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Marketing therapy to parents concerned about adolescent substance use: Association of adolescent problems and parent preferences for direct-to-consumer marketing

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Abstract

Parent-directed marketing strategies have great potential to promote the utilization of therapy by adolescents with or at risk of substance-related problems. The extent to which marketing strategies should be tailored to parents of adolescents with various presenting problems – such as substance use, mental health, and legal involvement – is unknown. The current study represents a secondary analysis of a direct-to-consumer (DTC) marketing survey, which used a well-established framework called the Marketing Mix to solicit parent preferences about marketing across three dimensions: Promotion (i.e., how parents prefer to receive information); Place (i.e., where parents prefer to receive therapy); and Price (i.e., how much parents are willing to pay and how far parents

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are willing to travel). Four-hundred eleven parents of 12- to 19-year-old adolescents (51% girls, 82% Non-Hispanic White) completed the survey and answered five questions spanning Promotion, Price, and Place dimensions of the Marketing Mix. A subsample of 158 parents also reported on their actual therapy-seeking behavior, allowing us to report on both parents' ideal and actual experiences. We explored the extent to which parent preferences varied as a function of adolescent substance use, externalizing, internalizing, and legal problems. Bivariate analyses and multivariate logistic regressions were used to examine which of these variables were associated with parents' responses to specific survey items. Analyses confirmed that both parent preferences and parents' actual therapy-seeking behavior varied as a function of adolescent problems. Recommendations are offered for professional psychologists to use DTC marketing strategies to connect with adolescents in need of services.

Keywords

Marketing mix; adolescent; direct-to-consumer marketing; parent; substance use

Closing the needs-to-services gap among adolescents with a substance use (SU) disorder has been recognized as a critically important public health objective for over a decade (Institute of Medicine, 2006). It has been estimated that about 90% of SU disorders first emerge during adolescence (Merikangas et al., 2010). When left untreated, adolescent SU problems confer increased risk for later mental health, interpersonal, academic, vocational, and legal problems, underscoring the need for timely treatment (e.g., National Center on Addiction and Substance Abuse at Columbia University, 2011). According to recent national survey data, fewer than 8.8% of adolescents who met criteria for a SU disorder received specialty care (Substance Abuse and Mental Health Services Administration [SAMHSA], 2018), highlighting a chasm between those who need services and those who receive them.

To date, efforts intended to increase SU service utilization have predominantly targeted provider-level barriers to treatment such as knowledge, willingness, and skill delivering evidence-based services (Becker, 2015a; Friedberg & Bayar, 2017). Simply put, prior efforts have predominantly sought to increase the availability of services by increasing the *supply* of SU therapies offered in the community. This provider-centered approach has failed to sufficiently consider patient *demand* for services by addressing crucial patient-level barriers that may interfere with or deter adolescents from seeking out SU services (Becker, 2015b; Gallo, Comer, & Barlow, 2013). Common patient-level barriers that may deter adolescents from seeking treatment include insufficient knowledge of SU problems, lack of motivation to pursue services, personal or social stigma surrounding their SU problems, belief that their problems will resolve without treatment, or misconceptions about the effectiveness of available therapies (Corrigan, Druss, & Perlick, 2014; Reardon et al., 2017). Additionally, research has shown that children and adolescents encounter unique patient-level barriers due to the gatekeeper role of parents or guardians, who often navigate the healthcare system on behalf of their adolescent in need of SU services (Berridge, McCann, Cheetham, & Lubman, 2018). Addressing parent-level barriers such as knowledge and beliefs about treatment represents a critical and complementary approach to traditional provider-directed efforts, by seeking to drive demand for adolescent SU services.

In recent years, there has been increased recognition of the potential value of direct-to-consumer (DTC) marketing as a means of increasing demand for SU and other behavioral health therapies (Becker, 2015a; Cates, Diehl, Crandell, & Coyne-Beasley, 2014; Gallo, Comer, Barlow, Clarke, & Antony, 2015). Defined as the marketing of products or services directly to the consumer (or potential patient), DTC marketing represents an alternative mechanism by which to disseminate SU treatments. The underlying rationale for DTC marketing stems from the concept of push versus pull marketing (Dowling, 2011): rather than "pushing" providers to offer specific services, DTC marketing gets patients to request specific services, effectively "pulling" the service from the developer to the provider (for a detailed explanation, see Becker, 2015a).

