

Attitudes to Evidence-Based Practice among Social Work Practitioners in South Africa

Frederik Booysen

<https://orcid.org/0000-0001-7449-3221>
University of the Witwatersrand,
South Africa
frederik.booyesen@wits.ac.za

Paulin Mbecke

<https://orcid.org/0000-0002-4669-7128>
Université du Moyen Lualaba, DRC
University of the Free State,
South Africa
pmbecke@gmail.com

Amanda de Gouveia

<https://orcid.org/0000-0003-4559-4386>
University of the Free State,
South Africa
agouveia@ufs.ac.za

Tetanda Manomano

<https://orcid.org/0000-0002-8245-4537>
University of the Free State,
South Africa

Pius Tanga

<https://orcid.org/0000-0003-1359-8729>
University of the Free State,
South Africa
ptanga@ufh.ac.za

Abstract

The implementation of evidence-based social work practice is an international priority. Attitudes to evidence-based practice are instrumental in its dissemination and active implementation. This paper, the first of its kind, explores the nature and correlates of attitudes to evidence-based practice among social work practitioners in South Africa, based on a descriptive statistical analysis of data from a small online survey. In terms of results, the Evidence-Based Practice Attitude Scale suggests that respondents' attitudes to evidence-based practice are generally positive. One exception is the requirements subscale, where performance indicates some resistance to a regulatory or authoritarian approach to the implementation of evidence-based social work practice. Furthermore, the limited evidence presented here shows that more experienced social work practitioners are less inclined to adopt prescribed evidence-based practice. Moreover, they find such practice less appealing, and



are less open to implementing new structured and manualised interventions. With regard to recommendations, it is proposed that training in evidence-based practice be incorporated into continuous professional development programmes for social work practitioners. In addition, studies of this nature should be replicated on a more comprehensive and representative scale in South Africa and other developing countries.

Keywords: evidence-based practice; Evidence-Based Practice Attitude Scale; social work; South Africa

Introduction

Evidence-based practice (EBP) in the field of social work emerged from the evidence-based medicine movement in the 1990s (Gilgun 2005). EBP is characterised by the social work practitioner making decisions on service provision based on “not only research evidence but also client preferences and values, situational circumstances, professional ethics, the practitioner’s existing skills, and available resources” (Thyer and Myers 2011, 8). It advocates a role for the “growing body of evidence describing effective interventions with a variety of populations” in informing social work practice (Wike et al. 2014, 161). Today in fact, EBP is mandated by funders and policymakers alike, and its dissemination and implementation an international priority. The publication in the Western world of numerous studies on social work and EBP is indicative of the prominence of the EBP movement (Scurlock-Evans and Upton 2015). In the relatively voluminous literature on the Evidence-Based Practice Measurement Scale (EBPAS), the specific measurement instrument employed in this study, only a single American study focuses exclusively on social workers (Pignotti and Thyer 2009), while another study recruited its participants from attendees of a social work conference in the United States (Cesnales, Dakin, and Rose 2016). Gudjonsdottir et al. (2017) in turn surveyed Icelandic social workers using EBPAS. EBPAS, therefore, has not been widely applied in studies of EBP attitudes among social workers, including social workers in developing countries such as South Africa, a research gap that is dealt with in this paper.

Evidence-based Social Work Practice

EBP consists of a five-step process. The practitioners (a) convert a need for information into an answerable question, (b) consult the best available evidence on the issue, (c) critically evaluate the validity, impact and applicability of this evidence, (d) integrate the relevant evidence into their clinical expertise and client values and circumstances, and (e) evaluate their expertise in this practice and embark on actions to improve it (Thyer and Myers 2011, 18). EBP, therefore, transcends merely being equipped with research knowledge.

