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Workforce Turnover in Community Behavioral Health Agencies in the USA: A Systematic Review with Recommendations

Laurel A. Brabson[1] · Jordan L. Harris[2,5] · Oliver Lindhiem[3] · Amy D. Herschell[4]

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Abstract
Rates of behavioral health workforce turnover are chronically high, with detrimental effects on the agency and remaining staff, as well as hypothesized negative impacts on client care and outcomes. Turnover also creates challenges for studies investigating the effectiveness and/or implementation of behavioral health interventions. Research examining factors that precede and predict behavioral health staff turnover has become increasingly important, as have studies that include recommendations for preventing and reducing turnover. The current paper systematically reviews the body of research on factors associated with behavioral health staff turnover, synthesizes recommendations made for combating turnover, and identifies gaps in this important area of research.

Keywords Evidence-based practices · Behavioral health · Implementation science · Workforce turnover

Following numerous calls for the improvement of behavioral health services, (e.g., APA Task Force on Evidence-Based Practice for Children and Adolescents 2008; National Institute of Mental Health 1998; US Department of Health and Human Services 2000, 2003), published research on the effectiveness and implementation of behavioral health interventions has increased substantially over the past few decades (Bruns et al. 2016). While research advancements have been made demonstrating the effectiveness of evidence-based practices (EPBs; e.g., Ayers et al. 2007; Chorpita et al. 2011; Scogin et al. 2005) and implementation methods (e.g., Damschroder et al. 2009; Fixsen et al. 2005), some challenges remain. One key challenge is workforce turnover which can be defined as the voluntary or involuntary departure of an employee from an organization.

The Problem of Staff Turnover in Behavioral Health Agencies

Though rates of behavioral health staff turnover may vary based on a number of factors, the industry average falls around 30% annually (Substance Abuse and Mental Health Services Administration 2013) and is greater than other industries in which turnover is considered problematic, including physicians at 7% (American Medical Group Association 2013) and teachers at 8% (Goldring et al. 2014). Previous research suggests that some agencies may even experience 100% turnover in a 4-year period (Beidas et al. 2016). Such high rates of turnover are problematic on a number of levels.

In community behavioral health agencies, the loss of staff members can lead to several problems. Perhaps one of the greatest concerns at the organizational level is the cost of hiring and training new staff (Aarons and Sawitzky 2006; Sheidow et al. 2007). One estimate indicated that turnover at a large psychiatric rehabilitation clinic resulted in a loss of over $100,000 to $200,000 annually, even with a turnover rate well below the industry average (Selden 2010). Although troublesome, the associated expense is not the only

✉ Laurel A. Brabson
labrabson@mix.wvu.edu

1 Department of Psychology, West Virginia University, 1124 Life Sciences Building, P.O. Box 6040, Morgantown, WV 26506-6040, USA

2 University of Pittsburgh Medical Center, Pittsburgh, PA, USA

3 Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA, USA

4 Community Care Behavioral Health Organization, UPMC Insurance Services Division, Pittsburgh, PA, USA

5 University of Iowa, Iowa City, IA, USA

problem for agencies with high rates of turnover. In agencies of all sizes, the loss of an experienced staff member can make things difficult for the remaining staff who may be expected to carry a heavier workload. These added burdens may lower morale and increase burnout, ultimately resulting in additional turnover (Bukach et al. 2015). Furthermore, if the staff member who left was trained in an EBP, their knowledge and ability to deliver that specific intervention will be lost for the agency. This loss can also impair access to needed services for clients, particularly those located in rural or otherwise underserved areas (Boydell et al. 2008; Kelleher et al. 1992).

The Problem of Turnover for Clients

For a client, finding the right clinician can be a difficult process. Building rapport is essential to positive therapeutic outcomes (Leach 2005) and takes time to establish. Turnover can rupture the therapeutic rapport that has been built between a client and a clinician (Strolin-Goltzman et al. 2010). As such, it is often hypothesized that turnover may be detrimental to client outcomes (e.g., Albizu-García et al. 2004; Kim and Stoner 2008; Mor Barak et al. 2001; Sheidow et al. 2007; Woltmann et al. 2008). However, this hypothesis has received mixed support, with some studies demonstrating poorer outcomes for clients impacted by their clinician leaving (Strolin-Goltzman et al. 2010; Williams and Potts 2010) and other studies demonstrating no association between turnover and client outcomes (e.g., Garner et al. 2013). Despite mixed evidence, it is important to consider the impact that turnover might have on those outside of the organization and especially clients.

The Problem of Turnover for Research

In addition to detrimental effects of turnover on staff and clients, turnover can also hinder effectiveness and implementation research (e.g., Herschell et al. 2015; Woltmann et al. 2008), further limiting access to needed services. Although effectiveness and implementation studies have fundamentally different outcomes of interest, both types of research depend on direct service providers (e.g., therapists, clinicians) as research participants and are hindered by high rates of turnover within the behavioral health workforce.

Turnover is a complex problem, making it difficult to predict and plan for, particularly in effectiveness and implementation studies in which successful outcomes are largely contingent upon a stable workforce of direct service providers (Bjorklund et al. 2009). Although turnover is generally measured as a discrete event at the individual level, the turnover experience is ongoing and continuous at the organizational level due to the high frequency of discrete turnover events. This ongoing nature of turnover occurring throughout the course of the study often limits the amount of data collected and the conclusions that can be drawn from such data (Herschell et al. 2014).

