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Predictors and Impact of Psychotherapy Side Effects in Young Adults

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Abstract

What should we tell our younger clients—who may or may not have chosen to come to therapy—about possible risks of engaging in psychotherapy? To explore this question, we examined psychotherapy side effects in 366 young adults with a history of psychotherapy or counseling. Psychotherapy side effects were common, with 41% of participants reporting at least one. Perceived lack of control over the decision of when and how to engage in therapy was the strongest predictor of experiencing therapy side effects. Of the different kinds of side effects, feeling that therapy had gone on too long and experiencing worsening of existing symptoms were the most strongly predictive of poor therapy outcomes such as dissatisfaction with care and lower perceived improvements. Finally, there was a significant association between reporting side effects of psychiatric medications and side effects of psychotherapy, suggesting common factors that contribute to side effect experience across treatment modalities. These findings highlight the need to monitor possible side effects during psychotherapy and counseling, and to have an open dialogue with our youngest clients and their families about the likelihood for negative outcomes when they are compelled to engage in therapy.

Keywords: adverse events, client satisfaction, counseling, psychotherapy, side effects, treatment outcomes

1. Introduction

Psychotherapy has immense power to alter one's cognitive, emotional, and social function. But with great power comes great responsibility—we must consider how these changes can lead to unintended adverse effects. The mark of good clinical practice and ethical informed consent is direct acknowledgment, assessment, and management of adverse treatment effects. This manuscript expands the literature on psychotherapy side effects by documenting side effect prevalence in a sample of young adults reporting a range of different therapy modalities and exploring possible predictors and impact of therapy side effects.

Clinicians do not typically track therapy side effects, as we often assume they are rare events (Barlow, 2010). For example, a systematic review of clinical trial registry entries for studies of hypnosis found that only a fraction of trials report any side effect data (Bollinger, 2018). However, several studies have suggested that between 27% and 93% of clients experience at least some unwanted effects of therapy (Moritz et al., 2015; Peth, Jelinek, Nestoriuc, & Moritz, 2018; Rozental, Kottorp, Boettcher, Andersson, & Carlbring, 2016; Schermuly-Haupt, Linden, & Rush, 2018). The most commonly reported therapy side effects include new symptoms or symptom substitution (e.g., relaxation-induced anxiety; Heide & Borkovec, 1983), worsening of existing symptoms (Cuijpers, Reijnders, Karyotaki, de Wit, & Ebert, 2018), emotional pain or distress (Rozental et al., 2016), stigmatization or shame in using therapy (Moritz et al., 2015; Moritz et al., 2018; Rozental et al., 2016), prolongation of treatment past its usefulness (Linden, 2013), changes in life circumstances associated with therapy (e.g., loss of friendships when quitting substances; Troester, Parker, van Knippenberg, & Sahlmueller, 2018), and feeling dependent on therapy (e.g., failure to resolve transference in psychodynamic therapy; Kächele & Schachter, 2014; Parker, Paterson, Fletcher, McClure, & Berk, 2014).

Clinicians may also assume that because we are the tool by which therapy is delivered, we are directly responsible for any unwanted effect (Barlow, 2010; Linden & Schermuly-Haupt, 2014). However, even properly administered, adequate care can result in unintended effects; unwanted events do not necessarily indicate malpractice. In fact, one study that assessed both therapy side effects (unintended effects in the context of correctly applied treatment; Linden, 2013) and malpractice effects (negative effects arising out of incorrectly applied treatment or improper conduct of the therapist) found that although side effects were very common (reported by 94% of clients), malpractice issues were very rare (reported by 3%–8% of clients; Ladwig, Rief, & Nestoriuc, 2014).

Regardless of whether or not they are due to clinician error, side effects may contribute to poor treatment outcomes (Moritz et al., 2015; Moritz et al., 2018). What is more, ethical principles of informed consent demand that our clients understand the risks and benefits of treatment—including the likelihood and severity of potential side effects (Berk & Parker, 2009) and how these side effects may detract from positive therapy outcomes (Moritz et al., 2018). The present study investigated how therapy side effects predicted several treatment outcomes, including participants' perceived impact of therapy on their mental health, satisfaction with care, and likelihood the participant would seek therapy in the future.

