

An investigation into Saudi Arabian Primary school teachers' attitudes towards willingness to teach Attention Deficit Hyperactivity Disorder [ADHD] students in mainstream classrooms in Riyadh city

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Abstract: *The study aimed to identify the experiences of teachers who have all dealt with children that have been diagnosed with ADHD in Saudi Arabia. Sample of the study consisted of (4) teachers. The four Primary school teachers have been purposively selected, as their knowledge and experience of teaching will reveal their attitudes toward their willingness to teach ADHD students in the primary school classroom. To achieve the aim of the study, the research explore the experiences' of four teachers' who have all dealt with children that have been diagnosed with ADHD. Through the use of semi structured interviews, there will be a number of questions which are posed to these individuals to identify prevalent attitudes towards children with ADHD as well as their willingness to teach them in their classes. There will also be a line of enquiry about the types of support which is required not only for the children but also for teaching staff. Their answers have been thematically analysed and have been coded in order to present the various aspects to their experience. In a discussion about their experiences there will be suggestions and links to the existing literature to assess whether or not there may be societal and cultural differences which impact upon dealing with ADHD. Through this research there will be an argument put forward about the best way to teach children with ADHD and the most appropriate way to support teachers. Additionally, there will also be a discussion about future directions for research in this area with various approaches to explore this issue.*

Keywords: *Attitudes of Teachers, Willingness to Teach, ADHD , Saudi Arabia.*

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I. Introduction

There are many difficulties which are associated with teaching, and for many within the profession their workload can be much greater simply if they do not have the right levels of support or they have disruptive elements within their classroom. The identification of Attention Deficit Hyperactivity Disorder [ADHD] as a condition which many children have has led to many pieces of research and various policy decisions which seek to deal with problematic students'. While their behaviour may be inappropriate, it is considered with a greater amount of sympathy due to the fact that they are not necessarily in control of their facets as much as other children.

In this paper there will be an investigation into the attitudes of teachers' willingness to teach Attention Deficit Hyperactivity Disorder [ADHD] to their students'. ADHA is a commonly diagnosed brain disorder and forms one of the current most controversial child diagnoses which continues to be an under-diagnosed disorder (Moldavsky et al., 2013; Soroa et al., 2014). However, Soroa et al. (2016) suggest "despite the interest in teachers' having extensive knowledge on this subject, different investigations show that teachers' level of knowledge differs from one study to another" (Soroa et al., 2016, p. 206).

The onset of schooling in a formal setting is one of the major times in which parents and teachers become more aware of the possibility of the child having ADHD. This is when and where the child's ability to concentrate for a longer time is linked directly to success (Bradshaw, & Kamal, 2013) and children with attention deficiencies experience greater difficulties in following the rules and directions that form part of a school's structured setting. It is within the daily classroom setting, therefore, that primary school teachers can find themselves at odds with difficulties in these children. This paper will consider this problem and will examine the attitudes of primary school teachers towards the inclusion of ADHD children in their mainstream classes. It will examine what their attitudes are, how willing they are, and the reasons for their attitudes.

The exact nature and causes of ADHD are currently unknown, but it is a commonly held belief that it concerns the multiple interactions between the environment, genetics and organic factors. It has been suggested that there are a variety of identifiable factors that can place a child at risk, such as their family history of ADHD, particularly on the male side, such as uncle, brother or father. Various other factors placing a child at risk of

developing ADHD include neurological infections, meningitis, head trauma, chronic otitis media, prenatal complications, and prolonged exposure to medications or toxins (Hockenberry & Wilson, 2015, cited in Aly et al., 2015, p. 165).

Individuals that are suffering from ADHD find that the manifestations may change, as they get older. Children, for instance, can exhibit aggression, excitability, overactive responses, inattentiveness and impulsivity. They can often become easily frustrated, frequently irritated and have temper tantrums. Their responses to social situations and their skills to adjust their behaviour are also poorly developed (Datta, 2014). As Bradshaw & Kamal (2013) observed, inattentive ADHD children experience considerable difficulty giving close attention to activities or instructions when needed, [do] not seem to listen when spoken to, [have] difficulty completing series of instructions, struggle[s] with organisation, [appear to] lack cognitive stamina, [are] easily distracted, lose[s] things and [are] forgetful in daily activities. They also suggest that whilst, hyperactive/impulsive ADHD children tend to fidget with [their] hands, feet or squirm[s] in [their] seat, leave place[s] when staying in one spot is expected, run[s] about and climb[s] excessively, on-the-go – moving all the time, unable to play at one thing for more than a few minutes, talks excessively, often calls out answers before the question has been asked, [experience] difficulty in turn-taking, and often interrupts. This means that a child with ADHD, in a group of twenty or more other children, can make for problems for the class teacher. It is these problems and what the class teacher's attitude is towards their willingness to teach such children, that this paper is concerned.

