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What are the ideal characteristics of empirically supported treatment adopters?

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ABSTRACT

There has been a clear and consistent shift in social work practice from offering treatment as usual to implementing empirically supported treatments (ESTs). As social work researchers and practitioners continue to evaluate the effectiveness of ESTs, their impact on clinical outcomes, and the various obstacles to their adoption, a developing literature could offer some guidance on characteristics of EST adopters. This paper provides a beginning discussion of the *ideal* characteristics of EST adopters both at the organizational and individual-levels. While this is a developing area of study, there are some important findings that could better serve community-based organizations, its work force, and the communities they serve.

INTRODUCTION

Social workers have made a substantial shift in the clinical services they provide toward the implementation of empirically supported treatments (ESTs) (Patterson et al, 2012). One of the main reasons that social workers have successfully incorporated ESTs into their practices are the surplus of studies linking clients' improved health outcomes and the general attitude that treatments should be based in scientific evidence (Institute of Medicine, 2001; Sackett & Haynes, 1995). Clinical workers must be well-informed and abreast of the newest knowledge in order to best serve their clients and remain professionally relevant (Pace, 2008; Gibbs, 2003). Because terms matter for both research and social work practice, implementing ESTs is very different from the process of using an evidence-based practice (EBP) model. A thorough discussion of the differences between implementing ESTs and EBPs are found in the literature (Gray et al., in-press; Thyer & Myers, 2011), but will be outlined briefly here.

Using the EBP model requires a *process* that involves the worker and patient understanding the problem, searching for and evaluating best practices, applying that practice, and continuing to evaluate the outcomes of the whole process. Implementing ESTs does not resemble the EBP process; in the former case, a best practice is chosen and that single practice is implemented. The issues related to staff training, implementation strategies, and practice fidelity also differ between these two procedures. Another important distinction is the issues related to understanding barriers to adopting these practices. What impedes the process of adopting EBPs are very different than the barriers that arise when adopting ESTs (Patterson & Dulmus, 2012; Patterson & McKiernan, 2010).

This paper predominantly focuses on the EST model, in which programs train their workers on a specific, proven practice and try to implement it throughout its clinical practice. Since ESTs have developed from a conceptual ideal to the gold standard of client care, the social work profession should focus its attention on ensuring that ESTs are widely implemented. Unfortunately, some studies indicate that both organizational and individual-level barriers prevent the implementation of ESTs within clinical services. Organizational-level studies have produced some interesting findings, particularly the factors associated with the culture and climate of an organization. For instance, organizational literature indicates that work place environment shapes decisions about implementing ESTs (Hemmelgarn et al., 2006; Patterson et al., 2012). Early dissemination and implementation literature (Rogers, 1995; Nadler & Tushman, 1997; Rousseau, 1997) revealed that any successful adoption of new technology is a social method as much as a technical method. Hemmelgarn and colleagues (2006) reported that an organization's social context can result in the organization managing problems differently, and can affect what types of interventions the organization selects and how it implements these

procedures. Similarly, the sway of an organization's social context on the choice, method, and everyday implementation of an intervention could alter its overall clinical effectiveness and impact on work-place environment (Aarons, 2004; Aarons, 2005; Burns & Hoagwood, 2005; Hemmelgarn et al., 2006; Patterson et al., 2012).

Individual worker issues also create barriers to implementing ESTs. For instance, Patterson et al., (2013a, 2013b) have indicated that worker characteristics such as gender, educational degree, and position within an organization, impact attitudes towards implementing ESTs. Individual worker perspectives toward ESTs can determine if ESTs are implemented into practice and these perspectives can impact the overall working conditions within the workplace.

Rather than continue to primarily investigate the growing list of barriers to implementing ESTs, the social work field would seem to benefit from understanding some of the *ideal* characteristics of EST adopters both at the organizational and individual-levels. While this is a developing area of study, there are some important findings that could better serve community-based organizations, its work force, and the communities they serve. This paper's intent is to discuss the scholarly work in organizational and worker-level factors and how this work can best inform what characteristic make up ideal EST adopters.

BACKGROUND

Organizational Characteristics

The Organizational Social Context Measurement Model (OSC), developed by Dr. Charles Glisson, is guided by a model of social context that comprises both organizational (e.g., structure and culture) and individual (e.g., work attitudes and behavior) level constructs, including individual and shared perception (e.g., organizational climate) that are believed to mediate the impact of the organization on the individual worker. By utilizing the OSC

measurement system, an organization's culture and climate profiles can be established as being good or bad (Glisson et al, 2008).