Empirical evidence, however, suggests that the implementation of EBP in the field of social work has been slow and suboptimal (Wike et al. 2014). There are many barriers

to the implementation of EBP in the field of social work. The obstacles, among others, include a lack of training and supervision, poor knowledge and skills, the organisational culture, poor leadership, and financial resource constraints. Central to these are the attitudes of practitioners regarding EBP (Gray et al. 2012; Scurlock-Evans and Upton 2015; Tuten et al. 2016; Wike et al. 2014). Not only are attitudes to EBP related to readiness with regard to its implementation (Damschroder et al. 2009), but in Aarons, Hurlburt and Horwitz's (2011) conceptual model of the implementation of EBP, attitudes also relate directly to active implementation. Ultimately, therefore, these attitudes affect decisions pertaining to the transfer of knowledge in the arena of social work practice, which is necessary to amplify the impact of the social work profession.

For this reason, this paper explores the attitudes to EBP among social work practitioners in South Africa. The paper is structured as follows: Firstly, the paper describes the main components of the methodology, namely the survey data, the key measures and their internal consistency, and the analytical approach adopted in the empirical analysis. In the results section of the paper, the various characteristics of the study population are outlined, followed by a summary of the nature of the respondents' attitudes to EBP. Next, the paper compares attitudes to EBP across various socio-demographic characteristics of practitioners as well as aspects of the work environment to determine how such factors may be associated with attitudes to EBP. The paper also sets out the study's main limitations. Following the discussion of the study's conclusions and recommendations, the paper proposes avenues for further research. In relation to its contribution to the literature, this study is the first to implement Aarons' (2004) Evidence-Based Practice Attitude Scale (EBPAS) in the context of a developing country, and is one of only a handful of studies to apply the methodology exclusively to the social work profession.

Methodology

Data

The ethics committee of the University of the Free State's Faculty of Economic and Management Sciences approved the study (UFS-HSD2016/0163). An online survey was conducted with a small sample of South African social work practitioners, using SurveyMonkey. An email invitation to participate in the study was circulated to registered members of the South African Association of Social Workers in Private Practice (SAASWIPP). The invitation was also posted on the organisation's website and that of the South African Council for Social Service Professions (SACSSP). Registration with the SACSSP, which is a statutory body, is compulsory for all social workers. By contrast, registration with the SAASWIPP is voluntary and focuses exclusively on private sector practitioners who provide their services on a fee-for-service basis. A total of 124 social workers responded to the online survey. The analytical sample consisted of the 108 social work practitioners who indicated that they

are currently in practice. The study participants provided written informed consent as a first step in completing the online survey.

Measurement

The EBPAS was administered to the survey respondents (Aarons 2004). The EBPAS was originally developed to “assess mental health provider attitudes toward adoption of innovation and EBP in mental health and social service settings” (Aarons et al. 2012, 332). The 15-item index comprises four sub-scales, namely (1) requirements (the likelihood of the adoption of EBP if it was required by an agency, supervisor, or state), (2) appeal (the likelihood of the adoption if EBP is intuitively appealing, could be used correctly, or was being used by colleagues who were happy with it), (3) openness (the extent of openness to trying new interventions and willingness to try or use more structured or manualised interventions), and (4) divergence (a negative perception of EBP as not clinically useful and less important than clinical experience) (Aarons 2004; Hitch 2016). The response scale to the 15 questions is: “not at all” (0), “to a slight extent” (1), “to a moderate extent” (2), “to a great extent” (3), and “to a very great extent” (4). Table 1 presents the specific questions for each of the 15 items in the four measurement scales. The total score represents the mean of all 15 items. The items on the divergence sub-scale are reverse scored when constructing the total EBPAS score (Aarons 2004). A total of 70 study participants responded to all 15 questions. In addition, the survey respondents provided some basic socio-demographic and occupational information, including gender, age, sector of employment, and years of experience.

Table 1: EBPAS, items by sub-scale

<i>Question</i>		<i>Sub-scale</i>
Instruction: The following questions ask about your feelings about using new types of therapy, interventions, or treatments. Manualised therapy, treatment, or intervention 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 or predetermined way. Indicate the extent to which you agree with each item using the following scale.		
1.	I like to use new types of therapy or interventions to help my clients.	3
2.	I am willing to try new types of therapy or interventions even if I have to follow a treatment manual.	3
3.	I know better than academic researchers do how to care for my clients.	4
4.	I am willing to use new and different types of therapy or interventions developed by researchers.	3