An interesting side issue to perhaps consider at a later date, arising from this data, will be concerned with the nature of the diagnosis of children with ADHD, as Bradshaw & Kamal (2013) observed, "most diagnoses of ADHD include rating scales completed by teachers and parents, which have been developed and normed in North America and the UK" (2013, p. 2). They continued to argue that "to apply the same Diagnostic and Statistical Manual of Mental Disorders [DSM IV] (American Psychiatric Association, [APA] 2000) scales for the diagnosis of ADHD in the Middle East may not provide valid or reliable indicators" (Bradshaw & Kamal, 2013, p. 2) due to two particular aspects. Firstly, the Middle Eastern culture, norms and behavioural expectations are different to those of western countries; and secondly, that behavioural standards are different between the UK, USA and Middle Eastern countries.

Researchers have observed that teacher information and education concerning children with ADHD is an important aspect of how they approach and deal with such students. When school teachers understand that ADHD students can respond positively to both medical and instructional interventions; and that ADHD is a neurological disorder, not a case of the individual being unmotivated, or lazy or their responses being the result of ineffective parenting, then their attitudes towards including them in mainstream classes change. Interestingly, however, Soroa et al., (2016) observed that there was a lack of scientific instruments to assess such knowledge and that teachers have been observed to know more about the main characteristics and symptoms of ADHD (Anderson et al., 2012) than about the nature, impact, causes and treatment of ADHD (Perold et al., 2010).

As the American Academy of Paediatrics [AAP] (2011) argued, there was up to ten percent prevalence of children with ADHD in any given classroom situation, it is doubly important that educators understand the identifying characteristics of ADHD and that they are able to identify children suffering from ADHD in order to comprehend their social and educational needs, as well as being able to employ approaches that will be successful in helping such children achieve social success and academic goals within the classroom situation. Indeed, teachers could benefit with in-service training so as to accept and understand more fully, the biological and environmental nature of ADHD; and to be able and willing to implement specific strategies with the child in order that they can develop the necessary skills to manage their own individual behaviour, as well as become more successful academically and socially. Behavioural strategies are recommended by the American Paediatric Association as an initial course of intervention in the course of encouraging more appropriate behaviour from children with ADHD.

In a large percentage of cases, the primary school teacher is frequently the first person to encounter inappropriate behaviour by ADHD children, in the classroom (Khademi et al., 2016), as they commonly exhibit such behaviours as: disobedience of orders; poor peer relationships; inability to conform or understand social cues; aggression; low self-esteem; cognitive, emotional and social problems; and depression (Perold et al., 2010). Children with ADHD tend to be increasingly likely to act as a disruptive influence on their peer's learning than children who do not have ADHD (Rodrigo et al., 2011). As a result of their limited social skills combined with their aggressive conflicting attitudes towards their peers, children with ADHD experience difficulty relating to their peers, often resulting in them being rejected (Sandeep et al., 2014). Only limited research has been conducted concerning teachers' knowledge of ADHD children and their problems while the majority of attitudinal research has been concerned merely with the assessment of knowledge (Kos, 2008). Indeed, Kos (2008) observed that there is "a dearth of research assessing teachers'

classroom management of children with ADHD, and very little emphasis has been placed on research within a theoretical context" (2008, p. 1).

In recent years, the surge of diagnosed ADHD cases has brought into focus the need for classroom teachers to receive more training and direction in ways in which to meet the needs of these students. However, such students are continually labelled as 'problem' students, or 'weak' students whom teachers are reluctant to include in their mainstream classes. These ADHD students do indeed frequently warrant special educational treatment, the official recognition of this fact could result in a specialist teacher being allocated to spend time with such children within the classroom setting, or withdrawing them for smaller study groups/classes, concentrating more on behaviour and attention than the general classroom teacher can manage to spend time on. Small general stream classes could also possibly affect the way in which teachers feel about working with ADHD students, but such an environment is unfortunately not the most practical, either financially or facilitation due to pressure on building space and qualified staff.

Such students in mainstream schools today fail to meet the prescribed achievement criteria for success, due to teacher/pupil related factors that hinder such student's abilities and are consequently withdrawn and place in settings with greater restrictions. They can often be diagnosed with ADHD and also be considered to qualify for extra classifications, such as the special education classification, concerned with various multiple disabilities and handicaps. As McKnight (2015) noted, the combination of "two or more disabling conditions, ...[causing] such severe educational needs that they cannot be accommodated in a programme designed solely to address one of the impairments" (2015, p. 3). These can become classified as "Multiply Disabled" leading to a considerably more restrictive educational setting. However, although such an educational environment may be argued to be the 'most appropriate' environment for such children's learning, main-stream teachers often lack the experience and training required to engender success for these children, and the teachers' degree of willingness to work with ADHD students can significantly affect the child's success. The responsibility and fault of "the unfortunate trend affecting the success of students with ADHD in the least restrictive environment lies with not only the teacher but [also] the district in which the teacher is working" (McKnight 2015, p. 4).