DTC approaches have proven indisputably effective in increasing demand for prescription drugs and other healthcare services (Schwartz & Woloshin, 2019), though the marketing of for-profit medication has garnered some controversy (see Frosch, Grande, Tarn, & Kravitz, 2010; Ventola, 2011). For behavioral therapies, clinical psychologists and public health researchers have both argued that, when used in an ethical and responsible manner (e.g., promote behavioral health literacy, engage hard-to-reach families, emphasize evidence-based practices), DTC marketing may be effective in closing the needs-to-services gap among adolescents with SU or other behavioral health problems (Becker, 2015a; Friedberg & Bayar, 2017).

A successful DTC marketing strategy requires understanding the treatment needs and communication preferences of a specific population, to ensure that information about the product or service is packaged appropriately and delivered via channels (e.g., websites, brochures, TV) where the target audience might receive it. One established framework for gathering necessary information to guide DTC marketing decisions is the Marketing Mix or "The 4 Ps" (see Zeithaml, Bitner, & Gremler, 2012), which outlines four domains critical to a successful DTC strategy: Product/Service (i.e., *what* is being marketed), Promotion (i.e., *how* the service is being marketed), Place (i.e., *where* the service being marketed is ultimately delivered), and Price (i.e., the *costs* of obtaining the service). Table 1 presents definitions of each of the Marketing Mix dimensions and examples of the types of concepts that can be explored within each dimension.

Our research team has previously examined parent preferences and opinions about therapy across all four dimensions of the Marketing Mix (Becker, Weeks, et al., 2018; Becker, Helseth, Frank, Escobar, & Weeks, 2018; Becker, Spirito, & Vanmali, 2016). Our work focusing on the Product dimension revealed that parents had limited familiarity with the concept of evidence-based therapy, had incorrect assumptions about what it means, and had unfavorable impressions of the term (Becker, Spirito, et al., 2016). Negative impressions of the concept were most pronounced among parents from racial/ethnic minority groups, those with lower income per capita, and those with lower education (Becker, Weeks, et al., 2018). Relatedly, our work examining the Promotion, Place, and Price dimensions revealed that parents with lower income per capita, lower education, and those from racial/ethnic minority groups had different preferences for receiving information about therapy (Becker, Helseth, et al., 2018), suggesting that DTC marketing strategies should be tailored for these underserved groups.

While an important first step, our research to date has not yet considered the role of parent-level factors, such as severity of adolescent SU problems, co-occurring mental health problems, and history of legal involvement, on parent preferences for DTC marketing. It seems plausible that parents who perceive their adolescent as having more severe problems might prefer a different marketing strategy than parents who perceive their adolescent's problems as more minor. The current study aimed to address this gap in the literature by examining the extent to which parent preferences across the Marketing Mix dimensions varied as a function of three types of adolescent problems. First, we examined the role of adolescent SU problems, based on prior work from our team and others indicating that SU symptom severity it is a significant predictor of parents' treatment-seeking behavior (Kang et al., 2019; Kessler et al., 2001). Second, we assessed the role of externalizing and internalizing symptoms on parent preferences, since about 60% of adolescents with a SU disorder have at least one co-occurring mental health diagnosis (Chan, Dennis, & Funk, 2008; Turner, Muck, Muck, Stephens, & Sukumar, 2004). Finally, we tested the role of legal problems, recognizing that the juvenile justice system is one of the most common pathways to SU treatment for adolescents (National Center on Addiction and Substance Abuse at Columbia University, 2011; Waldron, Slesnick, Brody, Turner, & Peterson, 2001).

The overarching goal of the present analysis was to evaluate whether parent preferences varied as a function of adolescent SU, externalizing, internalizing, or legal problems. However, recent work by our team revealed significant discrepancies between parents' ideal (i.e., preferred) and actual (i.e., most recent) experiences receiving therapy and obtaining therapy information (Becker, Helseth, et al., 2018); therefore, we also examined whether parents' actual therapy-seeking behavior varied as a function of adolescent problems. Consistent with said recent work (Becker, Helseth, et al., 2018), we focused on the Promotion, Place, and Price dimensions of the Marketing Mix because these dimensions are arguably the most amenable to change by professional psychologists seeking to market treatment. Due to the paucity of prior research on parent preferences for DTC marketing of SU treatment, these analyses were intended to be exploratory.