<i>Question</i>		<i>Sub-scale</i>
5.	Research-based treatments or interventions are not clinically useful.	4
6.	Clinical experience is more important than using manualised therapy or interventions.	4
7.	I would not use manualised therapy or interventions.	4
8.	I would try a new therapy or intervention even if it were very different from what I am used to doing.	3
Instruction: If you received training in a therapy or intervention that was new to you, how likely would you be to adopt it if		
9.	it was intuitively appealing?	2
10.	it “made sense” to you?	2
11.	it was required by your supervisor?	1
12.	it was required by your agency?	1
13.	it was required by your state?	1
14.	it was being used by colleagues who were happy with it?	2
15.	you felt you had enough training to use it correctly?	2

Note: Sub-scale 1 = requirements, 2 = appeal, 3 = openness, 4 = divergence.

Source: Aarons (2004, 72)

Internal Consistency

In terms of internal consistency, Cronbach’s alphas mostly fall within the ranges reported in the empirical literature. In fact, the requirements sub-scale ($\alpha = 0.96$) even exceeds that reported in any other study, where four studies reported an alpha of 0.94 (Aarons and Sommerfeld 2012; De Paul, Indias, and Arruabarrena 2015; Nakamura et al. 2011), including the study by Gudjonsdottir et al. (2017) of social workers in Iceland. The reliability of the appeal sub-scale is low at 0.70, but considerably greater than the lowest value of 0.59 reported by Melas et al. (2012). Aarons et al.’s (2010) marker is considerably greater, at 0.80. In the case of the openness sub-scale, the study records an alpha statistic equivalent to the maximum number recorded in the validation study of Aarons et al. (2010) ($\alpha = 0.84$). The divergence sub-scale performed the worst of the four sub-scales ($\alpha = 0.59$). The internal consistency of this sub-scale is higher than the lowest alpha of 0.51 (Gudjonsdottir et al. 2017), but considerably lower than the 0.66 reported by Aarons et al. (2010). On aggregate, EBPAS in this study scored 0.79 on the yardstick of internal consistency. This falls within the range of the minimum ($\alpha = 0.72$) (De Paul, Indias, and Arruabarrena 2015) and maximum ($\alpha = 0.86$) (Aarons and Sommerfeld 2012) values reported in the literature. With reference to the guidelines published by Hamilton and Carr (2016), the respective scales’ reliability can be described as excellent (requirements), good (openness), and acceptable (appeal and total), but less than acceptable for divergence. However, the latter scale has performed equally poorly or even worse in other studies.

Analysis

The analysis conducted in this paper comprises three components. Firstly, the characteristics of the study participants are outlined (Table 2). A distinction is drawn between the full analytical sample ($n = 108$) and the smaller sub-sample with complete EBPAS data ($n = 70$). This test for selection bias is complemented by a comparison of practitioners in the private and non-private sectors, given the use of the two very different sampling frames. Secondly, the paper describes the mean scores on each sub-scale and the aggregate scale, together with the corresponding standard deviations. Finally, a bivariate analysis is conducted, comparing scores on the five scales across each of the four descriptive characteristics (age, location, sector, and experience), using a one-way analysis of variance (Table 3). Given the small number of men in the EBPAS sub-sample ($n = 5$), gender is excluded from the latter analysis. The data analysis was conducted by means of Stata 13 (StataCorp 2013). As far as the criteria for statistical significance in the latter bivariate analysis are concerned, the common gold standard of 5 per cent is employed together with the more strict 1 per cent level and the less conservative margin of 10 per cent.

Results

Descriptive Characteristics of Survey Respondents

The full sample is almost exclusively female (93.0%), and older rather than younger. A greater proportion of the respondents therefore fall within the top three age groups than in the two lower groups, which are smallest in size (Table 2). Three quarters of the respondents (76.0%) practise in urban areas and more than half in Gauteng (55.0%). A relatively large proportion of the sample (44.0%) has more than twenty years of experience in social work practice. Importantly, there are no statistically significant differences between the full survey sample and the sub-sample with complete EBPAS data, which are employed in the bivariate descriptive analysis.