The OSC measurement tool contains 105 items that form four domains, sixteen first order factors and seven second order factors that have been confirmed in a national sample of 100 mental health service organizations with approximately 1,200 clinicians. The self-administered Likert scale survey takes approximately twenty minutes to complete and is presented on a scanable bubble sheet booklet.

The OSC is a measure of a program's culture and climate as reported by its workers; thus, scores are computed for the program as a whole and not for its individual workers. The scores reported are T scores, the computation of which is based on Glisson et al.'s (2008) sample of agencies. The three factors that comprise an organization's culture are Proficiency (.94), Rigidity (.81), and Resistance (.81.). The factors for organizational climate are Engagement (.78), Functionality (.90), and Stress (.94) (Glisson et al., 2008).

Cut-off points for ideal and less than ideal organization group selection follow the work of Glisson et al., (2008). Organizational profiles can be developed using the psychometric properties of the OSC tool, labeling them as having "ideal" or "less than ideal" culture and climate. The nationwide study of mental health clinics were used to establish profiles. These profiles developed as the result of a second-order confirmatory factor analysis of clinician responses, estimates of scale reliabilities, and indices of within-clinic agreement and between-clinic differences. A proficiency score of two or more standard deviations above the organization's resistance and rigidity scores is necessary to meet the "ideal" criteria. The criteria for being "less than ideal" is set by an agency's proficiency score being two or more standard deviations below both its resistance and rigidity scores (Glisson et al., 2008).

Once this profile is created, it allows for some level of understanding of the effects of organizational culture and climate on the individual, thereby allowing for the potential of the OSC measure predict the adoption of a new EST (Hemmelgarn et al., 2006). Because of its association with national norms, the OSC measuring tool allows researchers to study organization sites that meet certain social context criteria (e.g., organizational profile types). Understanding the characteristics within these types of organizations and the ability to identify specific contextual characteristics that affect EST implementation rates offer an exciting new approach that goes beyond in the existing organizational research.

Worker Characteristics

It also must be noted that there is a developing literature focusing on worker attitudes toward ESTs. Providers' attitudes toward new clinical practices may hamper or facilitate the adoption of ESTs into practice settings. A quick measure of workers' attitudes toward adopting ESTs was developed and attitudes were investigated in relation to a set of individual differences (Aarons, 2004; Aarons & Sawitzky, 2006; Garland, 2003; Pignotti & Thyer, 2009; Stahmer & Aarons, 2009). According to Aarons (2004) and Patterson et al., (2013), worker's attitudes toward ESTs can be reliably measured and vary in relation to individual differences. These attitudes have the potential to improve the process and effectiveness of implementation efforts (Aarons, 2004).

While the primary purpose of Aarons' 2004 study was to develop a brief EST attitude measure, there were other hypotheses tested. The original study found no differences in attitudes toward adoption of ESTs across disciplines (e.g., social work, MFT, psychology, psychiatry, and other). There were, however, individual differences across higher educational levels and professional status (Aarons, 2004; Aarons & Sawitsky, 2006).

Other studies measuring workers' attitudes about ESTs have produced mixed outcomes. For instance, Pignotti and Thyer (2009) found significant differences related to subject's age and years of experience, contrary to earlier studies (Aarons, 2004). Findings appear to be inconsistent between studies pertaining to subjects' educational attainment. The studies that reported educational attainment (Aarons, 2004; Loy, 1968; Ogborne et al., 1998) found that higher degreed workers conveyed more positive attitudes compared to those with less education. However, a more recent study found differences between the attitudes of workers with equal levels of educational attainment (Stahmer & Aarons, 2009). Aarons' original 2004 EBPAS validation study did not find significant differences between a worker's educational discipline and EST attitudes. However, a later study (Stahmer & Aarons, 2009) found attitudinal differences between workers with different educational backgrounds.

Again, while there is a growing and developing literature on organizational and individual-level barriers to implementing ESTs, studies that identify possible profiles of EST implementers are lacking. Although there are gaps in the knowledge, some findings can begin to reveal characteristics of EST implementers.

Ideal Organizational Implementers

Glisson and colleagues have done an outstanding job at understanding the culture and climate within child welfare organizations. They have rightly documented that an organization's culture and climate are correlated to quality of care, working conditions, and implementing new technologies. Their work on developing organizational profiles (e.g., good and bad cultures and climates) can assist leaders with addressing their internal environments.

Organizational profiles of EST implementers could also be helpful. At this point, there is a lack of understanding if good culture and climate organizations are good EST implementers.

Some findings have shown that there are significant culture and climate differences between programs using ESTs and those that do not (Patterson et al., 2012). Arguably, in order to successfully implement ESTs, the factors that make up a good culture and climate would be altered.