Methods

Sampling strategy and procedures for this survey study have been described previously (see Becker, Weeks, et al., 2018; Becker, Spirito, et al., 2016). Parents of adolescents were recruited via postings in private parent Facebook groups, emails on professional listservs for behavioral health providers, and emails to parents across six high schools in Rhode Island. Though the primary purpose of the screener was to assess participant eligibility, it also contained multiple safeguards, including IP address confirmation, use of cookies to prevent duplicate screening, and a multiple-choice question asking where the participant learned about the survey that included fake responses. To be eligible for the study, respondents needed to currently reside in the United States, be the legal guardian of an adolescent between the ages of 12 to 19, and report elevated concern about their adolescent's SU (i.e., scores ≥4 on a 5-point Likert scale with responses ranging from 1 = *not at all concerned* to 5 = *extremely concerned*). We relied upon parents' subjective concern about their adolescent's SU based on evidence that subjective impressions of behavioral health motivate treatment-seeking more than actual symptom severity (Becker, Spirito, et al., 2016; Hunt & McKenna,

1993). Survey responses were collected anonymously; hence, study procedures were deemed exempt by the Brown University IRB.

All parents completed questions about their preferred approaches to provider selection, impressions of evidence-based therapy, and ideal therapist characteristics. In addition, parents answered questions about their adolescents' clinical characteristics (e.g., adolescent SU, mental health, and legal problems) and family's socio-demographics (e.g., household income per capita, parental education, adolescent and parent race/ethnicity). The questions about preferred approaches to provider selection were guided by the Marketing Mix framework and formed the basis of the present study. Parents of adolescents with a history of prior therapy were asked additional questions about their adolescent's most recent therapy experience, to gain insight into how they selected their adolescent's provider. Parents were compensated via e-gift card.

Sample Characteristics

In total, 845 parents completed the online screener. Three hundred fifty respondents (41%) were ineligible because they triggered a screener safeguard (n = 229; 64%) or were not concerned about SU (n=121; 36%). Of the remaining 499 eligible parents who were sent survey invitations, 411 (49% of those screened, 82% of those eligible) completed the survey. One hundred fifty-eight parents (38% of survey completers) whose adolescents had a history of treatment completed the supplemental questions about their adolescent's most recent treatment experience. Parents in the full sample (n = 411) were predominantly female (86%), biological parents (91%), Non-Hispanic White (88%), and married or in a domestic partnership (73%). Most were employed full-time (64%) and had earned an associate's degree or higher (76%). Households were in predominantly urban or suburban areas (80%) and reported a median income per capita of $25,000, which is below the national average. Adolescents were female (51%), Non-Hispanic White (83%), and were on average 16.1 years old (SD = 1.8).

Survey Items

All parents (n = 411) reported on their preferences for how to obtain therapy for their adolescent. Five items across three Marketing Mix dimensions formed the basis of the current analysis: Promotion (2 items), Place (1 item), and Price (2 items). In addition, those parents whose adolescents had a prior history of therapy (n = 158) answered a parallel set of items about their adolescent's most recent therapy experience. Item response options were derived from prior qualitative research with parents about their therapy-seeking behavior (Becker, Midoun, Zeithaml, Clark, & Spirito, 2016; Becker, Spirito, et al., 2016); parents were allowed to select only one response option for each question.

Promotion 1 asked parents from whom they would prefer to receive information about therapy for their adolescent. Options included a list of providers from their insurance company; a pediatrician or primary care doctor (i.e., physician); a school counselor or other school official; a friend or family member; or another parent whose adolescent had received treatment. **Promotion 2** asked from which information channel parents would prefer to

obtain information about therapy. Choices included a website, social media, the radio, TV, or in a brochure.

The **Place** item asked parents where they would prefer their adolescents receive therapy, with options encompassing their adolescent's physician's office; their adolescent's school; a treatment center or clinic focused on SU; a treatment clinic focused on mental health; or a treatment clinic focused on adolescent health in general.

Price items 1 and 2 asked parents about how much they were willing to pay for their adolescents' therapy: namely how many minutes they were willing to commute (**Price 1**) and how much they were willing to pay out-of-pocket (i.e., amount personally incurred and not covered by insurance) for each treatment session (**Price 2**). Price items used ordinal response options in increasing increments of $10 (e.g., $0-$10, $11-$20, etc.).

