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Phenomenology and educational research

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RESEARCH ARTICLE

Phenomenology and Educational Research

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Manuscript Info	*Abstract*
	Amongst novice researchers, there is considerable uncertainty about how to use phenomenology as a methodological framework. The problem seems to reside in the fact that phenomenology is a philosophy, a foundation for qualitative research, as well as a research method in its own right. Added to this confusion is the misperception that phenomenology is one unified approach when it actually consists of three disparate complex philosophies. It is, therefore, important for a phenomenological researcher to state the approach that they have adopted for their research, as it impacts upon their selection of methodological procedures. The aim of this article is to address these problems and to provide a useful resource to postgraduate education students who are considering applying this research method to their study. This article commences by defining phenomenology as a philosophy, and then explores a range of salient features of the three different philosophical approaches. It concludes by outlining how to carry out a transcendental phenomenological study with specific examples to illustrate key aspects of how to use the tools and techniques associated with this method of research.

INTRODUCTION

The study of phenomenology has its roots in philosophy and has been studied in various forms throughout history (Merriam, 2014, Moustakas, 1994). Phenomenologists are interested in the analytical and descriptive experience of phenomena by individuals in their everyday world, the phenomenological term for this being the 'lifeworld' (Creswell, 2013). Phenomenologists, therefore, are more concerned with first hand descriptions of a phenomenon than they are in resolving why participants experience life the way they do. For example, a phenomenological study on anorexia may concentrate on the experience of what it is like to be an anorexic from the individual's point of view and try to describe how he or she interprets the everyday world. Phenomenological research would endeavor to capture the essence of the experience rather than measure the number of anorexics or define the causes of anorexia. Phenomenologists are interested in all types of human experience, which can include both the mundane, such as being at home as well as dramatic experiences of everyday life, such as what it is like to be a victim of domestic violence. Phenomenologists perceive that human experience of the everyday world is a valid way to interpret the world. They, therefore, reject the notion that the detached scientific empirical tradition is the superior method of research. The phenomenon being studied is not measured or defined through the lens of its accepted reality; rather an understanding is sought of how the participants make sense of their everyday world.

Phenomenological research differs from other modes of qualitative inquiry in that it attempts to understand the essence of a phenomenon from the perspective of participants who have experienced it (Christensen, Johnstone & Turner, 2010). The focus, then, in this type of research, is not on the participants themselves or the world that they inhabit, but rather on the meaning or essence of the interrelationship between the two (Merriam, 2007). The task of a

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phenomenological researcher is to uncover the essence of the phenomenon that they are attempting to study. Phenomenological research has specific techniques that aid this process, such as bracketing and imaginative variation.

Key Characteristics of the Phenomenological Approach

A key characteristic of phenomenological research is its rich, detailed descriptions of the phenomenon being investigated. The description should present 'how' the participants experienced the phenomenon investigated rather than any preconceived perception the researcher may have of the phenomenon being studied. The phenomenological reduction process assists the researcher with this, allowing the researcher to keep an open mind and listen in a receptive manner to the participants' descriptions of the studied phenomenon process (Moustakas, 1994). In traditional phenomenological research this is achieved through the phenomenological process of epoche, also known as bracketing whereby the researcher purposefully sets aside any preconceived knowledge or everyday beliefs he or she regards might be used to explain the phenomena being investigated. This allows the researcher to listen and record the participants' description of an experience in an open and naïve manner.

Imaginative variation is the methodological step that follows bracketing and reduction in the phenomenological research process. The imaginative variation process allows the researcher to uncover the structural themes sourced from the textural descriptions, which were produced during the process of phenomenological reduction. Imaginative variation requires the researcher to see the phenomenon from a variety of perspectives, so that they can understand the essence of the participants' experiences.

Finally, in the last step in the phenomenological process the researcher develops a statement from the composite textural and structural descriptions that reveals the essences of the phenomenon being researched. Moustakas (1994) perceived that these essences are never truly exhausted, but simply represent one researcher's perspective at a particular time and place.