It has been argued that it is the authority's or the district's responsibility to ensure that the teachers working with such students are also prepared and willing to meet the needs of such students. Indeed, McKnight (2015) argued that "teachers, in turn, must be willing and prepared to implement research-based strategies and interventions for accommodating these students so that they may meet their potential for success" (ibid). Both teachers, as professionals, and authorities/districts, need to provide supported, informed professional development, and apply expertise and experience to the classroom in an effective and consistent manner. McKnight (2015) claims that outdated thinking, media fuelled ideas and politically skewed intentions should be abandoned in favour of action based research findings, guidance and support from professionals, and soundly based, theoretically proven, educational philosophy. Teachers displaying unwillingness or reluctance to engage with such children have been found to have a negative impact on the education of ADHD children (McKnight, 2015). Indeed, Girio and Owens (2009) argue that the way in which individuals behave and the manner in which their skills are used, are influenced by their belief in their ability to teach.

It is important that teachers also understand that certain more severe cases of ADHD in children might need to be referred to other appropriate agencies, ones that are known to the class teacher and ones that they understand how to seek help from in such cases. By the use of available strategies and services, teachers should be willing and read to direct children with ADHD in order to become productive, successful members of society and school. Class teachers are in a unique position to be able to provide informed feedback on the effectiveness of medications that also might be called into use for some ADHD students, and can assess continually, the various effects of medical applications.

As it is possible to infer from this short introduction, although this particular area has been a subject of research and the attitudes of primary school teachers towards their willingness to teach ADHD children in mainstream classrooms has been a subject of some study, there has not been a substantial amount of research into this particular approach - that of the teachers' attitudes affecting their willingness to become involved with the education of ADHD children.

The Problem of the study determined by the following questions:

The overall aim of this research is to establish primary school teachers' attitudes toward willingness to teach ADHD students in mainstream classrooms.

The two research questions for this research are:

1. Are primary school teachers willing to teach ADHD students in their classrooms, and if so, what are the reasons for their willingness to teach them?
2. If primary school teachers are not willing to teach ADHA students, what are the reasons for their lack of willingness to teach them?

II. Method

2.1 Population and Sample

The population sample for this research consisted of primary school teachers, currently teaching in primary schools in Riyadh, Saudi Arabia Primary School [3LK].

2.2 Instrument

The population sample for the current study consisted of four primary school teachers, currently teaching in primary schools in Riyadh, Saudi Arabia Primary school teachers purposively selected, as their knowledge and experience of teaching reveal their attitudes toward their willingness to teach ADHD students in the primary school classroom. However, because this form of sampling based on non-probability sampling, as other participants have no probability of selected, the findings from the paper cannot be generalised to any other population. Critics could argue, therefore, that the research findings do not have any external validity. However, this considered not to be of relevance for this research since it anticipated that the four participants provide rich in-depth data about their willingness to teach ADHD students in the primary school classroom. The four participants in the population sample will be provided with details about the study and what their participation in the study. Four classes representing teachers. Table (1) below display respondent distribution by gender and age group.

Table (1): Sample distribution by gender, age, level of education and teaching experience

Variable	Categories	Frequency	%
Age	30-40	3	%75
	40-50	1	%25
Gender	Male	2	%50
	Female	2	%50
Level of Education	Bachelor degree	1	%25
	Master degree	2	%50
	PHD degree	1	%25
Teaching Experience	1-5 years	0	%0
	5-10 years	4	%100
Total		4	%100.0

2.3 Assessment Methods: Assess ADHD.

In order to assess ADHD, behaviour-rating scales, interviews and observations in the playground, the lunch area and the classroom employed together with consultations with parents and teaching staff. Indeed, the American Academy of Pediatrics [AAP] (2000) uses such methods including checklists and questionnaires in order to identify ADHD students (Rosenberg et al., 2008).

2.3.1 Research Tool: Evidence-Based Decision Making

In this current research, evidence that is data based decision-making will be the tool which will be used for this research. This form of tool for education research is not new to the discipline: "Evidence has been considered a cornerstone of effective professional practice" (Kowalski & Lasley, 2010, p.xi). Indeed, "parents want teachers who use instructional practices to utilise interventions that are grounded on evidence" (ibid).

The various limitations of evidence-based decision-making significant reduced by the evaluation of the evidence through three specific criteria, which should be considered to determine if evidence is relevant and of value for practice: relevance; sufficiency; and veracity (Thomas, 2004).

Relevance: the extent to which the information supports or refutes a claim. If the evidence is of relevance, it is pertinent to both the decisions made and the research problem.

Sufficiency: the corroboration of some evidence by integrating it with other forms of evidence. Data can then be grouped in four ways: "(a) isolated observations (an inspiration), (b) prima facie evidence (a hunch), (c) corroborative evidence (a rational belief), or (d) conclusive evidence (knowledge)" (Thomas, 2004, cited in Kowalski & Lasley, 2010, p. 12).

Veracity: the establishing of whether the particular evidence has any errors or bias as a result of vested interests. Mayer (2003) argued that if data is evaluated with Thomas' (2004) three criteria, the differences in value become apparent. Moreover, the relation between the problem under focus and the data is more important than the methods utilised to generate the data.