Adolescent Problems

Adolescent SU problems were assessed using the 16-item Substance Problem Scale from the Global Appraisal of Individual Needs (Dennis, White, Titus, & Unsicker, 2008). The items collectively query the presence of symptoms related to substance use disorders (e.g., hiding drug use, being unable to reduce drug use, spending time obtaining drugs). Internal consistency of the scale was excellent in the current sample ($\alpha = 0.96$).

Adolescent externalizing, internalizing, and legal problems were assessed using items from the Global Appraisal of Individual Needs—Short Screener (GAIN-SS; Dennis, White, Titus, & Unsicker, 2008). The GAIN-SS is a brief measure assessing how recently an adolescent experienced each problem (i.e., past month, past year, 1+ years ago, or never). Items spanned our focal clinical domains: externalizing problems (5 items; e.g., inattention, aggression, difficulty following directions); internalizing problems (5 items; e.g., suicidality, depression, anxiety, trauma); and legal problems (5 items; e.g., property crime, interpersonal violence, drug-related crime). The GAIN-SS items have shown outstanding sensitivity (90%) and specificity (92%) for correctly identifying people with a psychiatric disorder, as well as robust internal consistency (a = 0.96; Dennis, Chan, & Funk, 2006). The 15 GAIN-SS items demonstrated good internal consistency in the current sample (α=.86).

Analytic Plan

Prior to hypothesis testing, we examined bivariate correlations between each of the variables of interest: adolescent SU problems, externalizing problems, internalizing problems, and legal problems. Because our goal was to inform marketing to subgroups of adolescents, the focal study variables (i.e., SU, internalizing, externalizing, legal problems) were dichotomized to reflect the presence or absence of past-year problems in each domain, with the latter serving as the reference group. Price variables were transformed from ordinal to continuous variables (e.g., a response of $1-10 was re-coded using the median value of $5.50) to facilitate analysis. Phi coefficients among the adolescent problem variables were significant, with small to moderate associations among problems (ϕs 0.23 to 0.48, ps < .001), though no associations were too large to preclude multivariate analysis.

Data were analyzed three ways. First, we used chi-square analyses to test whether parents' (n = 411) ideal therapy experiences varied as a function of adolescent problems, within each Marketing Mix domain (i.e., Promotion, Place, Price). Each adolescent problem was examined separately to determine the extent to which each was associated with parent preferences. When multiple problems were significantly associated with a particular response, we used multinomial logistic or linear regression to determine the relative association of problems on binary (Promotion and Place) and continuous (Price) outcome variables, respectively. Next, we repeated these analyses using data collected from the subset of parents whose adolescents had a prior history of treatment (n = 158). This allowed us to test the association of each problem on parents' actual behavior during their most recent treatment experience. Due to the paucity of literature on parent preferences for marketing, the analyses were intended to be exploratory and information-generating in nature. Reflecting the multiple univariate analyses conducted on the five survey items, we used an item-level Bonferroni correction and only report and interpret univariate analyses that met a conservative criterion of $p < .01$. Only those variables that met this conservative criterion were included in multivariate analyses. We used a standard p-value of .05 to report results of the multivariate analyses.

Results

Overall, parents in the full sample (n = 411) reported that their adolescents had a modest level of problems (Mean = 1.8, SD=1.3) over the past year. The GAIN scales were used to determine whether parents perceived their adolescents as having a past-year history of problems. Results indicated that 39% of parents perceived their adolescents as having past year problems with SU, 66% perceived problems with externalizing behavior, 51% perceived problems with internalizing distress, and 25% perceived problems with legal involvement. These rates were understandably higher among the subsample of adolescents with a prior history of treatment (n = 158), whose parents reported an average of 2.6 problems (SD = 1.2) with past year SU (49%), externalizing (87%), internalizing (77%), and legal (42%) problems. It is noteworthy that even though our survey screened parents based upon concerns about adolescent SU, adolescent mental health problems were more common than SU problems in the final sample. These data indicate that the current sample was concerned about adolescent SU, but that the adolescents were not necessarily experiencing acute SU problems.