Turnover is a Multilevel Problem

One factor that complicates the study of turnover is the multilevel nature of variables that can influence a staff member's decision to leave. Specifically, some variables occur at the individual level, such as age, gender, and education level (Ben-Dror 1994; Blankertz and Robinson 1997), while other variables such as salary and organizational culture occur at the organizational level (Glisson et al. 2008a). Further complicating the issue is that many of these variables can be measured at both the individual and organizational levels. Similarly, individual- and organizational-level variables are not always independent, often resulting in complex cross-level interactions. For example, burnout on the individual level can influence organizational climate on the organizational level, and vice versa. Estimating these cross-level interactions generally requires the use of sophisticated statistical models. While this can allow for more nuanced models and a refined understanding of turnover, studies have most often focused on one level of analysis (Glisson et al. 2008a), which can hinder comparisons of the same variable across multiple studies.

Current Review

Considering the growing body of work describing and addressing turnover within the behavioral health workforce, and the inherent complexity of understanding turnover, the purpose of the current paper is to systematically review literature on turnover within community behavioral health samples, from the lens of effectiveness and implementation research.

While behavioral health effectiveness and implementation research can take place in a variety of settings (e.g., schools, child welfare agencies), community behavioral health agencies are the focus of the current review for a few reasons. First, diverse service settings differ across a variety of organizational domains which can make synthesizing or comparing results difficult. Second, community behavioral health agencies provide services to a majority of both children and adults who receive mental health services (US Substance Abuse and Mental Health Administration 2009; the last year for which data was available), while alternative settings (i.e., schools, primary care settings) tend to provide services to only one population. With these considerations

in mind and in order to maintain a pointed focus for the current review, the goal of this paper is twofold: first, to summarize the body of research identifying factors associated with turnover for workers in community behavioral health settings, and second, to synthesize recommendations made for both researchers and community stakeholders to counteract problematic levels of turnover. A narrow focus on community behavioral health agencies also allows for clear and actionable recommendations.

Method

Search Strategy

Relevant papers were identified through searches conducted between the dates September 18 and 22, 2017 within the following databases: PsycINFO, Medline/PubMed, and Social Science Citation Index (SSCI). The following search strings were used: ("community behavioral health" AND "clinician turnover" OR "practitioner turnover" OR "provider turnover" OR "therapist turnover" OR "workforce turnover") and ("community mental health" AND "clinician turnover" OR "practitioner turnover" OR "provider turnover" OR "therapist turnover" OR "workforce turnover"). This variety in search terms was selected in order to capture the variation in terms and definitions used to describe both treatment centers (i.e., community behavioral health vs. community mental health) and staff (i.e., clinician, practitioner, provider, therapist, and workforce) within this body of literature. The various combinations of search terms resulted in a substantial overlap in search results, with relatively few unique results for each different combination.

Inclusion and Exclusion Criteria

Given that the purpose of this review was to summarize as comprehensive a body of literature as possible, all studies that met inclusion criteria were included, regardless of the year in which they were published. For inclusion in the current review, studies were required to (a) take place in and/or recruit participants from a community mental/behavioral health service setting; (b) focus on staff turnover as an outcome variable, or report on rates of staff turnover during the course of the study; (c) take place in the USA (U.S.); and (d) be published in English. Although research on turnover within community behavioral health settings has been conducted outside of the USA, the decision to include only samples within the USA was made based on consideration of international differences in policy, service structure, and other system-level factors that might influence the provision of behavioral health services. This choice was made in order to provide a more well-defined focus and to summarize relevant recommendations for a specific group of researchers and stakeholders. In addition to the aforementioned exclusion criteria, book chapters and theses/dissertations were excluded from the current review in order to only include studies that have undergone peer review.

Because studies could be excluded for multiple reasons, a stepped approach was taken to classify the excluded studies. First, studies were screened by the first author for publication language and to determine if they were a thesis, dissertation, or book chapter. If papers were not automatically excluded based on those criteria, they were reviewed further. The next step was to determine if participants were staff members in a community behavioral health setting. If this criterion was met, the paper was reviewed further to determine if turnover was included as an outcome variable or if a rate of turnover was described. If this criterion was met, the final step was to determine if the study took place in the USA. If insufficient details were provided within the manuscript to ensure that the paper met the inclusion criteria, it was excluded from the review. These details are provided in order to give the reader a context to interpret the PRISMA diagram (Fig. 1). Those papers that were excluded because they did not take place within the USA met all other inclusion criteria, meaning they examined the turnover of community mental/behavioral health staff within a different country. This approach was taken to not exclude samples outside the USA earlier in the screening phase, so that a determination could be made about the number of studies that focus on community behavioral/mental health staff turnover in different countries. Although recommendations provided within those papers are not necessarily relevant for the focus of the current review, it was deemed important to provide the opportunity for interested readers to seek out those articles.

Coding Procedures

Once manuscripts had been screened for eligibility, they were reviewed for the following information: sampling strategy; description of the treatment setting; total number of clinics and participants; the time frame in which turnover was measured; whether turnover was actual or intended and the method by which the turnover data was collected; the methodological quality (described below); the rate of turnover within the study; the level at which variables were measured and analyzed; factors that were examined in relation to turnover; and recommendations made by the author(s) for reducing turnover. These dimensions were selected to include various components of the study setting or design that might help a reader understand if any given recommendation would be useful for their particular interests. Additionally, the choice to include all variables measured within each study, regardless of