There are special considerations for understanding therapy side effects in a young adult population, most of whom completed therapy as children or adolescents. Most notably, compared with older adults, young people are more likely to be encouraged or even compelled into therapy by an external authority, such as their family or school. This lack of agency could create negative attitudinal bias against therapy and increase the chance of experiencing negative effects. In the present study of young adults, we predicted that feeling agency in choosing therapy would predict lower incidence of psychotherapy side effects.

Different reasons for seeking therapy may carry different side-effect profiles. Rates of psychotherapy side effects differ significantly depending on the population, ranging from moderate rates in depression (39%–53%; Ladwig et al., 2014; Moritz et al., 2018) to very high rates in obsessive-compulsive disorder (93%; Moritz et al., 2015). In particular, therapy side effects are likely more common in treatment of anxiety disorders and trauma-related conditions, where it is common to see temporary worsening of symptoms as clients reduce reliance on safety behaviors and confront stimuli or memories they typically avoid (Barlow, 2002). For example, it is well documented that exposure-based treatments can exacerbate PTSD symptoms in both children (Scheeringa, Weems, Cohen, Amaya-Jackson, & Guthrie, 2011) and adults (Foa, Zoellner, Feeny, Hembree, & Alvarez-Conrad, 2002). Based on this literature, we predicted that clients who sought treatment to manage an anxiety disorder or to process a trauma would be more likely to report therapy side effects than clients with other concerns.

Implications for Practice

- Because many participants reported psychotherapy side effects, clinicians should proactively acknowledge side effects during informed consent for treatment and track possible negative effects throughout care delivery.
- If participants said they did not have control over the choice to go to therapy, or how that therapy happened, they were significantly more likely to report negative side effects from that therapy. That said, these same participants also acknowledged some benefits of therapy on their mental health. These data should be discussed with parents/families of young people who are being compelled to go to therapy: by openly acknowledging resistance in our youngest clients, we open an important dialogue about risks and benefits that may ultimately lead to better treatment buy-in.
- There were significant associations between perceived side effects from psychotherapy and medication side effects, suggesting a common set of factors driving perceived negative effects across treatment modalities, which suggest that we can reliably turn to the medication literature to learn how to manage psychotherapy "nocebo" effects.

Implications for Policy

- These data suggest that informed consent/assent procedures for psychotherapy with children and adolescents should acknowledge potential side effects, putting these into context with likely benefits.

Finally, it is possible that side-effect experience may generalize across psychotherapy and psychiatric medication. In clinical trials, even patients in nonspecific or placebo conditions sometimes report side effects, a phenomenon termed "nocebo" (Bootzin & Bailey, 2005). It has been speculated that nocebo effects may arise because a subset of clients will experience side effects regardless of treatment type, due to conditioning or expectation-induced activation of brain reward circuits (Enck, Benedetti, & Schedlowski, 2008). That is,

there may be client-level factors that predict side-effect experience. If psychotherapy side effects are susceptible to nocebo effects, we should expect that participants who report side effects of psychotherapy will be also be more likely to report side effects of medication. On the other hand, if psychotherapy side effects are specific to psychological treatment, we should expect them to be unrelated to medication side effects.

2. Methods

2.1. Participants and procedure

This was a secondary analysis of a survey of the effects of mental health history on young adults' romantic and sexual relationship functioning. Participants completed an online survey of their demographics; history of mental, emotional, and physical health conditions; history of mental health treatment; and a variety of measurements related to sexuality and romantic relationships not reported here (e.g., sexual function; see Lorenz 2020). The only criteria for participation were age (18+), Internet access, and ability to read English. The study was advertised on community websites (e.g., Craigslist) and on the psychology subject pools at the University of North Carolina–Charlotte (UNCC) and the University of Nebraska–Lincoln (UNL). Student participants were awarded credit toward research requirements for their psychology courses, and community participants were entered into a drawing for gift cards. All participants provided informed consent, and procedures involving human subjects were approved by the Institutional Review Boards at UNCC and UNL. A deidentified copy of the data relevant to the analyses presented here is available on the Open Science Framework at https://bit.ly/39gu83t.

