comes to the initial financial therapy appointment exhibiting the following two characteristics: a low level of financial knowledge and a high level of anxiety. The financial therapist might identify these two background factors based on the way the client responds to and asks questions. In terms of financial knowledge, the client may not understand basic cash flow and balance sheet terminology. The client may not be using a spending plan or be tracking income and expenses. Additionally, when asked about relatively simple household financial management tools and behaviors, the client may seem lost or confused, which could be exhibited as being unaware of her or his retirement plan account balance, unsure of the location of important estate planning documents, or uninterested in dealing with immediate financial needs.

The financial therapist may also be able to pick up cues that the client is exhibiting aspects of generalized anxiety. According to the National Institute of Mental Health (2019), "People with generalized anxiety disorder (GAD) display excessive anxiety or worry, most days for at least 6 months, about a number of things such as personal health, work, social interactions, and everyday routine life circumstances." Symptoms associated with GAD include:

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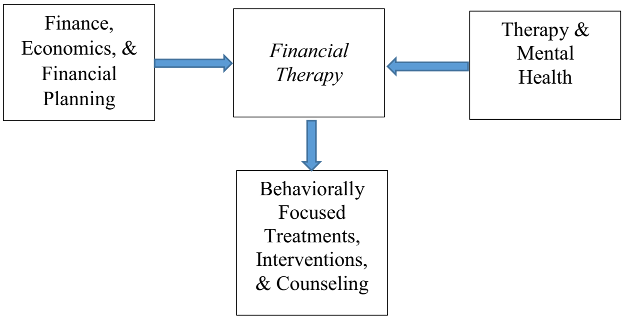

Fig. 1 Model of financial therapy

- Feeling restless, wound-up, or on-edge;
- Being easily fatigued;
- Having difficulty concentrating; mind going blank;
- Being irritable;
- Having muscle tension;
- Having difficulty controlling feelings of worry; and
- Having sleep problems, such as difficulty falling or staying asleep, restlessness, or unsatisfying sleep.

Based on training, education, and experience, the financial therapist will know that anxiety can cause problems in the way the client deals with day-to-day issues, including inter-personal actions (e.g., marital discord), work performance, and money management behavior.

If the client had sought the help of a professional financial planner or a mental health practitioner—rather than a financial therapist—the manner in which information is conveyed from the planner/mental health practitioner to the client typically will be different. A siloed professional may tend to focus on what she or he is most familiar with and provide suggestions or interventions based on a narrow evaluation of the situation (e.g., the financial planner may "solve" the client's debt problem, whereas a mental health professional may help the client "cope" with anxiety issues). In this paper, and case example, a financial therapist is envisioned as someone whose training is influenced by both personal finance and mental health related fields. Rather than meeting the client and working the case from a primary discipline perspective, such as financial services or mental health therapy, the financial therapist blends aspects of both to optimize outcomes for the client. In this case, a financial therapist will take a different approach when addressing the situation. Specifically, the financial therapist will understand the possible ways in which financial knowledge and anxiety interact and how the interaction may shape the client's perceptions, cognitions, and behavior. Within this practice framework, it is essential that both the financial and psychological aspects of the client's case are managed concurrently.

A primary outcome associated with the research presented in this paper was to help address this gap in the literature. Specifically, the purpose of this study was to determine the extent to which two psychosocial constructs—financial knowledge and generalized anxiety—are associated with and related to risky financial management behavior. The following hypotheses were tested:

- Increased levels of financial knowledge are associated with an increase in the number of risky financial management behaviors exhibited by an individual.
- Decreased levels of anxiety are associated with an increase in the number of risky financial management behaviors exhibited by an individual.
- Financial knowledge moderates financial management behavior.
- Generalized anxiety moderates financial management behavior.

The outcomes associated with this study can be used by financial therapists and other help providers when developing, presenting, and implementing behaviorally focused treatments, interventions, and counseling recommendations.