Sectoral Composition of the Sample

Table 2 illustrates an important feature of the sample in relation to its sectoral composition. This is, most likely, a function of the two diverse sampling frames used in recruiting study participants (i.e. the SACSSP and SAASWIPP). More than half of the study participants (53.6%) work in the private sector. This is considerably more than the proportion of social workers employed in the non-private sector, which has been described as “few” (Lund 2010) and estimated at approximately a third (Earle 2008). This means that private sector practitioners are relatively over-represented in this study. With the exception of gender, respondents in the private sector differ significantly from those in the public and NGO sectors in all respects. Practising social workers from the private sector who participated in the study are significantly older ($p = 0.026$) and, as a result, significantly more experienced ($p < 0.001$). Apart from the high and almost equal share of study participants working in the Gauteng province, private practitioners who

responded to the survey more likely work in the Western Cape province and those outside the private sector in the Free State province ($p = 0.006$).

Table 2: Characteristics of the study population

<i>Characteristic</i>	<i>Private sector (n = 53)</i>	<i>Non-private sector (n = 49)</i>	<i>EBPAS sample (n = 70)</i>	<i>Full sample (n = 108)</i>
<i>Sector:</i>				
Public			11.6	14.3
Non-profit			34.8	31.6
Private			55.2	53.6
<i>Total</i>			<i>100.0</i>	<i>100.0</i>
<i>Gender:</i>				
Male	5.7	8.5	7.1	7.0
Female	94.3	91.5	92.9	93.0
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
<i>Age (years):</i>				
20–29	5.7	21.3	12.9	13.0
30–39	9.4	23.4	18.6	16.0
40–49	32.1	19.2	25.7	26.0
50–59	24.5	19.2	20.0	22.0
60+	28.3	17.0	22.9	23.0
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
<i>Area:</i>				
Urban	88.7	61.7	72.9	76.0
Peri-urban	7.6	17.0	14.3	12.0
Rural	3.8	21.3	12.9	12.0
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
<i>Province:</i>				
Gauteng	56.6	53.2	50.0	55.0
Western Cape	28.3	4.3	18.6	17.0
Free State	3.8	29.8	18.6	16.0
Other	11.3	12.7	12.8	12.0
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
<i>Experience (years):</i>				
0–5	0.0	27.7	12.9	13.0
5–10	9.4	17.0	15.7	13.0
10–15	17.0	10.6	14.3	14.0
15–20	22.6	8.5	15.7	16.0
20+	50.9	36.2	41.4	44.0
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

Note: Numbers may not add up due to rounding.

Survey Respondents' Attitudes to Evidence-based Practice

The attention now shifts to the description of the respondents' attitudes to EBP. The means (standard deviations) for the respective sub-scales are: requirements 2.17 (1.25); appeal 2.93 (0.64); openness 2.93 (0.77); and divergence 1.37 (0.67). The mean for the aggregate scale is 2.70, with a standard deviation of 0.49. Based on this evidence, the respondents generally are not "indifferent", but are supportive of EBP. Scores on three of the four sub-scales differ considerably from "2", which some researchers consider the point of "indifference" on the five-point Likert scale. In other words, EBP was thought to be appealing to a greater extent. The respondents were also open to EBP to a relatively great extent. Negative perceptions of EBP relative to clinical experience were relatively slight. On the aggregate scale, agreement leaned towards "a great extent". The only exception, in terms of positive attitudes to EBP, is the requirements sub-scale, where the average is around "2". That is to say that, to a large extent, the respondents only agreed moderately with EBP being adopted if required by an agency, supervisor, or the state. Furthermore, the levels of the attitudes to EBP that were observed among the study participants are not that different from the national norm for American mental health service providers published by Aarons et al. (2010).