As the survey was conducted entirely online, there were several quality control methods to ensure participant attention and accuracy. Scale anchors were counterbalanced throughout (e.g., "not at all" to "very much," sometimes presented left to right and sometimes right to left). Several attention-check questions were presented with instructions on how to complete them correctly, for example "in the past month, how often did you time travel? (please select *Never* to let us know you are paying attention)." If participants failed these attention checks, they were presented with a screen reminding them of the importance of accurate and honest answers. Finally, prior to analysis, data were carefully checked for contradictory answers (e.g., indicating an age of first therapy use that was older than the participants' current age); these participants' data were removed from further analysis.

2.2. Measures

2.2.1. History of therapy use

Participants were asked whether they had ever done any kind of psychotherapy or counseling in the past. If they indicated "yes," they were then asked a series of questions regarding their therapy experiences, including age at first therapy.

Participants were presented with a list of possible reasons for seeking therapy and asked to select all that applied: to manage/treat depression or a mood disorder; to manage/treat anxiety or an anxiety disorder; to manage/treat substance abuse or addiction; to manage/treat another mental health condition; to improve relationships with family; to improve

relationships with intimate partner(s); to process loss or grief; to process a traumatic event; or other reasons. Participants were also presented with a list of therapy modalities and asked to select any they had received: cognitive-behavioral therapy (CBT); acceptance and commitment therapy (ACT); interpersonal therapy (IPT); dialectical behavior therapy (DBT); mindfulness-based therapy; Christian counseling/faith-based therapy; psychoanalysis/psychodynamic therapy; art/play therapy; other specific therapy; or general counseling/don't know. It should be emphasized that these designations indicate what the client *believed* they received; there were no data regarding therapy quality or protocol adherence.

Finally, participants were asked about how much choice they had in therapy/counseling with a Likert scale ranging from 1 ("no control: I was forced to go by someone else, or my wishes were ignored") to 4 ("complete control: I actively sought out therapy, and was completely in control of when and where I went").

2.2.2. Psychotherapy side effects

A list of possible side effects of psychotherapy was drawn from the side effects most commonly reported in the research literature and recommended for further study by experts in the area (Berk & Parker, 2009; Linden, 2013; Linden & Schermuly-Haupt, 2014). These included the following: emergence of new symptoms; existing symptoms got worse; treatment went on too long; treatment was very painful or emotionally difficult; felt dependent on therapy; therapy changed relationships or life situation in a negative way; and feeling ashamed of going to therapy. Participants were asked to select any of the side effects they had experienced; from this, an incidence variable (any side effect reported) and a severity variable (the sum of all side effects reported) were calculated. Note that, in this context, participants were asked to consider if their "worsening of symptoms" was due specifically to the action of the psychotherapy, and thus was differentiated from the natural course of deterioration.

2.2.3. Psychotherapy outcomes

Participants indicated their satisfaction with their experience in psychotherapy/counseling on a Likert scale (1 = extremely dissatisfied to 5 = extremely satisfied). They were also asked what impact psychotherapy had on their mental health (1 = significantly worsened to 7 = significantly improved). Finally, participants were asked to consider how likely they would be to attend therapy in the future (reverse-coded; 1 = extremely likely to 5 = extremely unlikely). This statement was qualified ("assuming it were affordable and accessible") to get a pure measure of participants' perception of therapy benefits outside of cost considerations.

2.2.4. History of psychiatric medication use and side effects

Participants were presented with a list of the 48 most commonly prescribed psychiatric medications and asked whether they had ever used any of the medications on the list. If they indicated any lifetime history of psychiatric medication use, they were then presented with a list of twenty commonly reported side effects of psychiatric medications such as weight gain, fatigue/drowsiness, headache, dry mouth, and changes in sexual function. They were asked to select any side effects they had ever experienced while taking

psychiatric medication; these data were used to derive incidence and severity variables as described above. It is important to note that participants who indicated lifetime history of both psychotherapy and psychiatric medication may or may not have used these treatments concurrently.