Literature Review

Demographic Factors and Financial Management Behavior

When evaluating the associations between and among financial and mental health concepts, the literature indicates that demographic characteristics contribute to descriptions of perceptions, attitudes, and behaviors (Robb and Woodyard 2011; O'Neill and Xiao 2012; Tang and Baker 2016). For example, Robb and Woodyard (2011) found that being older, possessing increased levels of education, and being white was associated with reporting better financial practices (e.g., paying off credit card debt, incurring no overdraft fees, and having retirement accounts). Likewise, O'Neill and Xiao (2012) noted a positive association between education level and responsible financial behavior in three domains: budgeting, spending, and saving. Tang and Baker's (2016) supported both of these findings.

In regards to race/ethnicity, Lyons (2004) found that Black and Hispanic students were more likely to have difficulty paying their credit card balances in full (compared to White students). However, Asian students were less likely than White students to report having difficulty paying a credit card balance in full. Interestingly, Lyons did not find a significant difference in the likelihood of reaching limits on credit cards based on race/ethnicity. Grable and Joo (2006) found that African-American students reported less desirable financial behaviors, including higher credit card balances compared to non-Hispanic White students. Sages et al.

(2013) noted that Whites are more likely to make themselves aware of how much money they owe and pay their credit card bills in full each month.

Over the past two decades, gender and financial management behavior has been studied with mixed results. For example, some research has suggested that women possess lower levels of financial knowledge compared to men (Borden et al. 2008; Lusardi and Mitchell 2008), and women tend to report lower frequencies of positive financial behaviors than their male counterparts (O'Neill and Xiao 2003; Hira and Mugenda 2000; Tang and Baker 2016). However, Hayhoe et al. (2000) reported that female students are more likely to engage in positive financial behaviors, including saving and making spending plans, compared to similar male students. Furthermore, Sages et al. (2013) found that males reported being more likely to reach the maximum limit on their credit cards.

In general, people who live in households with high income, and those with personally high levels of income, are known to be more likely to display positive and responsible financial behaviors (O'Neill and Xiao 2012; Perry and Morris 2005; Robb and Woodyard 2011; Tang and Baker 2016). In Robb's and Woodyard's analysis (2011), income level had the most significant impact on financial behavior. Higher income was associated with a greater frequency of financial best practice behaviors. Robb and Woodyard argued that income constraints may play a role in many financial behaviors, such as over-drafting a checking account and not paying credit card balances in full; however, they were unable to make any causal inferences due to the cross-sectional nature of the data.

Financial Knowledge and Financial Behavior

Numerous studies have also shown an association between financial knowledge and financial behavior (Borden et al. 2008; Hilgert et al. 2003; Perry and Morris 2005; Robb and Woodyard 2011). In the literature, financial knowledge is typically measured objectively or subjectively (Huston 2010). Although conceptually different, objective and subjective knowledge measures tend to be empirically related (Carlson et al. 2009). According to Ailawadi et al. (2004), a measure that asks a person to subjectively indicate her or his knowledge of consumer issues can provide valuable insights into behavior.

Research findings regarding the link between financial knowledge and financial behavior have been mixed. Findings from several studies support the notion that increased financial knowledge—measured objectively and subjectively—tends to be associated with more positive and responsible financial behaviors (Hilgert et al. 2003; Perry and Morris 2005), although the effect size and direction of the association continues to be debated.

Some research has found support for improving financial behavior by increasing objective financial knowledge through education (Robb and Woodyard 2011), while other studies question the relationship between increasing financial knowledge through financial literacy interventions and the subsequent effect on improving financial management behaviors (Borden et al. 2008; Mandell and Klein 2009). Borden et al. (2008) reported that increased financial knowledge was associated with intending to engage in more normatively positive financial behaviors and fewer risky financial behaviors; it is interesting to note, however, that Borden et al. did not find evidence that this intention translated to actual behavior. In their study, financial knowledge did not significantly predict either effective financial behaviors or risky financial behaviors.