2.3.2 Interview Elicitation and Semi-Structured Interview

The interview for this research will be based on photograph elicitation and semi-structured interview questions. This research will use interview questions to obtain information for the research, and photographs to elicit information from the participants. This method of data collection is well known in qualitative research. In research "Photo-elicitation techniques,... photos are used in conjunction with interviews" (Braun & Clarke,

2013, p. 33).

Harper (1998) defined photo-elicitation as "the simple idea of inserting a photograph into a research interview" (2002, p. 13). Photographs are introduced into the interview "as a stimulus for questioning" (Bryman, 2012, p. 480). The advantages of this research method is that participants tend not to have "memory blocks" (Collier, 1979, p. 281) or be unable to communicate what they are thinking, which could happen in normal question and answer interviews. Images may also facilitate a rapport between the researcher and the participant, and reduce the feeling of interview "strangeness" (Schwartz, 1989, p. 151-152) for the participant, which is often experienced in regular interviews.

Arthur, Waring, Coe, & Hedges (2012) discussed the ways photographs can be used in interviews such as the interviewer using photo-elicitation to stimulate conversation with participants, to find out what the photographs mean to them or to explain what is going on in the photograph. The researcher does not necessarily ask any interview questions, instead they ask the participant to react to the photograph, to stimulate the participant to talk about the content of the image based on alternative thoughts.

Semi-structured interviews will be conducted as they have the "capacity to provide insights into how research participants view the world" (Bryman, 2012, p. 471). The participants will be asked demographic questions about their teaching experiences, specifically how long they have been teaching primary schools children and will be asked if they have taught children with special educational needs, and asked for some examples of the special educational needs, their students had. They will then be asked about their views on the content of about 5 photographs of students with ADHA. The photographs will also show pictures of students of ADHA in classrooms with other students, and in classrooms with a classroom teacher. The participants will also be presented with cards that state some definitions of ADHA, and that have some short stories about teachers working with ADHA children. The participants will be requested to state their opinions on the definitions and the short stories.

It is hoped that the researcher can build a rapport with the participants, prior to the beginning of the interview questions. The initial demographic questions are designed as "acquaintance questions" (Braun & Clarke, 2013, p. 88), since "building rapport and putting the participant at ease are a priority" (ibid).

The researcher will probe the participant for further material, if it is thought the participant may be able to add more information to their original response. The interview question guide should not specify "exactly what will happen at every stage of the journey..." (Holloway, 2005, p. 46). Consequently, bearing this in mind, additional questions will be interjected into the interview questions, if it is thought answers to them will provide further insight on something not previously considered during the design of the interview questions. In line with interview guidelines, there will be no 'closed' questions will be asked, those requiring one-word answers. The interviews with the four teachers will be recorded and transcribed, since recording and transcribing data has several advantages (Heritage, 1984); for example, it tends to prevent arguments that the researcher's bias or beliefs might have influenced the analysis, and it enables the researcher to thoroughly examination the interview data. Although it is acknowledged that transcribing an interview script is time-consuming (Bryman, 2012), due to there being only four participants, the transcription task should not be too time-consuming.

III. Results

3.1 Results related to the first question:

Each of the four participants asked fifteen questions in a series of semi-structured interviews, plus the invitation at the end to offer more information.

Question 1. 'What is your experience in teaching?' All four participants had 9 or 10 years of experience of primary school education, thereby fulfilling the criteria of being participants chosen "in a strategic way, so that those sampled are relevant to the research questions that are being posed" (Bryman, 2012, p. 418).

Question 2. In response to the question of whether they had previously taught students suffering from ADHD, all four participants had experience of teaching such students, and again this was purposive so as to comply with the pre-recognised sample group. One out of the four participants when asked if their point of view had changed, stated that it had not:

Changed at all, due to the fact that those students are very difficult to teach and that [they did not] have enough time to attend to them because of the large number of students in the classroom and their influence on other students and that when PII managed to identify such a case, they referred "them to the student guide or to the social worker" (ibid).

Question 3. When asked what the participant considered to be the most effective element in the ADHD students' education was, one that could result in them being differentiated either positively or negatively, PII considered that it was the need to spend a lot of time with them, which "may impact negatively on the other students".

Question 4. This question was concerned with the difficulties of the class teacher attending to a child

with ADHD and the rest of the class. All four participants considered that large class numbers were difficult to handle when combined with the special educational needs of a student with ADHD. Considered that "learning disorder specialisation [was] not very difficult and must include a resource centre" Whilst Participant I stated that they could "control the class if [they had] just one or two [ADHD] students". However, if the class was "between 20 to 25 [and that] one student [had] hyperactivity" then there could be control difficulties, as they could "distract the attention of other students".