2.2.5. Demographics

Participants provided information on their age, gender/sex, and racial/ethnic identity. They were presented with a list of racial and ethnic identities derived from the U.S. Census and asked to select all that applied. These selections were later categorized into the groupings most commonly reported in this sample: non-Hispanic White, Hispanic White, Black, Asian, and mixed race.

3. Results

3.1. Demographics

A total of 366 participants indicated they had a history of some form of psychotherapy/counseling and passed all accuracy checks. Reflecting national trends in psychological services use among college students (Turner, Camarillo, Daniel, Otero, & Parker, 2017), the sample was predominantly female (81%) and non-Hispanic White (74%). The remaining racial/ethnic groups were mixed race (10%), Black (7%), Hispanic White (4%), and Asian (4%). Mean age was 20.20 years (SD = 3.27).

Participants reported seeking psychotherapy/counseling for the following nonexclusive reasons: managing/treating a mood disorder (52%), anxiety disorder (59%), or other diagnosed disorder (e.g., eating disorder; 8%); improving relationships with family (33%) or intimate partners (8%); processing a traumatic event (30%) or loss/grief (16%); managing substance abuse (3%); and other (9%, with reasons ranging from "parents' divorce" to "gender dysphoria"). The average age at first psychotherapy/counseling was 15.40 years (SD = 4.18).

Notably, in this young adult sample, more than a third of participants (39%) felt they had little to no control over whether they attended therapy (M = 2.81, SD = 1.13). However, the majority said that therapy had made their mental health at least "a little bit" better (78%) and were at least "somewhat" satisfied with the care they received (66%). There were significant associations between perceived degree of control over the decision to attend therapy and perceived benefits to mental health ($r(214) = 0.28$, $p < .001$), higher satisfaction with care ($r(214) = 0.32$, $p < .001$), and interest in seeking therapy again in the future ($r(212) = 0.21$, $p = .002$).

Participants endorsed engaging with different kinds of psychotherapy or counseling, including cognitive-behavioral therapy (CBT; 18%), mindfulness-based therapies (8%), interpersonal therapy (IPT; 5%), Christian counseling (5%), art or play therapy (4%), acceptance and commitment therapy (ACT; 2%), dialectical behavior therapy (DBT; 1%), and psychodynamic therapy (1%). However, by far the most reported type was "general counseling/don't know" (39%).

3.2. Incidence of psychotherapy side effects

A sizeable minority of participants (41%) reported experiencing at least one side effect of psychotherapy. The most commonly reported side effect was feeling ashamed of using therapy (14% of participants). Other commonly reported side effects included feeling that therapy was emotionally painful or difficult (11%), feeling dependent on therapy (10%), treatment went on too long (8%), new symptoms emerged (6%), existing symptoms got worse (5%), and some sort of negative change in one's relationships or life situation as a result of therapy (2%).

3.3. Predictors of psychotherapy side effects

To explore predictors of side-effect experience, we conducted stepwise linear regression with the side-effect severity as the dependent variable and gender/sex, racial/ethnic group, age at first therapy, reason for seeking therapy, and perceived control in choosing to attend therapy as independent variables. Psychotherapy side effects were significantly predicted by feeling less in control over the choice to attend therapy ($\beta = -0.226$, $t(206) = -3.47$, $p < .001$); female sex/gender ($\beta = 0.138$, $t(206) = 2.11$, $p = .036$); and using therapy to treat a mood disorder ($\beta = 0.154$, $t(206) = 2.23$, $p = .027$), to treat an anxiety disorder ($\beta = 0.148$, $t(206) = 2.07$, $p = .040$), to process trauma ($\beta = 0.131$, $t(206) = 1.99$, $p = .048$), or to address "other" specified issues (e.g., parental divorce; $\beta = 0.177$, $t(206) = 2.60$, $p = .010$; model $R^2 = 0.15$).