It is possible that financial knowledge impacts varying types of financial behaviors differently. In a study of more than 6500 college students, Robb and Sharpe (2009) found that students with higher levels of financial knowledge exhibit significantly higher credit card balances compared to students with lower levels of financial knowledge. Additionally, financial knowledge, in some studies, has failed to predict the decision to revolve a balance on a credit card. Other studies (e.g., Borden et al. 2008; Jones 2005) have reported no relationship between financial knowledge and credit card behavior.

Xiao et al. (2011) concluded that subjective financial knowledge is more important than objective financial knowledge in preventing risky behaviors pertaining to credit management. Robb and Woodyard (2011) argued that the relationship is more nuanced, with both subjective and objective knowledge influencing financial behavior. In their study, Robb and Woodyard noted that subjective financial knowledge has a larger relative impact, compared to objective financial knowledge, in shaping financial behavior. Their measure of financial behavior included six areas of financial planning best practices: (a) emergency funds, (b) credit reports, (c) over-drafting an account, (d) paying off credit cards, (e) retirement accounts, and (f) risk management.

Sages et al. (2013) noted that subjective financial knowledge was negatively associated with making people aware of the total amount of money owed. Sages and associates also found that spending more money than one's household earns, and having difficulty paying bills because of not having enough income, was negatively related to financial knowledge in their sample of college students. However, Sages et al. did not find a significant relationship between subjective financial knowledge and credit management behaviors.

To summarize, it is important to note that the literature related to the relationship between financial knowledge and financial behavior tends to be multifaceted and lacking consensus. What does emerge from the literature is that financial knowledge is an important factor, but not the sole determinant of financial behavior. This provides an insight into the value of financial therapy; namely, it may be possible to improve financial behavior by enhancing one's financial well-being more holistically.

Anxiety and Financial Behavior

While extensive work has been done in relation to examining the associations between and among financial knowledge and financial management behavior and outcomes, little academic work has been conducted to test the relationship between anxiety and financial management and behavior. There is, however, an emerging body of work on financial anxiety. This work tends to show that financial anxiety is a separate construct from depression as well as generalized anxiety (Shapiro and Burchell 2012). Financial anxiety is often described as a psychosocial syndrome that is manifested by an unhealthy attitude towards engaging with and managing personal finances in an effective manner (Burchell 2003; Shapiro and Burchell 2012). The literature suggests that a relationship between financial anxiety and financial behavior does exist (Archuleta et al. 2013; Shapiro and Burchell 2012; Grable et al. 2015).

Investment behavior is one aspect of financial behavior that has been studied in the context of broader forms of anxiety. Gambetti and Giusberti (2012) hypothesized that trait anxiety should influence risk preferences and subsequent financial decision making. Their hypothesis was based on the assumption that anxiety should predispose a decision maker to avoid investment decisions, particularly decisions that are perceived as risky. Gambetti and Giusberti found support for their hypothesis, noting that as a trait, anxiety was associated with holding more conservative assets in investment portfolios. They also found that anxiety was negatively related to saving behavior. These findings make sense considering that investing is one way in which people save for the future.

Robb and Sharpe (2009) were among the first to examine anxiety within the context of risky financial management behavior. They found that college students who exhibited higher anxiety were less likely to revolve a balance on a credit card. In a national sample of low- and moderate-income households, Hayhoe et al. (2012) found that those with lower levels of anxiety tend to engage in more recommended financial management behaviors (e.g., spending, financial goal-setting). Those who present lower levels of anxiety are also more likely to save regularly. Furthermore, Sages et al. (2013) linked anxiety to three financial management behaviors: (a) spending more than earnings, (b) difficulty paying bills due to insufficient income, and (c) reaching the maximum limit on credit cards. In their study, anxiety was not significantly associated with making oneself aware of the total amount of money one owes, paying credit card bills in full to avoid finance charges, or obtaining cash advances to pay money towards other credit card balances.