Parents' Ideal Experience

Table 2 shows responses (n = 411) to the five Marketing Mix items as a function of each study variable. For Promotion 1 (i.e., from whom parents preferred to receive information), parents most often selected their adolescent's physician (42.8%) and secondarily selected another parent (29.2%). However, parent preferences varied significantly as a function of adolescent problems. Univariate analysis revealed that, relative to parents of adolescents without each problem, parents of adolescents with externalizing or legal problems were significantly more likely to prefer receiving information from another parent. Furthermore, parents of adolescents with externalizing, internalizing, and legal problems were less likely to prefer receiving information from their adolescent's physician. Also, parents of

adolescents with SU problems were more likely to prefer to receive information from their family's insurance company relative to parents of youth without SU problems. Two separate multivariate analyses were conducted to test for the effects of adolescent mental health and legal problems on parents' preferences to receive information from another parent or from a physician. Both adolescent externalizing (OR = 1.9, p = .01, 95% CI [1.1, 3.2]) and legal problems (OR = 1.8, p = .02, 95% CI [1.1, 3.0]) were associated with significantly greater odds of having parents prefer to receive treatment information from another parent. None of the variables were significant in the multivariate model for desire to receive treatment information from a physician (p's > .07).

For Promotion 2 (i.e., from which information channel parents preferred to receive information), parents most often selected websites or brochures (68.1% each). No adolescent problems were significantly associated with parent preferences in univariate analyses.

For Place (i.e., from where parents preferred their adolescent receive therapy), most parents selected a center focused on adolescents (52.6%), though parent preferences varied based on the adolescents' problems. Relative to parents of adolescents without problems, parents of teens with externalizing or internalizing problems were significantly more likely to prefer that their teens be treated at a center focused on mental health. In multivariate analysis, adolescent internalizing problems (OR = 2.6, p = .003, 95% CI [1.4, 4.8]) was the only variable associated with greater odds of preferring therapy in a mental health-focused treatment center (externalizing problems p = .08). By contrast, parents of adolescents *without* legal problems were significantly more likely to prefer therapy at a center focused on adolescent health than were parents of adolescents with legal problems.

For Price, on average, parents were willing to commute 37.6 minutes to receive therapy and were willing to pay $44.14 in out-of-pocket costs per session. Parent preferences on Price did not vary as a function of adolescent problems using the p < .01 criterion.

Parents' Most Recent Experience

A subset of parents (n = 158) responded to a parallel set of questions, this time reporting on their most recent experience getting therapy services for their adolescent (see Table 3). On Promotion Item 1 (i.e., from whom parents received information), most parents reported receiving therapist information from their adolescent's physician (32.3%), an insurance company (27.2%), or a close friend or family member (24.7%). Only one significant association was found using the p < .01 criterion: relative to parents of adolescents without problems, parents whose adolescents had externalizing problems were less likely to report receiving information about therapy from a physician.

For Promotion 2 (i.e., from which channel parents received information about therapy), most parents had received information about therapy from brochures or websites (34.2% each). Relative to parents of adolescents without problems, a greater proportion of parents whose adolescents had externalizing or internalizing problems reported receiving therapist information via a website. Of note, only adolescent externalizing problems (OR = 8.37, p < .05, 95% CI [1.05, 66.7]) was associated with greater odds of receiving information from a website in the multivariate model (internalizing p = .09). Similarly, compared to parents of

adolescents without problems, parents of adolescents with externalizing or legal problems were more likely to report having received information about therapy via brochures. Both adolescent externalizing (*OR* = 9.14, *p* = .04, 95% CI [1.17, 71.6]) and legal problems (*OR* = 2.07, *p* = .04, 95% CI [1.04, 4.12]) were significantly associated with greater odds of brochure use in the multivariate model.

For Place, most parents reported that their adolescent was treated at a center focused on mental health (65.2%); however, parents of adolescents with SU problems were less likely to report that their adolescent was treated at a mental health center, relative to parents of adolescents without SU problems. Instead, parents of adolescents with SU problems reported that their adolescents were relatively more likely to receive therapy in a center focused on SU. In addition, relative to parents of adolescents with internalizing problems, parents of adolescents *without* internalizing problems were more likely to report receiving therapy at school.

Finally, parents reported commuting 23.2 minutes (Price 1) and paying $22.96 (Price 2) on average for their adolescent's most recent therapy experience. Adolescent problems were not significantly associated with the actual price parents paid using the $p < .01$ criterion.

Discussion

Guided by the Marketing Mix framework, we explored how parent preferences and experiences obtaining information about therapy varied as a function of adolescent SU, externalizing, internalizing, and legal problems. Information about the impact of parent-level variables on marketing preferences may help professional psychologists refine their DTC marketing strategies to connect with those in need of services. We first review findings within each Marketing Mix domain, and then discuss the broader implications of our results.