Attitudes to Evidence-based Practice according to the Characteristics of the Respondents

According to Table 3, openness to adopting EBP is significantly associated with age ($p = 0.036$). Younger age groups are more open to EBP than older age groups, a result mirrored in the age group differences for the total score ($p = 0.074$). Working in an urban or rural allocation has no bearing on attitudes to EBP. The likelihood of adopting EBP if required by an agency, supervisor or the government, is significantly greater in the public sector compared to the non-profit or private sectors ($p = 0.097$). None of the other three sub-scales or the aggregate scale varies significantly by sector of employment. Experience, however, is associated with three of the four sub-scales. Interestingly, the attitudes to EBP of practitioners with less experience are more positive in all instances. This is so particularly in the case of the openness sub-scale ($p = 0.023$), but marginally so for the requirements ($p = 0.057$) and appeal ($p = 0.079$) sub-scales. As a result of the significant association with experience for almost all of the sub-scales, the differences in the aggregate scale are also somewhat significant ($p = 0.052$).

Table 3: Comparative analysis of attitudes to EBP, by sub-scale

<i>Characteristic</i>	<i>Requirements</i>	<i>Appeal</i>	<i>Openness</i>	<i>Divergence</i>	<i>Total</i>
<i>Age (years):</i>					
20–29	2.29 (0.91)	3.11 (0.54)	3.22 ** (0.56)	1.58 (0.67)	2.79 * (0.25)
30–39	2.53 (1.31)	2.96 (0.63)	3.09 (0.70)	1.55 (0.67)	2.77 (0.62)
40–49	2.50 (1.09)	3.11 (0.68)	3.12 (0.57)	1.23 (0.58)	2.90 (0.41)
50–59	1.88 (1.39)	2.76 (0.63)	2.92 (0.74)	1.30 (0.74)	2.61 (0.55)
60+	1.68 (1.33)	2.76 (0.64)	2.42 (0.96)	1.31 (0.72)	2.43 (0.44)
<i>Area:</i>					
Rural	2.59 (1.06)	2.88 (0.91)	2.94 (0.75)	1.52 (0.80)	2.73 (0.56)
Urban	2.10 (1.27)	2.94 (0.60)	2.93 (0.78)	1.34 (0.65)	2.69 (0.49)
<i>Sector:</i>					
Public	2.75 * (1.03)	2.87 (0.50)	3.06 (0.041)	1.65 (0.46)	2.75 (0.15)
Non-profit	2.38 (1.02)	3.08 (0.71)	3.11 (0.61)	1.47 (0.71)	2.80 (0.51)
Private	1.86 (1.37)	2.86 (0.62)	2.75 (0.88)	1.22 (0.67)	2.61 (0.53)
<i>Experience (years):</i>					
0–10	2.73 * (0.92)	3.17 * (0.55)	3.25 ** (0.50)	1.53 (0.68)	2.91 * (0.37)
10–20	1.98 (1.31)	2.95 (0.69)	3.01 (0.64)	1.42 (0.61)	2.67 (0.57)
20+	1.91 (1.32)	2.75 (0.61)	2.65 (0.92)	1.21 (0.69)	2.57 (0.48)

Note: Means with standard deviations in parentheses. Lower scores on the divergence sub-scale denote better performance. Statistical significance is presented as *** (1%), ** (5%), * (10%).

Discussion

This study is the first to employ the EBPAS methodology in investigating the attitudes to EBP among social work practitioners in a developing country context such as South Africa. Generally speaking, attitudes to EBP among this sample of South African social work practitioners are positive. One exception, however, is the requirements sub-scale,

which may reflect some resistance to an authoritarian or regulatory approach to implementing EBP.

Although, as stated, it was not possible to investigate gender differences in attitudes to EBP with these data, it is interesting to point out that Cesnales, Dakin and Rose (2016) found female practitioners to be more positive towards EBP. The evidence presented here suggests that younger practitioners are more favourably oriented towards EBP in terms of openness to its adoption. So too, the role of experience is underscored. More experienced social work practitioners are less inclined to adopt EBP when prescribed to do so. They find such a practice less appealing, and are less open to implementing newly structured and manualised interventions. In sum, based on comparisons of the aggregate scale, social work practitioners with more experience are less favourably disposed towards EBP. Cesnales, Dakin and Rose (2016), however, found more experienced case managers to experience less divergence, but also report that the less experienced scored more favourably on appeal. This makes sense given that recently qualified practitioners have potentially higher exposure to the latest knowledge on empirically supported interventions. Private sector practitioners who participated in the survey display less positive attitudes to EBP than those in the public sector, underlining the importance of the role of organisational context in understanding attitudes to EBP. This reality is emphasised by Tuten et al. (2016).