The existing literature describes important intersections between financial issues and mental health concerns (i.e., anxiety). Knowledge of the association between anxiety and financial behavior perhaps has bearing on the therapist's work. Financial behaviors that result in instability (e.g., spending more than one earns, making no contribution to savings and retirement accounts, etc.) can contribute to a client's level of anxiety. Furthermore, financial concerns may have significant ramifications on a client's capacity for coping with stress/anxiety, concentration on therapy goals (i.e., the financial issues seem most pressing and urgent), or even receiving help regularly due to financial constraints (i.e., rescheduling or cancelling therapy appointments; no accessible funds to continue paying for therapy treatment). Attending to one area over another may only worsen or exacerbate these interrelated concerns. Financial therapy in practice offers a unique way of conceptualizing and addressing the complexities among financial knowledge, anxiety, and financial behavior.

Methods

Sample

The sample for this study included 110 clients who sought financial planning or financial counseling help from an inter-professional training clinic housed at a southeastern U.S. research and teaching institution. Services offered at the clinic include individual, couple, and family therapy, as well as financial counseling and financial planning, nutrition counseling, and legal problem solving services. Data were collected from 2016 to 2018. Study participants agreed, based on university IRB protocols, to participate in this study. Each participant allowed the use of their clinical assessment data for research purposes. Assessment data were collected prior to receiving services at the clinic, and as a holistic clinic, the assessment was used to explore multiple domains of a client's life.

Outcome Variable

A measure of participant risky financial management behavior was used as the outcome variable in this study. Financial management behavior (FMB) was derived by summing responses to the following five questions from the Financial Management Behavior scale (Dew and Xiao 2011): (a) Paid off credit card balances in full each month when interest would otherwise be charged; (b) Maxed out the limit on one or more credit cards; (c) Maintained or purchased an adequate health insurance policy; (d) Maintained or purchased adequate property insurance like auto or homeowners insurance; and (e) Maintained or purchased adequate life insurance. Participants were asked to indicate if they never (1), seldom (2), sometimes (3), often (4), or always (5) engaged in these behaviors. The second item was reverse coded. Scores could range from 5 to 25, with lower scores representing problematic (risky) behavior and higher scores representing less risky financial management behavior.

Independent Variables

Each participant's gender was assessed by asking if the person identified as male (coded 1), female (code 2), transgender female (code 3), or transgender male (coded 4). Data were recoded so that those who identified as a female were coded 1, otherwise 0. None of the participants in the study identified as transgender. Each participant's race/ethnicity was coded dichotomously with 1 = Whites, otherwise 0. Those who were married were coded 1, otherwise 0. Educational status was coded dichotomously with those holding a bachelor's degree or higher level of education coded 1, otherwise 0. Household earned income was assessed using an eleven-point ordinal scale. Income was recoded at the median, with those reporting incomes of $30,000 or higher coded 1, otherwise 0.

Financial knowledge was measured by summing scores from the following three items from the Financial Strain Scale (Aldana and Liljenquist 1998): (a) I know how interest works on my current debts, (b) I feel financially educated, and (c) I feel well informed about financial matters. A five-point Likert-type scale was used to measure responses, with 1 = never and 5 = always. Scores could range from 3 to 15, with higher scores suggesting a greater degree of subjective financial knowledge.