Promotion

In general, most parents preferred to receive therapy information from their adolescent's physician or another parent. However, relative to parents of adolescents without externalizing or legal problems, parents of adolescents with these problems were *less* likely to prefer information from their physician. Instead, parents of adolescents with externalizing and legal problems were more likely to prefer information from another parent. These findings are not entirely surprising, as marketing research has shown that receiving information from individuals similar to oneself can drive consumer behavior more than receiving information from perceived experts (Wang, 2006). A key implication of these results is that DTC marketing of therapy for adolescents with externalizing and legal problems should consider strategies that enable parents to learn from other parents' experiences, such as through parent testimonials.

We also found that relative to parents of adolescents without SU problems, parents of adolescents with SU problems preferred to receive therapy information from their insurance company. This likely reflects parents wanting to know which SU therapy providers were covered by insurance. Of note, insurance companies represented the largest provider of therapy information to parents of adolescents with SU problems who had previously

received therapy but not the largest provider of therapy information for parents of adolescents with mental health or legal problems. These results suggest that insurance companies play a uniquely important role in linking parents of adolescents with SU problems to treatment. SU therapy providers seeking to market their services should consider affiliating with insurance providers.

Another key finding was that parents preferred to receive information via websites or brochures, and that these preferences did not vary as a function of adolescent problems. By contrast, parents' actual behaviors did vary as a function of adolescent problems; parents of adolescents with mental health and legal problems reported significantly higher rates of obtaining therapy information via websites or brochures, which were the channels most preferred by parents in general. It was also noteworthy that parents of adolescents with SU problems did not appear to have unique preferences or experiences, suggesting that professional psychologists seeking to market treatment to adolescents with SU problems may not need to use alternative channels to those used to reach adolescents without SU concerns.

Place

Though most parents preferred their adolescents receive treatment at a center focused on adolescent health, parents of adolescents with mental health problems generally preferred centers focused on mental health, and most parents actually received therapy for their adolescents in this setting. Additionally, parents of adolescents with SU problems were significantly more likely to have received treatment in an SU specialty setting, while parents of adolescents *without* internalizing problems were more likely to report receiving therapy at school. These data are generally consistent with previous research linking adolescent symptom severity to parent treatment-seeking behaviors (Mian, Godoy, Eisenhower, Heberle, & Carter, 2016), and suggest that parents recognize the benefits of their adolescent receiving treatment in a center designed to address their specific problems. Of note, consistent with national survey data, sample-wide rates of treatment delivery in SU specialty centers were extremely low (6.3%), as were rates of SU treatment delivery in the sub-sample with SU problems (12.8%), suggesting an ongoing need to increase access to specialty SU services (SAMHSA, 2018).

Price

Unlike the other Marketing Mix dimensions, parents' preferences for and experiences with Price did not vary as a function of adolescent problems. These data suggest that parents of adolescents with SU, mental health, or legal problems in the current sample did not have unique preferences or behaviors associated with the costs of therapy. Consistent with prior studies (Loomis, 2011), we found that although parents reported being willing to travel substantial distances and incur substantial out of pocket expenses, the distance parents actually traveled and the amount they actually paid for their most recent sessions were much lower. The reasons for such discrepancies are believed to be multi-factorial (see Becker, Helseth, et al., 2018, for a review) and highlight the value of examining both preferred and actual experiences of consumers.

Limitations

Interpretation of these results must take into account several limitations. First, although we screened based on parental concern about SU, less than half of adolescents had current SU problems. The final sample was predominantly comprised of parents whose adolescents had current mental health issues. Thus, results of this study should be considered as revealing DTC marketing preferences of parents concerned about adolescent SU in general, but not necessarily the preferences of parents of adolescents with acute SU problems. Second, the survey items were developed specifically for this study based on prior qualitative research (Becker, Spirito, et al., 2016) and have not been psychometrically validated. Future work should seek to validate tools to measure parent preferences for receiving information about therapy. Lastly, the sample was predominantly non-Hispanic White and well-educated. The demographics of the sample were generally consistent with the sample of SU treatment seeking adolescents in Rhode Island, which is about 80% Caucasian (SAMHSA, 2016). In prior work we found that, even within this restricted sample, there were meaningful differences in parent preferences by education level, socio-economic status, and race/ethnicity. This underscores the need for future surveys to recruit more heterogeneous samples to fully assess these differences.