3.4 Psychotherapy versus medication side effects

We then considered the subsample of participants who reported lifetime experience of both psychotherapy and psychiatric medication use ($n = 126$). On average, participants reported 5.29 medication side effects ($SD = 4.42$). The rank-order correlation between severity of psychotherapy side effects and psychiatric medication side effects was significant (Spearman's $\rho = 0.27$, $p = .002$), such that the more psychotherapy side effects a participant reported, the more medication side effects they reported as well (Figure 1).

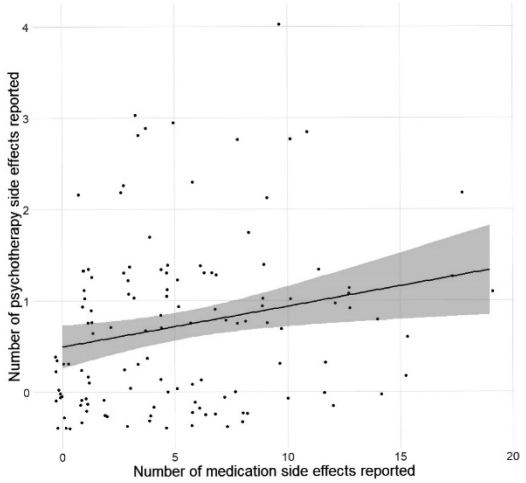

Figure 1. Significant association between reported side effects of psychiatric medication versus psychotherapy. Data have been jittered to improve the display of overlapping values.

3.5. Impact of psychotherapy side effects

Reporting more psychotherapy side effects significantly predicted lower satisfaction with care ($r(365) = -0.19$, $p < .001$) and less positive perceived impact on mental health ($r(365) = -0.10$, $p = .046$). However, there was no significant association between psychotherapy side effects and likelihood of seeking therapy in the future ($r(365) = -0.01$, $p = .837$).

Specific side effects were also tested as predictors of therapy outcomes. For these analyses, we entered all of the specific therapy side effects as predictors into a stepwise linear regression to determine the best-fit model of satisfaction with care, perceived impact on mental health, and likelihood of seeking future therapy. Lower satisfaction with care was significantly predicted by existing symptoms worsening ($\beta = -0.21$, $t = -4.22$, $p < .001$) and treatment going on too long ($\beta = -0.17$, $t = -3.43$, $p < .001$). Feeling ashamed of going to therapy was included in the best-fit model but was only marginally significant ($\beta = -0.09$, $t = -1.74$, $p = .082$; model $R2 = 0.10$). Participants who reported treatment going on too long were less likely to seek therapy in the future ($\beta = 0.15$, $t = 2.91$, $p = .004$; model $R^2 = 0.02$). And finally, perceptions that therapy had a negative impact on mental health were predicted by treatment going on too long ($\beta = -0.12$, $t = -2.38$, $p = .018$) and existing symptoms worsening ($\beta = -0.18$, $t = -3.60$, $p < .001$). Feeling dependent on therapy was included in the best-fit model but did not itself significantly predict perceived impact on mental health ($\beta = 0.07$, $t = 1.46$, $p = .146$; model $R^2 = 0.06$).

4. Discussion

Although psychotherapy side effects are rarely assessed, they are extremely common and contribute significantly to clinical outcomes. In the present study, a little less than half of participants who had been in therapy reported at least one adverse treatment reaction. These data support the recommendation that clinicians and researchers include information about possible therapy side effects during informed consent procedures and proactively assess and manage these effects during treatment (Linden & Schermuly-Haupt, 2014).

In this young adult population, the strongest predictor of experiencing therapy side effects was lack of choice in when and how they received therapy. Most of the participants were adolescents or teenagers when they first entered treatment and about half felt they lacked agency in therapy. However, the majority indicated that despite not feeling in control of the choice to do therapy, they still felt therapy improved their mental health and were satisfied with the care they received. These findings suggest the need to proactively raise the issue of agency at the outset of therapy with young people, discussing how agency plays into the risk of therapy side effects with both the patient and their families. At the same time, it may be helpful to explain to our young patients that the data suggest that while they may not have chosen to enter treatment, they may still ultimately benefit.