Generalized anxiety was assessed using a modified version of the Generalized Anxiety Disorder scale (Spitzer et al. 2006). Whereas the original Spitzer et al. (2006) scale consisted of seven items, the modified version of the scale used in this study consisted of the following six items: (a) feeling nervous, anxious or on edge; (b) not being able to stop or control worrying; (c) trouble relaxing; (d) being so restless that it is hard to sit still; (e) becoming easily annoyed or irritable; and (f) feeling afraid as if something awful might happen. Do to missing data, the item "worrying too much about different things" was excluded from the scale. Participants were asked to choose between the following options when answering items: not at all (coded 1), several days (coded 2), more than half the days (coded 3), and nearly every day (coded 4). Scores could range from 6 to 30, with higher scores indicating greater generalized anxiety. The reliability of the modified scale was not significantly reduced after omitting the one item. The Cronbach's alpha of the modified scale was .89, suggesting excellent scale reliability.

Table 1 Participant descriptive statistics (N = 110)

	Mean	*Std. Deviation*
FMB	21.86	10.09
Gender (1 = Female, 0 = Male)	.66	.47
Race (1 = White)	.71	.46
Marital status (1 = Married)	.29	.46
Education (1 = Bachelor's or Higher)	.64	.48
Income (1 = $30,000 or Higher)	.49	.50
Anxiety scale	12.18	4.90
Financial knowledge	9.97	3.23

A moderation effect in the model was measured by creating an interaction term between financial knowledge and anxiety. Prior to interacting these two items, each item was centered. Item centering was conducted to reduce issues related to multicollenarity. Descriptive data for the variables used in this study are shown in Table 1.

Data Analysis Methods

Three procedures were used to test the relationships among generalized anxiety, financial knowledge, and financial management behavior. First, correlations between and among the variables were estimated to determine the degree to which the variables were associated. Second, an ordinary least squares (OLS) regression was used to estimate the relationships among the three core variables holding other relevant variables constant, and third, a moderation test (see Baron and Kenny 1986) was used to determine if an interaction between financial knowledge and anxiety existed among those seeking financial planning and financial counseling services.

Results

Descriptive data are shown in Table 1. In general, the sample exhibited relatively positive financial management behavior. Not surprisingly, given the help-seeking nature of the participants (see Joo and Grable 2001), the majority of those in the study were White females. Only about one-in-three were married. The majority of participants were well educated, with nearly two-out-of-three indicating household incomes equal to or greater than $30,000. In alignment with sample insights provided by Spitzer et al. (2006), participants, on average, exhibited a moderate degree of anxiety. Participants' self-assessed financial knowledge, on average, fell into the middle range of possible scores.

Table 2 Bivariate correlations among variables

	FMB	Gender	Race	Marital status	Education	Income	Anxiety scale	Financial knowledge
FMB	1.00							
Gender (1 = Female, 0 = Male)	.18*	1.00						
Race (1 = White)	.20*	− .03	1.00					
Marital status (1 = Married)	.11	− .14	.10	1.00				
Education (1 = Bachelor's or higher)	.35***	.10	.06	.15	1.00			
Income (1 = $30,000 or Higher)	.17*	− .19*	.15	.41	.25	1.00		
Anxiety scale	− .39***	− .13	− .06	.04	− .28*	− .08	1.00	
Financial knowledge	.34***	− .04	.03	.10	.15	.16*	− .16*	1.00

$^*p<.05$; $^{**}p<.01$; $^{***}p<.001$

Table 3 Regression coefficients showing relationship with financial management behavior (FMB)

	Model 1					*Model 2*				
	b	*S.E.*	*β*	*t*	*Sig.*	*b*	*S.E.*	*β*	*t*	*Sig.*
(Constant)	12.22	4.37		2.80	.01	− 2.87	7.93		− .36	.718
Gender (1 = Female, 0 = Male)	3.27	1.79	.15	1.83	.07	3.21	1.75	.15	1.83	.070
Race (1 = White)	3.64	1.81	.17	2.01	.05	3.95	1.78	.18	2.22	.029
Marital Status (1 = Married)	1.03	1.98	.05	.52	.60	1.22	1.95	.06	.63	.534
Education (1 = Bachelor's or Higher)	4.11	1.84	.20	2.24	.03	4.84	1.83	.23	2.65	.009
Income (1 = $30,000 or Higher)	.91	1.88	.05	.49	.63	.94	1.84	.05	.51	.609
Anxiety Scale	− .54	.18	− .26	− 3.07	.01	.54	.50	.26	1.06	.291
Financial knowledge	.81	.26	.26	3.11	.01	2.22	.68	.71	3.29	.001
Knowledge × anxiety						− .11	.05	− .66	− 2.26	.026