Limitations of the Study

The study has some important limitations. Firstly, the sample is small and, in some ways, purposive. As a result, the findings cannot be generalised to all social workers in South Africa. As the descriptive analysis suggests, private practitioners, i.e. SAASWIPP members, are relatively over-represented. The following groups are also relatively under-represented: male social workers, social workers in the public sector and those working in rural areas, and social work practitioners from provinces other than Gauteng. In particular, male social workers need to be over-sampled in a replication of studies of this nature. Furthermore, the small sample ruled out meaningful sub-group analysis by sector of employment. The sample size also constrains the statistical power of the analysis, precluding the application of regression analysis.

Secondly, although the social work practitioners who participated in the study generally exhibit positive attitudes to EBP, it is possible that these attitudes are overstated owing to selection bias. Social workers with more positive attitudes to EBP may be more likely to participate in research. In addition, it was not possible to compare the EBPAS estimates from this study with those published in two others studies on attitudes to EBP among social work practitioners (Gudjonsdottir et al. 2017; Pignotti and Thyer 2009), because the authors did not report the means and standard deviations of the aggregate and sub-scales.

Conclusions and Recommendations

The attitudes to EBP among the social work practitioners in South Africa who responded to the survey are generally positive. Based on the negative association of attitudes to EBP with greater age and experience, it is proposed that capacity building in EBP be rolled out as part of programmes for continuing professional development offered to social work practitioners.

In terms of avenues for further research, there are four important and logical next steps to follow in building on this study. First, the study should be replicated using a more elaborate methodological approach, to allow for the generalisation of the results. Secondly, a study of this nature can be expanded to include a validation of EBPAS-50 (Aarons et al. 2012). Similarly, researchers can assess EBPAS's concurrent and criterion validity using the equally widely used 24-item Evidence-Based Practice Questionnaire (EBPQ) (Upton, Upton and Scurlock-Evans 2014). Melnyk, Fineout-Overholt and Mays' (2008) two scales on EBP beliefs and their implementation can also be used to further complement research of this nature. Thirdly, additional data should be collected on not only behavioural intentions and actual decisions regarding the adoption of EBP, but also on a larger variety of correlates of attitudes. This is necessary to better understand the diversity in attitudes to EBP as well as their implications for its implementation. Important examples include organisational climate and culture, and practices and experiences of supervision. Lastly, the resultant evidence should be employed to develop and experimentally evaluate interventions targeting the predictors of the behavioural change required for the effective implementation of EBP in the social work profession. In fact, few studies have explored the link between attitudes and the actual adoption of interventions. One exception is Pignotti and Thyer (2009), who reported a weak yet positive correlation between EBPAS scores and the adoption of novel (yet unsupported) interventions by social work practitioners.

Moreover, it is important to point out that EBP is but one approach to supporting informed decision-making (Manuel et al. 2009). Two other prominent approaches include empirical clinical practice (ECP) and empirically supported treatment (EST) (Thyer and Myers 2011). The literature also refers to case-based practice (CBP) (Okpych and Yu 2014) and evidence-informed practice (EIP) (Nevo and Slonim-Nevo 2011). As such, it is necessary to study EBP alongside other approaches to social work practice to fully understand how the implementation of these paradigms plays out in practice.

Acknowledgements

This paper has been produced with the financial assistance of the Programme to Support Pro-Poor Policy Development (PSPPD), a partnership programme of the South African Department of Planning, Monitoring and Evaluation (DPME) and the European Union

(EU). The contents of this report cannot be taken to reflect the views of the DPME and the EU.