Different Phenomenological Research Methods

The different philosophical approaches include transcendental phenomenology founded by Husserl (1858-1938), existential phenomenology which was articulated by Merleau Ponty (1908-1961) and heuristic phenomenology founded by Heidegger (1889-1976). While these three phenomenological approaches have different philosophical postures, they all follow four primary phenomenological concepts, these being description, reduction, imaginative variation and essences (Moustakas, 1994). Several authors (Bryman, 2001; Merriam, 2014) have presented phenomenology as a single approach and failed to point out the differences and similarities between the disparate phenomenological research methods. There appears to be a failure to grasp the differences between the transcendental, hermeneutic and existential approaches.

Transcendental phenomenology

Husserl (1859-1938) is considered the father of transcendental phenomenology, which forms the basis of all the other phenomenological methods (Schwandt, 2001). He came from a mathematics and scientific background, but decided to pursue an education in philosophy. He believed that the scientific, empirical approach should not be applied to human subjects in psychology, as humans attached meaning to external stimuli and therefore did not respond automatically (Moustakas, 1994). The results of research carried out this way, Husserl asserted, would be skewed as key differences and constructs were not taken into account. He, therefore, advocated a departure from science and a return 'to the things themselves' (Moustakas, 1994). Husserl perceived that the phenomena of an object or 'lived experience' (everyday world) of an individual should be reflected on instead, as this method captured the way a person experienced the world around him or her, as well as his or her interpretation of reality (Merriam, 2014). Human consciousness and the world were, in Husserl`s opinion, one and could not, therefore, be studied in isolation from each other (Moustakas, 1994).

Husserl considered transcendental phenomenology to be a valid alternative to the scientific method of research. He believed that by using the transcendental reduction process one could delve deeply into consciousness and uncover the underlying structures of a phenomenon. The reduction process devised by Husserl focused on the technique of epoche or bracketing whereby a philosopher could purposefully set aside outside prejudices and beliefs in order to gain a clear view of the phenomenon. Two other concepts that Husserl considered important in the understanding of transcendental phenomenology were intentionality and the essences (Moustakas, 1994). Intentionality, Husserl believed, represented the researcher's conscious intent to investigate a phenomenon. By consciously directing one's attention towards an object, he perceived, one could form a description of the phenomenon. In Husserl`s estimation, every intentional experience consists of a noema and noesis. The noema represents the objective experience of the object, whereas the noesis represents the subjective experience. For

example, if all research students attended a research lecture once a week, the noema would constitute the 'what' of the lecture, whereas the noesis would relate to how the different students perceived and experienced the lecture. In phenomenological research, one, therefore, has to consider both the noema and the noesis in order to understand the experiences described by the participants. By considering their meanings, the underlying structure or essences of a phenomenon could be discovered.   Hermeneutic and Existentialist phenomenologists built upon Husserl`s interpretation of phenomenology to develop their own new schools of thought.

Hermeneutic phenomenology
        Heidegger (1889-1976) was trained by Husserl and for a while followed the Husserlian method. He later, however, dissociated himself from this approach, as while he deemed lifeworld to be an important component of phenomenological research he differed in the way he perceived it should be explored. For example, while Husserl concentrated on understanding individual experience through bracketing, Heidegger believed that it was impossible to set aside one's own presuppositions and beliefs. Indeed he believed that intrinsic awareness was fundamental to phenomenological research, as the researcher needed to me immersed within the phenomenon to gain an understanding of the experience. There is then a shift from the transcendental approach whereby the researcher takes on the detached observer position to the purposeful recognition of both the researcher's and participants' perceptions. Another key difference between the two philosophical approaches lies with the research focus itself, transcendental phenomenology taking a descriptive approach, whereas hermeneutics takes an interpretive approach. This difference influence every aspect of the study from the formation of the research question to the analysing and synthesising of the findings. For example, a researcher carrying out a transcendental study is solely interested in the participants' descriptions not their interpretations of the phenomenon being explored. The hermeneutic researcher on the other hand is equally concerned with the participants' descriptions of the phenomenon, as well as the interpretation or meaning of the experience. The researcher then needs to make an interpretation from the different meanings deduced from the participants' lifeworld experiences. Van Manen (1990) is a well-known present day hermeneutical phenomenological researcher and has written books on this type of phenomenological approach.