Participant III considered that it could be helpful to have "training courses in psycho-behavioural programmes specifically to learn how to deal with this category of student" and fewer pupils per class would be helpful. Participant II stated that they strongly agreed for such children to be in mainstream classrooms, but that they did not think that there was a way to teach this class of students in the normal classroom due to a special classroom being able to focus on them more and work strategies and plans aimed at them, and a fewer number of students in order to manage the classroom with the provision of a specialised teacher.

Question 5. The question as to what the most effective element in ADHD students' education was, that could lead to them being differentiated either positively or negatively appeared to be that of time spent with each one. The demands such students make are in excess of the rest of the class, and consequently the rest of the class suffer due to lack of teacher time, that is occupied with the ADHD students. As PII observed, such "students require the teacher to focus on them and that may impact negatively on the other students ... and this requires considerable effort and time. Indeed, PIII summed it up by stating that "the most effective negative element [is] the lack of focus and attention deficit" and that the "most effective positive element [is] utilising from their hyperactivity and kinetic activities emphasised the difficulty of attempting to teach a large class of students and provide an ADHD student with sufficient attention, in that the teacher "may lose the control of this student and at same time he will attempt to provide the information to the other 24 students".

Question 6. The participants asked if they thought that there was a certain area needing specific help, what should be done, and did they think that they could help them in a regular class. The latter part of this question was responded to with a concern over time necessary to do so, in that working with one such student requiring one-to-one attention, necessarily meant that the other students did not get any attention from the teacher. This added stress to the management of time and the general class management for the teacher. PI considered that such students needed a specialist teacher to help them and that the majority of teachers did "not want to teach them because this type of student creates problems. PIII thought that it was necessary to have "training courses in psycho-behavioural programmes specifically to learn how to deal with this category of students and that it was possible to "help them in a regular class with a condition that when there is a few number of students, which helps to contain such activities in addition to the student status" (ibid).

PII observed that they saw such students as being in:

a special classroom to focus on them more and work strategies and plans aimed at them and a fewer number of students in order to manage the classroom with the provision of a specialised teacher. In this case, I strongly agree to put them in the regular classroom with the rest of the students, but this should be done gradually, with the student being initially placed in special classes outside prior to attending the regular classroom

PI was further probed on this question by the researcher saying, "from what you have understood, do you prefer not to have this type of students in the class?" to which they responded, "Yes, because it is difficult to deal with them. For example imagine in a case where you have 6 or 7 students with attention deficit hyperactivity disorder (ADHD), you may need 5 teachers"

Question 7. The participants were asked what they thought about the incentive or motivation patterns which may encourage them to teach this type of students; and why. PIII considered it was necessary to motivate such students by motivating their families to "know how to deal with such types of students, and to help and support students from both educational and psychological sides in order to increase their confidence and make the effective in the society"). PII observed that, "if I have a few students and a lower number of lessons in the classroom, in addition have a salary increment and suitable training to deal with such cases of students, then I will teach them.

Question 8. This involved the participant being asked to examine three different definitions), and to state which one they considered to be the most appropriate and why. They were also probed to consider the other definitions and to remark on them. PI considered that all three definitions were appropriate due to their descriptions of behaviour of a child with ADHD and observed that the child's condition is "influenced by the genetic factors of childhood but that the ADHD behaviour would decrease as the individual got older, and would have a "lower effect in age of adulthood" (ibid).

PII considered that Al-Khashrami's (2004) definition was "the most appropriate and the best definition as it focused "on the causes, time and effect of genetic factors and it [was a] comprehensive and concise definition" (ibid). PII considered the genetic part of the condition to be important and thought that Hamed's (2000) definition focused "on the hyperactivity just as accurately" but it did not "mention anything in relation to

the attention deficit. PII considered that Barkeley's (1998) description was not correct as it only described the behaviour and did not mention causes, but did mention "that the behaviour doesn't rely on mental problems and that's incorrect. Most of the problems are caused by the brain and he also ignored the genetic side"

PIII considered that the second definition (Hamed, 2000) was the most appropriate due to its "clarity and comprehensiveness of the symptoms and specifying the severity, duration and expansion of such symptoms. They considered that the third definition (Al-Khashrami's, 2004) was not accurate with regards to the severity and aging of the individual and that it did "not take into account that a person grows in age and becomes less active, with alleviated attention deficit hyperactivity disorder (ADHD) symptoms", but that it did give "greater importance to the genetic side of the reasons behind the attention deficit hyperactivity disorder (ADHD) symptoms considered that the first definition, by Barkely (1998) "explained that attention deficit hyperactivity disorder (ADHD) symptoms are not due to sensory or linguistic problems, physical or mental disorder or severe emotional disorder and from my point of view that these may be the causes themselves", although the second definition (Hamed 2000) was "appropriate among other definitions. However, PIV, disagreed with the third definition by Al-Khashrami, (2004) as they considered that there was "no adequate study to confirm that the main cause of hyperactivity and distraction is due to impaired brain performance or genetic causes.

Question 9. Involved the participants looking at five different pictures and being asked the following questions:

- What is happening or what do you see in the picture?
- Have you ever been in such a situation?
- What do you feel about the teacher in the picture as you see it?
- Can you remember the reasons why you felt that way?