Model 1: $F_{7,102} = 7.265$, $p < .001$; $R^2 = .333$

Model 2: $F_{8,101} = 7.252$, $p < .001$; $R^2 = .365$

R^2 Change: .032, $F_{1,101} = 5.112$, $p < .05$

Table 2 shows the correlation coefficients between and among the variables of interest in this study. Financial management behavior (FMB) was positively associated with being female, being White, holding a bachelor's degree or higher level of education, and exhibiting more financial knowledge. FMB was negatively associated with higher scores on the generalized anxiety scale. Anxiety also was negatively associated with education and financial knowledge, whereas financial knowledge was positively related with income. It is worth noting that female participants reported statistically significant lower levels of income.

Table 3 shows the results from the OLS regressions. Model 1 shows the effect of each independent variable on FMB without the interaction variable. In this model, Whites and those with a higher attained education level exhibited better financial management behavior. Generalized anxiety was negatively associated with FMB, whereas the relationship between FMB and financial knowledge was positive. Results from the regression provided support for the first research hypothesis. Overall, the model was robust with approximately 33% of the variance in FMB scores explained by the independent variables.

Model 2 shows the same analysis with the inclusion of the moderation effect variable (i.e., Knowledge × Anxiety). The relationships between race and FMB, education and FMB, and financial knowledge and FMB remained the same in Model 2. However, a moderation effect was also noted. Specifically, holding financial knowledge constant, an increase in generalized anxiety was found to be associated with a decrease in positive financial management behaviors. Results from the second regression provided support for the second research hypothesis. As shown in Table 3, anxiety had a larger negative effect on FMB among those with more financial knowledge. The inclusion of the interaction term increased the amount of explained variance in the model significantly.

Discussion and Implications

A unique aspect associated with the practice of financial therapy is the awareness and sensitivity a financial therapy professional possesses in relation to assessing the concerns of clients in the domains of both (a) finance, economics, and financial planning and (b) mental health (Archuleta and Grable 2011). In this study, financial knowledge and generalized anxiety were found to be significantly associated with financial management behaviors. Additionally, a moderation effect between financial knowledge and anxiety on financial management behaviors was noted. Findings from this study indicate that anxiety and financial knowledge are concurrently important when considering a client's financial behavior. As such, a financial therapy approach that can help a client work through issues that are potentially associated with degrees of financial knowledge and generalized anxiety is warranted.

As already noted, the financial therapy approach is distinct from the typically independent practices of financial planning and clinical therapy (Archuleta and Grable 2011). In practice, consider how a financial planner stereotypically develops client focused recommendations related to a portfolio choice or decisions associated with credit, debt, and saving behaviors. A financial planner usually gathers appropriate financial information from a client in an attempt to quantify a client's financial capabilities. Competent financial planners then add assessments related to a client's tolerance for financial risk, financial knowledge, and in some cases, other non-financial evaluations (e.g., life satisfaction) to help shape recommendations. Rarely, however, do financial planners measure a client's level of generalized anxiety, depression, or other mental health characteristics. On the other hand, it would be rare for a therapist or mental health professional to assess a patient's level of financial knowledge or financial behavior (or other financial planning input) before developing a treatment plan designed to help a client deal with stressors or anxiety arising from problematic financial behaviors.