Marketing Implications

The current study has several implications for professional psychologists seeking to market their services to parents of adolescents concerned about SU. First, our findings suggest that psychologists should seek to leverage strategies that make parents feel connected to other parents, especially if they wish to engage parents of adolescents with mental health problems. When combined with our finding that all parents valued websites and brochures, these data indicate that websites or brochures containing confidential testimonials or quotes from other parents could represent a valuable strategy to market therapy. Second, psychologists should consider partnering with physicians to share information about therapy, as about 40% of parents preferred to receive therapy information from their adolescent's physician. In particular, physicians might be especially well-suited to market information to parents whose adolescents are not yet experiencing acute problems, as these parents were the most likely to value information from physicians. Physicians could stock their waiting rooms with psychoeducational brochures and advertisements of websites developed by psychologists, facilitating parents access to scientifically-informed materials relevant to their adolescent's problems. Third, our results imply that psychologists seeking to engage adolescents with SU problems might recruit more patients if they affiliate with insurance providers because parents of adolescents with SU problems were more likely to prefer information provided by their insurer. Fourth, professional psychologists seeking to market their clinics may wish to emphasize their expertise with adolescent developmental issues, as settings focused on adolescent health were preferred by many parents. Fifth, consistent with national data, our results suggest that very few parents seek therapy in clinics specializing in SU, indicating a need to build awareness about specialty treatment options.

In sum, consistent with our prior work, results of this analysis suggest that professional psychologists should be mindful of parent preferences when selecting methods to market information about therapy. In addition, professional psychologists should carefully consider

their target patient population before developing marketing materials, as parent preferences for information varied as a function of the adolescent's problems with SU, internalizing distress, externalizing behavior, and legal involvement. This study highlights a number of key strategies that professional psychologists can use to tailor their marketing of therapy to better reach the end consumers of adolescent therapy services.

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PUBLIC SIGNIFICANCE STATEMENT:

We asked parents of teenagers when, where, how, and from whom they would prefer to learn about therapy options for their teen. Parent preferences were different if their teen had mental health or substance use problems. We suggest ways that therapists can use marketing to reach families with teens in need of therapy.

Table 1.

Marketing Mix Dimensions and Sample Questions

Dimension	Definition	Example Questions
Product/Service	The specific product or service being marketed	• How would you describe your ideal therapy experience for your teen? • How would you describe your teen's actual therapy experience?
Promotion	The specific channels through which information about the specific service is marketed	• From whom would you prefer to get information about therapy for your teen? • From which channel would you prefer to get information about therapy for your teen?
Place	Where the specific service being marketed is ultimately delivered	• Where would you prefer to meet with your teen's therapist?
Price	The costs (both direct and opportunity costs) associated with obtaining the service being marketed	• How far would you be willing to travel for your teen's therapy? • How much would you be willing to spend for your teen's therapy?

Note. Example questions within each of the four domains of the Marketing Mix (see Zeithaml, Bitner, & Gremler, 2012).

Table 2.

Parents' Ideal Therapy Experiences by Adolescent Externalizing, Internalizing, Legal, and Substance Use Problems

	Externalizing		Internalizing		Legal		Substance Use		Overall
	No	Yes	No	Yes	No	Yes	No	Yes	
	n = 139	*n = 272*	*n = 201*	*n = 210*	*n = 307*	*n = 104*	*n = 252*	*n = 159*	*n = 411*
Promotion 1: From Whom									
Insurance company	7.9%	8.8%	6.5%	10.5%	8.5%	8.7%	5.6%	13.2% **	8.5%
Physician	54.0%	37.1% **	51.2%	34.8% **	47.2%	29.8% **	45.6%	38.4%	42.8%
School counselor	6.5%	8.1%	7.0%	8.1%	7.2%	8.7%	7.5%	7.5%	7.5%
Friend or family	11.5%	7.4%	9.0%	8.6%	9.4%	6.7%	10.7%	5.7%	8.8%
Another Parent	18.7%	34.6% **	23.9%	34.3%	24.8%	42.3% **	27.0%	32.7%	29.2%
Promotion 2: Which Channel									
Website	66.9%	68.8%	70.1%	66.2%	69.1%	68.3%	69.0%	66.7%	68.1%
Social Media	41.0%	45.6%	43.3%	44.8%	43.0%	47.1%	43.7%	44.7%	44.0%
Radio	20.1%	19.1%	20.4%	18.6%	20.2%	17.3%	19.8%	18.9%	19.5%
TV	33.1%	24.3%	24.9%	29.5%	27.0%	27.9%	25.0%	30.8%	27.3%
Brochure	69.1%	67.6%	72.1%	64.3%	69.4%	64.4%	69.4%	66.0%	68.1%
Place: Where Receive									
Center focused on SU	9.4%	6.3%	8.0%	6.7%	6.2%	10.6%	6.7%	8.2%	7.3%
Center focused on MH	8.6%	22.8% ***	9.5%	26.2% ***	15.3%	26.0%	17.1%	19.5%	18.0%
Center focused adolescents	59.0%	49.3%	58.2%	47.1%	56.7%	40.4% **	56.0%	47.2%	52.6%
Physician's Office	12.9%	7.0%	11.9%	6.2%	10.4%	4.8%	8.7%	9.4%	9.0%
Adolescent's school	1.4%	0.7%	1.0%	1.0%	1.3%	0.0%	1.6%	0.0%	1.0%
Price 1: Willing to Commute									
Mean (in minutes)	40.8	36.0	39.8	35.5	38.8	33.9	38.0	34.0	37.6
Price 2: Willing to Pay									
Mean (in $)	$46.72	$42.82	$47.82	$40.62	$45.43	$40.31	$43.85	$44.60	$44.14