Existential phenomenology
        Both existential and hermeneutic phenomenology built on Husserl`s perception of lifeworld, but discarded the Husselerian transcendental approach as flawed. They believed that consciousness and self could not be realistically separated. This perception directly impacts upon the transcendental reduction process, whereby the researcher is expected to bracket or suspend individual presuppositions. The existentialism interpretation of Husserl transcendental perceptions of intentionality and intentional analysis are linked to the philosophical writing of Sartre (1905 –1980) and Merleau-Ponty(1908 – 1961).
        It is important to have a good understanding of these three different approaches to phenomenology when carrying out research as it impacts data collection, as well as analysis and synthesis of the data.

The Study
A Phenomenological Study of Advanced Learners in Educational Settings Suited to their Academic Needs
        The transcendental phenomenological approach was selected for the study that is used as an example in this article. The researcher selected this approach, as they were interested in the lived experience of gifted students attending schools that purposely provided for their unique academic needs. Most research in this area had, until this point, been carried out from the outsider rather than the insider perspective (Seaton, Marsh & Craven 2009). This study set out to describe the gifted child's experience from their own perspective rather than that of the outside academic. Through the participants' rich, in -depth descriptions of their lifeworld as well as the researcher's use of phenomenological transcendental processes such as epoche, an understanding was achieved on how gifted primary aged Australian students experience the specialised school setting.
        In this paper, a literature review and conceptual framework has not been included from the study, as the intent here is to illustrate the methods and procedures of data collection, as well as the organisation, analysing, synthesising and presentation of findings in transcendental phenomenology. The organising and analysing of data in this study was largely based on Moustakas's and Giorgi (1985) qualitative adaptation of the Husserlian transcendental phenomenological approach. Several of the researcher's own modifications of the phenomenological research method were applied.

The research questions that guided this study:
1) How do primary aged gifted students perceive and experience the social contexts of schools that actively seek to cater to their atypical academic needs?
2) Do gifted girls and boys experience the social context of schools that provide them with extension classes differently?
3) What are the social and emotional outcomes of these types of school environments and how do they relate to the gifted children's experience of being gifted in a school that actively sought to cater to their atypical academic needs?

Selection of participants
Following the phenomenological tradition, participants were selected who had experienced the phenomenon being researched (i.e. extension classroom experiences) and were willing to describe it in a tape recorded interview (Eddles-Hirsch, 2012, 2013). Phenomenological samples do not usually have a large number of participants, as the data collection process requires an in depth study of human experience. However, such studies need enough participants to offer different experiences of the phenomenon being studied (Moustakas, 1994). For this phenomenological study, 27 academically advanced students who had experienced school settings that actively sought to cater to their atypical academic needs were required. Participants were randomly selected from each school's extension classes in order to ensure that diverse perceptions of the school environment were heard. The participants and their parents were both sent Informed Consent documents several weeks before the interview process commenced. Both Informed Consent Documents were approved by the university ethics committee and guaranteed participants` confidentiality, but allowed for publication of the dissertation and future work. The anonymity of the participants in this study was assured by the adoption of self-selected pseudonyms.

Collecting Data
Phenomenological Interviews
In a phenomenological study, the in-depth interview transcript forms the basis of the data. It is through the participants' descriptions of the phenomenon being investigated that the researcher is able to uncover the invariant structures or essences of the phenomenon being investigated.

Interviews followed the transcendental phenomenological tradition and data was collected through two individual in depth interviews, carried out in the participants' school (Eddles-Hirsch, 2012, 2013).No interview was carried out without both consent forms being signed and permission given for the interview to take place. Participants were also reminded at the start of each interview that they could leave the interview process at any time without fear of negative reprisals from their school or the university. All interviews in this study were recorded and transcribed verbatim.