The process and benefits from traditional practice approaches can be potentially problematic to a client. In the case of financial planning outcomes, the lack of use of mental health measures or attending to behavioral risks may lead a financial planner to recommend a course of action that is not realistic, appropriate, or even counterproductive. As shown in this study, those who exhibited higher levels of generalized anxiety were more likely to report engaging in problematic financial behavior, controlling for income, marital status, education, and financial knowledge. Developing a spending plan for such a client may be relatively ineffective, not because the plan is inappropriate, but rather because the client's level of anxiety may override the influence of financial knowledge or advice. The findings from this study suggest that financial planners and financial counselors should consider engaging in additional education and training to improve communication skills and assessment techniques related to better understanding the psychological factors that are associated with financial behaviors. It is also recommended that financial professionals learn when and how to refer clients for therapy services and vice versa.

For mental health therapy outcomes, focusing only on improving a client's sense of anxiety may also fall short in helping the client deal with the stressors associated with problematic financial management behaviors. As noted in this study, those who participated in this study who exhibited low levels of financial knowledge, holding income, marital status, education, or anxiety level constant, were more likely to engage in problematic financial behaviors, even in situations where the participant's anxiety level was moderately low. Although not measured directly, future research may show that is pattern holds true even in situations where generalized anxiety decreases over time. The solution, as highlighted in this study, involves providing mechanisms to increase financial knowledge and improve financial behaviors while concurrently decreasing generalized anxiety (Gale et al. 2012; Kim et al. 2011). This is an important role a financial therapist can play in the life of a client. The consumer financial protection bureau (CFPB) offers an array of resources that can be used by mental health therapists when working with clients who present questions and concerns related to the management of day-to-day household financial resources. CFPB resources are easy to use and understand. These resources have been tested to help individuals improve financial knowledge and behavior.

Currently, little to no training on the topic of money management or personal finance exists in most mental health therapy programs. This lack of training is intriguing given what the American Psychological Association continually finds; namely, money is a top stressor for nearly all American households. The findings from this study suggest that addressing anxiety alone without increasing financial knowledge may lead to suboptimal outcomes. Mental health professionals should consider cross-training in personal finance concepts to more effectively work with clients when money issues are present. Likewise, mental health academic programs should consider making a personal finance course part of the curriculum. However, adding additional courses to a curriculum that has room for no or few elective hours may prove problematic. An alternative path is for mental health program accreditation bodies to require personal finance training and/or continuing education for those who are working on completing an academic degree, as well as those who are currently licensed. Another recommendation is that both students in personal finance and mental health/

therapy related programs learn more about the other disciplines and best practices in referring or consulting across disciplines.

Results from this study have direct practice implications specifically for financial therapists. The way in which a financial therapist works with a client should be supportive of each client's unique situation. In cases where a client is exhibiting anxiety, low financial knowledge, and/or risky financial behaviors, it is important for the financial therapist to ensure that a treatment plan corresponds to the client's goals. While goal setting is important for both mental health professionals and financial planners and counselors, setting clear and specific goals and identifying what is getting in the way of a client accomplishing her or his goals is a best practice starting point when attempting to reduce financial anxiety (Pittman and Karle 2015). Consider the work of Archuleta et al. (2019). They found that utilizing a solution focused therapy approach to goal setting in a financial planning setting was helpful to immediately reduce characteristics of financial anxiety. Their study demonstrates that mental health/therapeutic modalities of treatment that addresses issues around personal finance (i.e., financial goal setting) can help lower client's anxiety.

Another best practice involves helping a client gain confidence and experience through knowledge enhancement. As noted in this study, the effects of anxiety on financial behaviors can be moderated through improved levels of financial knowledge. Although not always the case, generally, with greater knowledge comes an improvement in financial management behaviors. It is important to keep in mind that social determinants of health (e.g., social, cultural, political, historical factors) can also play a role in describing a client's degree of financial anxiety, knowledge, and behavior (Shapiro and Burchell 2012). For example, intergenerational socialization as it relates to money may influence a client's mistrust of financial institutions or access to learning about money, which can limit a client's ability to engage in what is deemed to be positive financial behaviors (Britt 2016; Serido and Deenanath 2016).