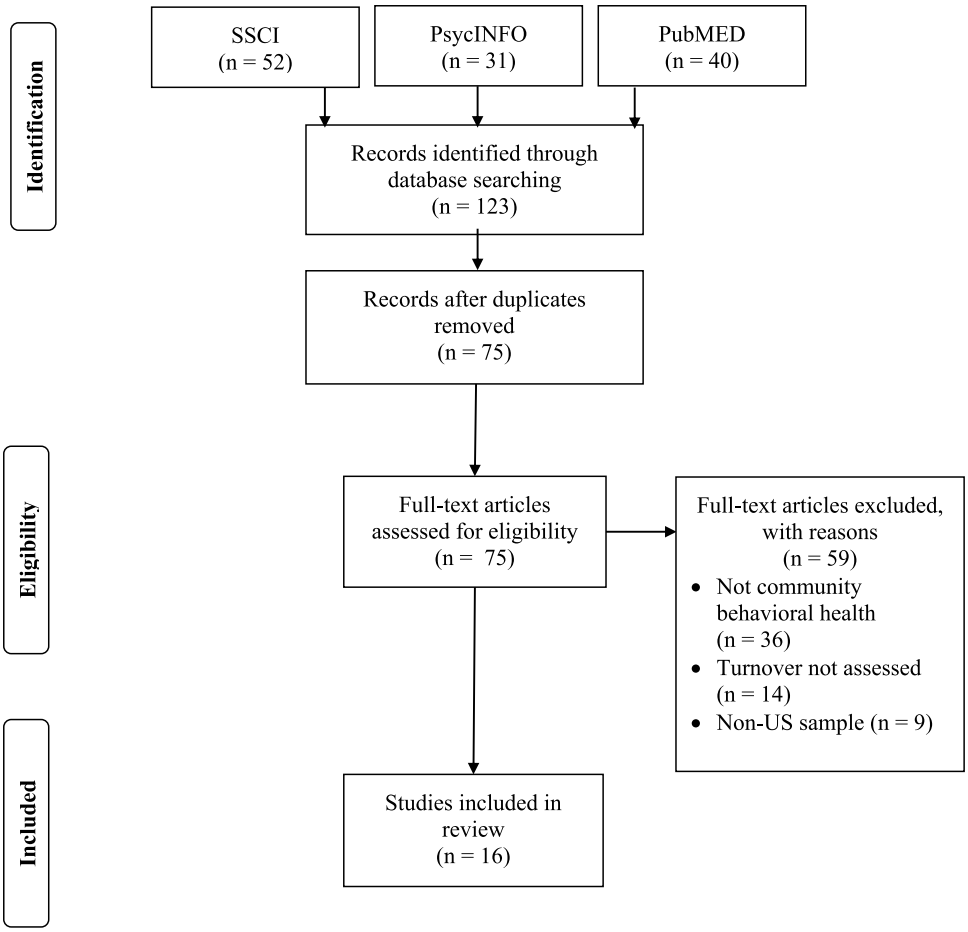

Fig. 1 PRISMA diagram depicting the systematic review process

statistical significance, was made in order to highlight any possible discrepancies within the literature.

A variety of theories and guiding frameworks were cited by the included papers. Due to the diversity of theoretical frameworks used by the reviewed manuscripts, it did not seem feasible to identify one unifying framework for the current review. Rather, the terms and language used to name and define variables were kept consistent with the language used in each paper. Similarly, the level at which a variable was assessed (i.e., individual, organizational, or both) was categorized according to how it was described within the paper.

In order to complete the coding, a data extraction form was developed by the second author. Three papers meeting inclusion criteria were coded by both authors to ensure adequate reliability assessed using the κ coefficient, which ranged from 0.76 to 0.94. A consensus meeting was held to resolve discrepancies and to better match the level of qualitative detail extracted by each author. The remaining papers were divided evenly between the first and second authors for coding.

Study Quality

Multiple tools are available to assess the methodological quality of published papers (Zeng et al. 2015). However, those that were considered by the authors for possible use in the current review tended to be biased in favor of randomized controlled trials (RCTs) to the extent that their use within the current review would have resulted in floor effects given the quasi-experimental and survey designs commonly used in the included literature. As such, a revised version of the Quality Assessment Tool for Quantitative Studies (Effective Public Health Practice Project 2008) was used to assess the methodological quality of studies included in this review. This tool assists the user in rating a study as strong, moderate, or weak in the following categories: (a) selection bias; (b) study design; (c) confounders; (d) blinding; (e) data collection methods; (f) withdrawals and dropouts; (g) intervention integrity; and (h) analyses. An accompanying dictionary provides the user with decision rules on which to base the rating of strong, moderate, or weak. Once each category has been

rated, the user then assigns an overall global rating of strong, moderate, or weak to the study.

To provide an accurate rating of methodological quality for the studies included in this review, many of which used simple survey designs, all four authors revised the tool. This revision process consisted of removing categories that were more pertinent for intervention studies than survey studies and adding decision rules to the dictionary that took into account the goals of the current review. For example, within the study design category, a subcategory to indicate whether turnover was measured as *actual* or *intended* was added and weighted in the decision to classify a study design as strong, moderate, or weak. In addition, changes were made to subcategories pertaining to the method of analyses in order to account for the possibility of multilevel analyses, a nuance which was not adequately accounted for in existing tools. The final quality assessment tool used in this study included the following categories: (a) selection bias; (b) study design; (c) data collection methods; (d) withdrawals and dropouts; and (e) analyses. Categories rated as strong are assigned two points, moderate are assigned one point, and weak are assigned no points. Once each category has been rated, the user then sums the points to obtain a global score, with higher scores indicating greater methodological quality.

The first and second author each independently coded three papers using the final quality assessment tool. Inter-rater reliability, assessed using the κ coefficient, ranged from 0.45 to 1.00. Discrepancies were discussed and resolved, with adjustments made to the quality assessment tool to account for the greater level of detail and more well-defined decision rules developed during consensus meetings. Both authors then independently coded all papers to ensure high reliability which, ranged from 0.79 to 1.00. The authors' codes were then averaged to create the overall quality score for each manuscript. The scores are included in Table 1.