Questions in the interviews were concerned with the participants` perceptions of their everyday lived experiences in the specialised school environment. The questions devised for this study were intentionally open-ended in order to give the participants the opportunity to voice their own thoughts and opinions of life in this type of school setting. The use of bracketing throughout the interview process further contributed to the process of gathering information from the participants' perspectives.

Interview Schedule
Opening questions were the same for each participant and were given to encourage each child to begin describing his or her perceptions of lifeworld in the school. These included:
- Can you describe for me what it is like to attend (name of school) from the minute you arrive until the time you leave?
- If you were to describe to a new student what it is like to attend your school what would you say?

If the child did not speak extensively about his or her experience of the lifeworld, follow up questions were introduced.
- Can you tell me more about that?
- Can you recall another time that happened and describe it to me?

If a child was not forthcoming with information on social context, some indirect prompts were offered. For example questions about the types of interactions they experienced with their peers and teachers. Further questions were based on the participants' responses.
Member checking is a procedure not advocated by Moustakas (1994), but was adopted by Giorgi (1985) a psychological phenomenologist was also incorporated into this study to ensure it validity.

Organising, Analysing and synthesising data
Transcription of Interviews
          Following a modified version of Moustakas`s (1994) recommendations of data analysis, I transcribed and analysed the interviews. The fact that I personally transcribed the majority of the interviews in this study helped with this process, as listening to each of the participants repeatedly helped me to become familiar with his or her individual experiences and different perceptions of school life. Listening to the participants' voices helped me to become more aware of tone change and why they might be silent for a moment at a particular point in the interview. For example, Alison in Year 5 at St Mary`s school became very excited when discussing the school's Friday Friends program, but became agitated when the conversation veered towards friendships with girls in her Year 5 class.
          When reading the participants` transcripts, I once again engaged in the phenomenological process of epoche, which I had made use of throughout the interview process. At this point in the study, I made notes in the margin of each transcript and used a horizontal line to indicate when meaning changed in their descriptions of school life. To ensure that I had a good understanding of each participant's school experiences, I played the appropriate interview tape when reading each interview. This step brought me back once again into the interview room, reminding me of the personality and body language of each participant.
          Second interviews were conducted once I had transcribed the first interviews, which allowed me to follow up on questions that had been introduced during the first interview and validate the raw data.   This is where the data collection phase differed in this study from Moustakas`s steps of data analysis. Interviews were also carried out with key personnel that had emerged as important figures in the participants' interviews. For example, the gifted coordinator and vice principal were key personnel mentioned in participants' first interview transcripts.

Listing and Preliminary Grouping
          The first step recommended by Moustakas (1994) in the phenomenological reduction process is horizontalization of the data. Moustakas recommended that in order to carry out this step the researcher needs to be *receptive to every statement of the co-researcher's experience, granting each comment equal value* (Moustakas, 1994, p.122). This step is related to the epoche process and required that I keep an open mind when I examined each statement. Statements that referred to the phenomenon investigated, were lifted out of the transcript and recorded on a separate piece of paper. These statements were then referred to in this study as the horizons. In order to illustrate this process, I have extracted a small example of the horizons collected for one of the participants in this study. Due to the confines of this article, a full listing of horizons is not possible for this participant or other participants who took part this study.

Table 1: *Horizontalization*

…we're just all one big community; it's really good because we all know each other…
Most people they just sit down with a friend and then everybody starts sitting around them.
We all sit in big groups… we sometimes have one or two groups because people are sitting and we can't all fit together but then we still like talk to each other.
…At my old school you didn't interact with another group, but here, even though they do sit differently you can go and sit there and they won't really mind.
Here it's just all open…you felt more welcome because everybody is just open…
…when you play they've got like handball courts that are quite close to each other, then you see each other playing and you're like oh hi, and you have little talks in the line waiting for your turn.
…my old school, the boys and girls they didn't really interact, but here the girls play soccer and the boys play handball and yes, we interact heaps… it's like we're equals
…sometimes the boys at my old school, the boys would play soccer and if a girl wanted to play soccer the boys would say no you can't play because you're a girl and we don't want a girl on our team because we'll lose, but here they say sure you can come.
(Westerford School Year 5 Ely)

