

From continuing education to personal digital assistants

[Education](#)



Abstract

This critical essay has been written to seek to evaluate a peer reviewed journal article entitled ' From continuing education to personal digital assistants: what do physical therapists need to support evidence-based practice in stroke management' (Salbach et. al. 2010).

In this essay, the contents of this paper shall be critically discussed to validate its purpose, methods and findings. Once this has been undertaken, conclusions shall be drawn regarding the implications of these.

1. Introduction
2. Study Purpose
3. Literature

The peer reviewed journal article entitled ' From continuing education to personal digital assistants: what do physical therapists need to support evidence-based practice in stroke management' (Salbach et. al. 2011) has been written to seek to understand how physical therapists would be best able to gain access to research literature and resources whilst they are working. The author has chosen a variety of articles to seek to justify why their topic is so important. However, upon close examination of the references cited most of these are over four years old (as an example see: Cricelli, 2006; Honeybourne, Sutton & Ward, 2006). It would therefore, seem that the literature in relation to this subject, is older and that there is a need for this study. In conjunction with this, most of the cited articles which are specifically related to the provision of evidence based learning resources for

physical therapists are dated from the 1990's (Tassone & Speechley, 1997) and during the first five years of this century (Stevenson, Barclay-Goddard & Ripat, 2005). The only exception to this is a paper by the author Salbach et. al. (2009). Therefore, there is a strong need for this research to be carried out, as it will enable scholars to understand how physical therapists perceive and view the best means through, which they may undertake their work by having access to the evidence base on electronically. Both the lack of literature and the benefits, which may arise if the electronic system for these physical therapists is implemented strongly, justify the need and requirement for this research.

4. Study Approach

This research has sought to understand the best means through which physical therapists may have access to evidence based treatment information (Salbach et. al. 2011: 786). To this end, the researchers have sought to undertake a satisfactory investigation by adopting an appropriate research approach (Dash, 1993). Since the research question is educational in nature participants have been asked a number of theoretical questions to seek to ascertain how the proposed methods may be used to enhance their clinical practice. To this end, they have considered different paradigms based on the research criteria. This will assist them to select and define problems for inquiry.

For this research, a qualitative approach was adopted, as a number of depth interviews with physical therapists were to be undertaken (Salbach et. al. 2011: 787). This is based on the anti-positivism study approach. This

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research paradigm places emphasis on social reality. Therefore, the research uses methods to view and interpret the views held by individuals according to the ideological positions that they favour. Thus, knowledge is personally experienced rather than acquired from or imposed from outside. The anti-positivists believed that reality is multi-layered and complex (Cohen et al, 2000) and a single phenomenon has multiple interpretations. Therefore, this type of research is based on subjective data, which is gathered from participants. To this end, it is possible to understand why Salbach et. al. (2011: 787) used this approach for their study, as they were seeking to understand what physical therapists perceived about having access to information via a PDA. However, though adopting this method allowed the researchers to gather in-depth information, they could have adopted a positivist approach to undertake this research.

The positivist paradigm can be used to explore social reality. However, this is based on observation and reason as means of understanding human behaviour. Therefore, this method utilises objective data to understand different phenomena (Cohen et al, 2000). Hence, this research would have been undertaken within the framework of the principles and assumptions of science. This would have changed the nature of the study, as the researcher would not have been able to gather in-depth data. Instead, they could have collated a survey and distributed this to a wider number of physical therapists. This would have given their study more objectivity, measurability, predictability, controllability and constructs laws and rules of human behaviour. However, the questions, which they posed, would have to be changed to closed or attitudinal based ones, so that all answers could be

coded and statistically verified. The nature of the research question would not have been affected by this change and the same methodology of conducting interviews over the telephone could have been implemented.

From the above though, one may see that the research paradigm, which was chosen by the researchers, was because they wished to gather in depth information (Salbach et. al. 2011: 787), though the methods chosen limited the objectivity, measurability, predictability and controllability of their study (Cohen et al, 2000). However, the method, which they chose, suited the requirements, which they stipulated for their study.

5. Study Methodology

The research methodology which was chosen for this study was ' a qualitative descriptive approach to address the study objective. In-depth interviews were conducted by telephone to enable access to physical therapists living in remote or rural areas and to maximize flexibility of scheduling interviews' (Salbach et. al. 2011: 787). This suited both the needs and requirements of the research, as the researchers wished to gather in depth information to understand the best means through which physical therapists may gain access to evidence based treatment information (Salbach et. al. 2011: 786). To this end, the research design was appropriate for the study.