Results

A total of 16 studies met criteria for inclusion in the current review (Table 1). Each included study was reviewed for the following information: sampling strategy; description of the treatment setting; total number of clinics and participants; the time frame in which turnover was measured; whether turnover was actual or intended and the method by which turnover data was collected; the methodological quality; the rate of turnover within the study; the level at which variables were measured and analyzed; factors that were examined in relation to turnover (both those that were statistically significant and those that were not); and recommendations made by the author(s) for reducing turnover. This information is summarized in Table 1. Of particular relevance for researchers and community stakeholders are the factors associated with turnover and recommendations made to combat turnover. These topics are described in greater detail below, with a focus on studies which were coded as moderate-to-high methodological rigor/quality ($\geq$ 4/8 or $\geq$ 5/10).

Factors Associated with Turnover

Fifteen of the 16 (93.8%) included studies identified factors that were associated with turnover. Each of these 15 studies used quantitative analyses to identify the associated factors, while 1 study used a mixed methods approach. Although there were some factors that were identified across a number of included studies, there was also considerable variability. Some of this variability can likely be attributed to the differences in definitions and measurement methods, which will be discussed later as a limitation to this body of literature. The summary of findings that follows is organized into organizational-level factors and individual-level factors, based on how each variable type was described and measured in included studies.

Individual-Level Factors

Twelve of the 16 included studies examined individual-level factors associated with turnover. Five studies identified stress/burnout/emotional exhaustion (Ben-Dror 1994; Blankertz and Robinson 1997; Kim and Stoner 2008; Sheidow et al. 2007), four identified organizational/social support (Acker 2004; Beidas et al. 2016; Bukach et al. 2015; Kim and Stoner 2008), two identified job satisfaction (Acker 2004; Kim and Stoner 2008), two identified job autonomy (Aarons et al. 2009; Kim and Stoner 2008), two identified growth opportunities (Acker 2004; Blankertz and Robinson 1997), and two identified experience within the field (Blankertz and Robinson 1997; Herschell et al. 2014). In particular, greater stress/burnout/emotional exhaustion and role conflict were positively associated with turnover or turnover intentions, while organizational/social support, job satisfaction, job autonomy, the availability of growth opportunities, and experience within the field were negatively associated with turnover or turnover intentions. In addition to these individual-level factors identified within multiple studies, a number of individual-level factors were identified within only one of the included studies. In the interest of brevity, these factors will not be described here, but rather are shown in Table 1.

Organizational-Level Factors

Organizational culture and climate are two multidimensional constructs often examined in the study of turnover. Organizational culture describes the way in which work is accomplished within an organization through underlying norms and expectations, while organizational climate is

Table 1 Turnover studies meeting all inclusion criteria

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
1 Aarons and Sawitzky (2006)	Convenience sample	Youth mental health clinics in San Diego County, CA	49	322 Clinical and case management service providers	Actual Program Manager	1 year	5*	28%	Org.	– Organizational climate (mediator)[1]* – Work attitudes[1]* – Organizational culture[1]* – Age – Sex – Education level – Professional status (intern vs. professional) – Job tenure
2 Aarons et al. (2009)	Convenience sample	SafeCare home-based clinic	21 Teams	153 Home-based service providers	Actual Staff Self-Report	Actual 29 months	5*	37.3%	Ind.	– Job autonomy[1]* – Age – Sex – Race – Education level – Length of employment – Work attitudes
3 Aarons et al. (2011)	Purposive sampling	Safety net institutions in NM	14	109 Staff (admins., providers, other)	Actual Staff Self-Report	Actual 18 months	2*	22%	Org.	– Transformational leadership (moderator)[2]* – Emotional exhaustion[1]*

Table 1 (continued)

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
4 Acker (2004)	Convenience sample	Outpatient mental health agencies in NY	16	259 Social workers	Intended Staff Self-Report	N/A	2*	N/A	Ind.	– Role conflict[4]* – Role ambiguity[4]* – Social support[5]*[4]* – Professional development opportunities* – Satisfaction with salary* – Job satisfaction[3]* – Education level – Age – Gender – Marital status – Number of children – Length of employment – Social support from co-workers – Caseload size

Table 1 (continued)

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
5 Beidas et al. (2016)	Convenience sample	Child outpatient mental health clinics	29	130 Therapists 36 Supervisors	Actual Clinic Leaders	1 year	5*	Therapist 24% Supervisor 17%	Both	Quantitative – Burnout* – Openness to new practices[6]* – Employee recognition for EBP implementation[7]* – Organizational culture[8] – Organizational climate[8] – Age – Organizational tenure Qualitative+ – Demographics – Licensure status – Personal reasons (illness, childcare, not feeling challenged, wanted more free time) – More desirable position elsewhere – Frustration with clients – Large caseloads – Low pay – Independent contractor workforce model – Poor leadership and support

Table 1 (continued)

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
6 Ben-Dror (1994)	Convenience sample	Full time direct service residence	1	104 Mental health workers	Actual Staff Self-Report	1 year	4*	50%	Ind.	– Ongoing stress* – Lack of participation in decision making about clients* – Low pay* – Age – Level of education – Gender – Seniority – Primary/secondary earner – Marriage/children – Bad relationship with co-workers/supervisor – Not feeling part of the team – Autonomy – Lack of communication – Lack of merit pay – Low satisfaction with work or workplace – Disagreement with organizational policies
7 Blankertz and Robinson (1997)	Convenience sample	Psychiatric rehabilitation clinics	N/A	848 Psych. rehab. workers	Intended Staff Self-Report	2 years	4*	Somewhat likely: 29% Likely: 8% Very likely: 6% Extremely likely: 7%	Ind.	– Burnout[9]* – Low pay* – Little advancement potential* – Personal/family reasons* – Younger in age* – Less education* – Supervisor more likely to leave* – Gender – Race/ethnicity