Reduction and Elimination
          I then reviewed the horizons listed for each participant to ensure that there were no overlapping or repetitive statements. Moustakas (1994) also recommended that the researcher ask the following two questions when recording these statements, 1) "Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?", 2) "Is it possible to abstract and label it?" (Moustakas, 1994, p.121)
The horizons that met these requirements then became known as the invariant constituents of the experience for each of the participants. I have chosen to use the same participant to illustrate the following step in the data analysis process in order to demonstrate how each step is built on and interconnected to the next one. This interconnected

approach, as well as the phenomenological process of epoche, ensured that the participants' descriptions rather than my own perceptions were considered throughout the data analysis process.

Table 2: *Invariant-Constituents* (representing different themes)

… Like our teacher was saying I think the first week we came in she's like this class is a gender free zone, you won't be judged on what gender you are, we're all equals, which actually made me, and I asked all my friends, and they said it made them feel a lot better.   …the teachers recognise us for our strengths here because at my old school there could be up to 33 people in a class, so the teachers, they couldn't really put as much attention on you, but here since they've made the classes a bit smaller you get to put more into the conversations and discussions.   … it was really easy to make friends because since we were all new none of us could feel embarrassed by anything, because they didn't know anything about us so it was really, really cool. It's like you could start fresh.   … so if we have a conflict normally, yeah, we just sit down and talk about it or the person, like the next day it's all forgotten and you go back to school and there are, like oh no, it was a silly fight…

Clustering and Thematising the Invariant Constituents

In the next step of the reduction process, the invariant horizons, or meaning units, were gathered together to form core themes for each of the participants in this study. This step in the data analysis process clearly illustrated the participants' individual school experiences. In the section below, the core and sub themes are presented for Ely, one of the participants from Westerford School. The gathering and organising of all the invariant constituents was carried out for each of the 27 participants in this study. I have chosen to use the same participant to illustrate the next step in the data analysis process in order to demonstrate how each step is built on and interconnected to the next one.

Table 3: *Core Themes/ Structures of the Experience* (Westerford School Year 5 Ely)

Friendship   *Peer expectations*   *Peer acceptance and support*   *Academic competition*   *Interaction between the genders on the playground*   *Interaction between the primary and high school students*   *Interaction between classes*   *Group work*   *Space: Playground and buildings impact on peer relations*   *Challenging Instruction*   *Choice*   *Self-efficacy*   *Freedom to express ideas*   *Teachers' understanding of academic needs*   *Teacher expectations*   *Teacher attention*   *Changes: Curriculum/Facilities*   *Social and emotional support*   *Sense of community*   *School size*   *Teamwork*   *Teachers' recognition of emotional and social issues*

Individual Textural Descriptions

The next step in the data analysis process was to write textural descriptions for each of the participants. This was carried out in order to present each of the individual participant's perceptions of the experience being investigated. The textural descriptions give the 'what' of the experience in a transcendental phenomenological study. In this step, Moustakas (1994) recommended that the participant's own words be included in order to convey their unique perceptions of the phenomenon investigated. Below is an extract from Ely`s Individual Textural Description.

Table 4: *Individual Textural Description*

Ely believes that Westerford has a more social environment than her past school where she believes it was harder to make friends as, *...a lot of the groups were really, really, they're sort of picky and they only wanted to have people that were cool or good at sport and they sort of have really hard criteria to get into a group.* Her experience at Westerford is vastly different, as the students in her year tend to form one big group with one child sitting down and others freely joining them, *everybody starts sitting around them.* Ely feels that the close arrangement of the handball courts further aids social interaction on the playground, as their close proximity allows the children to call out to each other and have conversations across courts. Another change for Ely on the playground has been the interaction between the genders. *At my old school, the boys and girls they didn't really interact but here the girls play soccer and the boys play handball and... we interact heaps... Here it's just all open.*

(Ely Year5, Westerford School)

Composite Textural Descriptions

The next stage in the data analysis process was to form composite textural descriptions for each of the three schools from the participants' individual textural descriptions. Moustakas (1994) guides the researcher in this process by stating that in forming composite textural descriptions, the invariant meanings and themes of every co-researcher are studied in depicting the group as a whole (Moustakas, 1994, p.137-138).