References

- Aarons, Gregory A. 2004. "Mental Health Provider Attitudes toward Adoption of Evidence-Based Practice: The Evidence-Based Practice Attitude Scale (EBPAS)." *Mental Health Services Research* 6 (2): 61–74. <https://doi.org/10.1023/B:MHSR.0000024351.12294.65>.
- Aarons, Gregory A., Guy Cafri, Lindsay Lugo, and Angelina Sawitzky. 2012. "Expanding the Domains of Attitudes towards Evidence-Based Practice: The Evidence-Based Practice Attitude Scale-50." *Administration and Policy in Mental Health* 39 (5): 331–40. <https://doi.org/10.1007/s10488-010-0302-3>.
- Aarons, Gregory A., Charles Glisson, Kimberly Hoagwood, Kelley Kelleher, John Landsverk, Guy Cafri, and Research Network on Youth Mental Health. 2010. "Psychometric Properties and United States National Norms of the Evidence-Based Practice Attitude Scale (EBPAS)." *Psychological Assessment* 22 (2): 356–65. <https://doi.org/10.1037/a0019188>.
- Aarons, Gregory A., Michael Hurlburt, and Sarah M. Horwitz. 2011. "Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors." *Administration and Policy in Mental Health and Mental Health Services Research* 38 (1): 4–23. <https://doi.org/10.1007/s10488-010-0327-7>.
- Aarons, Gregory A., and David H. Sommerfeld. 2012. "Leadership, Innovation Climate, and Attitudes toward Evidence-Based Practice during a Statewide Implementation." *Journal of the American Academy of Child and Adolescent Psychiatry* 51 (4): 423–31. <https://doi.org/10.1016/j.jaac.2012.01.018>.
- Cesnales, Nicole I., Emily K. Dakin, and Paige D. Rose. 2016. "HIV Case Managers' Attitudes toward Empirically Supported Interventions." *Journal of HIV/AIDS and Social Services* 15 (2): 234–47. <https://doi.org/10.1080/15381501.2014.951504>.
- Damschroder, Laura J., David C. Aron, Rosalind E. Keith, Susan R. Kirsh, Jeffery A. Alexander, and Julie C. Lowery. 2009. "Fostering Implementation of Health Services Research Findings into Practice: A Consolidated Framework for Advancing Implementation Science." *Implementation Science* 4:50. <https://doi.org/10.1186/1748-5908-4-50>.
- De Paul, Joaquín, Silvia Indias, and Ignacia Arruabarrena. 2015. "Adaptation of the Evidence-Based Practice Attitude Scale in Spanish Child Welfare Professionals." *Psicothema* 27 (4): 341–6. <https://doi.org/10.7334/psicothema2015.67>.
- Earle, Nicci. 2008. *Social Work in Social Change: The Profession and Education of Social Workers in South Africa*. Cape Town: HSRC Press.

- Gilgun, Jane F. 2005. "The Four Cornerstones of Evidence-Based Practice in Social Work." *Research on Social Work Practice* 15 (1): 52–61. <https://doi.org/10.1177/1049731504269581>.
- Gray, Mel, Elyssa Joy, Debbie Plath, and Stephen A. Webb. 2012. "Implementing Evidence-Based Practice: A Review of the Empirical Literature." *Research on Social Work Practice* 23 (2): 157–66. <https://doi.org/10.1177/1049731512467072>.
- Gudjonsdottir, Bjorg, Hervor A. Arnadottir, Halldor S. Gudmundsson, Sigrun Juliusdottir, and Solveig A. Arnadottir. 2017. "Attitudes toward Adoption of Evidence-Based Practice Among Physical Therapists and Social Workers: A Lesson for Interprofessional Continuing Education." *Journal of Continuing Education in the Health Professions* 37 (1): 37–45. <https://doi.org/10.1097/CEH.0000000000000139>.
- Hamilton, Elena, and Alan Carr. 2016. "Systematic Review of Self-Report Family Assessment Measures." *Family Process* 55 (1): 16–30. <https://doi.org/10.1111/famp.12200>.
- Hitch, Danielle P. 2016. "Attitudes of Mental Health Occupational Therapists toward Evidence-Based Practice." *Canadian Journal of Occupational Therapy* 83 (1): 27–32. <https://doi.org/10.1177/0008417415583108>.
- Lund, Francie. 2010. "Hierarchies of Care Work in South Africa: Nurses, Social Workers and Home-Based Care Workers." *International Labour Review* 149 (4): 495–509. <https://doi.org/10.1111/j.1564-913X.2010.00100.x>.
- Manuel, Jennifer I., Edward J. Mullen, Lin Fang, Jennifer L. Bellamy, and Sarah E. Bledsoe. 2009. "Preparing Social Work Practitioners to Use Evidence-Based Practice." *Research on Social Work Practice* 19 (5): 613–27. <https://doi.org/10.1177/1049731509335547>.
- Melas, Christos D., Leonidas A. Zampetakis, Anastasia Dimopoulou, and Vassilis Moustakis. 2012. "Evaluating the Properties of the Evidence-Based Practice Attitude Scale (EBPAS) in Health Care." *Psychological Assessment* 24 (4): 867–76. <https://doi.org/10.1037/a0027445>.
- Melnyk, Bernadette M., Ellen Fineout-Overholt, and Mary Z. Mays. 2008. "The Evidence-Based Practice Beliefs and Implementation Scales: Psychometric Properties of Two New Instruments." *Worldviews on Evidence-Based Nursing* 5 (4): 208–16. <https://doi.org/10.1111/j.1741-6787.2008.00126.x>.
- Nakamura, Brad J., K. Charmaine, Higa McMillan, Kelsie H. Okamura, and Scott Shimabukuro. 2011. "Knowledge of and Attitudes Towards Evidence-Based Practices in Community Child Mental Health Practitioners." *Administration and Policy in Mental Health Services Research* 38 (4): 287–300. <https://doi.org/10.1007/s10488-011-0351-2>.