For instance, Patterson and colleagues (2012) found that programs using ESTs had significantly more rigid and resistant cultures. While these findings would be considered bad culture indicators (Glisson et al., 2008), programs that expend the necessary resources to train workers and ensure that the EST is properly applied throughout practice need some level of rigidity and resistance to change. Utilizing an EST's manualized approach requires some level of fidelity assurances. There should be an organizational understanding of rigidity contained to implementing an EST. Also, the term "resistant," in relation to culture, implies that workers will resist any efforts to new changes. This urge to allow new changes to enter the system, while negative in the culture profile, is useful when organizations decide to implement ESTs. Having invested the time and resources needed to implement ESTs, the organization would be wise to focus solely on the EST and not allow new practices to enter and interfere with the EST protocols.

According to Glisson et al., (2008), a good working climate has workers who feel engaged with their clients, function as a group receiving peer support, and are not overly stressed by the lack of accomplishing work tasks. The factors making up good organizational climate, engagement, functionality, and stress also suffered in programs using ESTs (Patterson et al., 2012). Programs using ESTs were significantly less engaged and functional and more stressed.

Some of the earlier debates about social workers adopting EBP and EST models should be reexamined. For instance, Gambrill (1999, 2003, 2006), O'Hare (2005), and Pollio (2006)

cautioned that some clinical workers' professional experiences might be disrupted due to new practices implementation and Gioia (2007) and Mattaini & Moore (2003) elucidated the organizational disturbances caused by possibly implementing best practices models. The routines developed over time in task-performing groups will continue on without planned strategies to change its path (Gersick & Hackman, 1990; McGrath et al., 1984; Szulanski, 2000). An organization able to implement the required protocols of ESTs (e.g., rigidity and resistance), while balancing the clinical autonomy of its workers, would greatly improve its workplace climate. The ideal organizational EST adopter would positively reinforce the stringency needed to meet implementation standards and resist efforts to change practice behaviors before the EST is fully adopted into its system. This effort demands a specific plan to address and alter the work team's current routine(s). The organization must support its workers and design a system of peer support. Adopting ESTs requires strict protocols. Developing a system that allows the workers to be clinically engaged, self-supporting, and able to complete important tasks on time will greatly improve the chances that the organization is an ideal setting for EST adoption.

Ideal Individual Implementers

Aarons (2004) and Patterson et al (2012, 2013) have carried out empirical research directed toward investigating the various characteristics of workers who are likely to adopt ESTs. Aarons' *EBPAS* measures worker's attitudes toward adopting EBPs. While Aarons' scale uses the term "EBP," the instructions and the terms in the questions are clearly asking about the worker's attitudes towards using ESTs. For instance, the survey states: "The following questions ask your feelings about using a new type of therapy, interventions or treatments. Manualized therapy refers to any intervention that has specific guidelines and/or components that are outlined in a manual and/or that are to be followed in a structured/predetermined way."

Researchers using the *EBPAS* have had a mixture of outcomes. In a small sample using the *EBPAS*, Patterson et al., (2013), found that the individuals best suited for adopting ESTs were females and workers who held a degree in something other than education, psychology or nursing. In a larger study with over 1200 participants, Patterson and colleagues (2013) indicated that one of the most important factors for adopting ESTs is the worker's openness to change their practice. Conditions that foster an open attitude toward changes in clinical practice among workers are essential for EST adoption. As the field of social work continues to strive to offer the best, most up-to-date clinical services, having an open-minded work force could be one of the most significant factors for accomplishing this goal. If organizational culture and climate are possible barriers to implementing ESTs, the open-minded worker could be the major force behind demolishing this barrier.

DISCUSSION AND APPLICATION TO PRACTICE

These types of studies will begin to fill the gaps in knowledge of the differences in the characteristics of organizations and workers who are more likely to implement new clinical practices; they will also identify factors that contribute to EST implementation enhancement. Understanding who adopters are and why they adopt ESTs would seem beneficial for all interested parties. As the social work field continues to move toward widespread acceptance and implementation of ESTs in clinical services, it is important to understand not only potential barriers to EST implementation, but what types of workers will best adopt ESTs. This information could be important for organizations that are responsible for carrying out ESTs and looking for a workforce capable of complying. While it can be controversial to evaluate a worker's attitudes and EST implementation characteristics during the hiring process, high standards and ethical practice require the ability to focus on what best serves the community. In

an effort to shape the science of social work (see Brekke, 2012), and bridge the gap between research and practice (Institute of Medicine, 2001), scientific investigation into what types of organizations and workers are ideal adopters is an essential building block and step as we cross this bridge.

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