Table 1 (continued)

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
8 Bukach et al. (2015)	Randomly selected mental health agencies in Ohio	Mental health agencies in Ohio	42	Between 1 and 73 community psychiatric supportive team workers per agency	Actual Agency Leaders	1 year	3*	26%	Ind.	– Career advancement programs* – Salary* – Number of employees* – Supervisor support* – Benefits offered – Region (city vs. rural)
9 Glisson et al. (2008a, b)	Purposive sampling	Mental health clinics servicing children	100 Clinics	Between 8 and 372 therapists per clinic, average of 37	Actual Clinic Directors	1 year	4	N/A	Org.	– Organizational culture[8]* – Organizational climate[8]* – Service structure* – Number of employees – Education level
10 Green et al. (2013)	Convenience sample	Child/adolescent mental health clinics in San Diego County, CA	64	388 Community mental health providers	Intended Staff Self-Report	N/A	6*	N/A	Org.	– Emotional exhaustion[1]* – Transformational leadership (moderator)[2]* – Caseload size – Age – Gender – Mental health care tenure
11 Herschell et al. (2014)	Convenience sample	Community-based agencies	10	64 Frontline mental health therapists	Actual Staff Self-Report	2 years	5	45%	Ind.	– Experience in the field* – Gender – Age – Race – Education level – License status and type

Table 1 (continued)

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
12 Kim and Stoner (2008)	Convenience sample	Sample of registered social workers in CA	N/A	246 Total 43% Comm. mental health 24% Medical health 17% Child welfare 8% School	Intended Staff Self-Report	N/A	4*	N/A	Ind.	– Role stress[4]* – Job autonomy[10]* – Social support[11]* – Burnout (mediator)[9]* – Age – Gender – Annual salary – Organizational tenure
13 Kolko et al. (2012)	Convenience sample	Community-based child welfare or mental health	17 Programs 10 agencies	182 Direct service staff	Actual Staff Self-Report	6 months 18 months	7	6 months: 22% 18 months: 49.5%	Ind.	– Organizational climate[8]* – Job role – Study condition – Attitude toward EBPs[6]
14 Rollins et al. (2016)	Convenience sample	Community social service agencies	3 VA Medical centers 2 Social service agencies	145 Behavioral health providers	Actual and Intended Staff Self-Report	Actual 6 weeks and 6 months Intended past 6 months and next 6 months	3	Actual: 6 weeks: 0.7% 6 months: 2.1	Ind.	– This study examined the effect of a workshop intervention on burnout, not directly on turnover
15 Rollins et al. (2010)	Convenience sample	Assertive Community Treatment (ACT) Teams	28 ACT Teams in IN	Various providers per team (see paper for full description of an ACT team)	Actual Annualized Rate	1 year	4	30%	Ind.	– Fidelity to treatment model[12]* – Two distinct patterns; some teams had high initial turnover followed by later stability and some teams had early stability followed by high later turnover

Table 1 (continued)

Article	Sampling strategy	Description of clinic(s)	Number of clinics	Number and type of participants	Measure and reporter of turnover	Time frame	Article quality	Rate of turnover	Variable level	Variables examined in relation to turnover
16 Sheidow et al. (2007)	Convenience sample	Juvenile justice, child welfare, and authorities referred mental health clinics	45 Programs	453 Clinicians	Actual Annualized Rate	2.5 years	6	21%	Both	– Salary[13]* – Rate of referrals* – Emotionally demanding work[14]* – Job satisfaction[14]* – Caseload size – Organization climate[14] – Organizational structure – Gender[13] – Age[13] – Ethnicity[13] – Education[13] – Training[13] – Experience[13]

In the "Article Quality" column, scores with asterisks were out of 8 points because they were 1 timepoint only and info on dropouts was not applicable, while the ones without asterisks were out of a possible 10 points because they included multiple timepoints and reported on dropouts. In the "Variables Examined in Relation with Turnover" column, asterisks denote statistically significant variables. Superscripts are used to indicate the measurement tool used to assess each variable. A lack of superscript indicates that the paper did not provide detail regarding how that specific variable was measured within the study, or that the data was collected using a study-developed survey

Ind. individual, Org. organizational

[+]No statistical analyses were run on qualitative data; therefore, there are no asterisks to denote statistically significant factors

[1]Children's Service Survey (Glisson 2002)

[2]Multifactor Leadership Questionnaire (Bass and Avolio 1990)

[3]Job in General Scale (Ironson et al. 1989)

[4]Role Conflict and Ambiguity Scale (Rizzo et al. 1970)

[5]Caplan et al. (1980)

[6]Evidence-Based Practices Attitude Scale (Aarons 2004)

[7]Implementation Climate Scale (Ehrhart et al. 2014)

[8]Organizational Social Context (Glisson et al. 2008a)

[9]Maslach Burnout Inventory (Maslach and Jackson 1981)

[10]Job Content Questionnaire (Karasek et al. 1998)

[11]Social Support Measure (House and Wells 1978)

[12]Dartmouth Assertive Community Treatment Scale (Teague et al. 1998)

[13]Personal Data Inventory (Schoenwald 1998)

[14]Psychological Climate Questionnaire (James and sells 1981)

defined as the employee perceptions of the overall work environment (Glisson et al. 2008a; Pritchard and Karasick 1973). Of the six included studies that examined organizational-level factors, five specifically examined organizational culture, climate, or both.