- Nevo, Isaac, and Vered Slonim-Nevo. 2011. "The Myth of Evidence-Based Practice: Towards Evidence-Informed Practice." *British Journal of Social Work* 41 (6): 1176–97. <https://doi.org/10.1093/bjsw/bcq149>.
- Okpych, Nathanael J., and James L-H Yu. 2014. "A Historical Analysis of Evidence-Based Practice in Social Work: The Unfinished Journey toward an Empirically Grounded Profession." *Social Service Review* 88 (1): 3–58. <https://doi.org/10.1086/674969>.
- Pignotti, Monica, and Bruce A. Thyer. 2009. "Use of Novel Unsupported and Empirically Supported Therapies by Licensed Clinical Social Workers: An Exploratory Study." *Social Work Research* 33 (1): 5–17. <https://doi.org/10.1093/swr/33.1.5>.
- Scurlock-Evans, Laura, and Dominic Upton. 2015. "The Role and Nature of Evidence: A Systematic Review of Social Workers' Evidence-Based Practice Orientation, Attitudes, and Implementation." *Journal of Evidence-Informed Social Work* 12 (4): 369–99. <https://doi.org/10.1080/15433714.2013.853014>.
- StataCorp. 2013. *Stata Statistical Software: Release 13*. College Station: StataCorp LP.
- Thyer, Bruce A., and Laura L. Myers. 2011. "The Quest for Evidence-Based Practice: A View from the United States." *Journal of Social Work* 11 (1): 8–25. <https://doi.org/10.1177/1468017310381812>.
- Tuten, Michelle, Darnell Morris-Compton, Tina Abrefa-Gyan, Jeongha Hwang, and Donna Harrington. 2016. "Predictors of the Use of Evidence-Based Interventions among National Association of Social Work (NASW) Members." *Journal of Evidence-Informed Social Work* 13 (3): 253–62. <https://doi.org/10.1080/23761407.2015.1047109>.
- Upton, Dominic, Penney Upton, and Laura Scurlock-Evans. 2014. "The Reach, Transferability, and Impact of the Evidence-Based Practice Questionnaire: A Methodological and Narrative Literature Review." *Worldviews on Evidence-Based Nursing* 11 (1): 46–54. <https://doi.org/10.1111/wvn.12019>.
- Wike, Traci L., Sarah E. Bledsoe, Jennifer I. Manuel, Mathieu Despard, Lydia V. Johnson, Jennifer L. Bellamy, and Candace Killian-Farrell. 2014. "Evidence-Based Practice in Social Work: Challenges and Opportunities for Clinicians and Organizations." *Clinical Social Work Journal* 42 (2): 161–70. <https://doi.org/10.1007/s10615-014-0492-3>.