There were more therapy side effects reported by participants who used therapy to process trauma or to manage a mood or anxiety disorder. As noted, treatment of anxiety and trauma is well known to carry the risk of (temporary) symptoms worsening (Barlow, 2002); in fact, this phenomenon is so common, regardless of modality (Taylor et al., 2003), that it is unclear whether symptoms worsening is a true side effect or a regrettably

necessary feature of therapy for these conditions. More unexpectedly, treatment for mood disorders was also associated with higher rates of therapy side effects. This may simply reflect the high comorbidity in mood and anxiety disorders, particularly in young people (Cummings, Caporino, & Kendall, 2014). However, it may also reflect a higher likelihood of experiencing side effects in therapy to manage any specific mental health condition, as compared to counseling for more diffuse issues such as adjustment concerns. Most prior research on therapy side effects has been in the context of manualized treatments used in well-defined populations with specific diagnoses (see Locher, Koechlin, Gaab, & Gerger, 2019 for review)—that is, not in the typical case of psychotherapy as it is practiced in the community. Clearly, further research on therapy side effects in a wider range of settings and populations is needed to establish accurate risk estimates.

The side effects that most consistently predicted negative treatment outcomes were feeling that therapy had gone on too long and worsening of existing symptoms. This suggests that clinicians should regularly assess symptoms and monitor for worsening or stagnation. Objective assessment data allow better determination of when to change intervention strategies or discontinue therapy, which would help prevent these therapy side effects from negatively impacting client satisfaction or perceived benefit of therapy.

Side effects of psychotherapy were significantly associated with side effects of psychiatric medication, supporting the hypothesis that, to some extent, side effects arise out factors that are common across treatment modality. Meta-analyses on medication nocebo effects suggest that, across medication types, higher perceived dose or exposure is among the strongest predictors of reporting nocebo effects (Webster, Weinman, & Rubin, 2016). Given the parallels between participants' reported medication and psychotherapy side effect experience, this suggests that long-term or intensive courses of therapy may be more susceptible to nocebo effects than brief, targeted therapy. This interpretation is further underscored by the finding that feeling therapy went on too long was strongly predictive of negative treatment outcomes.

There were some limitations to the present study that warrant mention. These findings have all the complications of interpreting self-reported, retrospective data such as affective memory biases. We did not assess the length of time in therapy, nor the number of times a participant may have been in therapy; future research should investigate developmental and order effects on side-effect experience. It is possible that side effects from one course of therapy may carry over to other experiences, or that positive or negative therapy experiences at an earlier age may have a greater impact than those experienced later in life. The sample was predominantly White and female, limiting generalizability to other groups. Finally, the measure of therapy side effects was very brief and created for this study. There are several validated measures of therapy side effects, such as the Inventory for the Assessment of Negative Effects of Psychotherapy (Ladwig et al., 2014) and the Negative Effects Questionnaire (Rozental et al., 2016), which provide a detailed profile of all adverse events including side effects, malpractice, and therapeutic misconduct. However, the present study data were derived from a large survey of mental health and sexuality in young people, and given the length of the survey, a more extensive measure of therapy side effects was not possible. Despite these limitations, the study also had some strengths: there were multiple quality control checks for online survey data; there was good diversity in

therapeutic modality and reason for treatment; and these were the first analyses of therapy side effects to consider the role of client agency in therapy, which was a significant factor in this young adult population.

Although few clinicians or clinical trials make efforts to track negative effects of psychotherapy, these data and those of others suggest that side effects are common and contribute significantly to treatment outcomes. There is sufficient evidence to warrant systematically tracking therapy side effects both in research and in clinical practice, and to include mention of possible side effects during informed consent for treatment. Only by properly assessing side effects can we hope to learn how to prevent them.

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Conflict of interest – The author declares that he has no conflict of interest.

Ethics Approval – All procedures involving human subjects were approved by the Institutional Review Boards at the University of North Carolina–Charlotte (UNCC) and the University of Nebraska–Lincoln (UNL). The study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments.

Data Availability Statement – A deidentified copy of the data relevant to the analyses presented here is available on the Open Science Framework at https://bit.ly/39gu83t.

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