Aarons and Sawitzky (2006) examined the relation between organizational culture, organizational climate, work attitudes, and turnover using a nested structural equation model to account for the multilevel nature of the data. Results indicated that constructive cultures were negatively associated with poor organizational climate, while defensive cultures were positively associated with poor organizational climate. Poor organizational climate was, in turn, associated with more negative work attitudes, which were associated with greater turnover at one year. One strength of this model is its estimation of both direct and indirect effects, which demonstrated that organizational climate partially mediated the effect of organizational culture on work attitudes. In short, organizational culture not only directly impacts work attitudes, but also indirectly impacts work attitudes through its correlation with organizational climate (Aarons and Sawitzky 2006).

Using a mixed methods approach, Beidas and colleagues examined turnover within the context of a system-level EBP implementation initiative. To account for the multilevel, nested structure, linear regression models with random intercepts and interaction terms were used. Although organizational culture and climate were included in the models, they were not found to be significantly associated with turnover. Rather, at the organizational level, staff recognition was the only variable associated with turnover, such that turnover was greater at organizations that provided more staff recognition for implementing an EBP. Other organizational factors were noted in during qualitative interviews with participants, including too high organizational expectations, lack of organizational support and supervision, lack of incentives to stay, financial concerns, poor leadership, and high caseloads (Beidas et al. 2016).

Similar to Beidas et al. (2016), Sheidow et al. (2007) did not find a significant effect of organizational climate on turnover. Rather, lower mean salary and lower rates of mental health referrals were the only two organizational-level factors associated with greater turnover (Sheidow et al. 2007).

In contrast to the other studies examining organizational-level variables, Green et al. (2013) did not examine the multidimensional construct of organizational climate, but rather focused on emotional exhaustion, which is often considered an underlying indicator of organizational climate (Glisson et al. 2008a). Using multilevel regression models, results indicated that greater emotional exhaustion significantly predicted greater turnover intentions, but this relation was moderated by transformational leadership. Greater transformational leadership weakened the relation between emotional exhaustion and turnover intentions (Green et al. 2013).

Published Recommendations for Limiting Workforce Turnover

Based on the identified factors associated with turnover, numerous recommendations for individuals interested in reducing turnover are included within the reviewed studies. These recommendations are largely speculative in nature and are based on the assumption that the factors found to be associated with workforce turnover are in fact causally related and can be modified via changes in policy, training, or intervention. The most frequent recommendations noted in the included studies were to foster a positive and supportive work environment (5 out of 16 studies), develop strong leadership (4 out of 16 studies), provide high-quality clinical training and supervision (3 out of 16 studies), reduce emotional demands on employees (2 out of 16 studies), and increase financial compensation (2 out of 16 studies). Additional recommendations were noted in a single study. These included conducting an organizational assessment and providing feedback to the organization (Aarons and Sawitzky 2006); matching employee involvement in organizational issues with their individual competence and morale (Ben-Dror 1994); limiting service providers' caseloads, providing stress management training, and increasing recognition for hard work (Blankertz and Robinson 1997); and maximizing job autonomy and decentralizing the work environment (Kim and Stoner 2008).

Discussion

Results of the current review yielded 16 studies that met all inclusion criteria. Included studies contained a variety of EBPs implemented within diverse community settings. While some studies used survey designs with clinician samples who were already using EBPs, one of the included studies was an effectiveness trial (Aarons et al. 2009) and four were implementation trials (Herschell et al. 2014; Kolko et al. 2012; Rollins et al. 2010; Sheidow et al. 2007). All studies included a description of various factors that influenced turnover within their respective samples, and most translated their findings into recommendations for agency stakeholders interested in reducing and preventing turnover. These recommendations have varying degrees of cost and feasibility, and stakeholders must carefully weigh pros and cons before acting on such recommendations. In this section of the manuscript, we continue to focus on recommendations from studies which were coded as moderate-to-high methodological rigor/quality ($\geq 4/8$ or $\geq 5/10$).

Considerations for Behavioral Health Stakeholders

Low pay is consistently identified as a salient factor in workforce turnover in community mental health agencies (e.g., Beidas et al. 2016; Ben-Dror 1994; Sheidow et al. 2007), but it may not be a malleable factor, at least in the short term. Offering higher salaries may simply not be a feasible option, particularly for agencies that rely on federal, state, or local governments for significant portions of their operational costs. Reimbursement rates may be non-negotiable, limiting the flexibility in employee compensation. Along similar lines, the recommendation to reduce the size of individual caseloads would require either hiring additional staff (an additional cost) or reducing the number of families receiving services. This would lower revenue from reimbursements and increase the wait time for families seeking services, again making this recommendation potentially infeasible for many agencies. Such policy changes would likely require shifts in priorities and/or legislation at the state or even national level (Ellett et al. 2007). While mental health services researchers are beginning to more fully explore financial considerations through a variety of cost analysis designs (e.g., Dopp et al. 2019), to date, such studies appear to be focused on the financial benefits of embedding specific interventions or EBPs in the community. It would be an important direction for future research to explore the financial considerations associated with various organizational strategies that may improve worker retention.

Other recommendations do not come with such obvious price tags, but may still have hidden costs for agencies that choose to implement them. These include leadership training and development, providing employees with high-quality clinical training and supervision, offering self-care options for staff (e.g., stress management workshops), and providing opportunities for career advancement within the organization. Workshops and trainings have associated fees in addition to the cost incurred by providing staff with the reduced workload or time off necessary for participation. Increased supervision also requires a reduced workload to offset the additional time requirement. Career advancement opportunities for employees already within an organization may also have short-term costs to the agency. All of these short-term costs might eventually be offset by long-term benefits to the agency, including reduced turnover and less hiring and training of new employees. In many cases, however, it may be challenging for agencies to take on upfront costs due to uncertainty about the stability of federal or state funding streams.