Ethical and professional standards and scope of practice must be at the forefront when providing services in which professionals must do no harm to clients (Ross et al. 2016). Practitioners (i.e., mental health professionals and financial planners and counselors) working with clients who present with issues related to money and anxiety—particularly professionals who have not been trained to incorporate interventions and techniques from the adjacent professional field—may find that referring or collaborating with someone in the opposite field can be a way to improve the well-being clients. Goetz and Gale (2014) identified four distinct ways in which financial and mental health professionals can collaborate effectively: (a) professional referral, (b) parallel services, (c) consultative services, and (d) integrative services. Professional referral means making a referral to an appropriate professional. Parallel services refers to both professionals working simultaneously with clients and communicating with one another about services to help clients reach common goals. Consultative services involves inviting the other professional into a session with the client on a short-term or as needed basis. Integrative services refers to fully collaborating with a professional from the adjacent discipline in a normalized process where clients meet with both professionals together. Regardless of the process, financial and mental health professionals can consider how to implement models of collaboration and consultation (Gale et al. 2009).

Limitations and Future Research

Like any study that deals with an exploratory topic, limitations exist in the context of this research. First, while this study utilized a unique dataset, data were restricted to clients who were seeking clinical services related to financial counseling and planning in a specific region of the United States. As such, these findings based on this sample should not be generalized to the entire U.S. population. Future research should strive to look at both non-clinical and clinical populations to address generalizability issues.

Second, this study used only one measure of subjective financial knowledge. Utilizing an objective measure of financial knowledge or a combination of both objective and subjective measures may have yielded different results. Future research should incorporate both subjective and objective financial knowledge assessments along with anxiety and financial behavior measures with non-clinical samples. Third, as an exploratory study, this research was conceptualized a theoretically. The lack of a specific theory was the result of the paucity of research on this topic. Results from this study can be used by others to help develop a more comprehensive model of financial therapy (see Klontz et al. 2015). It would be particularly helpful for future research to consider how generalized anxiety, financial knowledge, and financial behavior can be modeled theoretically.

As the findings from this study suggest, opportunities exist to continue to link the financial and mental health fields in ways that help clients reduce anxiety and improve financial behavior. In this study, measures of generalized anxiety, financial knowledge, and financial behavior were the primary variables of interest. Variables such as depression, family/relationship conflict, and financial well-being should also be tested in connection to the primary variables of interest in this study, along with other variables that address cognitive, relational, behavioral, and emotional aspects of a client's life. As further connections are made, theory can be developed to help frame and shape future research studies.

It is also important to consider how financial stress and anxiety impacts relationships. Financial concerns and relationship issues can interact to destabilize couples and families. Financial therapy offers an opportunity to provide support to couples and to families in unique and important ways.

Conclusion

Whether a mental health clinician or a financial practitioner, both work with clients who experience anxiety around money. Opportunity exists for both mental health clinicians and financial practitioners to work within their own scope of practice, collaborate with other professionals who possess the expertise needed (e.g., mental health clinician can help reduce anxiety; financial practitioner can help increase financial knowledge), or engage in the practice of financial therapy to improve client financial behavior. All of which ultimately impact overall well-being.

For financial therapists, they play an important role in helping those who are struggling with the dual responsibilities of managing day-to-day financial behaviors and dealing with co-occurring mental health issues. As illustrated in this study, an association between financial knowledge and exhibited levels of generalized anxiety appears to exist. As shown in Fig. 1, a financial therapist adds value to her or his client's life by combining knowledge and skills from the fields of finance, economics, and financial planning and mental health when developing behaviorally focused treatments and interventions. At a minimum, findings from this study suggest that the type of financial advice, counseling, and managerial recommendations made to someone exhibiting generalized anxiety should be different than the advice given to others.

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