The researchers wished to understand the physical therapists attitudes towards evidence based data to enhance their clinical practice and whether or not they would consider utilizing a PDA to access this information (Salbach

et. al. 2011: 786). Therefore from a theoretical perspective to understand this fully an in depth approach had to be utilized to ensure that the researchers fully understood the attitudes perceptions and reasons why these participants either favoured using this approach or not. Without using this type of methodological approach, they would not have been able to fully answer the research question, which they had posed.

Another consideration is the ethical issues, which surround this study, as it is important that these are carefully considered by the researchers. The aim of the project was about developing resources and educational initiatives for this specific group of physical therapists (Salbach et. al. 2011: 787). To this end, these participants needed to be fully consulted on what was being proposed to ensure that it was acceptable to them. In line with this the researcher also ensure that the participants were made aware of the purpose of the study (Salbach et. al. 2011: 787), they took measures to ensure that their responses were kept confidential and they ensured that the participants identities remained anonymous (Salbach et. al. 2011: 788). This ensured that the study was undertaken ethically and that the participants understood both their role and the researchers when they took part in the study.

6. Sampling

The participants of this study were randomly chosen from a list of therapists who had indicated that they would be happy to take part in research (as they had already responded to a previous survey (Salbach et. al. 2011: 787).

Therefore, the sampling methodology, which was used, allowed the

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participants and the researchers to choose how and when they would take part in the study. To this extent, the sampling process used was quite flexible, however, as random participants were chosen if one had decided that they were not able to take part, then this would have meant that the researchers could have had to select another participant from the therapists chosen. Therefore, under these circumstances the sampling process could have become cumbersome.

In relation to this, the participants that did take part in the study were informed of its purpose, the researchers and their role, they were also allowed to undertake interviews over the phone in a variety of places, where the confidentiality of their responses could be assured (Salbach et. al. 2011: 788). Therefore, the approach that the researchers adopted enabled the participants to undertake their interviews under circumstances where they felt comfortable. This ensured that the researchers met the ethical requirements of the study.

7. Data Collection

The data for this study was collected by undertaking a number of telephone interviews with randomly selected study participants (Salbach et. al. 2011: 788). Within the context, of the study, the sample, which was used, was therefore sufficient. The methodology, which was adopted by the researchers, limited the generalizability of their findings (Cohen et al, 2000). Therefore, the researchers may not have gathered data, which was applicable to all of the physical therapist in Canada. However, this is one of the limitations of the approach, which they chose to use. Further to this, as <https://assignbuster.com/from-continuing-education-to-personal-digital-assistants/>

each of the interviews were transcribed verbatim and interviews were continuously undertaken until themes had been clearly identified by the researchers, the documentation of the study and its findings were fully completed in line with the methodology which was adopted (Salbach et. al. 2011: 788). To this end, within the context of the study and its acknowledged limitations the whole picture was examined. However, the design and the data collection methods, which were utilised, for the study were not flexible, as the approach used needed to be carefully managed to ensure that the research question was answered in the correct manner.

8. Data Analysis

A thematic analysis was adopted for analysing the results of this study (Salbach et. al. 2011: 788). This is a way of seeing, making sense of related material, systematically observing situations, groups, organisations, interactions, cultures and behaviours. Thematic research is a repetitive process that involves understanding, coding, making memos, querying the data to get differing viewpoints. It may be said that, thematic analysis enables researchers, especially in the early stages of a project, to formulate their problem and to create the foundations for the design of their project to help to support knowledge sharing and communication. The ' data' being analysed might take any number of forms such as, an interview transcript. This is the method has been utilised to analyse the interview transcripts from the study.

Further to this, to seek to ensure that the thematic analysis was undertaken properly, NVivo, a new-generation qualitative data analysis (QDA) computer <https://assignbuster.com/from-continuing-education-to-personal-digital-assistants/>

software package created by QSR International was used (Salbach et. al. 2011: 788). Therefore, the interview transcripts from this study were analysed by adopting this approach. This enabled the researchers to understand the content or to create groups of themes by coding the interview transcripts. Once this had been undertaken, the coding enabled the researchers to categorise the material from the interview transcripts. This then enabled them to ascertain each of the themes, which were present and to understand the data, which had been collated. The researchers were then able to fully understand what the results from the research undertaken indicated (Salbach et. al. 2011: 788).

These methods were suitable for the study due to the type of data that was gathered. However, the article does not state if other methods were considered and discounted though they may have been (Salbach et. al. 2011).