Recommendations pertaining to training providers in EBPs and participation in research are more nuanced still. There is some evidence that training in EBPs might reduce turnover if it is provided along with supportive consultation and fidelity monitoring (Aarons et al. 2009) and if clinicians are open to learning a new therapeutic model and techniques (Beidas et al. 2016). To this end, it has been suggested that promoting positive attitudes towards EBPs might result in greater participation in EBP training, as well as reduced turnover following training (Beidas et al. 2016).

Findings regarding staff recognition for EBP use have been inconsistent. Notably, one study found greater turnover in agencies that provide recognition for EBP use and posited that such recognition may foster clinician confidence in their new skills, leading them to leverage their training into a new position elsewhere (Beidas et al. 2016). Interestingly, this finding is in direct contrast with the recommendation made by Blankertz and Robinson (1997) to reduce turnover by providing greater staff recognition. To further complicate the issue of turnover in the context of EBP implementation, still others have suggested that implementing EBPs has no measurable impact on clinician turnover (Sheidow et al. 2007). One important nuance that warrants additional consideration is if perhaps inconsistencies in the findings related to the recognition for EBPs are related to whether clinicians practicing EBPs are primarily responsible for turnover, or if clinicians who are less open to EBPs account for the majority of turnover cases. Regardless, given the inconsistencies in recommendations, it is evident that stakeholders must carefully consider recommendations based on similarities in design and population.

Considerations for Behavioral Health Researchers

Despite the abundance of recommendations made for reducing turnover, no studies included recommendations specifically for researchers who must consider turnover when designing new studies. There are many important decisions related to turnover that should be made at the start of an effectiveness or implementation trial. For example, will clinicians who are lost to turnover be replaced? On one hand, replacement will guard against problems with statistical procedures, but replacement might create challenges with interpretation. If clinicians are to be replaced, researchers must plan ahead to ensure that new clinicians have access to requisite training. If clinicians are not replaced, will the study team recruit additional clinician participants at the outset so that enough clinicians are left at the final data point to have adequate power for detecting differences across groups and time? Given the importance of planning for turnover in research designs, the following considerations for behavioral health researchers are made based on the results of the current review in conjunction with relevant implementation science literature.

As the focus of effectiveness and implementation trials is on the provision of EBPs within community settings, not all clients are appropriate for that specific EBP. This means that the ratio of clinicians to client participants in effectiveness

and implementation trials is small and can even be a 1:1 ratio. In other words, every clinician trained contributes an average of one client participant to the study (e.g., Kolko et al. 2012; Southam-Gerow et al. 2010; Weisz et al. 2009). An effectiveness or implementation study with a recruitment goal of 200 clients may therefore be needed to recruit and train up to 200 community clinicians. The rate of participation also tends to be very uneven, with up to half of clinicians not referring/enrolling any clients into the study and the bulk of referrals/enrollments coming from a small number of clinicians. This means that substantial effort must be invested in recruiting and training clinicians so that enough client participants are able to be recruited into the study. Some researchers have addressed this concern by conducting training at multiple planned times throughout the study (e.g., Herschell et al. 2015), which has to be factored into the study timeline and budget.

As previously mentioned, some studies have reported a protective effect for EBP implementation (e.g., Aarons et al. 2009); however, others have found the opposite (e.g., Aarons and Palinkas 2007) or that there is not a measurable impact (Sheidow et al. 2007). While an implementation study may not be concerned with turnover as a primary outcome, researchers may want to consider collecting data on organizational-level constructs (e.g., culture, climate) and staff variables (e.g., demographics, attitudes toward EBPs) to understand possible differential rates of turnover within specific organizations, staff groups, or across study conditions, particularly given these mixed findings.

Gaps in the Literature

Given the speculative nature of many recommendations made to combat turnover, it is important that researchers begin investigating whether any such recommendations actually work. We are only aware of two groups that have tested the effectiveness of organizational interventions in reducing burnout and/or improving other factors associated with turnover, such as organizational culture and climate. In one such study, 145 behavioral health staff members were randomly assigned to a 1-day BREATHE (Burnout Reduction: Enhanced Awareness, Tools, Handouts, and Education) workshop or an active control condition (a 1-day workshop on person-centered treatment planning). Results showed no significant differences between the two groups on any of the outcome measures including burnout, job satisfaction, or turnover intentions (Rollins et al. 2016).

The second group evaluated the effectiveness of the Availability, Responsiveness, and Continuity (ARC) organizational intervention, which is designed broadly to support the improvement of behavioral health services for children (Glisson and Schoenwald 2005). Specifically, the ARC intervention may target factors such as improving the organizational culture and climate and increasing staff openness to new procedures. Thus, although it is not designed specifically to reduce turnover, it targets domains that have been strongly associated with turnover. Results indicate that the ARC intervention can improve organizational culture, climate, and work attitudes within behavioral health settings (Glisson et al. 2012). Even more promising, the probability of caseworker turnover was reduced by two-thirds following participation in the ARC intervention within a child welfare and juvenile justice setting (Glisson et al. 2006). While these results certainly paint a hopeful picture for reducing problematic levels of turnover and improving the work environment, additional research is needed to more fully explore the possibilities of the ARC organizational intervention.