Table I: Responses from Participants I & II for Question 9 i)

	Participant I	Participant II
Picture 1 Question i)	There is a lack of self-control and impulsivity with the aggressiveness towards other classmates.	Expressed excessive activity and sabotage of the tools without thinking, sprinting, writing on fellow writers, standing on the table and jumping.
Picture 2 Question i)	This is concerned with the negligence of doing the assignments and the home tasks.	Expresses the boredom of studying, school assignments and preoccupation with play.
Picture 3 Question i)	There is a possibility to teach such a student by giving him attention to a specific picture not to another student, because such a student may be attracted to external effects out of the classroom and then all his focus will be on the external sounds.	Expresses distraction and goes into another world.
Picture 4 Question i)	The least possible thing distracts them, a pen, a picture existing in the class, or maybe one of the classmate's bags; in such case the student may lose his attention, that's why the teacher should keep the class free of those mentioned things that are not used for educational purposes.	Expresses the student's distraction and goes to play instead of giving his attention to the lesson's discussion and always interrupting the other students.
Picture 5 Question i)	In terms of integration, in regular classrooms, teachers see that it is difficult for him to integrate because of his behaviour, while the specialist supports the student because his intelligence rate is the same as ordinary students, but the problem of his behaviour is integrating into the ordinary classroom, and how it can impact on normal classmates in terms of behaviour, whether aggression or impulsiveness or lack of discipline.	Expresses distraction, the student plays instead of giving his attention to the lesson's discussion.

Table II: Responses from Participants III & IV for Question 9 i)

	Participant III	Participant IV
Picture 1 Question i)	Inappropriate behaviour for the situation.	A child with excessive movement and distraction and is irregular with the students of the class and harmful to those around him for they are afraid of him, they imitate him and are impressed by his movements.
Picture 2 Question i)	A student failing to perform the task.	The child is uninterested and had attention deficit
Picture 3 Question i)	Inattention and behaviour that is not convenient for the educational setting, which may lead to a loss of linking between students and teacher in the delivery of information.	I see that the teacher explains and makes an effort and the child is drowsy in daydreams and not attending
Picture 4 Question i)	Inattention and attention deficit by the external stimuli existing in the students' surrounding environment.	The child is in his own world and the teacher explains the lesson and the other students are listening.
Picture 5 Question i)	Difficulty in engaging, this may impact on the students understanding and may lead to cause inconvenience to those students around him in the classroom.	I see that the student's behaviour does not fit in with the explanation, but at the time I see that the teacher is careful not to focus on the student.

All the participants answered affirmatively to question 9 ii). This was not surprising, as they had all been selected due to their experience with such children.

First Photograph



All the participants thought that the teacher in the first picture (above) would feel "interrupted because of the noisy fighting among the students" (P I) and might be so upset that he might not want to continue with that class (ibid). PII thought that the teacher was feeling "anger and discomfort...and [was] looking for a way to fix the problem" (PII). PIV thought that the teacher was feeling annoyance and was "thinking how to start the lesson, because it is clear from the picture that the teacher has entered the class and is wondering how to start the lesson" (PIV). PIII thought that the teacher was feeling "dissatisfied" (PIII).

The second photograph elicited similar sentiments from the four participants.

Second Photograph



Participant III thought the teacher would feel a "sense of frustration and PIV thought that the child was demanding more attention from the teacher than was possible to give, given that there were the other children in the class too. PII thought that the teacher would feel both frustrated and sad. PI considered that the family should be involved in the education of such a child, and should help the child follow-up with their classwork at home.

The Third Photograph



In response to this photograph, PI thought that the student was not focusing and was "distracted" which would result in no achievement of the given VIgoal. PII thought that the teacher would feel "sadness and anger" due to the student making "himself busy while the class lesson is running. PIII considered that the teacher would feel "a sense of frustration" at the situation and PIV discussed the problem of the teacher attending to this one daydreaming child, at the expense of the other attentive members of the class.

The Fourth Photograph



Participant IV raised the problem of the teacher paying attention to the disruptive child at the expense of the other class members, thereby running the possibility of them all losing their concentration. PI stated that the slightest thing would distract such children, and that the teacher needed to keep the variety of items in the classroom down to as few as possible, to avoid such behaviour. PII thought that the teacher could feel "angry and annoyed at the student and that the student could be sent out of class. PIII thought that the teacher would be feeling "uncomfortable" by this behaviour.

The Fifth Photograph



PII thought that the teacher was feeling "anger and anxiety because of the student" and considers him responsible for the other students missing the purpose of the lesson, plus he was annoying. PIII thought that the teacher would be feeling a "sense of outrage" due to the student not being able to concentrate during class. P IV thought that "the teacher appears angry" and followed up that observation with, that from their own view point:

the inability of the teacher or the teacher's inability to attract the attention of students or control the classroom, fills the teacher with frustration and failure, and to solve this problem I see that the teacher of the resource room or shadow teacher helps to focus students with hyperactivity or rapid dispersion.