This meant that I needed to return to the individual textural descriptions for each school and to become aware of common themes, as well as those that were experienced by individual participants alone. The individual textural descriptions were synthesised so that a synopsis of the experiences could be created in the form of composite textural, which was written for each of the three schools that took part in this study.

The composite textural descriptions enabled the individual descriptions of each participant to be represented as a whole. The composite textural descriptions, which were written for each school, enabled me to form a good understanding of the lifeworld experienced by the participants.

Table 5: *Composite Textural Description for Westerford School- Theme: Friendship*

All the participants perceived that Westerford School had a more open and welcoming social environment than most other schools. The participants had been able to find friends to whom they related and most felt no need to mask their academic ability in order to establish peer relations.

Participants who spoke about their friendships had different ideas about the characteristics that were important in a good friend. For Alana who was in the Year 6 opportunity class the primary criteria were trust and someone who did not spend all his or her time studying, but enjoyed taking part in fun out of school activities. Katy, who was in the same year group, sought very different qualities. She looked for friends that were *reasonably clever and interesting*. She also felt that she should have a few close friends rather than *be friends with a lot of people*. Julie, who was in the Year 5 opportunity class looked for honesty and friendliness and did not believe that academic acumen was an important quality in a friend, *not really like smartness or anything... I kind have the dumbest friend in the world but she's my best friend*. Ely, who also was in the Year 5 opportunity class, felt that intelligence level was unimportant for her. She looked for friends that were non-judgmental, *nice, understanding, patient* and *honest.* Jason, who was in the same classroom, sought friends that played sport, had a sense of humour and were not quick to fight. David *(Year 5)*, looked for *kindness and friendship* in his friends, whereas it was important for Fred, in Year 4, that his friends were not boastful. He preferred that his friends were instead, *really nice and humble.*
Despite the diverse qualities that the participants sought in a friend they all had found at least one good friend at Westerford School. Indeed, they perceived that isolated students were a rarity at their school as most students saw themselves as part of *one big community (Ely, Year 5)* rather than small fractured groups. Fred perceived that children were not left out of games in Year 4 and that this could only have happened to students in classes when they were in Year 2, as they were still learning at this point how to socialise effectively. When a child was seated alone, most participants felt that it was usually due to a playground conflict that generally was quickly resolved either by the children themselves, or the teacher on duty. When aware of isolated students or conflicts amongst friends, many students were quick to step in and offer their assistance. Alana described this phenomenon by saying *lots of the time me and my friend if we see anyone, like if they are in Year 3 or Year 7 or whatever, we will go up to them. Lots of people are like that.*

Composite Structural and Textural Description

The final step in this transcendental phenomenological study was to amalgamate the composite textural and structural descriptions and to write a composite description that represented the lifeworld of participants at all three schools involved in the study. This represented the essences or the invariant structures of the phenomenon researched. The aim here was to open a window on a world not previously accessible to the researcher. After reading this composite description an individual should have a better understanding of what it is like to be a gifted child in a school setting that purposefully attempts to recognise their unique cognitive abilities.