Note. Percentages reflect the proportion of participants who endorsed each response who did, or did not, report each adolescent problem. SU = Substance Use, MH = Mental Health.

** $p < .01$

*** $p < .001$

Table 3.

Parents' Most Recent Therapy Experiences by Adolescent Externalizing, Internalizing, Legal, and Substance Use Problems

	Externalizing		Internalizing		Legal		Substance Use		Overall
	No	Yes	No	Yes	No	Yes	No	Yes	
	n = 20	*n = 138*	*n = 37*	*n = 121*	*n = 91*	*n = 67*	*n = 80*	*n = 78*	n = 158
Promotion 1: From Whom									
Insurance company	10.0%	29.7%	16.2%	30.6%	24.4%	31.3%	26.3%	28.2%	27.2%
Physician	60.0%	28.3% **	32.4%	32.2%	36.3%	26.9%	41.3%	23.1%	32.3%
School counselor	20.0%	11.6%	24.3%	9.1%	15.4%	9.0%	13.8%	11.5%	12.7%
Friend or family	15.0%	26.1%	37.8%	20.7%	27.5%	20.9%	31.3%	17.9%	24.7%
Another Parent	10.0%	15.9%	16.2%	14.9%	13.2%	17.9%	18.8%	11.5%	15.2%
Promotion 2: Which Channel									
Website	5.0%	38.4% **	16.2%	39.7% **	29.7%	40.3%	32.5%	35.9%	34.2%
Social Media	5.0%	26.1%	18.9%	24.8%	16.5%	32.8%	22.5%	24.4%	23.4%
Radio	10.0%	15.2%	10.8%	15.7%	15.4%	13.4%	16.3%	12.8%	14.6%
TV	5.0%	17.4%	13.5%	16.5%	12.1%	20.9%	13.8%	17.9%	15.8%
Brochure	5.0%	38.4% **	29.7%	35.5%	25.3%	46.3% **	30.0%	38.5%	34.2%
Place: Where Received									
Center focused on SU	0.0%	7.2%	2.7%	7.4%	2.2%	11.9%	0.0%	12.8% **	6.3%
Center focused on MH	50.0%	67.4%	54.1%	68.6%	67.0%	62.7%	75.0%	55.1% **	65.2%
Center focused adolescents	25.0%	14.5%	18.9%	14.9%	14.3%	17.9%	15.0%	16.7%	15.8%
Physician's Office	5.0%	2.9%	5.4%	2.5%	3.3%	3.0%	2.5%	3.8%	3.2%
Adolescent's school	10.0%	3.6%	13.5%	1.7% **	7.7%	0.0%	2.5%	6.4%	4.4%
Price 1: Time Commuted									
Mean (in minutes)	19.5	23.7	21.5	23.7	20.4	26.9	21.9	24.4	23.2
Price 2: Amount Paid									
Mean (in $)	$19.60	$19.23	$27.30	$21.60	$25.37	$19.69	$26.78	$19.05	$22.96

Note. Percentages reflect the proportion of participants who endorsed each response who did, or did not, report each adolescent problem. SU = Substance Use, MH = Mental Health.

** $p < .01$

*** $p < .001$