Question 10.

The last section of the semi-structured interviews concerned three short case studies, describing young ADHD students and the four participants were asked if they had experienced such phenomena; what they thought about handling and overcoming such cases and which part they considered to be the most difficult. Unsurprisingly, all four participants had experienced such cases, and they concurred on the necessity of having another experienced adult in the classroom to cope with the behaviour of such children. PI thought that Case I presented the most difficulties, as it called for "a double effort, so that you sacrifice hours to control the behaviour of the student and PII agreed with PI, stating that from their view point, "Case I is the hardest, ...because it includes three problems - hyperactivity, attention deficit and impulsivity - that are difficult to deal with and require considerable time and much effort, PIII thought that the third case was the hardest but did not offer any reason and PIV thought that the third case was the most difficult, as they had experienced two of the cases and thought that it was "difficult to deal with these cases without the intervention of a specialist teacher, or modification of the behaviour"

IV. Discussion

This research was conducted to investigate primary school teachers' attitudes toward willingness to teach students with ADHD in mainstream classrooms. Initially two research questions arose:

- Are primary school teachers willing to teach ADHD students in their classrooms, and if so, what are the reasons for their willingness to teach them?
- If primary school teachers are not willing to teach ADHA students, what are their reasons for their lack of willingness to teach them?

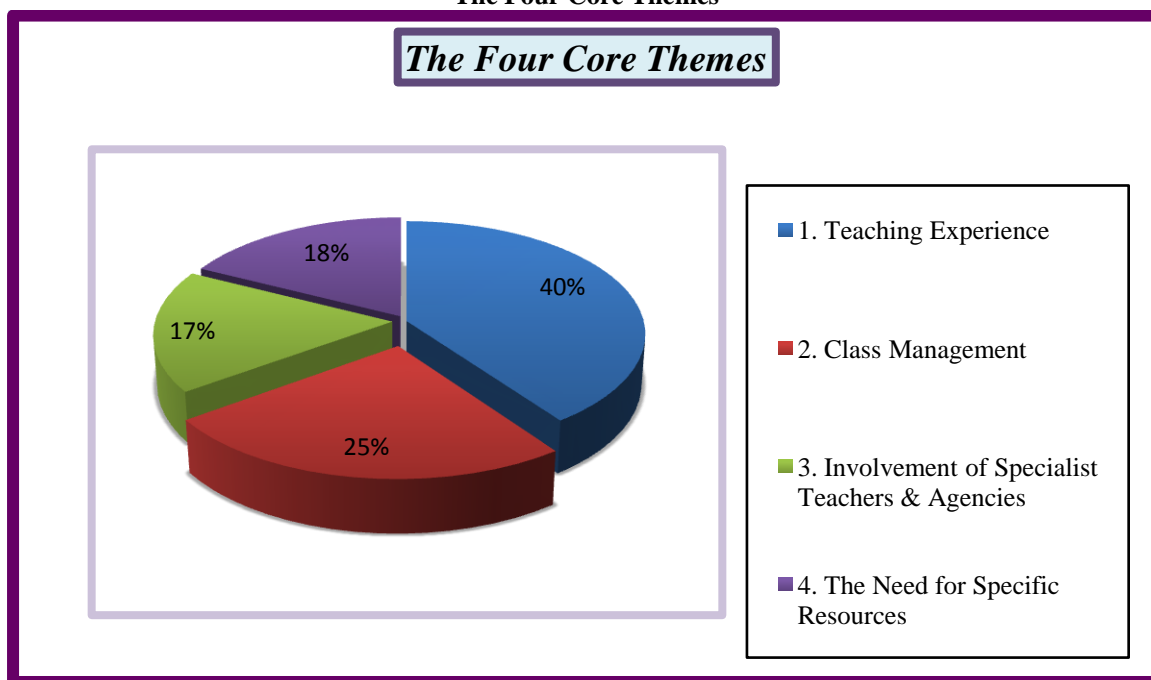
Interestingly, the literature review indicated four main areas of concern: academic; behavioural; social; and psychological and it was these four areas that arose throughout the research. The investigation into why teachers were (or were not) concerned with the inclusion of ADHD students in their mainstream classes, with special reference to their willingness to work with classes including such students, resulted in four core themes: the teacher's experience; class management; the involvement of specialist teachers/agencies; and the need for specific resources, being identified. These four themes are themes that would have been apparent in the review and the research itself, but it was only when completing this thematic analysis table that they became more prevalent. The codified themes were indicated in the transcripts and enabled a rapid identification of the weighting of each core theme (see. These are shown in the Table III below:

Table III: Thematic Analysis Table of Research Findings.