Additional gaps in the literature pertain more specifically to how turnover is studied and measured. Evident in Table 1, researchers within this field are inconsistent in their measure of turnover intent versus actual turnover. Turnover intent is often used as a proxy for actual turnover, as it may be easier to measure in a short time frame and has been justified by the argument that "the best single predictor of an individual's behavior [is] a measure of his intention to perform that behavior" (Fishbein and Ajzen 1975, p. 369). However, there are discrepancies within the organizational psychology literature regarding the correlation between turnover intent and actual turnover, with some older research demonstrating weak correlations (e.g., Tett and Meyer 1993) and other research indicating that turnover intent is the strongest predictor of actual turnover (e.g., Griffeth et al. 2000). Given these inconsistencies, it is important that researchers carefully consider their choice of outcome variables, and stakeholders should take caution to not conflate turnover intent with actual turnover when interpreting findings. This is also an important area for future research, as the correlations between turnover intent and actual turnover may differ for the behavioral health workforce relative to the general workforce covered by the organizational psychology literature.

As previously mentioned, there are also concerns with the level at which variables are being assessed and analyzed within the turnover literature. While substantial conceptual work supports the multilevel and cross-level structure of many variables associated with turnover (e.g., Glisson et al. 2008a), few studies included in this review addressed variables at the organizational level, and even fewer still used statistical models that account for cross-level interactions. Future research examining turnover within behavioral health should be sure to appropriately consider multilevel variables.

While there are studies being done on the influence of state-level factors on turnover (e.g., Regan et al. 2017), there is an apparent gap in this literature. As most community behavioral health agencies are at least in some part affiliated with the public sector and the state, there is reason to believe that additional research on state-level influences are

a contributing factor to turnover (Swain et al. 2010). Hopefully, future research will more thoughtfully consider state-level influences on community mental health turnover.

One final point of consideration is the language used to discuss turnover and the related predictor variables. A noted concern within the field of implementation science has been a lack of common language, resulting in different terms used to describe the same concept (Damschroder et al. 2009). Along similar lines, turnover researchers have used different terms to describe the same or overlapping constructs (e.g., role stress, job stress, burnout). Even when describing different constructs, some researchers do not attend to larger multidimensional constructs to which their unidimensional construct might contribute (e.g., emotional exhaustion contributes to both the multidimensional construct of organizational climate and burnout). Given the differences in definitions and terms used, it is perhaps unsurprising that a variety of measures have also been used to assess turnover, as noted in Table 1. Considering all the complexities inherent in the study of turnover, it is crucial that researchers use consistent language and accurately describe variables so that future endeavors to reduce turnover are targeting appropriate domains. The aforementioned recommendations will help to establish a common language around turnover, as well as to provide insight into how to understand the interaction of multiple levels of turnover (e.g., employee, agency, state). The hope is that these recommendations will aid researchers and future meta-analytic work to better understand the weight of different factors that cause turnover and to be able to prevent problematic turnover that negatively impacts agencies, remaining staff, and client care.

Next Steps

Based on these gaps we have identified in the literature, we make the following five recommendations for next steps in the field: (1) There is a clear need for empirical tests of interventions to reduce turnover. (2) Turnover studies should focus on actual turnover rather than turnover intent. (3) Studies should consider multilevel variables and cross-level interactions when studying turnover. (4) There is a need for studies that focus on state- and county-level policy and budget-related variables that may be impacting turnover. (5) Finally, there is a clear need for a common lexicon of precisely defined terms related to research on workforce turnover.

Limitations

There are a few limitations to the current review that are worth noting. The aforementioned challenges associated with inconsistency in variable definition and measurement rendered it difficult to identify patterns in variables associated with different rates of turnover. This issue is further compounded by the relatively small number of studies included in this review, as well as generally poor study quality. A more nuanced understanding of variables associated with turnover may be more feasible as a direction for future research, particularly meta-analytic reviews, as the body of literature continues to grow.

Similarly, the current review is limited by the lack of a unifying conceptual framework. Though this is a limitation, it was an intentional decision to not use one specific conceptual or theoretical framework due to the plethora of discrepant frameworks employed by studies included in the review. This serves to further highlight the larger aforementioned gap in the literature that there are a multitude of existing frameworks that are used across studies, which can render comparisons across studies particularly challenging.

It is important to mention that behavioral health services are increasingly being delivered in settings outside of community behavioral health clinics, such as school and primary care clinics. Readers should keep in mind that the recommendations drawn from this review focus on community behavioral health settings and, as such, may or may not generalize to other service settings. As effectiveness and implementation research continues to branch into new services settings, the scope of systematic reviews on turnover may be expanded to include those service settings.

It is also important to keep in mind that the current review only included studies conducted in the USA This decision was made in order to control for international differences in policy, service structure, and other system-level variables. However, many of the predictors identified by papers included in the current review were not system-level variables. While it is possible that the identified predictors were influenced by system-level factors (e.g., higher burnout or more negative organizational culture resulting from restrictive healthcare policy), this is speculative in nature as none of the included papers directly examined system-level factors. Regardless, the restriction on the geographic locations outside the USA should not be overlooked as a limitation of the current study and the recommendations included in this review should be carefully considered before applying to settings outside of the USA

Conclusion

As the body of research on the effectiveness and implementation of EBPs for behavioral health has grown (Bruns et al. 2016), so too has research on the correlates and determinants of behavioral health staff turnover. Results of the current systematic review yielded 16 studies that described rates and/or predictors of turnover and included recommendations for key stakeholders on how to plan for and possibly reduce

turnover. Limitations noted within this body of research, including discrepant operational definitions of key variables and speculative recommendations for reducing turnover, provide opportunities for future avenues of research. It is critical that evidence-based methods for preventing turnover are identified, in order to develop a more stable workforce that can support burgeoning EBP implementation efforts.

Compliance with Ethical Standards

Conflict of interest All authors declare that they have no conflicts of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

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