9. Trustworthiness

The researchers have based their findings on the subjective opinions of a number of respondents who were interviewed. Though, the interviews did not stop until a number of themes had been identified (Salbach et. al. 2011: 788), the nature of this data is always going to be questionable (Cohen et al, 2000). However, the researchers have tried to combat the issues, which are related to their chosen methodology by ensuring that the interviewees did not know the interviewees and by utilising random sampling (Salbach et. al. 2011: 787). Therefore, one may say that the researchers have done there

upmost to ensure that the research procedures adopted produced results, which were trustworthy.

Furthermore, they have taken the verbatim responses of the respondents and utilised NVivo, a computer software package created by QSR International to analyse these. Again this has helped to ensure that the researchers personal preferences or subjective opinions do not affect the results when they are analysed. This also ensures that the analysis, which has been undertaken, is objective and therefore trustworthy.

In summary, one may say that in the context of this study the researchers have sought to ensure that the data collection and analyses are as trustworthy as possible given that the data which was collated was based on the subjective opinions of the respondents (Salbach et. al. 2011: 787).

10. Conclusions and Implications

The findings from this study, which have been stated by the researchers show that the physical therapists that were interviewed perceived that there was a need for them to have access to evidenced based data, which could help them to improve their practice (Salbach et. al. 2011: 790-791).

However, as the researchers have stated this is the first study which has been undertaken to ascertain which means would be best to effectively achieve this type of knowledge transfer. Furthermore, they have also acknowledged that due to the sample of respondents that were chosen this has limited their findings (Salbach et. al. 2011: 792). Both of these factors, coupled with the limitations of the methodology, which was chosen to

undertaken this investigation have limited the conclusions, which can be drawn from this research (Cohen et al, 2000).

Though the researchers sought to ensure that the data collected and the analysis, which was used produced trustworthy results, due to the nature of the study, its reliability may be questioned (Cohen et al, 2000). This is because it is based on limited data, which has, been collated from a small sample of therapists (Salbach et. al. 2011: 792). To this end, the reliability of the results, findings and conclusions may be questioned. The conclusions which are drawn from the study are vague, which reflects the nature of the findings (Salbach et. al. 2011: 792). From this, one may assert that the study may have identified the preferences in relation to these therapists, however the findings are so limited that they researchers fail to suggest one strategy, which could be used to implement this.

In light of this, it can be said that the study has been unsuccessful in its aim. This has been left unsaid by the researchers when they are drawing their conclusions (Salbach et. al. 2011: 792). Therefore, the information, which they have produced, only informs us that strategies should be considered. However, this was clear from the beginning of the study, so what can we really learn This is questionable, we can learn that this is important to enhance clinical practice (in this limited context) and we can learn that strategies need to be carefully considered. However beyond this, there is little that may be gleaned from this, apart from the fact that this approach to examine this type of problem may give such limited and questionable results

that other methodologies should be considered before the ones which have been adopted by these researchers.

References

- Cohen, L., Lawrence, M. and Morrison, M. (2000). *Research Methods in Education* (5 th Ed.). London.
- Cricelli, I. (2006) Use of personal digital assistant devices in order to access, consult and apply a corpus of clinical guidelines and decision based support documentation like the Italian SPREAD Guidelines on stroke disease. *Neurological Sciences*, 27 (Suppl. 3), S238–S239.
- Dash, N. K. (1993). *Research Paradigms in Education: Towards a Resolution*. *Journal of Indian Education* 19(2), pp1-6.
- Honeybourne, C., Sutton, S. & Ward, L. (2006) Knowledge in the Palm of your hands: PDAs in the clinical setting. *HealthInformation and Libraries Journal*, 23 (1), 51–59.
- Salbach, N. Veinot, P. Susan B. Jaglal, S., Bayley M. and Rolfe, R. (2011) From continuing education to personal digital assistants: what do physical therapists need to support evidence-based practice in stroke management *Journal of Evaluation in Clinical Practice* 17, 786-793
- Salbach, N. M., Veinot, P., Rappolt, S., Bayley, M., Burnett, D., Judd, M. & Jaglal, S. B. (2009) Physical therapists' experiences updating the clinical management of walking rehabilitation after stroke: a qualitative study. *Physical Therapy*, 89 (6), 556–568.
- Stevenson, T. J., Barclay-Goddard, R. & Ripat, J. (2005) Influences on treatment choices in stroke rehabilitation: survey of Canadian physical therapists. *Physiotherapy Canada*, 57 (2), 135–144.

- Tassone, M. R. & Speechley, M. (1997) Geographical challenges for physical therapy continuing education: preferences and influences. *Physical Therapy*, 77 (3), 285-295.