Table 6: *Composite Description*

All participants in this study sought acceptance from their peer group, whether it was easily achieved or hard to gain. The different social contexts of the three schools in this study, however, impacted on whether they felt the need to resort to social coping strategies that hid their academic ability or not. The way the school organised their gifted program also impacted social relations, as they structured the amount of time academically advanced students spent together. Additionally, school gender expectations played a key role in the participants' perception of what made a child popular or how they should behave on the playground.   While there were many differences among the three schools, generally all of the participants perceived that it was easy to make friends in their school's extension programs. They discovered that they generally shared similarities that did not only relate to academic pursuits, but included other interests that were not always perceived as 'cool' by their same aged peers, for example, extra-curricular activities such as ballet, debate, instrumental music and chess. They also appreciated the time the extension class gave them to work with peers who thought the same way they did, and shared a passion for the subject being taught. The participants generally perceived that group work in the extension classes allowed them to progress at a faster rate academically, as they were able to learn from each other and develop more

Essences of the Experience

The essential structure of the phenomenon described by the participants in the composite description was then transformed into educational language, which were analysed in order to address the research questions.

Conclusion

This article has attempted to describe the phenomenological research processes and procedures used in a dissertation. While a brief history of phenomenological methodology, key characteristics and its various approaches have been outlined, the researcher has concentrated on how data was collected, organised, analysed and synthesised in this transcendental phenomenological study. It is hoped that this article will be of benefit to postgraduate research students who have selected transcendental phenomenology as their research approach.

Glossary

Cluster of meanings Participants' statements that address the phenomenon being researched are first collected with repetitive and overlapping statements then delineated. The remaining statements are clustered together into similar meaning units.

Duquesne School: This phenomenological method emerged from the psychology department at Duquesne University and is the school followed in this study. It is based on the philosophy of Husserl, which used to be called the descriptive method. Van Kaam (1966) and Giorgi (1985) are phenomenological researchers from the Duquesne school. They outlined specific analysis techniques that researchers could follow in order to carry out phenomenological research.

Eidetic Reduction: A term used in Transcendental Phenomenology, it is the process that reduces the sense the researcher makes of the experience once her or his prior knowledge and personal opinions have been bracketed.

Epoche/bracketing: The researcher purposefully sets aside any preconceived knowledge or everyday beliefs he or she believes might be used to explain the phenomena being investigated. This allows the researcher to listen and record the participant's description of an experience in an open and naïve manner.

Essential, invariant structure: Essences: A description of the underlying structures of the phenomenon being investigated. It includes phenomena that are universal and are experienced by all the participants. They are uncovered by the researcher through analyses of the interview data, which contain the first hand experiences of the phenomena described in detail by the participants.

Horizontalization: Is part of the phenomenological reduction process, whereby the researcher gives equal value to all of the participants` statements. The researcher will remove all repetitive statements as well as those that do not relate to the research questions.

Imaginative variation: This is the third step in phenomenological research and follows the process of phenomenological reduction. The function of Imaginative Variation is to take the varying perspectives of the participants and to unify them into structural themes so that they represent the essences or underlying structures of the experiences.

Intentionality: This concept is central to all phenomenological doctrine and incorporates the concepts of noema and noesis. Intentionality connects us as humans to the world around us, as every conscious act involves an object. For example, when I use my imagination I can see an object such as a bird flying up in the sky, when I use my vision I can see a cloud or my computer screen. This also occurs when we remember something such as a bouquet of flowers sent many years ago by a friend. Intentionality in the phenomenological sense does not signify an action such as something we intend to do, but rather it applies to the mental relationship we have with the world around us. By recording the participants` descriptions of their relationships to the intentional world, the phenomenological researcher is able to gain insight into how they experience the world around them.

Lifeworld (German-Lebenswelt): Husserl (1970), the founder of phenomenology, coined this term to describe our everyday self-experience with the world around us. For the participants in the study, this would relate to their experiences of everyday life in a school that attempted to cater to their atypical academic needs.

Noema and Noesis: Every intentional experience consists of a noema and noesis. The noema represents the objective experience of the object, whereas the noesis represents the subjective experience. For example, if all research students attended a research lecture once a week, the noema would constitute the 'what' of the lecture, whereas the noesis would relate to how the different students perceived and experienced the lecture. In phenomenological research, one therefore has to consider both the noema and the noesis in order to understand the experiences described by the participants.

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