Core Themes	Sub Themes	Codes	Extract from the Data	References
1. Teaching Experience.	a. Difficulty in teaching ADHD students.	1DT	"those students are difficult to teach."	PII
	b. Shortage of class time available.	2ST	"may impact negatively on the other students." "I don't have enough time to attend to them..."	PII PII
	c. Teacher's lack of knowledge.	3LK	"...specifically to learn how to deal with this category of student."	PII
2. Class Management	a. Less students in the mainstream class.	4LS	"a fewer number of students..." "... due to the large number of students in the classroom"	PII PII,
	b. Regular Additional trained adult help.	5AH	"with the provision of a specialised teacher."	PII,
3. Involvement of specialist teachers and agencies.	a. Regular help from Specialist Teachers & Agencies	6ST	"Learning disorder specialisation..." "...we need a specialised teacher in this regard..."	PIV PI
4. The need for specific resources.	a. A well equipped Resources & Resource Centre.	7RC	"...the school facilities and its resource centre".	PIV
	b. Training courses for teaching ADHD children.	8TC	"...having training courses in psycho-behavioural programmes." "The teacher needs training or to be enrolled in a special education diploma course... to be able to deal with such cases."	PIII PI

The Core Theme of Teaching Experience was one that occurred throughout the papers reviewed for the literature review and in the data accumulated by the research. All the participants had either nine or ten years teaching experience and all of them had encountered difficulties when attempting to teach a mainstream class with an ADHD child in it. After examining all the transcripts from the semi-structured interviews for this research, the following chart emerged, (Chart I), showing the number of references in total to each of the four Core Themes:

Charts 1
The Four Core Themes



Each of these four core themes contained sub-themes, for example, core theme Teaching Experience contained 1DT, 2ST, and 3LK, whereas the core theme for the Need for Specific Resources contained 7RC and 8TC, as shown below in Table IV.

Table IV Relationships between four core themes

Core Themes	Sub Themes	%
1. Teaching Experience	1DT; 2ST; 3LK.	40
2. Class Management	4LS; 5AH.	25
3. Involvement of Specialist Teachers & Agencies	6ST.	17
4. The Need for Specific Resources	7RC; 8TC.	18

From Table IV above, it became apparent that the percentage of concerns that were mentioned by the participants in the semi-structured interviews varied greatly, and that although all the participants mentioned all these four core themes, some were mentioned more frequently than others, indicating, it could be argued, a sense of increased concern. For instance, although the Core Theme 1, Teaching Experience, had the three sub-themes of 1DT; 2ST; and 3LK, it was mentioned 40% of the total time, whereas Core Theme 4, The Need for Specific Resources, which possessed only one sub-theme less than Core Theme 1, 7RC and 8TC, received 18% of the total mentioned aspects of problems teaching ADHD children in mainstream classes. Indeed, it could be argued that these results are not as expected, as the researcher considered that class management (Core Theme 2) would be the most difficult aspect, due to the nature of ADHD. However, this research appears to indicate that lack of lesson time and lack of expertise in this area are of utmost concern. It was by this process of analysis and reflection that the researcher became aware of this specific aspect of concern for teachers of children with ADHD. It was a valuable view that would otherwise have been bypassed due to lack of sufficiently informed reflection.

In terms of the accumulated data, it transpired that both 4LS and 6ST were the most frequently mentioned by the participants in the semi-structured interviews – the need for smaller mainstream classes and regular help from specialist teachers and agencies is clear. Interestingly, 3K was the least mentioned, and this

was backed up by less importance being raised concerning 3LK and 8TC – teachers' lack of knowledge and training courses for class teachers. It is as if the class teachers had decided to delegate responsibility to the 'trained specialist teachers' rather than attempting to attain the necessary skills and expertise to deal with the difficulties themselves. The reasons for this disparity could be postulated to range between the individuals not wishing to engage in educating such children through to individuals considering that they do not have enough class time to do so, or that they were not receiving a high enough salary to take on the added responsibility that such an undertaking involves.

The argument for teachers' to be fully trained in being able to deal with ADHD is well founded; however, the practicalities of this are perhaps not that realistic. In terms of understanding the culture within, which a particular school is, then this will dictate the approach which is taken towards education. Moreover, the budgets which are allocated to various education systems in different countries will denote the degree to which these children can be properly supported. From the teachers' perspective, while they may be happy to be trained to work with ADHD children, there may be some cases where their behaviour is so extreme that even with all the training available, they will not be able to find a suitable working relationship between the child, themselves and the rest of the class. In such situations where teachers' are asked to go above and beyond their training, experience and pay grade then there is also every chance they will end up leaving the profession (Zentall et al., 2011).

V. Future Works

In exploring the attitudes which exist in relation to teaching ADHD children, it could be possible to interview teachers from more different schools and from various countries in order to build up a sense of how different cultures can influence those attitudes. There could also be a more quantitative research which looks to compare and contrast the different attitudes which may prevail within different parts of the world as this could indicate that there may be certain attitudes which need to be addressed. Additionally the current research into ADHD attitudes in schools does not utilise much observation of teachers, so therefore there could be a series of class observations to explore the approaches which different teachers take to dealing with challenging behaviour. There could also be short assessments which could be carried out with the children that have ADHD to explore their experiences within school and to find out what they do and do not enjoy about their education.

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